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A DAY IN THE LIFE OF A CHIEF EXECUTIVE

THE REAL-TIME USE OF SIX CHIEF EXECUTIVES IN THE NZ PUBLIC SERVICE

A thesis presented in partial fulfilment of the requirements
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ABSTRACT

The research involved a structured observation real-time use study of six New Zealand government chief executives, and examined Mintzberg's 1973 theory of managerial roles in practice. Mintzberg's theory of ten management roles was found to be relevant in 1997, but with the addition of the risk manager role, which is essential in a changing environment.

Similar patterns of work to those described by Mintzberg were found; that is, chief executives jobs were "activity characterised by brevity, variety, and fragmentation." The NZ chief executives appeared to have a reactive orientation, being driven by external events and stakeholder and spent over 65% of their day in meetings. They never gave direct orders; and never finished a task that they started without interruption. They worked long hours, took short lunch breaks and spent some of their time fire-fighting with other agencies or the media. They also spent most of their time in the leadership, role exhorting staff to do more with fewer resources, for the good of society.

This time use study gives a snapshot of the chief executives' role in the NZ public service in 1997. It has implications for the recruitment, retention and development of chief executives in the public sector and will be of interest to their employers, staff, information technology specialists, professional developers and researchers of management. It illustrates Mintzberg's managerial roles in practice.

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1.0 INTRODUCTION

This section introduces this study, conducted on six chief executives in the NZ public service. It identifies the confusion in the literature over terminology used to describe the nature of managerial work.

For the better part of this century researchers have sought to define the *content* and *characteristics* of the manager's and chief executive's job. The *content* is what a manager actually does in their job. The *characteristics* are where managers work, with whom, how long they work, the media they use to communicate etc. Historically managerial work has been described as having a set of functions (things that were done) these included planning, organising and controlling. Mintzberg changed the management paradigm in two ways: he observed chief executives first hand where others had surveyed them by examining their diaries; he then defined what they did in the form of roles, where others had described activities, skills and functions. From this he developed a role theory of managerial work. He was more interested in recording the reality and nature of managerial work than in telling managers that they should be controlling, planning or organising.

A role is a specific part of the manager's function. Dictionaries and the literature often interconnect and confuse the meanings of role and function, for example the Pocket Oxford Dictionary defines a "function" as an "activity proper to the person" and an "Official or professional duty" (NZ Pocket Oxford Dictionary, p309). A "role" is described as a "person's or thing's function" (*ibid*, p 668). Mintzberg (1973) said "At best a role is a fuzzy concept" and he based his definition of roles on the purpose he observed of a manager's work. Mintzberg suggested that the purpose of a chief executive's job is operationalised through three major interrelated role clusters; that of interpersonal, informational and decisional roles, which he expanded into ten specific roles, Table 3.

Studies of managers have historically used the survey or diary method and looked at activities, information use and competencies (skills, knowledge and attributes). None, except Mintzberg, have examined in real-time specifically what a chief executive does on a day to day basis. This study is the first of its kind on public sector chief executives in

NZ. The need for it was identified after the State Services Commission (1994) published a competency study on the work of chief executives, based on interviews with them and their stakeholders, but not on a real-time use study of their work. This study should be of interest to archivists, information specialists, management researchers, employers, personal assistants and developers of public sector chief executives.

2.0 A BRIEF HISTORY OF MANAGEMENT THOUGHT

This section gives a brief overview of the history of management thinking and research from the Sumerians to the present day. It looks at the different schools of management thinking from the scientific to the spiritual.

Managerial thinking and work can be traced back to the Sumerians who in 5000 BC commenced record keeping (George, 1972). Then the Egyptians in 4000 BC recognised the need for *planning, organising* and *controlling* (George, 1972). These three themes have continued in the literature throughout history as the primary elements of a manager's job; particularly they dictated what a manager *should* do. This was until Mintzberg's 1973 study when from his observations of what managers actually did rather than what they should do, he added managerial roles into the mix.

Throughout the twentieth century writers have focused on the various aspects of a manager's job. In the early 1900s the scientific management school, focused on systematic analysis and measurement of work and was driven by an emphasis on controls, standards and economic rationalism (Gilbert et al, 1992). There was an assumption that people were economically motivated and the more efficient an industry could become the more productive and happier everyone would be. Fayol, in 1916, developed the first theory of management and suggested that managers plan, organise, coordinate, command and control (George, 1972). In the 1920's the emphasis was on people and how they were managed, and moved through to the manager managing the social interaction and group processes (Mayo's Hawthorne studies), through to Follett's ideas of the manager's job as that of "coordination of people and processes" (George, 1972). Follett stressed, "power with people, not power over people" (Sibbet, 1997). Then Gulick in 1937 also emphasised "planning, organising, staffing, directing, reporting and budgeting" (Mintzberg, 1973). In 1938 Barnard added the roles of communications and definition of purpose (today we would call this vision and mission) to the manager's portfolio, emphasising cooperation rather than top down edicts (Sibbet, 1997).

In the 1940s the human relations school of Weber, Likert, and Argyris (George, 1972) emphasised personal needs and motivation of people at work, which called for a different style of management. Urwick in 1943 synthesised the body of management knowledge into a unified theory he called "management". Simon (1957 & 1965) described managers as reactive and unprogrammed decision makers who programmed the work of others.

In the 1950's & 1960's writers like Collins, Moore & Unwalla (1964); Newcomer (1955) and Stewart (1965) emphasised directing and controlling the established network of relationships within a manager's control. Drucker (1967) moved away from the relationship school to focus on managing the outcomes of a job and developed "management by objectives."

In the late sixties and seventies the emphasis in the literature turned to look at the manager as a leader and added the innovation role and the decision maker role to the mix of management. Theories of leadership had been around since the "Great Man Theory" which assumed that leadership characteristics were innate, inherited and inborn. Research moved from looking at traits to behaviours with the 1947 Ohio State studies, Blake and Mouton's managerial grid and Likert's work on levels of leadership (Gilbert et al, 1992). These studies described leadership behaviours (both task and process) and identified styles for example: Blake and Mouton's "country club, organisational man, team leader, slave driver or laissez faire style". Like others in the behavioural school the issue for leaders was to "exhibit high concerns for both task and people" (ibid, p189). The emergence of the contingency school of management thinking (theorists include Fielder, 1966 and Hersey & Blanchard, 1972) emphasised the "forces in the manager, the subordinate and the situation" as important factors in the leadership continuum (ibid). The contingency school differed from the previous thinking in that "contingency researchers recognised the interdependency of personal and situational factors in determining employee behaviour" (Vecchio et al, 1992, p 18).

Other theorists have identified and added to the blend of managerial roles and tasks, often without differentiating between the two. Andrews (in George, 1972) introduced "strategy

development” as the primary work of executives and Collins et al, (1970) developed this into the “entrepreneurial school” and stressed innovation and creation of new combinations as the key skill of managers.

George (1972), after reviewing the history of management thought, gave the definition of management as: “the process of setting and achieving objectives by influencing human behavior within a suitable environment.” He described the functions of management similarly to the Egyptians as: planning, controlling, directing and organising (p173-176). However, he did not describe the roles of a manager nor the nature of their actual work.

In the past thirty years emphasis has moved from prescribing the tasks that the manager should do to an examination of what they actually do. Carlson (1951) suggested that the literature “is more concerned with the general speculations regarding the functions of the executives than with actual descriptions of their work”. The classical schools helped to “label our areas of ignorance” (Mintzberg, 1973) and told managers what they should be doing rather than what they actually did do. Tasks were traditionally ill defined at the top of organisations while jobs at the lower levels were being defined by those at the top, usually by the chief executive. Stewart’s (1963, 1965 & 1967) diary study suggests that a manager “forecasts, sets objectives, analyses problems, organises, motivates, makes decisions and co-ordinates.”

Kotter (1982, p132) in his work on general managers, using survey and conversations, stressed the “use of personal assets to create agendas for their areas of responsibility” using “ongoing, incremental largely informal processes that utilises many subtle methods.” Over recent years, other well known writers of management have emphasised one or two aspects of a managers job, but few have looked at the total job. According to Mintzberg:

“...we now have ‘doing’ for Tom Peters, ‘conceiving’ for Michael Porter, ‘leading’ for Abraham Zaleznik and Warren Bennis, ‘controlling’ for the classical writers, and so on.”
Mintzberg (1994, p21).

Grinyer, Mayes and McKiernan's 1990 "sharpbender" study identified that a results orientation and the ability to install systems to create change were the key management functions for successful management in a changing environment. They also identified the good and poor aspects of management. The good included: "action orientation, valuing people, good communication, innovation, and risk taking." The features of poor management included: "inflexible autocrat, poor communication and vision; poor quality, history of poor decisions" (Campbell-Hunt et al, 1993, p 128).

Kanter (1983) stressed the management of change as a key ingredient of a manager's job. She also emphasised the importance of societal and community outcomes that organisations have to achieve. The community/ societal theme has also been reinforced by Putnam (1993), Handy (1989, 1990, 1994), Senge (1990) and Covey (1990, 1992). This theme has extended to include the personal values of the manager and staff, described by De Pree (1987) and Greenleaf (Spears, 1995) as "servant-leadership", where managers and leaders encourage and motivate their teams from a basis of shared values and often lead from behind.

Recent literature, Fukuyama (1995), Spears (1995), Wheatley et al (1996), Handy (1997), Leigh (1997) and Hock (1997), indicates that during the 1990's the values based approach has moved to a spiritual base. There are also numerous international conferences (eg. the 4th Annual World Spirituality Conference in Mexico in 1997) and web sites actively promoting the role of spirituality in the workplace and particularly the leader's role in creating the environment. Spirituality, is a dimension of management, (not a role or function) and, though not yet widely researched or cited in the literature, is likely to add a context to management that some writers, like Senge (1990), Bolman and Deal (1991), and Marsh (1993) have hitherto only hinted at.

To put spirituality in its context, Dilts (1993) drew together the work of Gregory Bateson and Albert Einstein to describe what they called "logical levels or logical types". These levels are not roles or functions rather dimensions, put into an organisational context for the purposes of this report.

They were described as:

- Environment - where people operate at work
- Behaviours - what people do at work
- Capabilities - what skills people use in their work
- Beliefs - what people believe about themselves and their work
- Identity - what role people have at work eg CEO, manager, scientist etc.
- Spirituality - what or who else is involved in our world, what is our contribution to the wider world and how does work contribute to the meaning of life.

For example, some organisations may be being managed at what Dilts (1993) calls the behavioural level when they are concentrating on getting the basic behaviours and delivery to customers right. Other managers may focus on the capabilities level (increasing the skills base of their staff) and still others on their identity (who they are) which is often expressed through the development of mission and vision statements. He suggests that the spiritual level is the highest that organisations can aspire to (Dilts, 1993).

Paraphrasing the ideas of Einstein and Bateson, Dilts (1993) says that “problems cannot be solved at the same level at which they were created”, which means that if the problem is a behavioural one (eg. someone not performing), one has to move to the “capabilities or beliefs” level (or higher) to solve it. They maintained that the “spiritual” level was the ultimate level aim for.

Applying spirituality to management, the “spiritual” level could be interpreted in two ways: firstly, inside the organisation where people are seeking meaning out of their everyday work and expect their managers and leaders to provide work that has meaning for them (however they interpret it) (Hackman & Oldham, 1976); secondly, spirituality can mean how an organisation contributes to its communities (of interest and geography) and what legacy it leaves in the world. Handy (1997), Leigh (1997) and Hock (1997) maintain that spirituality will be the challenge for managers and leaders in the new millennium.

Putting the history of management thinking into perspective: each view of management tended to build or expand on one or two aspects of previous studies and reflected its place and time in history. In hindsight it is easy to reflect on management thought as a

continuum or sequence of orderly developments, which was not necessarily the case. Dewe (1989) suggests that each school of management thought was attempting to solve a particular problem, had its own set of presuppositions and answers, Table 1.

Table 1 - Schools of Management Thought

<i>School of Thought</i>	<i>Problem they wanted to solve</i>	<i>Pre-suppositions</i>	<i>Answers</i>
<i>Scientific Management School</i>	Inefficiency	People were economically motivate	Individual and team bonuses
<i>Human Relations Schools</i>			
(a) Industrial Sociologists	Alienation of people at work	Belonging to a group was important	Negotiated performance goals
(b) Self Actualising School	People wanted growth and development	Higher order needs and satisfactions important	Whole jobs were taken through to completion
<i>Contemporary School</i>			
Contingency Theory	Integration of individual and organisational needs	That the person and environment (organisation) need to fit	Multi disciplinary approach with peer support etc.

Based on Dewe (1989)

Dewe (1989) also identified the presuppositions underlying the schools of thought as:

- (1) that it is possible for organisations to operate efficiently
- (2) that organisations will continue to grow and expand economically
- (3) that stable power relationships exist in organisations
- (4) that work is the central life interest of most people.

He suggests that most of the schools deal with “what is” and not with “what could be”, which is not surprising, since the schools were not sequential nor integrated but reflected the interests, norms, values and aspirations of the researchers and the society they lived in at the time.

The discussion on management vs leadership has been debated over many, in this research the leadership role has been subsumed under the management umbrella because Mintzberg was one of the first to identify the fact that leadership is not an isolated role (Kotter, 1982).

2.1 - The New Zealand Research

This section details the paucity of New Zealand research on senior managers and chief executives.

There are few New Zealand studies examining the work of chief executives, however, many researchers refer to (and have interviewed) chief executives as part of other research: human resource, marketing, financial etc. The following six New Zealand studies were found to be most relevant to this study in reflecting New Zealand thinking about the current work of chief executives:

The Making of New Zealand Managers; Hooley and Franko (1990);

Islands of Excellence? A Study of Management in New Zealand: Campbell-Hunt et al (1993);

Management Competencies in New Zealand; Page et al (1994);

The Competencies Used to Assess the Effectiveness of NZ Managers; Rippin (1995);

On Becoming an Effective CEO: Profiles of Information Management; Keane (1997);

A Profile of Managerial Effectiveness: A National Empirical Study; Page (1997).

Hooley and Franko (1990) suggest that managers need “to combine conceptual and analytical skills development with sound, relevant, practical experience.” (p39). They state that “inevitably the quality of our managers, and especially their ability to evolve and implement strategies to compete with their international counterparts, is coming under scrutiny.” (p iii). They also confirm that new skills are needed in the public sector“high quality management is required in the public and not-for-profit sectors to ensure that wealth created elsewhere is efficiently and effectively managed to provide goods and services to the greater benefit of society as a whole.”

Campbell-Hunt et al (1993) define managers as “any economic agent who allocates and coordinates resources within a hierarchy.” (p4). They offer five theoretical models to examine the changes in management in New Zealand as shown in Table 2.

They also say that “many studies of widely different aspects of management practice reveal a gap between what managers affirm, and even commit resources to, and what they ensure

takes place.” (p139). It was also found that “New Zealand rated in the bottom quartile of the OECD according to the criteria: entrepreneurship, management development, corporate performance, business efficiency” (p3) and they agreed with Hooley and Franko (1990) that there is a general lack of human resource management capability in New Zealand organisations, which is a major risk for the future.

Table 2 - Model of Management Practice

Model	Management Factors
Deterministic	Managers’ conduct determines firms’ performance, eg innovativeness, quality. Emphasises observable reactions to observable stimuli.
Rational Planning	Managers in rational decision making mode. Systems driven. Informal organisation or accumulated wisdom not allowed to intrude.
Organisational Learning	Social systems approach. Looks at the mental maps and how managers change them. Views manager as a learner.
Entrepreneurship Model	Emphasises the manager as an entrepreneur willing to exploit opportunities.
Normative Model	Looks at predicted management skills needed after deregulation eg strategy, marketing, learning, innovation, HR leaders, builders, dynamic to match external energy.

Compiled from the work of Campbell-Hunt et al (1993)

Rippin (1995) looked at managerial effectiveness and concluded that the most important qualities were: “ability to deal with people; being able to persuade and influence staff, to negotiate and relate well to people, to communicate openly and honestly, to manage change, to assess and develop staff.”

Page (1997) conducted a national empirical study of “managerial effectiveness” and said that NZ “managers are being accused of being under educated and underskilled ... while at the same time there is a bewildering array of claims about what constitutes managerial effectiveness”. (p1). Effectiveness is in the eye of the beholder and has been argued in the literature for years (Katz & Kahn, 1966; Luthans et al,1988; and Worledge, 1996).

Finally Keane (1997) examined the effectiveness and use of information by chief executive officers using an interview process which discussed the use of information by the CEO in the previous 24 hours. He found that “75% of all important information was obtained

within easy walking distance of the CEO's office" and only "1% via computers." He also found that social networking was more important as the size of the organisation increased.

Some common themes have emerged from the literature on the nature of the job of a manager. However, because of the paucity of studies on chief executives there is no agreement about their function and roles. This research attempts to identify the roles of New Zealand public sector chief executives and the application of Mintzberg's role theory to them.

The final word on the literature of management should go to the author of the History of Management Thought, C. S. George, who concluded that:

"Management is one of the most nebulous and at the same time most ubiquitous functions in all societies.... it is and always has been the strong right hand of all leaders." (George, 1972, p1).

2.2 - Mintzberg's Research

This section describes the original research of Henry Mintzberg where he observed five chief executives and documented their activities and time use and developed a theory of management roles.

In 1973 Mintzberg published his study on his structured observation of the work of five chief executives. He observed the chief executives in their workplace for one week each and noted their time use at their desks and when interacting with others. He focused on the job rather than the person and looked at the similarities in the managers' work rather than the differences. He documented the content (what is actually done) of the work of the chief executives rather than the peripheral characteristics or their environment.

Table 3 - Mintzberg's Roles of Management

<i>INTERPERSONAL ROLES</i>	<i>INFORMATIONAL ROLES</i>	<i>DECISIONAL ROLES</i>
Figurehead	Monitor	Entrepreneur
Leader	Disseminator	Disturbance Handler
Liaison	Spokesperson	Resource Allocator
		Negotiator

Mintzberg (1973)

From his observations he developed his theory of ten roles of management, Table 3. These are described in Tables 4 - 6.

Table 4 - Description of Management Roles - Interpersonal

Role	Description
<i>Figurehead</i>	Symbolic head; obliged to perform duties of legal or social nature.
<i>Leader</i>	Responsible for the motivation and action of subordinates/staff; including, training and other human resource functions (recruitment, retention etc)
<i>Liaison</i>	Maintains a self developed network of outside contacts and information gathers/brokers who provide favours and information.

Table 5 - Description of Management Roles - Informational

Role	Description
<i>Monitor</i>	Seeks and received a wide variety of special information (much of it current) to develop thorough understanding of Department and the environment. CE emerges as the nerve centre of internal and external information of the Department.
<i>Disseminator</i>	Transmits information received from the outside to members of the Department. Some information was factual some involving interpretation, analysis and added value by CE before being passed on.
<i>Spokesperson</i>	Transmits information to outsiders about plans, policies, actions, results. Use of CE's sector expertise.

Table 6 - Description of Management Roles - Decisional

Role	Description
Entrepreneur	Searches for opportunities, or ideas to initiate change or improvement projects. Sometimes supervises projects personally.
Disturbance Handler	Responsible for corrective action when department faces important unexpected disturbances.
Resource Allocator	Responsible for the allocation time, money, information, capital, equipment etc. Approval role.
Negotiator	Responsible for representing the department at major negotiations.

Mintzberg's study fell into the work activity school of research on senior managers along with that of Carlson (1951); Copeman et al, (1963); Dublin & Spray (1964); Brewer & Tomlinson (1964) and Stewart (1963). This is the "school of inductive research, in which the work activities of managers are analyzed systematically; conclusions are drawn only when they can be supported by empirical evidence and there are explicit attempts to incorporate the findings of previous studies in the development of new conclusions". (p 21).

Mintzberg's work was considered groundbreaking at the time, for two reasons. Firstly he broke from the ranks of his peers and predecessors by not using the "diary method" to ascertain what managers did. Previous diary studies include those of Burns (1954); Dubin

& Spray (1964); Horne & Lupton (1965) and Stewart (1963, 1965, 1967). The diary method only looked at the “inputs” of a manager’s job, whereas “structured observation” examined both the inputs and outputs. The diary method involved the manager, him or herself, recording their activities *after* they occurred. The obvious limitations of this method are the time required to record *every* action, the lack of accuracy of coding (what one manager considers a crisis another may consider a challenge) and also the motivation needed by the managers to accurately record every activity.

Secondly, his research redefined the roles of a manager into the “interpersonal, informational and the decisional roles.” This was a departure from the descriptions used historically, from the Egyptians through to Fayol and onwards, that of “planning, organising, staffing, directing, co-ordinating, reporting, budgeting” (George, 1972, p114). A reviewer at the time of Mintzberg’s publication said “rarely has the field of organizational behavior had better evidence of the value of description and induction than is found in Mintzberg’s book.” (Weick, 1974, p111). Mintzberg’s work has since been used as the definitive text by many researchers because it integrated the work of the manager and the work of the leader: including: Kotter (1982) and Peters & Waterman (1982). “Hundreds of studies have looked at issues related to leadership and management, but few focus on what managers actually do.” (Ives and Olson in Stephens et al, 1992, p451).

In 1994, Mintzberg said of his 1973 work that he was trying to “replace a worn-out description of managerial work and resurrect the role of intuition in management literature.” He was particularly keen to emphasise the “grounded” nature of his theory. Grounded meant rooted in observable data. He wanted to develop the best descriptive theory possible based on observation of what chief executives actually do. He later generalised his theory and extended his observations to other managers, (Mintzberg, 1994)

Mintzberg’s methodology involved observing a heterogeneous group of five chief executives from the public and private sectors for one, 5 day, working week each. During each week he documented a chronological record of their activities which included a record of their deskwork; incoming and outgoing mail and a record of their meetings, visits and contacts (including who was present; the purpose of the meetings; the duration and

whether these were scheduled or unanticipated meetings). He documented the activities into ten minute categories and later assigned roles to each category according to the purpose of each activity. He said that the “research had to be comprehensive to capture, not what might interest me or draw my attention for the moment, but the whole job of managing.” He aimed “to describe what we did not know, to develop from a study of specific managers a general statement of managerial roles” (Mintzberg, 1973, p 231).

Limitations to Mintzberg’s methodology were similar to the ones found in this present study; problems of data collection (eg; only hearing one side of a telephone call, and the speed with which tasks and activities changed); evening work done by the chief executives (it was not possible to shadow them for time spent outside their work environment); confidential meetings (for example a performance assessment); complexity of meetings and tasks (chief executives frequently changed roles during a meeting and coding of these was difficult).

3.0 - BACKGROUND TO THIS STUDY

This section looks at the background and rationale to this study.

This time use study in the NZ context is based on the work of Mintzberg (1973) and differs from other studies because it was designed to look at what manager's *actually* do rather than what they are supposed to do; what others think or say they should do, or what they report that they do, (often in diaries, surveys or interviews after the fact).

Some previous New Zealand studies have looked at various aspects of managers' work from the skills needed, to the effectiveness of managers and their use of information. They include work by:

Hooley and Franko (1990) who stressed that new skills were needed in the public sector for the good of NZ society as a whole;

Campbell-Hunt et al (1993) who developed models to predict and compare management practice to the reality. They said that "many studies of widely different aspects of management practice reveal a gap between what managers affirm, and even commit resources to, and what they ensure takes place";

Rippin (1995) who examined the effectiveness of management practices using interviews and survey methods. She identified some key skills and qualities necessary for effective management. These were mainly the people relationships skills of negotiation, communication and ability to manage change;

Keane (1997) who examined the information use by chief executive officers using an interview process discuss their use of information in the previous 24 hours;

Page (1997) who also examined the issue of effectiveness by conducting an empirical study using a survey methodology through a management magazine.

Each of these studies used methodologies (often secondary sources) that collected or examined data after the fact. This time-use study differs from the previous studies of

managers in New Zealand because it was designed specifically to look at what managers (a group of chief executives) are doing in real-time and the applicability of Mintzberg's role theory of management.

One other NZ study was influential in the decision to conduct this research on New Zealand public sector chief executives. In 1994 the NZ State Services Commission (SSC) produced the NZ Public Service Chief Executive's Competencies in answer to the 1991 Review of the State Sector Reforms (known as the Logan Review). The review identified the need for "strategic service-wide approach to management development and provide assurance that its most important asset (public service management) was being developed consistently." (SSC, p1).

The SSC developed a list of core competencies for chief executives based on interviews, focus groups and analysis conducted with public service chief executives and their key stakeholders (the ministers of the crown, senior staff and the government's central control agencies: The Treasury, Department of Prime Minister and Cabinet and the SSC itself). Like previous studies the competency study identified what chief executives should do in their jobs. The competencies, below, include indicators of "highly effective" and "ineffective" behaviours in each category.

NZ Public Service Chief Executives' Competencies

- Building and sustaining relationships
- Commitment to achievement
- Effective communication
- Honesty and integrity
- Intellectual capability
- Management of people
- Managerial expertise
- Managing in the political/cultural context
- Strategic leadership

Keane, (1997) and Rippin, (1995) indicate the paucity of research on NZ chief executives. This may be because chief executives are often seen to be too busy to be involved in research, or the complexity and confidentiality of their work, or the fact that they generally surround themselves with good “gate-keepers” who screen their callers and mail which can make them inaccessible to the average researcher.

The aim of this research is to identify what chief executives actually do and look at whether Mintzberg’s role theory is applicable to the 1997 New Zealand situation. It could be said that where chief executives’ spend their time indicates their priorities and preferred roles. This study aimed to find out. There was no intention to compare or contrast the chief executives in the 1973 study with this 1997 research.

The field work, real-time observation method was chosen after a variety of other research methods were examined: these ranged from secondary sources, critical incident, questionnaire, diary, activity sampling, unstructured observation and structured observation (Stewart, 1963; Kotter, 1982; Levinson & Rosenthal, (1984); Inkson et al, 1986; Tichy & Ulrich, 1989; Hooley & Franko, 1990; Patton, 1991 Campbell Hunt et al, 1993; Mintzberg, 1994; Page et al, 1994; and Kanter, 1995).

4.0 - METHODOLOGY

This section describes the methodology of data collection and interpretation.

The field work, real-time observation method was chosen because it was the one methodology that would allow direct observation and allowed both quantitative and qualitative data to be recorded. It was also the only way to get close to the chief executives and find out what they actually did rather than what they were supposed to do or what they thought they did. The differences in methodology between this and Mintzberg's research are shown in Table 7.

Table 7 - Differences Between Mintzberg's and This Study

<i>Factor</i>	<i>Mintzberg's Research 1973</i>	<i>This Research 1997</i>
Sample Size	Five	Six
Characteristics of sample	Chief Executives	Chief Executives
Length of time observed	One week each	One day each
Sector observed	A mix of public and private sector chief executives	Public sector chief executives
Method	Observational field study	Observational field study
Frequency of observation	Ten minute intervals rounded to the nearest hour	One minute intervals
Role Analysis	Developed after the data was analysed. Length of time each spent in various roles not recorded.	Role category and length of time in each role was recorded during data collection.

The observation period for each of the six chief executives was one full working day. Using Mintzberg's methodology, each event in the day was observed, documented and categorised into:

1. A chronological time record of activities (documented minute by minute)
2. A mail record - in and outwards (including email)
3. A contact record (who they met - whether scheduled or unscheduled meetings)

1. *Time Record* - noted minute by minute each activity as it occurred. This could be desk work, emails, mail, writing reports, phone calls, scheduled or unscheduled meetings etc. This was cross referenced to the other two recording charts (the mail and contact record). Numerous 10 - 20 second interactions with personal assistants were not recorded.
2. *Mail Record* - this involved documenting all incoming and outgoing paper and email (which did not exist in Mintzberg's study). Mail was categorised into number of pieces received, the format (letter, magazine, newsletter, memo) and the originator was recorded, then the purpose of mail, the amount of attention the chief executives gave to it (skim, read, etc) then finally the action taken was recorded, (passed onto secretary, staff, or others or put into the briefcase for later reading etc).
3. *Contact Record* - described the verbal contacts both telephone and face to face. This record was categorised into the medium (face to face or phone contact); purpose; participants (who was involved); initiator; duration and place.

The coding was developed from the function or purpose of each interaction observed, for example when a chief executive was attending a parliamentary book launch he was representing his department and was observed talking to others, exchanging and giving information. These interactions were coded under the "interpersonal roles" as a specific example of the "figurehead" role. The adaptation made to Mintzberg methodology was the identification of roles at the time of observation. (He developed his roles and theory after the observations.) Because the intention was to see if Mintzberg's roles and theory was still applicable in 1997 it was essential to use the same roles as he did.

Mintzberg's role fell into three clusters (Table 3):

Interpersonal - this included the figurehead, the leader and the liaison role (Table 4).

Informational - this included the monitor, the disseminator of information and the spokesperson role (Table 5).

Decisional - entrepreneur (improvement projects to bring about change), the disturbance handler (corrective action), the resource allocator, and negotiator (Table 6).

If the chief executives changed roles during any interaction or meeting these were recorded and timed. Each short interruption (if it involved meeting another person) was recorded as an “unscheduled meeting” and coded according to the purpose of the meeting. It was often the “content” and outcome of the discussion that indicated the coding category. Sometimes the content did not become clear until near the end of the discussion when action was about to be taken. This often allowed the researcher time to reflect on the incident and change the coding as the outcome emerged.

The choice of code was made on the day of recording as suggested by Mintzberg.

“In effect, the researcher is influenced in his coding practices, not by the standing literature and his own previous experiences, but by the single event taking place before him.” (Mintzberg, 1970,p3).

Fieldwork was conducted over a six month period and cross checks were made to ensure consistency of coding for each chief executive.

Fieldwork study has an anthropological origin and as Malinowski (1963) said “it always had to start from an empirical fact or image engraved in the mind.” He claimed that in order to reach the level of abstraction and theory necessary for scientific research the researcher needed to stay away from concepts and remain near the subjects he was observing. (Noel, 1989, p39). This study could not have got closer to the subjects. Unlike some New Zealand studies (discussed above) that used questionnaires, reported anecdotes or after the fact diary recording, this study aimed to accurately record moment by moment what the 6 New Zealand chief executives did in an average day.

According to Noel (1989) many other management studies have involved such field work, for example “the Hawthorne Studies (Roethlisberger and Dickson, 1939); the Glacier project (Jacques,1952); Melville Dalton’s Men who Manage, (1959); studies of bureaucracies (Blau, 1963; Crozier, 1963), and studies of managers (Carlson, 1951; Stewart, 1967; Mintzberg, 1973)”.

Minichiello et al (1990) and Grove & Fisk (1992) suggest that field research is characterised by a period of intense social interaction between the researcher and the subjects in the milieu of the latter. This was definitely the case in this field study.

The observational field study method used involved a mix of quantitative and qualitative research. The argument for qualitative (idiographic) or quantitative (nomothetic) theories continues with the quantitative school aiming to be objective, reliable, standardised, valid, generalisable, replicable ethic and value free. While the qualitative school acknowledges it is value laden; it takes an individual perspective, lets the realities of the world emerge, gives meaning to systems, allows for social constructs and is emic (gives the insider's perspective) and is often unable to quantify results in terms that can be measured or replicated. Qualitative research is "by design rather open-ended and interpretative". (Gibson et al,1985, p16).

Archer (1988, p266) offers three major reasons for the adoption of qualitative methods in management research. Firstly it can pay attention to micro level aspects otherwise not accessible. (Hence the detailed recording of the activities minute by minute.) Secondly, the state of the theoretical development of quantitative methods means that they cannot always be used, leaving way for the qualitative approach. Thirdly, that "in contrast with the pseudo-science" of quantitative methods, qualitative approaches permit access to the "real stuff of human interaction." To quote Marcus Aurelius, "nothing has such power to broaden the mind as the ability to investigate systematically and truly all that comes under thy observations in life" (quoted in Myers, 1988, p18).

Structured observation technique focuses on the qualitative individual episodes in chief executives' work and looks at the way they spend their time. The compromise between too little (informal interviews) and too much quantitative structure (moment by moment recording) is a difficult one. The structured observation technique allowed the flexibility of asking questions of the chief executives while recording work within a structured framework. The framework was flexible enough to allow interpretation and addition by the observer on a moment by moment basis. "To me, good descriptive theory in the right hands is a prescriptive tool, perhaps the most powerful one we have," (Mintzberg, 1973,p xii).

It was the wish to find out exactly what chief executives did on a daily basis that made this the preferred method. Asking chief executives what they did yesterday is analogous to asking someone “what they had to eat yesterday”. They will usually tell you what you expect to hear: that they ate fruit and vegetables, but they will probably forget to mention the chocolate bar and the glass of wine they had after dinner.

4.1 - Interpretation of results

When interpreting data, Kets de Vries (in Noel, 1989, p35), proposes four rules:

1. *thematic unity* (shaping the data into an interconnected cohesive unit)
2. *pattern matching* (searching for structural parallels over time and events)
3. *psychological urgency* (identifying in any situation some most pressing problems)
4. *multiple function* (analyzing from many different points of view, since any data can have more than one meaning).

A combination of these rules was used for analysis, interpretation and reporting of the results.

5.0 - LIMITATIONS TO THE METHODOLOGY

This section describes the limits to the methodology and the ways that these were overcome.

Limits to the methodology chosen fell into 5 main categories:

1. The Hawthorne Effect
2. Data Collection Issues
3. Types of Coding
4. Prior Knowledge
5. Confidentiality and Anonymity

1. The Hawthorne Effect

The Hawthorne effect is the likelihood of people acting differently under scrutiny than they would if they were not being shadowed, which could skew results.

The chief executives were so engrossed in the constant demands of their day that it did not (according to them) become an issue. The researcher had no influence on the meeting schedule or content of the day. Chief executives were assured that she was there to study the content of managerial activities not their performance. This was reiterated at the beginning of each day and eased any tension there may otherwise have been. After the first half hour of observation the chief executives appeared to carry on with their normal routine, making phone calls, doing desk work and moving from room to room often without noticing the researcher following behind them. (The researcher occasionally collided with a chief executive who was moving at speed and forgot they were being trailed by the researcher.) To check this limitation the chief executives personal assistants (PA's) were asked at the end of each day how typical the day was and all answered fairly average.

The researcher's presence was acknowledged by the chief executives in all scheduled meetings, where people (often before the observation day) were asked if they objected to the researcher's presence, none said they did.

2. *Data Collection Issues*

There were three main collection issues faced in using the observation methodology: (1) The hectic pace that the chief executives worked at. (2) The inability to gather all the data during telephone calls (the researcher only heard one side of the conversation) and (3) the limitation of work setting, that is the difficulty in recording the work that chief executives did outside their offices either in their homes or in other venues.

These limitations were partially overcome by the use of light-weight recording implements. A clipboard and pen (rather than a laptop computer) were used for ease of movement and because they were unobtrusive and created no noise. This was especially important when the chief executives were doing quiet desk work. The weight and portability of the clipboard proved essential when walking some kilometres (at speed) back and forth to external venues during which some chief executives held unscheduled meetings with the staff who were accompanying them.

The telephone obstacle was overcome by the astute use of questions every so often if the chief executives had forgotten to mention the caller or the purpose of the call after they'd hung up the telephone.

The limitations of setting were overcome by following the chief executives wherever possible during the work day. Most of the observation occurred within the chief executives' own offices, suites or meeting rooms. Some observations occurred in parliament buildings, ministers' offices, parliamentary foyers, and theatres. Informal meetings and interactions occurred en route from places like the lift, the cafeteria or the restroom and on the street. There was no difficulty in documenting these.

A limitation that occurred with one chief executive was the lack of an "invitation" for the researcher to Government House to attend a meeting. The chief executive was escorted to and from the building by the researcher to ensure that the unscheduled meetings (and there were some) were recorded along the way. The researcher accompanied one chief executive to a parliamentary book launch and another to parliament buildings and ministers' offices

for discussions on national strategy. The researcher received a visitor's pass when accompanying each chief executive.

The issue of night work was overcome by asking each chief executive to record the amount of time they spent on phone calls or paperwork. The paperwork was documented before it went into the briefcase and an early morning call the next day ensured that the data was captured.

3. *Types of Coding*

There were three coding limitations. One was the decision to use Mintzberg's ten roles for coding. This did not allow the flexibility to identify any additional roles that the chief executive may perform. The second was the type of coding chosen for this research which involved "both recording and interpreting an observation" (Dane, 1990, p155) and as all interpretation is subjective this was a limitation. The more filters a piece of information or a communication has to go through in order to be understood the more likely there is to be a misinterpretation. As all chief executives and their role in the public service were known to the researcher this barrier was not major. For example, when the chief executives said they were talking to a "central agency", a "minister's secretary" etc it was simply a matter of asking "which one" or "who". (In the government sector, minister's secretaries are not stenographers but rather the gatekeepers and often the conduit for instructions to chief executives from ministers). Thirdly, there is always the danger of filtering and deleting information when observing, recording and coding information, either through loss of concentration (which can move from the external event of observing to an internal thought or feeling, a headache in one instance) or through external distractions. Gellert, (in Dane, 1990, p157) says that "the number of categories and the number of coding errors are directly related". The way that these problems were overcome was to organise the coding charts into one-page checklists and stick to Mintzberg's ten role categories. Once all the data had been gathered a cross check was made to ensure that each use of a code had been consistent - eg that each time a chief executive attended a ceremonial function it was coded as "figurehead"; or each time external networks were accessed and used this was coded as "liaison" etc.

4. *Prior Knowledge*

All the chief executives in the sample knew or were known to the researcher. This could lead the researcher to leaps of judgement and too much interpretation which is why the flexible methodology was valuable. The fact that the research was looking at roles and not performance meant that she was able to be consistent between chief executives in the coding activities (and had Mintzberg's earlier guidelines to fall back on if necessary).

5. *Confidentiality and Anonymity*

Confidentiality of information and anonymity of identity was guaranteed. For this reason the size of the departments is not given, nor is the gender of the chief executive. Where there is no easy grammatical solution, the masculine gender is used, in the old fashioned convention. Participants were also given the right to edit any publications for any personal information which could identify them. Because of the sensitivities surrounding the work of government chief executives it was expected that the researcher would have to sign a "secrecy" declaration. However, only one asked for this to be done. The chief executives prior knowledge of the researcher may have been the reason for this. On only one occasion did a chief executive ask the researcher to leave the room while conducting a sensitive disciplinary staff interview. These issues were discussed before the research began.

6.0 - CHOICE OF SAMPLE

This section describes the sample group.

The research sample consisted of a group of six chief executives currently employed in the New Zealand public service. The titles sometimes used for these people is “departmental secretary” or “departmental head”. Each person described themselves as the chief executive of the department and that is the terminology used throughout this study.

The sample was deliberately, a small, convenient sample of chief executives known to the researcher. The direct observation method meant that a large sample was not possible. Also the difficulty of access to chief executives, their seniority, the nature and sensitivity of their work meant that many who were invited chose not to participate in such an intensive one on one study.

Three separate sets of “invitations to participate” in the research were sent to a 6 different chief executives with zero results. The responses ranging from “no time”, “too confidential”, “too much sensitive material” or “it’s budget round and too complicated.” The researcher then chose a sample of chief executives known to her. These were invited (in writing) to participate. Information sheets were provided on the nature and scope of the research. These were followed up with a phone call and arrangements made to sign the consent forms. Participants were free to withdraw from the research at any stage. None chose to.

7.0 - RESULTS

This section describes the data collection, gives a summary of key findings and individual results for each chief executive

7.1 - Data Collection

The total time for the field work was 3,961 minutes - (66 hours). Some evening hours, at home, were not directly observed but reported on the following day. The research data gathering involved meeting each chief executive in their office at a prearranged time to begin the recording. Each day started with refreshments and a discussion about the day's diary before the activities began or, in one case recommenced (these meetings were coded as scheduled meetings). One chief executive had been in the office since 5 am, which was his normal practice. Fortunately for the researcher he had been doing desk work (and had not seen or spoken to anyone else) and was able to hand over two 5 cm thick folders of mail that he had actioned. Each of these was documented, discussed where necessary and coded.

Each stopped for a quick lunch break (10 to 20 minutes) and invited the researcher to join. During this time they asked further questions about the research and observations to date. These were freely shared and discussed.

Following the observations, the data analysis involved structuring each chief executive's time use into the relevant categories and roles. A summary of each participant's time and activities was collated and tabulated with percentages calculated for each major subset (eg outward mail; verbal contact; meetings etc), Tables 8 to 22. Comfort and coffee stops were recorded but not included in the final analysis unless there was a meeting associated with them. Most refreshments were taken at their desks while checking emails etc.

The chief executives in the study were tertiary qualified. and were in their first, second or third position as a chief executive.

7.2 - SUMMARY OF KEY FINDINGS

The results confirm a similar pattern to Mintzberg that is, that “manager’s jobs were activity, characterised by brevity, variety and fragmentation”. It is not intended to give a detailed comparison of the chief executives in each study, but five differences were observed:

1. The average daily hours worked increased from 7.5 to 11 hours in this study.
2. The use of email as a communication medium was new.
3. The roles of risk and stakeholder management were identified as being more important in the 1997 environment.
4. The temperament differences (introversion/extroversion) were identified as influencing roles in this study.
5. The decisional cluster of roles were seen as the least observed in this study and had been identified by Mintzberg as an important cluster in the chief executive’s job.

The management roles (Table 3) were identified in both studies as a result of the time use observation, and supported the grounded nature of Mintzberg’s theory because it was rooted in detailed observable data. (Argyris and Schon, 1974). A discussion of each chief executive’s time use and individual profile is given below as a context for the discussion of managerial roles identified in this study.

7.3 - INDIVIDUAL CHIEF EXECUTIVE'S RESULTS

CHIEF EXECUTIVE A

Worked 855 minutes (14.2 hours), Table 15, the longest period of any chief executive in the study (and an average day according to the chief executive and staff). This chief executive started at 5 am with deskwork processing the in tray. This was delivered to the researcher for documenting and coding on her arrival at 7 am. 53.2% of time (7.5 hours) was spent in 12 scheduled meetings, Table 17, with 6.1% (52 minutes) on 13 unscheduled meetings, Table 18, ranging in time from 1 - 19 minutes in duration. Deskwork, Table 19, totalling 37.9% of the day, consisted of 15 separate sessions, of which 29 minutes were spent on emails, and 4.9 hours (295 minutes) on other deskwork. 10 telephone calls were made or received totalling 24 minutes (3.3% of worked time), Table 20.

CE A spent 64.6% of time on the interpersonal role, 30.6% of this in external liaison or stakeholder management, Table 8. 17.7% was spent on the informational role, Table 10, most of this on the disseminator role and only 0.6% on the monitor role which was the lowest of any in the study. The chief executive reported that the staff sometimes complained that the CE managed external relations at the expense of the management (monitoring) role. 17.7 % of time was spent on the decisional role, Table 12, mainly disturbance handling (16.8%) dealing with issues about boundaries between themselves and another department. This chief executive had initiated the meeting with the chief executive and senior team of the other department to sort through the issues.

CHIEF EXECUTIVE B

Worked 592 minutes (9.9 hours), Table 15. Like most others in the study he arrived early to get a head start on his in tray. 59.4% of time (5.8 hours) was spent in 5 scheduled meetings, Table 17, with (78 minutes) on 4 unscheduled meetings (13.2%) ranging in time from 1 - 60 minutes in duration, Table 18. Deskwork, Table 19, consisted of 11 separate sessions, occupied 27.4% of work time [1.8 hours (112 minutes)]. No telephone calls were made or received during the observation period, however emails were used instead (to the senior team) totalling 50 minutes for the day, Table 20.

44.4% of time was spent in the interpersonal role; 38.7% in the informational role and 16.8% in the decisional role, Tables 8, 10 & 12. There were no recorded events in the

negotiator or resource allocator role. However, 32.3% of time was spent in the monitor role and on one occasion the whole senior team and chief executive spent 34 minutes discussing a \$5,000 budget overspend.

CHIEF EXECUTIVE C

Worked 730 minutes (12.2 hours), Table 15. Spent 75.6 % of time in scheduled meetings, Table 17, 11.6% in unscheduled meetings, Table 18. Deskwork, Table 19, accounted for 9.6% of time (12 sessions) and telephone calls, Table 20, least in the study, another 3.2%. (10 calls - average duration 3.2 minutes). The first period of deskwork occurred after being in the office for two hours. The previous hours had been spent in scheduled and unscheduled meetings; (9 scheduled [75.6%] and 17 unscheduled [11.6%] for the whole day). Most meetings were held in and around the CE's office or suite. Like all the others in the study, this CE had an open door policy except when holding scheduled meetings. The largest gathering held for the day involved a 'state of the nation' speech to 40 plus staff.

The negotiator role (3.8%) involved discussions with a related external agency where resources (time, people and money) needed to be allocated on behalf of the department. The resource allocator (the highest of any in the study) took 4.1% of time and involved authority approvals for time, money and people resource.

Interpersonal roles took 56.4% of time. Informational role was 20.6% and decisional 22.9% of the day, Tables 8, 10 & 12. There was no entrepreneurial activity recorded for this CE. External interactions in the liaison role took 23.7% of time. Much of this was involved in setting up recruitment panels with outsiders for a senior management position and contacting overseas sources gathering research for use inside the department. The final liaison encounter for the day involved a networking meeting with peers.

Internal disseminator meetings, where the chief executive transferred information back into the organisation, were held with marketing and PR people and over morning and afternoon tea with senior staff to transfer informal information and took 5.3% of the total work time. Disturbance handling took 15% of time and this was taken up with dealing with issues raised in the media that directly impacted the department. Like the other chief executives who were involved in disturbance handling, this chief executive gathered information from

other informal (senior staff and colleagues) and formal sources (standards organisations, senior legal people) etc before speaking to staff and then the media.

This chief executive was the only one whose PA screened and made all calls (on instruction) and who did not make any calls except one to a spouse (who had been left hanging on the telephone for some minutes when the chief executive was distracted by yet another unscheduled meeting). Dictation was given to the PA rather than using the computer or email. A series of ordered “in” trays were piled on the desk and during the observation day this CE managed to process the three that were considered most urgent.

This CE sent more “appreciation” notes and letters to staff than any other observed.

CHIEF EXECUTIVE D

Worked 659 minutes (11.0 hours), Table 15. Spent 38.1 % of time in 7 scheduled meetings Table 17, and 3.9% in 8 unscheduled meetings, Table 18. Deskwork, Table 19, was the highest of any chief executive in the study, and accounted for 43.9% of time (9 separate sessions) and telephone calls, Table 20, another 14.1%. (9 calls - average duration 10.3 minutes). Most meetings were held in the chief executive’s office or suite. Like all others in the study, this CE had an open door policy except when holding scheduled meetings. The largest gatherings held for the day involved a ministerial debriefing meeting held with 21 senior and middle managers to relay ministerial instructions, trends and issues following a visit to the Minister’s Offices. The accuracy with which this information was transmitted was amazing. Few notes were taken during the ministerial meeting by the CE, yet he was able to transmit the facts, the implications, the nuances and the future consequences of everything that was said during the meeting. This skill of synthesis was observed in many of the CEs. It was the ability to take the weak market signals or indicators and interpret, add, extrapolate and forecast the implications for their departments.

CE D spent 25.9% in the interpersonal role (the lowest of any of the CEs); 59.5% in the informational role, and 14.5% (again the lowest) in the decisional role Tables 8, 10 & 12. Most of this was spent in disturbance handling (again in response to issues initiated by the

media). The time spent (1.2%) in the resource allocator role involved delegating their own authority as CE to members of the senior team.

CHIEF EXECUTIVE E

Worked 585 minutes (9.7 hours), Table 15, spent 51.3 % of time in 10 scheduled meetings, Table 17, and 18.1% in 22 unscheduled meetings, Table 18, (the highest in the study). Deskwork, Table 19, accounted for 18.5% of time (21 sessions again, the highest in the study) and telephone calls, Table 20, another 12.1%. (29 calls - average duration 2.4 minutes.) This chief executive made 27 of those calls and often searched the database for phone numbers to ring and on 5 occasions left messages for people to call back. The calls were often in reply to emails received requesting information updates or state of operations responses from senior staff. On one occasion four calls were made before locating a particular staff member. The largest meetings for the day involved two workshops (involving first 5 then 14 staff) where the CE walked and talked staff through the department's strategic vision and goals for the year ahead answering questions as they went.

67.9% of time was spent in the interpersonal role (the highest in the study). 57.1% of this time spent in the leadership role. 16.8% in the informational role and 15.2% in the decisional role. No time was spent in the negotiator role, Tables 8, 10 & 12.

CE E professed to be an extrovert and "information junkie". During meetings he talked more than anyone else in the study (ratio of 3 times more speaking than listening per hour). He also talked much faster than the average (about 170 words per minute against 110 - 120 for the others).

CHIEF EXECUTIVE F

Worked 539 minutes (9 hours), Table 15. Spent 42.4 % of time in 4 scheduled meetings, Table 17, and 13.4% in 20 unscheduled meetings, Table 18, (the second highest in the study). Deskwork, Table 19, accounted for 25.6% of time (16 sessions) and telephone calls, Table 20, another 18.6% (28 calls - average duration 2.8 minutes). This chief executive spent 56.2% of time in the interpersonal role mainly the leader (26.1%). 13.8% in the informational role (the least of all CEs). The decisional role was the highest of all

CEs in the study at 29.9% mainly in the negotiator role at 18.4%. CE F spent no time in the resource allocator role, Tables 8, 10 & 12.

8.0 - DISCUSSION

This section describes the application of Mintzberg's role theory identified in this study.

The three clusters and ten roles that Mintzberg identified from his research are described in Tables 8 -10 . The descriptions of each role and activities identified in this study are given.

8.1 - Interpersonal Roles

Table 8 - Percent Time Spent In Each Interpersonal Role For Each Chief Executive

Role / CEO	A	B	C	D	E	F
Figurehead	23.2	5.6	10.3	-	0.2	19.2
Leader	10.8	21.5	22.4	24.7	57.1	26.1
Liaison	30.6	17.3	23.7	1.2	10.6	10.9
Total	64.6	44.4	56.4	25.9	67.9	56.2

Table 9 - Description Of Management Roles Identified - Interpersonal

Role	Description	Identified in this Research
<i>Figurehead</i>	Symbolic head; obliged to perform duties of legal or social nature.	Figurehead seen in two forms - (1) attendance at ceremonial meetings - parliamentary openings, governor general gatherings (2) mail addressed to the CE because of their role and status.
<i>Leader</i>	Responsible for the motivation and action of subordinates/staff; including, training and other human resource functions (recruitment, retention etc)	One of the major roles identified. Motivation, training, recruitment, retention issues. Performance management interviews were seen here. Also meetings where the CE transmitted the direction, goals, vision and values of the organisation.
<i>Liaison</i>	Maintains a self developed network of outside contacts and information gathers/brokers who provide favours and information.	Numerous phone contacts with networks - especially seen in conjunction with the "disturbance handler role". The networks were used to gather and verify information during a disturbance as an external check.

This was the most frequently performed cluster of roles for all but one of the chief executives. Time spent in this cluster ranged from 25.9% to 67.9%, Table 8. The exception, CE B, made and received no telephone calls during the day of observation, he used email instead, though not as much as some others. The chief executives with the lower percentages tended to use email instead of face to face interactions even with their senior team (who were on the same floor) and described themselves as introverts. The others described themselves as extroverted.

Introversion and extroversion are two archetypes developed by Carl Jung in 1923 to explain people's temperament differences (Keirsey & Bates 1978). Jung's work was extended in the 1950s by Myers & Briggs (1962) and later still by Margerison & McCann (1984) who applied it to high performing teams. Introverts have a low need to interact with people; are often quieter; talk less; tend to think things through before talking about them (which means that people hear the pronouncements and decisions and sometimes not their "thinking in progress"). They prefer their own company to that of others and often, being surrounded by people on a continuing basis enervates rather than energises them. Extroverts by contrast gain their energy through interaction with people, talk their ideas out; can change their opinions quickly as a result of new (verbal) information.

The introversion and extroversion preferences of the chief executives did influence their methods of working and therefore the roles they preferred to play. For example the amount of interpersonal interaction they had with staff and stakeholders; their use of the email or telephone; the choice of letter writing or face to face meetings. This preference was also noted in the informational roles with the more extroverted chief executives using meetings or telephone interactions while the more introverted disseminated information by email or in writing.

Mintzberg's study indicated a preference for the verbal media though the introversion/extroversion preferences of his sample were not measured. Neither were they measured in this study, however, each chief executive had at some stage in their career completed a Myers-Briggs (1962) indicator that measured this dimension and these were reported to the researcher. (This was confirmed through observation).

8.1.1 - Figurehead Role: This role included the symbolic duties that are performed, often legal or social. For example attendance at ceremonial meetings, eg parliamentary book launches, governor general's gatherings. These occasions were seen as a necessary part of their role. They were also seen as occasions where chief executives met and exchanged "soft" information and trends with each other.

"The title of CEO is important in sourcing and/or making sense of information in over 50% of transactions" according to Keane (1997). There were examples of members of the public, staff and stakeholders (particularly the media) writing or calling the chief executive because of their figurehead role and the power and status proffered by that role. This meant they could give and get favours and speak on behalf of their departments. Several chief executives received letters or cards from staff and public thanking them or requesting favours related to cutting through the "red tape". These were coded as "status requests and acknowledgements". Percentages of time in this role varied from 0 - 23% according to the requests made and the external meetings attended.

8.1.2 - Leader Role. Table 14, indicates this role as the number one ranked in the study for all chief executives. At 27.1% this was the most preferred of all the roles. In this role chief executives were responsible for the motivation and action of staff, including training, human resource functions (recruitment, retention etc). Examples included: motivation and delegation to their senior teams; performance interviews; planning and filling staff vacancies; arranging for staff meetings/ seminars where they discussed the direction and goals (vision, values, and milestones) of the department, and organising overseas courses for senior executives.

All problem solving and solution giving fell into this category. Three out of the six chief executives referred to the department's statement of purpose (mission) when encouraging staff to keep the wider issues in mind. These same chief executives were seen linking the work of their subordinates to the bigger picture and longer term perspective.

Other ways that the chief executives were seen leading included:

- accessibility and availability - all had an open door policy except when having scheduled meetings.
- some had morning and afternoon tea with their senior teams and encouraged other staff to join them (in their office suite). None joined staff in the canteen, (each department had one).
- managing by walking around - most left their desks and went to the offices of their senior teams when they wished to speak to them; some on numerous occasions.
- all made requests of their senior teams - none gave a direct order.
- all juggled a variety of tasks with numerous interruptions - all with good humour and equanimity.
- two chief executives allowed their staff as well as their senior teams direct email access to them.

Since 1938, the literature has reported and emphasised the leadership role in management. The role was extended to that of the leader as a “communicator” in the 1950s (Rogers & Roethlisberger, 1952) and again to include the motivation of staff with Herzberg (1959). Kanter (1983, 1989, 1995) emphasised the change agent role of managers and more recently has emphasised the societal and community responsibility of organisational leaders. The ongoing change initiatives within each government department fell into this category. Chief executives were seen to be encouraging, exhorting and stimulating staff and their senior teams to stretch themselves, to set higher goals and to accomplish more in the change area than they originally thought possible. All except one chief executive was observed generating new ideas and possibilities within the boundaries of budget constraints. Often the issues raised by the senior teams were about the limited resource and the chief executive came up with alternative options, different ways of looking at things and suggestions for dealing with the problems. The wider societal and community issues were directly referred to by two out of the six chief executives during meetings.

It was obvious from the content of the meetings that the chief executives conducted that their emphasis was on the big picture, societal and public service good, with an emphasis on vision, goals and outcomes. As a key interpersonal role, leadership was seen as a real and tangible part of chief executive’s work, but not the only role they played.

8.1.3 - Liaison Role. In today's language we would call this role the stakeholder management role (Mitroff, 1983). That is, the role where outside contacts are actively managed and used for the benefit of the organisation. This was the second ranked role overall with the chief executives collectively spending 15.7% of their time in this role, Table 14. Mintzberg (1994) said that this role is more common among public sector top managers than in the private sector. This cannot be validated because this was not a comparative study, however, it would appear that government chief executives spent a varying proportion of their time on the liaison role. This role was closely linked to that of risk management (not specified by Mintzberg) but one that is emerging as an essential role for managers of the future. The chief executives reported to numerous Ministers of the Crown, and through the government monitoring mechanism to Central Agencies ie, The State Services Commission, The Treasury and the Department of Prime Minister and Cabinet. As well as these key stakeholders, the chief executives had their own constituents, clients or customer groups as well as lobby groups, non government organisations, other government departments (both policy and operational), universities, select committees, opposition members of parliament and the media to manage. Given the above, it was surprising that CE B saw only one external person (a stakeholder outside the organisation) during the day observed. His percentage of time in this role was 1.2% against 30% for the highest of all chief executives, Table 8.

The liaison role was closely related to the disturbance handler role, when five of the chief executives were observed ringing their contacts to gather information (they asked for impressions, advice and weak market information about the impending disturbance). All were then seen to use this information when strategising and problem solving with their staff about managing the disturbance.

The short informal meetings held with the researcher (for clarification or questioning) on the observed days were coded under "liaison" consistent with the definition of this role.

8.2 - Informational Roles.

Table 10 - Percent Time Spent In The Informational Roles For Each Chief Executive

Role / CEO	A	B	C	D	E	F
Monitor	0.6	32.3	13.8	8.8	7.3	4.9
Disseminator	15.8	6.4	5.3	30.3	7.1	7.2
Spokesperson	1.3	-	1.5	20.4	2.4	1.7
Total	17.7	38.7	20.6	59.5	16.8	13.8

Table 11 - Description of Management Roles Identified - Informational

Role	Description	Identified in this Research
<i>Monitor</i>	Seeks and received a wide variety of special information (much of it current) to develop thorough understanding of Department and the environment. CE emerges as the nerve centre of internal and external information of the Department.	Receiving reports, verbal and written on the state of play. External scanning for information eg periodicals, reviews etc (these were scanned at work but put aside for reading at home or on aircraft). This was often said to be a delegated task due to the nature of government reporting mechanisms. No CE read a periodical during the observed period of research.
<i>Disseminator</i>	Transmits information received from the outside to members of the Department. Some information was factual, some involving interpretation, analysis and added value by CE before being passed on.	Often seen as the coming together of information from various sources with the CE's slant put on it. Mail, email and messages passed on to others within the departments. Numerous small decisions made at this stage about who to involve and who to exclude from an issue.
<i>Spokesperson</i>	Transmits information to outsiders about plans, policies, actions, results. Use of CE's sector expertise.	Transmitter of information to stakeholders, eg Ministers etc. CE seen as the sector expert on standards. One of the least observed roles for NZ chief executives in this study.

CE D stood out as having this as their major role at 59.5%. This CE spent more time at the computer than any other and the least amount of time in the interpersonal role. This indicated their preference for gathering and disseminating information via computer, or telephone, rather than in person.

8.2.1 - Monitor Role - this role is the seeker and receiver of specialised information and was ranked 4th in this study, with chief executives spending collectively 11.3% of their time here, Table 14. This was seen in the research as receiving reports, verbal and written on the state of the department. External environmental scanning was done through international emails, magazines, periodicals and reviews; these were all skimmed.- none of these were read in depth on the day. All such information was put into a pile to be taken home or to be read while travelling. The monitor role has been noted in the literature since the turn of the century (Taylor, 1900, and Fayol, 1916 in George, 1972) where it was called “controlling”

Government departments have highly sophisticated reporting and measuring mechanisms. Many of these are managed for the chief executives by their corporate or chief financial officers, which could mean that some chief executives only monitor by exception. The time spent in each role ranged from 0.6% to 32.3%. The higher figure was for CE B, who on one occasion spent 35 minutes at a senior staff meeting discussing a \$5,000 overspend, and the lower by CE A who employed a chief financial officer.

The monitor role, like the liaison role is an essential role in risk management. As long as the chief executive is still accountable for the performance of his or her department, the monitoring role will continue to be an essential part of the job. Recent literature reinforces the renewed importance of controlling, measuring and monitoring; with business process re-engineerings, (Hammer & Champy, 1993) and the recent interest in NZ (conferences, workshops etc) on measuring the balanced scorecard (Kaplan & Norton, 1996).

8.2.2 - Disseminator Role - This is the information transmitter role, where information from outside is relayed into the department. This role involves analysis, interpretation and synthesis by the chief executive. This was seen as the chief executive sharing information that had been gleaned in the figurehead role (attendance at parliamentary openings and networking with colleagues) or in the spokesperson role (attendance on the minister) being synthesised, filtered, and transmitted to staff either by email, memo or at meetings. Having been present at the parliamentary networking and the ministers’ meetings and then at the staff meetings it was enlightening to read and listen to the synthesised versions and presentations to staff. A raft of factual and anecdotal information was mixed together to

create a “trend analysis” of forthcoming events with specific implications for each departments. The range of time spent in the disseminator role was 5.3% to 30.3% with the highest figure belonging to CE D who had the lowest interpersonal role score.

As the primary gatekeeper of information from ministers and central agencies the chief executive had a vital disseminator role in government departments. Three chief executives in the study had a formalised dissemination system from them to their staff (either through newsletters or regular team briefing meetings).

8.2.3 - *Spokesperson Role* - This role was the external information transmitter role. The receivers were usually outsiders, including stakeholders, ministers etc. Information was shared on the state of play of the department, eg its plans, policies, actions, results etc. This was also the role where the chief executives act as their sector experts; eg. one chief executive was asked by an external standard setting body for an expert opinion on likely changes to these standards. The range of time spent in this role was 0 to 20.4%.

8.3 - Decisional Roles

Table 12 - Percent Time Spent in The Decisional Roles For Each Chief Executive

Role / CEO	A	B	C	D	E	F
Entrepreneur	0.2	14.1	-	-	10.5	0.8
Disturbance Handler	16.8	2.7	15.0	13.3	4.0	10.7
Resource Allocator	0.7	-	4.1	1.2	0.7	-
Negotiator	-	-	3.8	-	-	18.4
Total	17.7	16.8	22.9	14.5	15.2	29.9

Table 13 - Description of Management Roles Identified - Decisional

Role	Description	Identified in this Research
Entrepreneur	Searches for opportunities, or ideas to initiate change or improvement projects. Sometimes supervises projects personally.	Strategy and review sessions conducted mainly with their senior teams. One CE was personally managing a special project.
Disturbance Handler	Responsible for corrective action when department faces important unexpected disturbances.	These fell into the damage control mode in response to issues raised by the Ministers, their offices the media etc.
Resource Allocator	Responsible for the allocation time, money, information, capital, equipment etc. Approval role.	As would be expected in a government department with an annually set budget there was little immediate budgetary approval except for senior team's expenses. Most resource allocation occurred around decisions on use of departmental time, equipment, staff or access to information by others.
Negotiator	Responsible for representing the department at major negotiations.	This role was observed where a CE had to negotiate for resources (mainly people and information) with another department. There were no formal negotiations during the observed period, which did not cover a budget round nor an industrial relations /wage round.

This cluster in Mintzberg's research included the entrepreneur role initiating improvement projects to bring about change. In this study change and the management of change was seen and reported by the chief executives as an ongoing part of their leadership role and as such was coded under "leadership". Only new projects initiated by the chief executives

were coded under the “entrepreneurial role. This thinking is in line with the emphasis in recent literature on the role of the chief executive as a leader of, and manager of change, in a continually turbulent environment. Organisational change is not seen today as a stop - start process rather a continuous process with occasional breaks for breath. (Kanter,1983, 1989, & 1995; Handy, 1989 & 1994; Collins & Porras, 1994; Rippin, 1995; Leigh, 1997; Hock, 1997).

No major national or departmental decisions were seen to be made during this study. Instead a series of small incremental decisions were observed. These were small activities that, when viewed individually, did not mean much: for instance who to involve in a meeting on a disturbance. However, when they all added up they formed a pattern that presented itself as an “idea” (some would say a strategy) from the chief executive’s mouth. The small stream of activities has become known as an “emergent strategy” according to Mintzberg (1994). This means it was not planned for, but developed as a result of a stream of actions.

Table 12, indicates that this was the role cluster least observed in the study. The total time ranging from 14.5% for CE D to 29.9% for CE F. The resource allocator role was ranked at 10, with the negotiator role at 9 and the entrepreneurial role at 8. However, the disturbance handler role was ranked at 5, Table 14. This may be because central agencies play such a major role in the negotiation of budgets and purchasing agreements and observations were conducted outside the contract negotiation cycle. Or it could mean that public sector chief executives do not play many decisional roles except disturbance handling. Most large organisations whether private or public have an annual budget cycle and any major purchases or expenses outside this cycle would be unusual.

8.3.1 - Entrepreneurial Role - This role was the third lowest role observed in the study. It involved the raising of new projects, innovations or projects personally managed, supervised or in one instance conducted by a chief executive.

The range of time spent on the day in this role ranged from 0 - 14.1%. The higher score involved CE B initiating a new project with a manager, spending 22 minutes discussing, plotting, mapping and planning the initiative. One other (CE E) at 10.5% was seen to be

personally managing a major information project - the only one doing so. He spent time briefing and enrolling staff in the project. He said that he did this in the initial stages then pulled back when the project team were clear about the requirements and are equipped to complete the project.

This role has had some recognition in the literature. According to Mintzberg (1973) it was implicitly acknowledged but not analysed. Since then authors such as Inkson et al (1986), Marsh (1993), Campbell-Hunt et al (1993), De Pree (1987), have identified this as an important role. There is, of course, an issue about how entrepreneurial a government chief executive can be when managing a department that has negotiated and prescribed outputs. It seems that they can be entrepreneurial about *how* they deliver but often not *what*. However, if new initiatives are not continually sought and developed at all levels it can also lead to a staid department and given that NZ managers scored lower than other OECD countries on the entrepreneurial dimension, it requires further investigation (Campbell-Hunt et al. 1993).

8.3.2 - *Disturbance Handler Role* - This role ranked 5th overall, with 10.4% of the collective time being spent in this role. It involved corrective action when a department was faced with unexpected disturbances, crises or incident. The role could arise when adequate risk management strategies were not in place. The risk management aspects of the chief executive role were not identified by Mintzberg but are essential in a turbulent and changing environment.

Each chief executive handled some form of disturbance during the observed day. Time in this role ranged from 2.7% to 16.8 %. The disturbances included negative media commentary that needed immediate responses; union issues; relationship difficulties with another agency or department; publication that showed the department in an unfavourable light; stakeholder complaints. A disturbance could be viewed as a lack of good risk management practices, so the chief executive with the lower score could be seen as being a better risk manager than the one with the higher score. However, this was not necessarily the case as the higher scoring chief executive was, in fact, engaged in risk management rather than disturbance handling; it was a preventative role. Here, then is a gap to be filled in Mintzberg's roles.

This role was most often seen in conjunction with the liaison role, where the chief executives called their colleagues and contacts to verify facts, gather weak market information and seek advice and clarification. It was noticeable that the disturbance handler role took precedence over any other planned activities, desk work, email or phone calls. The chief executives were able to “clear the decks” and concentrate (at least for a short time) on the issue at hand. Each chief executive engaged in this role moved from what could be described as informal, casual conversation to earnest and intense strategy formulation. The body language, speech patterns, speed of movement and speech all changed markedly when they were in this role. There was never a sense of panic or anxiety; rather a sense of intensity and philosophic reasoning. There was no blaming nor accusing, merely concentrated strategising and problem solving to move quickly to an outcome for the greater good of the department and in some cases for society.

Disturbances, either actual or potential, were not identified by chief executives in any major written reports. They came in the form of telephone calls from ministers’ offices or from the media or more rarely in the form of face to face meetings where senior managers relayed information to the CE. One or two potential disturbances were received as complaint letters addressed personally to the chief executives. Keane (1997) also found that “surprises came verbally”.

8.3.3 - Resource Allocator Role - (Table 14) was responsible for the allocation of resources (time, money, information, people, capital, equipment etc). It was the authorisation and approval role for chief executives. This was the lowest role observed in terms of time spent on the role (0 - 4.1%) which was not unexpected given the budgetary cycle of governments, which involve intensive periods of negotiation for resources (union and purchase agreement). This study did not observe these events. Most approvals were for the credit card spending, annual leave or absence of senior team members. On one occasion approval was being sought for use of government property by an outside agency; this came to the chief executive with a recommendation from a senior manager.

This role has long been implicit in the literature but not often discussed in relation to not for profit or government agencies. Campbell-Hunt et al (1993) said that managers “allocate

and coordinate resources". It can be seen from the results, Tables 8 - 14, that the six chief executives studied did more coordinating (disseminating and liaising) than they did resource allocating during the study.

8.3.4 - *Negotiator Role* - this is the final decisional role and covers the representation of the organisation at major negotiations. Table 14 shows this to be the 9th ranked role with only 3.7% of time spent in this role. This is a role recognised in Rippin's (1995) research where the emphasis was on persuasion, negotiation and the ability to deal with people.

Only two of the chief executives were observed in this role: CE F, during a potential conflict with another agency where they were involved in background preparation and strategising with staff and colleagues on alternatives and options, and CE C who was involved in direct face to face negotiations, (seated around a round table in his office) with an external agency about resource apportionments.

No formal negotiations were observed during the study and no chief executive was observed negotiating specifics with staff, however, some approvals for resource use were seen in the resource allocator role. Though none gave a direct order, they all asked for information, project updates etc in person or by email. It could be inferred that no negotiation was needed given the status of the position, however, each chief executive's interpersonal style was such that they invited comment and input at every meeting which supports Rippin (1997) in identifying the interpersonal nature of the management role. The implications for public sector chief executives of this role bears further investigation.

8.4 - Summary Of Roles

This research found that Mintzberg's management roles are still generally applicable and useful (Miner 1984) in describing the work of chief executives in the New Zealand public sector in 1997. However, there are some gaps. The issue of risk management is an important one for chief executives to address and could be included as an additional role. The disturbance handler role is a postfacto role whereas the risk management one is a preventative one and directly related to the monitor role. Both roles are closely related to the liaison and stakeholder management roles. The risk manager and stakeholder roles have been identified (Mitroff, 1983; Widdis, 1996; Kaufman, 1992; McCann & Duignan 1998, in prep) as essential in the management of large scale change. Given the continuing nature of change in government it is an area that warrants further research.

With the increased emphasis on team work within organisations, (Margerison & McCann, 1984 and McCann, 1988) it would be possible for a chief executive to share his or her roles with the senior team. For example the chief executive could perform the external figurehead and spokesperson roles and members of the team take up the monitor, negotiator and liaison roles. To some extent this happens within many organisations now. Depending on the chief executive's preferences and temperament they often choose a team to complement any gaps they may have. Mintzberg (pers comm) recently suggested that if the chief executive did not fill any particular role then someone in their team should. This fits with the research of Davies (1988) who suggests that there are key roles in any high performing team that must be filled either by a person, a system or a process. For example they say that the "explorer" role which is an external marketing role, similar to the "liaison" role could be filled by the CE or one of their team. If no one in the team has a preference for the role then a superb marketing/stakeholder management plan had better be in place.

The three role clusters are definitely linked and the chief executives' preferences for introversion/ extroversion played a part in which roles they chose to engage in. The low showing of the decisional roles in this study, either mean that the chief executives have a low preference for this cluster of roles or that they have little room to move within this cluster because of their position within the public sector environment. This has

implications for how government chief executives develop, innovation and entrepreneurial initiatives; what power they really have to negotiate resources of their departments and how they allocate resources once they have them.

Table 14 - Ranking of Average Time in Each Role For All Chief Executives

Role Order	Role Cluster	Role	Average time in role for all chief executives (%)
1	Interpersonal	Leader	27.1
2	Interpersonal	Liaison	15.7
3	Informational	Disseminator	12.0
4	Informational	Monitor	11.3
5	Decisional	Disturbance Handler	10.4
6	Interpersonal	Figurehead	9.8
7	Informational	Spokesperson	4.6
8	Decisional	Entrepreneur	4.3
9	Decisional	Negotiator	3.7
10	Decisional	Resource Allocator	1.1
Total			100.0

Table 14 shows the rank order of time spent collectively by all chief executives in this study with the leader role clearly the preferred role and the resource allocator the least observed.

All the roles are inter-related and though Mintzberg (1973) and others have isolated them for examination they are interdependent. The work of a chief executive is highly complex and cannot be judged by the roles alone. A multifaceted, multifactorial approach is needed to relate the roles to performance, effectiveness and long term societal outcomes. This approach is supported in recent literature. Mitroff (1983) and others (Handy, 1990; Senge, 1990; and Wheatley, 1996) started to place more emphasis on the complexity of management, its multifaceted and layered nature and moved away from the one right way approach to a more holistic, biological metaphor.

8.5 - Hours Of Work

Hours worked by chief executives ranged from a 9 to 14.2 hour working day (including work at home after they left the office). The average was 11 hours, Table 15. They all reported long hours as a regular feature of their week, including weekend work either at home or in the office. The one working 14.2 hours did this on a regular basis 5 days a week plus 6 hours at the weekend. The two recording the lowest hours were unwell at the time of observation (both had respiratory infections and were taking medication). Both used this as the reason for their “short working day”. The other four reported that the day observed was a “fairly average” day in their working lives. This was corroborated by their personal assistants. They all worked either early in the morning or late into the night, often preparing for the following day’s meetings. They each took a briefcase of work home and reported between 1.5 and 2 hours of reading.

Table 15 - Summary of Time Worked By Each Chief Executive

C E	A	B	C	D	E	F	Av
Time worked (Min)	855	592	730	659	585	539	660
Time worked (Hrs)	14.2	9.9	12.2	11	9.7	9.0	11.0

Table 16- Percentage of Total Work Time Spent in Various Tasks

C E	A	B	C	D	E	F	Av
Scheduled Meetings	53.2	59.4	75.6	38.1	51.3	42.5	53.3
Unscheduled Meetings	6.1	13.2	11.6	3.9	18.1	13.4	11.1
Deskwork	37.9	27.4	9.6	43.9	18.5	25.6	27.2
Telephone	2.8	-	3.2	14.1	12.1	18.6	8.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Those with child care responsibilities started work between 8.30 and 9 am and those without were able to get what they described as a “head start on the in tray” before staff arrived in the office (one regularly commencing at 5am). Also those with child care responsibilities received (or made) phone calls to/from their children during the observed day, while those without called their partner or spouse (usually to arrange evening social

meetings or transport) at least once during the day. These calls totalled no more than 5 - 10 minutes during the observed day.

The long hours worked have a few implications. Burnout is not uncommon among senior managers and several chief executives in this study were potential candidates because of their work habits. The state sector is seen as leading the way in "family friendly" workplaces yet these chief executive were not modelling family friendly behaviours to their staff or their families. Late night meetings were said to be dictated more by ministers' offices than by the chief executives. If chief executives are expected to consistently work these family unfriendly hours then promotion to the job is outside the reach of many aspirants with family responsibilities.

8.6 - Meetings

Each chief executive had a diary of scheduled meetings. The schedule was on their personal computer in 5 out of 6 cases and also prominently positioned on the desk. The schedule was updated as the day's events changed. Two people kept miniature versions of their day's schedule in their jacket pockets, for reference when out of the office.

Table 17 - Summary of Scheduled Meetings

C E	A	B	C	D	E	F
Number of meetings	10	5	9	7	10	4
Time spent in meetings (minutes)	455	352	552	251	300	229
Time range of meetings (minutes)	2-155	4-188	4-105	10-82	9-68	39-101
Average duration of meetings (minutes)	45.5	70.4	138	35.8	30	57
Proportion of total work time (%)	53.2	60.5	75.6	38.0	51.3	42.2
Number/s attending meeting						
% with 2 people	60	60	66	14	50	50
% with 3 people		20	11	14	20	
% with 4 people	20		11		10	
% with more than 4 people	20	20	11	72	20	50
Form of Initiation						
CEO	5	2	5	4	8	3
Other Party	7	3	4	3	2	1
Location of Meeting						
CEO Office	7	4	8	5	5	2
Meeting Room/ Suite	3	1		1	4	1
Corridor/ Lift						
Other Offices	1				1	
External Organisation	1		1	1		1

The number of meetings ranged from 4 - 12. Most were with one or two others. Total time spent ranged from 455 minutes (7.5 hours) down to 300 minutes (5 hours). Percentages of the day spent in scheduled meetings ranged from 38% to 75%. During each meeting the roles changed, often from the leader to the monitor and sometimes to the disturbance handler. Only one scheduled meeting did not occur (a consultant who did not arrive), this was viewed as a "gift of time" which was then spent in the "liaison" role, Table 17.

Table 18 - Summary of Unscheduled Meetings

C E	A	B	C	D	E	F
Number of meetings	13	4	15	8	22	20
Time spent in meetings (minutes)	52	78	85	26	106	72
Time range of meetings (minutes)	1-19	1-60	1-21	1-5	1-17	1-16
Average duration of meetings (minutes)	4	19.5	5.7	3.3	4.8	3.6
Proportion of total work time (%)	<i>6.1</i>	<i>13.4</i>	<i>11.6</i>	<i>3.9</i>	<i>18.1</i>	<i>13.6</i>
Number/s at meeting						
% with 2 people	92	100	73	100	95	100
% with 3 people			27			
% with 4 people	8				5	
% with more than 4 people						
Form of Initiation						
CEO	3	1		4	10	11
Other Party	10	3		4	12	9
Location of Meeting						
CEO Office	5	3	12	4	17	15
Meeting Room/ Suite	4	1		1		
Corridor/ Lift	2			2	2	2
Other Offices	2		3	1	3	3
External Organisation						

Unscheduled meetings ranged 4 - 22. Percentages from 4%.to 18%, average 11.1%. Total time spent in unscheduled meetings ranged from 106 minutes (1.76 hrs) down to 26 minutes. The time range for each unscheduled meeting was wide, from one minute for many short interruptions up to 60 minutes for others, Table 18.

All unscheduled meetings were in response to issues raised on the day. These included responses to ministers' urgent requests, media enquiries or disturbances that only the chief executive could handle. Each short interruption was coded as an unscheduled meeting because the chief executive was either gathering or giving information or advice in one of their roles.

Despite the pace and interruptions all chief executives consistently returned to the tasks they started and completed them. Noel (1989) suggested that they worked at an "unrelenting pace but demonstrated continuity" (p45).

The location of meetings varied from their own office suite to the offices of their senior team. Offsite meetings were held in ministers' offices in parliament; other parliamentary offices, and conference rooms belonging to the department.

8.7 - Deskwork

Deskwork included emails (in and out); paper work (preparation, reading, report writing) inwards and outwards mail.

Table 19 - Summary of Deskwork

C E	A	B	C	D	E	F
Number of sessions at desk	15	11	12	9	21	16
Time spent on emails (minutes)	29	50	-	61	65	27
Time spent on other desk work (minutes)	295	112	70	228	43	111
Total time spent at desk work per day (minutes)	324	162	70	289	108	138
Proportion of total work time (%)	11.8	27.8	9.6	43.9	18.5	25.5

The number of individual uninterrupted sessions of deskwork ranged from 9 to 21. With the numerous interruptions (phone, email, unscheduled meetings) most chief executives were able to spend only very short periods of time at their desk. Three (who did not have family commitments) solved the problem by arriving earlier than their staff; in one case by arriving at 5 am each morning to do desk work. Others who had family commitments said they did most of their reading after dinner each night.

No chief executive was observed completing a task without interruption. Five out of the six used email. The time spent on emails ranged from 27 minutes to 65 minutes. Total time spent at their desks (in split sessions) ranged from 70 minutes to 324 minutes (5.4 hrs) - for the chief executive who started at 5 am. Percentage of the day at the desk ranged from 9.6% to 43.9%, Table 19.

8.8 - Use Of Technology

All chief executives had personal computers on their desks and all except one used email (the exception dictated to a PA). Emails were rarely printed and were either deleted or filed as they were actioned. Longer reports were often drafted by others with additions, enhancements and alterations made by the chief executives. One did not receive (nor make) any phone calls during the day. One reported that he had a confidential staff data base that was used for performance management and promotions decisions. All 5 who used the email were observed making short quick responses, and requests and forwarding information to external contacts, staff and their management teams. Most had reasonably fast keyboard skills but were not as fast as their personal assistants. Two had ergonomic desks or equipment and three were observed stooping and lowering their heads to see their computer screens. Two chief executives were recorded using cell phones while walking to and from appointments.

None received a financial or management report or accessed a management information system during the study. This could indicate that management information systems are not being widely used by chief executives. All monitoring reports were received in hard copy (and usually put aside for later reading). This supports Mintzberg's study (1973) which found that most reports are historical and give the chief executive very little information that she or he had not already received verbally. All information about emergent or urgent issues was delivered to the chief executive by phone or in person. Keane (1997) also found that no important information was transmitted to chief executives by computers and that surprises come verbally. No chief executive was seen using a back up system for their computer or transferring information onto disk.

Email has become a complement to the telephone as tool for chief executives who were observed using it mainly for the interpersonal role and informational roles: that is their leader role, liaison and information disseminator role. Given that no emails were being printed (but filed on the computer or deleted) there could be an issue for record and archive management that may need to be addressed if accurate historical records are to be kept by government departments.

8.9 - Telephone Calls

Table 20 - Summary of Telephone Calls

CEO	A	B	C	D	E	F
Number of calls	10	-	10	9	29	28
Time spent on telephone calls	24		23	93	71	100
Average duration of call (minutes)	2.4		2.3	10.3	2.4	2.8
Proportion of total work time (%)	3.3	-	3.2	14.1	12.1	18.4

CE B neither made nor received a phone call during the day observed. He used his email, which was limited to his direct reports.

Table 20 shows the number of telephone calls (in and out) ranged from 9 to 28. Time spent ranged from 23 minutes to 100 minutes (1.6 hrs). Four out of the five chief executives who made calls, made their own outward phone calls (using either their personal address list, in hard copy, or the telephone directory. One had a staff telephone list on his computer. They all encountered answer machines, busy lines or were left waiting for some minutes. All four spent time leaving messages (CE E left 4 messages for a staff member before having it answered).

CE C, who did not make his own outward business calls, spent the least amount of time on the telephone during the day of observation, that was only 23 minutes. His personal assistant made all his calls for him under instruction. However, this chief executive did call his spouse and then accidentally left her hanging on the telephone (for 5 minutes) while he walked out of his office to attend yet another unscheduled meeting. (The researcher discreetly absented herself when he later phoned his spouse to make his apologies.)

The five chief executives who used the telephone, made personal or family calls during the day, totalling no more than 10 minutes. Those with school aged children made and received calls from them during each day. Others made calls to family and partners to arrange transport or night time meetings (business dinners, business theatre trips etc).

The average duration of telephone calls was short, ranging from 2.3 minutes to 10.3 minutes. Proportion of time spent on the telephone by the five who received and made calls, ranged from 3.2% to 18.4% of their day, Table 20.

8.10 - Mail

Table 21 - Summary of mail - inward

C E	A	B	C	D	E	F
Number of pieces received	48	26	65	78	58	27
FORM OF INPUT						
Letter	14	5	20	24	7	11
Memo	3	4	9	5	3	1
E-mail	8	13		25	36	7
Report			5	8		1
Periodical	5		6	5	7	
Newspaper clipping	7		12	3		
Newsletter/ Brochure	6	1		4		6
Minutes/ Accounts for approval	3	1	12	2	3	1
Faxes	1	1		1	1	
Personal	1	1	1	1	1	
SENDER						
Subordinate/staff	12		24	28	32	3
Executive team member	11	18	19	9	7	5
Government(SSC/Tsy/Ministers)	2	1	1	5	2	5
Other Gov. Dept.	4	2	3	9	1	4
Consultants	2	1	8			
External organisations/ people	17	4	11	27	16	10
PURPOSE OF INPUT MAIL						
Acknowledgement	3					
Status requests	3	1		3		
Solicitations	1		8	9	3	2
Authority request	1	1	18	11	7	2
Reference data		6	8	10	8	2
Reports	1	2	3	1	1	2
Periodical news	11		3	8		2
Events announcements	2	4	1	9		5
Reports on operations	11	3	7	8	15	4
Advice on situations	15	9	17	19	24	8
ATTENTION						
Skim	20	10	39	48	24	20
Read/ Study	28	16	26	30	34	7

Table 20 shows the mail inwards consisted of emails, memos, reports, periodicals, clippings, faxes and personal cards. The purpose of the mail included acknowledgements, requests for advice, problem identification, client information, status reports, monitoring requests, solicitations for business, announcements (openings, training courses etc),

operational reports and reports from Central Agencies (ie the State Services Commission, The Treasury and the Department of Prime Minister and Cabinet.)

Mail was received from the following sources: Central Agencies, members of the chief executive's senior team, staff members, clients, consultants, other government departments (their chief executive and staff), minister's offices, members of public.

All chief executives said that others (either their personal assistants or in one case a small committee of three) vetted their mail before it came to them. Private mail was left unopened (this consisted mainly of thank you notes and cards for favours granted). All chief executives made very quick decisions when handling mail; they forwarded it on, (usually to members of their senior teams) put it aside for future reading and reflection or dumped it in the rubbish bin.

All skimmed their mail quickly. The important mail that was read immediately usually related to a disturbance (present, past or potential). Other reports (particularly if they were more than 2 - 3 pages long) were put aside to be read in depth later (often at home or on aeroplanes). The occasional report was scanned and filed immediately for future reference (eg international committee minutes).

The results indicate that the chief executives played quite a major information disseminator role within their departments.

Mail outwards took the form of letters, memos and emails mainly to members of management teams and staff, outsiders, other government departments and central agencies. The purpose was mainly acknowledging other's input; replies to requests, forwarding information to others. CE E forwarded 54 pieces that he'd processed overnight. Few pieces of outward mail were seen to be initiated; others often drafted replies for their signatures. The colour of the mail on the chief executive desks was predominantly white, Table 22.

Table 22 - Summary of Mail - Outward

C E	A	B	C	D	E	F
Number of pieces sent	15	7	32	17	78	8
FORM OF OUTPUT MAIL						
Letter	6	2	20	4	11	2
Memo	2	1		1	3	
Email	4	3		9	17	5
Report					3	
Forwarding on letter/ Accounts/ Files	3	1	12	3	15	1
Forwarding memo/ Emails					2	
Forward clipping / periodicals etc					29	
TARGET OF OUTPUT						
Subordinate (staff)	4		24	7	48	2
Executive team member	7	5	6	2	19	4
Consultants			1			
Government (SSC/Tsy/ Minister)	3			3		
Independent others		2	1		6	2
Other Gov. Dept.	1			5	5	
PURPOSE OF OUTPUT MAIL						
Acknowledge input			16		11	
Reply to a request	2	5		5	3	
Reply to information received	3		1	2	6	5
Forward information to others for action, decision or information	5	1	3	7	54	
Originate/initiate a letter or memo	1			1	1	2
Approved Accounts	4	1	12	2	3	1

All mentioned the importance of keeping the channels clear and not allowing work or authority requests to sit on their desks for any length of time, Table 22.

Much of the work of the chief executives in this study was reactive which supports previous studies by Carlson and later Neustadt who said “priorities are not set by the relative importance of a task, but by the relative necessity deadlines rule his personal agenda” (in Mintzberg, 1973, p 50).

Two other themes are worthy of short comment because they had such an impact on the chief executives’ day: the role of central agencies and that of the personal assistant.

8.11 - The Role of Central Agencies

No phone calls were received but a few were made to central government control agencies, (The Treasury, Department of Prime Minister and Cabinet and the State Services Commission) during the study. A total of 16 pieces of mail in the form of requests, reports and letters were received from the agencies; for example EEO reports, surveys etc. These were generally passed onto members of the management team for action.

A total of six pieces of outward mail (that had been actioned over some days or weeks) was sent to central agencies by all chief executives during the study. No meetings were held with any member of these agencies during the study. This supports comments recently overhead at a chief executives' seminar "we never see people from the centre but we get plenty of correspondence from them".

The information sent from the agencies may need to be better co-ordinated as chief executives reported that they were often given short deadlines and they had to prioritise between conflicting requests from different sections of the same agency. Given the chief executives' preferences for the interpersonal role, face to face meetings may be an answer. The chief executives all worked to a planned cycle of government activity (dictated by the budgetary rounds) however, it was the unexpected (seemingly unplanned) requests that took time, energy and resources.

The SSC employs government chief executives and negotiates their performance agreements which are linked to the government's purchase agreements. These state the departmental outputs to be purchased by the minister on behalf of the government. No chief executive referred directly to their performance or purchase agreements during meetings, however, they all said (afterwards) that these drove their work and their priorities.

8.12 - Role of the Personal Assistant

All chief executives had a female personal assistant. Most had their desks just outside the chief executives' office. The PA was used as a gatekeeper for external visitors but all seemed to allow the free movement of senior staff in and out of the chief executives offices, particularly between formal meetings. No chief executive closed their door when doing desk work. This was seen as an attempt to be accessible to their teams.

Personal assistants interacted up to 20 times a day with their bosses. Sometimes in person, often by email or phone; often for 10-20 seconds at a time - (only longer meetings were recorded). Only one chief executive in the study used his PA to make telephone calls, which meant he spent the least amount of time (3.2%) on the phone in the study. The relationship between each chief executive and PA was observed to be informal, friendly and professional. The PAs were invaluable sources of soft information for the chief executives who quite often questioned them on their knowledge of an internal departmental issue.

The PAs played an important liaison role for the chief executives, they knew their bosses' networks and had their own contacts in other government departments where they could gain access to information quickly. Their functions warrant further investigation, particularly their part in the liaison role.

The chief executives could reduce the interruptions they receive and improve efficiency by closing their doors occasionally when doing important desk work and look at their use of their personal assistants to make some telephone calls and play more of the liaison role for them.

9.0 - CONCLUSIONS

This study examined and described the work of six public sector chief executives and from their activities identified their enacted roles according Mintzberg's role theory. In order to identify the roles it was necessary to determine the inputs to the roles (how they spent their time) and the output of their roles (the decisions and actions they took). This study reinforces some of the earlier work on the nature of the management job. It tells us what the manager was doing, how, when and for how long, but it does not tell us (nor was it intended that it did) whether one chief executive was a better performer than the other; nor whether their activities contributed to the performance of their departments. It also indicates the impact of personal preferences and styles on the roles carried out.

In summary the study found that:

- Mintzberg's role theory is still useful and valid in 1997. His theory can be applied in practice.
- Risk management is an important new role. This is because if a risk can be identified and then managed, less time will be spent in the disturbance handling role.
- All ten roles are inter-related, none stand alone, even leadership.
- All the roles need to be filled but not all by the chief executive - other members of the management team, or PA can fill some of them, for instance the monitor, the liaison and the negotiator roles.
- Where chief executives place their time indicates their preferences and priorities on the day.
- Chief executives in the study spent more than 50% of the day between the "leader", "liaison" "information disseminator", "monitor", "disturbance handler" and "figurehead" roles.
- Overall the "interpersonal role" cluster (leader, liaison and figurehead) was the highest role cluster followed by the "informational" then "decisional" roles.
- The interpersonal and informational cluster of roles was influenced by the chief executive's introversion/ extroversion preferences.
- The least observed roles were "resource allocator", "negotiator" and "entrepreneur". These were all the decisional cluster and have implications for the amount of decision

making chief executives have in the public sector. Given that the decisional role is an important cluster in the chief executive's job, (Mintzberg 1973, Campbell Hunt, 1993) the low showing of this role is a major difference between this and the Mintzberg study.

- All had a personal computer on their desks. All but one used email. Of the five who used the telephone, all but one, made their own outward calls.
- None were observed accessing a departmental management information system or the internet. None used a computer back up system or a technological archive system.

The data suggests that these NZ public sector chief executives took a reactive orientation to their work. They were externally driven by events, central agencies and stakeholders - staff and clients. This supports previous studies that indicated chief executives were unprogrammed, reactive, incremental and informal, (Simon, 1957, Kotter, 1982 and Fritz, 1989). They worked long hours (an average of 11 hours per day); spent 65% of their day in meetings; (54% of these are scheduled and 11% unscheduled). Others initiated the majority of their unscheduled meetings; 27% of their day was spent at their desk, but never for very long (between 9 and 21 sessions per day); they spent the rest of their day on the phone 8%. They never gave a direct order nor finished a task without interruption and took short lunch breaks while talking work. Their main disturbances were with other agencies or departments or the media, and they made few major decisions.

They initiated little, allocated few resources, did little negotiation and were rarely entrepreneurial. They did little risk management and managed disturbances only as they occurred. The low percentage in the decisional roles in this study either means that the chief executives have a low preference for this cluster of roles or that their environment allows them little room to move within this cluster. This has implications for how government chief executives develop innovation and entrepreneurial initiatives; what power they really have to negotiate resources of their departments and how they allocate resources once they have them.

Their technological proficiency appeared basic (email and cellphones); they rarely accessed information databases or used telephone/video conferencing facilities or the internet. They were not ergonomically minded for themselves; made most of their own phone calls; did not use their PAs as well as they could; never closed their doors while doing their own

work - unless having a meeting. They worked unsociable hours, took work home at night and weekends and did not model family-friendly practices. All these factors could indicate that the chief executive role is not for aspirants with families.

The data also suggests that they spent most of their time in the interpersonal role liaising with external stakeholders and disseminated vast amounts of information between the external environment and their departments. Collectively they spent 27% of their time in the leadership role, often exhorting their staff to do more with fewer resources, for the good of the department and society. They initiated the majority of their scheduled meetings. They spent most of their day interacting with people at meetings (65% of their day); only spent short periods of time at their desks but did this often (9 - 21 sessions). They got lots of surprises - usually verbally. Members of their senior teams initiated most of their unscheduled meetings, mainly giving the chief executives news and information; which meant they did not access the departments' management information systems often.

They all had personal computers on their desks and very occasionally used cell phones. They got plenty of exercise and fresh air walking back and forth to parliament and ministers' offices. They got to ring their families each day for at least a few minutes.

It could be said that the chief executive's use of time indicated their priorities. Where people put their time and energy is a good indicator of their priorities. Berne (1966) suggests that goal directed activities and intimacy have the highest pay off for individuals, after pastimes, rituals, withdrawal and games. The percentage of time that the chief executive in this study spent on goal directed activities would suggest that they get some payoff. Noel (1989) suggests that these payoffs appear as "magnificent obsessions" and indicate where the chief executives are placing their interest and priority. He believes that these obsessions play a role in the development of strategy. Strategy was not measured in this study, however, judging by the amount of time spent in the roles of leadership, liaison and information dissemination it could be inferred that public sector chief executives are "obsessed" with interacting with their staff and their stakeholders and sharing information with them. A further inference could be made that they are doing this for the greater good of their departments, government and society, that this impact on society is in fact their payoff for their obsession. Further investigation is needed to support this hypothesis.

A quick reference to the SSC competency study is in order. Though the study identified competencies not roles, this research indicates that some competencies do link to the roles. This is not exhaustively analysed and would repay further research, Table 23.

Table 23 - Comparison of SSC Competency & Equivalent Roles in this Study

SSC Competency	Equivalent Role with Comments
Building and sustaining relationships	This competency falls into the interpersonal roles.
Commitment to achievement	Evidenced through the long hours worked.
Effective communication	Interpersonal role was the highest preferred.
Honesty and integrity	Not comparable but the amount of monitoring could have a bearing on this one.
Intellectual capability	All in this study were tertiary qualified and all were seen to analyse and synthesise information quickly
Management of people	Seen in the leader role; which was the most observed.
Managerial expertise	Not measured, but how and what they managed was recorded.
Managing in the political / cultural context	Seen in the liaison and disturbance handler roles.
Strategic leadership	The leadership role.

The value of this research is that it not only identified what chief executives in the NZ public sector did, it identified their role preferences and their ability and opportunity to perform all roles. It also provided practical evidence of Mintzberg's management theory in use (Argyris & Schon, 1982). The fact that the resource allocator and negotiator roles (in the decisional roles cluster) were the two lowest observed roles indicates that these may not be within the immediate control of public sector chief executives and warrants further study.

Further research into the importance of the decisional roles and the risk manager role in particular, is called for, as is the use of management information systems; technological archiving and the use of intra and internet. Likewise the impact of introversion/

extroversion preferences on the leadership role needs further investigation as does the use of personal assistants.

The lack of previous research on chief executives in the public sector means it is not possible to clearly identify if there have been major changes in the roles since the state sector reforms. The risk manager role is one gap that has been identified in Mintzberg's taxonomy.

This research also has implications for the recruitment of chief executives, their professional development and their retention within the public service. Given the high achievement needs of most aspiring chief executives the lack of ability to make or control decisions may influence the pool of candidates putting themselves forward for chief executive roles in the future and for the likely retention of those currently in the service. Likewise the family-unfriendly nature of the role could eliminate some candidates.

The time use of these chief executives means that any professional development has to be user friendly and built into an already busy schedule. There appear to be two options; either take the professional development (eg technology updates) to the chief executives or take the chief executives out of their demanding environment for short periods of time to enable them to do some strategic thinking around issues of innovation, entrepreneurialism and change management.

So what does it all mean? Add up the roles and you identify the job of a chief executive. Or do you? The preferences for the interpersonal over the decisional roles for chief executives in this study may mean this is their preference or it may mean that they have more room to move in these clusters than in the decisional role cluster.

It could be said that these chief executives are leading and managing government departments for the greater good. They all specifically mentioned "community", "societal outcomes" and the "wider good", and in their own way they are all creating internal communities of interest and moving their organisations towards what Dilts (1993) calls the spiritual level.

In management, as in life, where one places one's attention, indicates one's priorities. Schein (1985) suggests that what leaders are observed to pay attention to is the primary setter of organisational culture. Six New Zealand public service chief executive's have shown their priorities to be in the interpersonal and informational arenas where they work for the greater good. They spent more than 27% of their days in the leadership role; 15% liaising, 12% disseminating information and only 1% allocating resources, 3% negotiating and 4% in the entrepreneurial role, Table 14.

" Life does not consist mainly - or even largely - of facts and happenings.

It consists mainly of the storm of thoughts that is forever blowing through one's head."

Mark Twain

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