# An Investigation into Reporting Human Resource Information in the Statements of Service Performance of Government Departments

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#### **Abstract**

Human resource costs comprise a significant proportion of New Zealand government departments' operating expenditure, thus, reporting on these resources is important. Yet, to date, a practical alternative to the monetary valuation and reporting of human resources has still to be found.

This thesis examines the usefulness and practicality of reporting non-monetary human resource information in government departments' statements of service performance. The examination was conducted through a mail questionnaire sent to all 39 government departments, with a response rate of 87% (34 questionnaires out of 39 sent) being achieved. Personal interviews were then conducted with two of the respondents.

The majority (84%) of government department financial controllers believed it was necessary to report non-monetary human resource information. A statement of service performance (SSP) received 61% support as the method of disclosure, followed by a statement of resources (48%), a separate human resource report (45%), and a chief executive's report (42%). There was considerable support for the disclosure in the SSP of several items of human resource information as either inputs, outputs or outcomes.

A number of costs and benefits were also identified by respondents as resulting from the disclosure of human resource information in the SSP. However, when comparing the overall costs and benefits, the majority of respondents did not expect such reporting to be cost effective. These results indicate that, although there is support in theory for reporting non-monetary human resource information in government departments' SSPs, further research is necessary to determine the practicality of such reporting.

The results of this thesis have extended the literature concerning disclosure of human resource information. Many costs and benefits associated with the provision of monetary human resource information have been found to apply to the reporting of non-monetary human resource information. Furthermore, many of the non-monetary human resource measures suggested for the private sector were found to be applicable to public sector organisations, specifically New Zealand government departments.

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# **Chapter One: Introduction**

"People are the means by which other resources are given utility; they provide the ideas, concepts and constructs to coordinate financial and physical resources. People are both the means by which these other resources become products and the consumers of the products themselves" (American Accounting Association, 1974, p. 116).

Resources are "a means of generating economic activities in a business firm" (Schwan, 1976, p. 219). Human resources are the human component of an organisation's total resources. A distinction must be made between the internal and external human resources associated with an entity. Internal human resources are the employees of the organisation, while the external human resources are its customers, suppliers and lenders (Henderson and Peirson, 1984, p. 772). This study considers the reporting of government departments' internal human resources only.

Human resources are particularly important to public sector service organisations, such as government departments, because the functions performed by these entities tend to be labour intensive:

"Government depends more on 'human capital' than land or technology for its productivity. Human resources are its 'competitive edge'. They represent an investment which is costly to acquire, costly to maintain, and costly to replace. And if the value of those human resources declines - through poor 'asset management' policies - the capability of government to serve the public well also declines" (Newell, 1987, pp. 371-372).

The cost of human resources is also significant to government departments. For example, personnel costs comprise an average of 47.6 percent of the total output costs of each government department, and in over 64 percent of the departments, 'personnel' is the largest single output expenditure. As at February 1994, it was estimated that 209,400 people were employed in the category of 'Central Government - Non-Trading'.

<sup>&</sup>lt;sup>1</sup> Departmental Budgets of the Government of New Zealand for the year ending 30 June 1995.

<sup>&</sup>lt;sup>2</sup> Statistics New Zealand, Labour Market Statistics, May 1995.

Given the importance of human resources, and the statutory accountability under which government departments operate,<sup>3</sup> it is argued that government department chief executives should be held accountable for their human resource decisions. Flamholtz (1979) argues that "[private sector] managers should be held accountable for conservation of the human resources allocated to them" (p. 218), and the same concept can be applied to government departments. Requiring the reporting of human resources may be one way of holding government department chief executives accountable for human resources.

Previously, government departments have not accounted for human resources, principally because of the environment in which they operated (Pallot, 1990). Firstly, government departments would have been unsure as to whether to account for the resources of the public service as a whole or for each individual department. Secondly, public service chief executives lacked the necessary control over human resources, as government department chief executives were not responsible for staff recruitment, promotion, remuneration and dismissal decisions (Pallot, 1990).

However, government departments now report on an individual basis,<sup>4</sup> and departmental chief executives now exercise similar control to that of private sector managers with respect to human resources.<sup>5</sup>

Continued failure by government departments to report on human resources may lead to negative consequences similar to those suggested below for the private sector. Myopic human resource decisions could be made by management in an attempt to reduce overall costs, thereby decreasing the long-term effectiveness of the organisation (Flamholtz, 1985). Moreover, short-term cost cutting may lead to labour relations problems in the future, as well as diminished employee commitment and motivation (Likert and Bowers, 1973).

<sup>&</sup>lt;sup>3</sup> This accountability framework is explained in Chapter Two.

<sup>&</sup>lt;sup>4</sup> Section 35, Public Finance Act, 1989.

<sup>&</sup>lt;sup>5</sup> Section 59(2), State Sector Act, 1988.

However, there are a number of difficulties associated with the monetary valuation of human resources.<sup>6</sup> Consequently, this study proposes that non-monetary descriptive measures be used to report on human resources. Furthermore, it is contended that the statement of service performance (SSP) published by government departments is the appropriate medium for disclosure.

Thus, the objective of this thesis is:

To gain an internal view of the internal and external usefulness and practicality of reporting human resources in the SSP, with respect to government departments.

Government departments are defined as in the Public Finance Act, 1989, that is "any department or instrument of the government, or any branch or division thereof; but does not include a body corporate or other legal entity that has the power to contract, or an Office of Parliament, or the Public Trust Office, or the Export Guarantee Office" (section 2, Public Finance Act, 1989).

Usefulness is defined as the provision of information which meets the two objectives of general purpose financial reports as specified in paragraph 3.1 of the *Statement of Concepts for General Purpose Financial Reporting (SoC)* (NZSA, 1993b), that is, decision-usefulness and promoting accountability.

Decision-usefulness is defined as "... [the provision of] accounting data which are useful to statement users in their decision making" (Barton, 1982, p. 9). There are four components to decision-usefulness:

- 1) Who are the intended users of the accounting reports?
- 2) What is the nature of the users' decisions which rely, at least in part, upon the accounting data contained in the report?
- 3) What qualities are expected of the data in the reports?

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<sup>&</sup>lt;sup>6</sup> These difficulties are discussed in Chapter Three.

4) What data are needed to assist the decisions? (Henderson and Peirson, 1984, p. 6).

The decision-usefulness of human resource information disclosed in the SSP is examined through a consideration of: who will use this information; what internal and external uses will be made of the information; to what extent this information should exhibit the qualitative characteristics set out in the SoC; and what human resource information, if any, should be included in the SSP.

The second objective of useful financial reports is to promote accountability. The issue of accountability will be examined by considering whether reporting human resource information in the SSP would be consistent with the accountability framework in which government departments operate.

In addition to the usefulness of reporting human resource information in the SSP, the practicality, or cost effectiveness, of such reporting must be considered. Therefore, it is necessary to estimate and compare the costs and benefits of such reporting (Caplan and Landekich, 1974; Controller and Auditor-General, 1994b; GASB, 1994; Henderson and Peirson, 1984; Filios, 1991; NZSA, 1993b).

This thesis commences with an overview of the environment, and in particular, the accountability framework, in which government departments operate. This chapter sets the scene for the contentions made in the following two literature review chapters. Chapter Three critically evaluates the various methods available to government departments to report human resources, dismissing monetary valuation of human resources as infeasible and supporting the disclosure of non-monetary information. Chapter Four examines the SSP as a means of facilitating the provision of non-monetary human resource information by government departments. The method employed in this study, that is a mail survey followed by two detailed personal interviews, is discussed in Chapter Five, while Chapter Six presents the results of the study. The results reveal significant support for the publication of non-monetary human resource information in government departments' SSPs, but not for the cost

<sup>&</sup>lt;sup>7</sup> These qualitative characteristics are explained in Chapter Four.

effectiveness of such reporting. The limitations of the study and suggestions for further research are presented in Chapter Seven, with concluding remarks being offered in Chapter Eight.

# Chapter Two: The Government Department Operating Environment

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#### I. Introduction

The State Sector Act, 1988 and the Public Finance Act, 1989 provide government department chief executives with considerable autonomy. This autonomy is accompanied by increased accountability for the use of resources and the operation of departments.

Accountability for departmental performance takes three forms: chief executives are responsible to the Minister overseeing that department; Ministers are accountable to Parliament for departments under their control; and Government is ultimately responsible to the taxpayer. In order to hold departmental chief executives, Ministers and Government accountable, information is required to assess performance. Consequently, government departments are required by the Public Finance Act to produce annual reports, including both financial and non-financial information.

Government departments are also accountable for human resource policies. Departments are required by the State Sector Act to act as 'good employers', including operating an Equal Employment Opportunities (EEO) policy.

This chapter is a descriptive review of the current environment in which New Zealand government departments operate. This review sets the scene for Chapters Three and Four, in which it is contended that the reporting and accountability requirements provide the opportunity, and the need, to report non-monetary human resource information. The chapter begins with a brief discussion of the reforms since 1988 that established the current environment. The accountability framework for the performance and governance of government departments is then reviewed, as are the reporting requirements of the Public Finance Act. Finally, the 'good employer' requirements of the State Sector Act are considered, leading to a discussion of the reporting of human resources in the next chapter.

# II. Public Sector Reform

The reform of government departments was achieved through the Public Finance Act and the State Sector Act. These reforms encompassed five underlying management premises:

- 1) Clear specification of objectives for which managers are responsible;
- 2) Freedom for government departments to make resource allocation decisions;
- 3) Accountability for meeting objectives;
- 4) Effective assessment of performance to ensure accountability, requiring a distinction between controllable and uncontrollable factors.
- 5) Sufficient quantity and quality of information to make performance assessment possible (Pallot, 1991a, p. 171; Treasury, 1987, pp. 55-56).

Briefly, these reforms aimed to introduce economy, efficiency, effectiveness and accountability into the New Zealand public sector, including government departments (Boston et al, 1991; Goldman and Brashares, 1991; Scott et al, 1990; Scott and Gorringe, 1989; State Services Commission, 1990).

#### (a) Economy

Economy is defined as "ensuring that the assets of the organisation and the services purchased are procured and maintained at the lowest possible cost consistent with a specified quality and quantity" (Grant, 1990, p. 58). Economy focuses on the cost of inputs, such as human resources, used to produce a given level of output. The assessment of economy requires performance indicators such as input costs (for

<sup>&</sup>lt;sup>8</sup> A full discussion of these reforms is beyond the scope of this thesis. For comprehensive reviews see Boston et al (1991), Scott et al (1990), and Scott and Gorringe (1989).

<sup>&</sup>lt;sup>9</sup> Inputs are "the resources used to produce the goods and services which are the outputs of the reporting entity" (New Zealand Society of Accountants (NZSA), 1993b, para. 8.2). Inputs, outputs and outcomes are discussed in greater detail as elements of service performance in Chapter Four.

example, wage costs) and actual versus planned input (for example, actual versus planned labour hours) (Grant, 1990).

#### (b) Efficiency

Efficiency is "providing a specified volume and quantity of service with the lowest level of resources capable of meeting that specification" (Grant, 1990, p. 58). It is concerned with the relationship between inputs and outputs. Baume (1992) further distinguishes allocative efficiency and technical efficiency. Technical efficiency relates to the relationship between inputs and outputs, while allocative efficiency is the allocation of resources to produce the maximum satisfaction for the whole community (Baume, 1992, p. 60). The types of performance measures required to report technical efficiency include productivity (such as services produced per labour input hour) and unit cost (such as labour cost per unit of output) (Grant, 1990).

#### (c) Effectiveness

Grant (1990) characterises effectiveness as "providing the right services to enable the organisation to implement its policies and objectives" (p. 58). Measures are therefore necessary to permit outcomes<sup>11</sup> to be compared with objectives (Grant, 1990), such as the attainment of EEO goals or human resource productivity targets. The effectiveness of government departments in implementing the Government's policies could be of interest to the Government in either of its dual roles of purchaser and provider.

#### (d) Purchaser-Provider Distinction

In the reform of government departments, a distinction between the two roles of Government was made. Government provides the operating and capital resources to government departments, and therefore has an interest similar to that of owners in the

<sup>&</sup>lt;sup>10</sup> Outputs are "the goods and services produced by the reporting entity" (NZSA, 1993b, para, 8,3).

<sup>&</sup>lt;sup>11</sup> Outcomes are "the impacts on, or consequences for, the community resulting from the existence and operations of the reporting entity" (NZSA, 1993b, para. 8.4).

private sector. However, the Government is also the principal (in many cases only) purchaser of government departments' output (Treasury, 1987; Wistrich, 1992). 12

Departmental performance must be assessed from both perspectives (Ball, 1992a). The ownership or resource provider perspective requires the disclosure of information similar to that found in the reports of private sector enterprises, that is, a distinction between capital and operating expenditure, capital maintenance and accrual accounting (Ball, 1992a, pp. 17-18).

Adoption of the purchaser standpoint necessitates information concerning both the financial cost of the output and reports on the delivery of that output, such as measures of quantity, quality, location and time (Ball, 1992a, p. 18; Controller and Auditor-General, 1994b; Pallot, 1991a, p. 172; Wistrich, 1992). This output reporting is consistent with the shift in primacy from input controls to output controls.

#### (e) Shift in Primacy From Inputs to Outputs

Prior to the Public Finance Act, government departments were assessed on input use and adherence to input restrictions as opposed to the results of the use of those inputs. However, the Public Finance Act changed this focus, with input controls relaxed and government departments having the autonomy to manage inputs. Government departments have authority to:

- control human resource policies; 13
- maintain bank accounts and earn interest on the balances:
- operate individual accrual accounting systems;
- manage foreign exchange risk;
- manage their balance sheets;

Some government departments also administer transfer payments on behalf of the Government. These payments are administered and appropriated separately from the normal departmental operating budget (Frost, 1994).

<sup>13</sup> Departments' autonomy for human resource policies is discussed in more detail in a later section of this chapter.

- assess the levels of capital required for their operations; and
- pay a return to the Government on this capital (Ball, 1992a, 1994; Goldman and Brashares, 1991; McCulloch, 1993; McCulloch and Ball, 1992; Scott et al, 1990; Scott and Gorringe, 1989; Wistrich, 1992).

Outputs became of principal interest, with departments entering into purchase agreements with the Government to produce a given quantity and quality of a good or service, to be delivered at an agreed time and place. Government department chief executives are held accountable for meeting these output agreements (Goldman and Brashares, 1991; McCulloch, 1993; McCulloch and Ball, 1992; Pallot, 1991a; Scott and Gorringe, 1989; Wistrich, 1992).

# III. Accountability Framework

One of the fundamental principles underlying public sector reform was increasing the accountability of the public sector for spending taxpayers' money (Pallot, 1991a; Public Finance Act, 1989, Long Title). However, no attempt is made in this legislation to define the term accountability.

The Concise Oxford Dictionary (1990) describes being accountable as being "responsible; required to account for one's conduct." The New Zealand Society of Accountants (NZSA) (1993b, para. 3.3) argues that accountability is "the requirement for one party to account to another party for its performance over a given period." Reporting is thus necessary from those controlling the resources to those not in control (Van Peursem, 1990, p. 5).

Van Peursem (1990, p. 22) therefore defines accountability in the New Zealand public sector as:

"... a state of being whereby one party (the accountor) responsible for the resources of or the policy established by another (the stakeholder) should report to the stakeholder on the economy of acquisition, on the efficiency of operation and the generation of outputs, on the effectiveness of organisational outcomes in meeting its objectives, on the appropriateness of those objectives in meeting public policy and social equity requirements, and on the maintenance of organisational capital. The accountor is subject to sanction from the stakeholder for past performance under his/her charge and submits to outside review on the reported information."

This process of accountability is shown in Figure 2-1.

Analysis of actual performance in the light of desired performance to be achieved

Reporting of actual performance

Reporting of actual performance

Reporting of actual performance

Figure 2-1: Components of the Accountability Process (NZSA, 1993b, Figure 2)

Sutcliffe (1985, p. 17) argues that the information reported by public sector bodies should go beyond that explicitly required by statute and include "[evidence of] good management control or other performance imposed by law, regulation, agreement or custom." This wider obligation arises because of the need to recognise the "custodial role played in the community by economic entities" that control resources (United Kingdom Accounting Standards Steering Committee, 1975, p. 15).

Recognition of the wider accountability obligation involves two different types of accountability; political accountability and managerial accountability (Day and Klein, 1987; Stewart, 1984). Political accountability is where "those with delegated authority [are] answerable for their actions to the people" (Day and Klein, 1987, p. 26). Managerial accountability is "accountability of a subordinate to a superior in an organisation" (Stewart, 1984, p. 18) or "making those with delegated authority answerable for carrying out agreed tasks according to agreed criteria of performance" (Day and Klein, 1987, p. 27). Political accountability sets the policy objectives and generates the criteria by which managerial accountability can be assessed (Day and Klein, 1987).

In New Zealand, Ministers and the Government have political accountability for the policies and objectives set, while government department chief executives face managerial accountability for the attainment of certain set criteria (Davies, 1987).

Accountability for the existence and operation of a government department can be divided into a hierarchy of different forms of accountability. Stewart (1984, pp. 17-18) describes five different levels in a 'ladder' of accountability:

- 1) Policy accountability: accountability for the goals and objectives set (political accountability).
- 2) Programme accountability: the achievement of those goals (managerial accountability).
- 3) Performance accountability: achievement of required standards (managerial accountability).
- 4) Process accountability: ensuring adequate procedures and efficiency (managerial accountability).
- 5) Accountability for probity and legality: avoidance of malfeasance and compliance with the law (managerial accountability, sometimes also referred to as legal accountability).

With respect to New Zealand government departments, the departmental chief executives are responsible for forms two to five above through the State Sector and Public Finance Acts. Accountability for the policies themselves lie with the relevant Minister and the Government, not the individual manager (Scott and Gorringe, 1989; Scott et al, 1990).

New Zealand government departments operate under the Westminster model of government, having three forms of accountability:

- 1) Departmental chief executives are accountable to the Cabinet Minister for their performance in managing the resources and affairs of the department;
- 2) Cabinet Ministers are accountable to Parliament for the performance of the departments under their control;

The Government is ultimately responsible to the taxpayers for the way in which the taxpayers' money is spent and the performance of the public sector entities that are funded and controlled by the Government (Finn, 1993; Fuller and Roffey, 1992).

## A. Accountability of Departmental Chief Executives

The accountability of the departmental chief executives to the Cabinet Minister for performance in managing the resources and affairs of the department arises through the State Sector Act and the Public Finance Act. Section 33 of the Public Finance Act states:

"The Chief Executive of a department shall be responsible to the Responsible Minister for the financial management and the financial performance of the department and shall comply with any lawful financial actions required by the Minister or the Responsible Minister" (section 33(2)).

"The Chief Executive shall be responsible to the Responsible Minister for compliance with the financial reporting requirements of this or any other Act" (section 33(3)).

<sup>&</sup>quot;'Responsible Minister' means . . . the Minister or Ministers for the time being responsible for the financial performance of the department" (section 2, Public Finance Act).

The Long Title of the Public Finance Act, while not setting out an explicit accountability relationship, states that two of the fundamental purposes of the Act are to:

"Establish lines of responsibility for the use of public financial resources; and

Establish financial management incentives to encourage effective and efficient use of financial resources in departments . . . " (Long Title, Public Finance Act, 1989).

The State Sector Act also sets out accountability requirements for chief executives:

"The chief executive of a Department shall be responsible to the appropriate Minister for -

- (a) The carrying out of the functions and duties of the Department (including those imposed by Act or by the policies of the Government); and
- (b) The tendering of advice to the appropriate Minister and other Ministers of the Crown; and
- (c) The general conduct of the Department; and
- (d) The efficient, effective, and economical management of the activities of the Department" (section 32).

The accountability relationship between departmental chief executives and Ministers is shown in Figure 2-2 below.

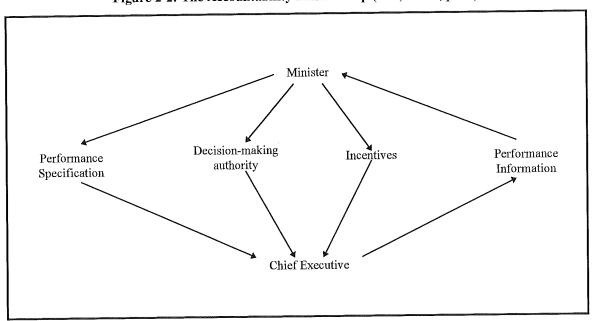


Figure 2-2: The Accountability Relationship (Ball, 1992a, p. 18)

The above diagram indicates that decision-making authority has been devolved to the individual departmental chief executives. This devolution of authority reflects the

principle that a chief executive should not be held accountable for something outside the control of the department (Aiken and McCrae, 1992; Tyler, 1989). The reforms allowed departmental chief executives control over most aspects of the operation and strategy of the department.<sup>14</sup> The move from input controls to output-based performance measures is one example of this devolution of control (Goldman and Brashares, 1991; Scott and Gorringe, 1989).

However, chief executives were now directly accountable for their performance. Permanent tenure was removed and departmental chief executives were placed on performance-based contracts for a period of not more than five years (Scott et al, 1990). This performance is assessed by the State Services Commission on behalf of the relevant Minister.<sup>15</sup>

Chief executives are only held accountable for departmental outputs. Outcomes are the responsibility of the Minister and Government (Scott and Gorringe, 1989; Scott et al, 1990). The reason for this division of responsibility is that many external factors affect the attainment of outcome goals (McCulloch, 1993; Scott and Gorringe, 1989). For example, a reduction in the crime rate may be influenced by the outputs of the Police, Justice and Labour Departments. Therefore, to hold the chief executive of any one of these departments accountable for the achievement of this outcome is to hold that chief executive accountable for something outside the control of the department. Hence, the responsibility for outcome goals lies with Ministers and Government, who choose the outcome goals (Scott and Gorringe, 1989; Scott et al, 1990).

#### B. Accountability of Ministers to Parliament

Ministers are accountable to Parliament for the performance of the departments under their control (State Services Commission, 1995; Treasury, 1987). "They are personally accountable to the cabinet and to Parliament for the administration of their departments" (Scott and Goringe, 1989, p. 83).

<sup>&</sup>lt;sup>14</sup> As discussed in the previous section.

<sup>&</sup>lt;sup>15</sup> As per section 43 of the State Sector Act.

"Ministers are . . . personally accountable for their departments, and must answer for their departments' actions in Parliament. They are expected to either defend the actions of their departments or to undertake to correct any mistakes that may have been made" (Treasury, 1987, p. 58).

The Public Finance Act facilitates this accountability by requiring that:

"The annual report of the department shall be forwarded to the Responsible Minister who shall lay it before the House of Representatives . . ." (section 39(2)).

The State Sector Act reinforces this responsibility through two provisions:

"The appropriate Minister shall lay a copy of the report [on the operations of the Department for that year] before the House of Representatives in accordance with section 39 of the Public Finance Act 1989" (section 30(2)).

"... nor shall any such delegation [of the Minister's powers to the chief executive] affect the responsibility of the appropriate Minister for the actions of any person acting under the delegation" (section 28(7)).

The 'appropriate Minister' is the minister responsible for the operation of the government department in question (section 2, State Sector Act, 1988).

The above extracts of the Public Finance and State Sector Acts indicate that the minister responsible for the operation of the government department is accountable to Parliament for the performance and conduct of that department.

Hamburger (1992) sees the accountability of ministers to Parliament as being of fundamental importance to democratic and constitutional government:

"Accountability of the executive to Parliament is the cornerstone of the whole system of Government.... Public servants share with ministers the exercise of the special powers of government, and like ministers have to answer in some way to Parliament" (Hamburger, 1992, p. 45).

In New Zealand, public servants, such as departmental chief executives, answer to Parliament through their Responsible Minister (Scott and Gorringe, 1989, p. 83; State Services Commission, 1995; Stewart, 1984). There are several ways in which this accountability can be enforced:

- Accountability through appropriation (Davies, 1986): all government departments receive operating and capital funds which must be authorised by Parliament.
- Accountability through Parliamentary questions (Davies, 1986): Parliamentary
  question time provides an opportunity for other members of the House to
  question Ministers on the performance of their departments.
- Accountability through the tabling of annual reports (Davies, 1986): as discussed above.
- Accountability through the audit reports on the departmental annual reports
   (Davies, 1986): section 38 of the Public Finance Act requires that the Audit
   Office issue an audit opinion on the departmental financial statements.
- Accountability through Select Committee investigations (Davies, 1986):
   various issues pertaining to the operation of government departments are
   periodically examined by Parliamentary Select Committees, which provide
   another opportunity for Parliament to review the conduct and operation of
   government departments.

However, neither public servants nor Ministers are specifically accountable to Parliament for the outcomes of the department (Pallot, 1991a; Tyler, 1989). There is no requirement for ministerial reporting to Parliament on outcomes, which is regarded as a deficiency in the legislative framework (Controller and Auditor-General, 1989). Nevertheless, Ministers and the Executive are responsible for selecting and implementing the policies that lead to the outcomes of government departments, and have been called to account, generally by taxpayers, if these policies have not succeeded (Tomkins, 1987).

# C. Accountability of Government to Taxpayers

The Government is ultimately responsible to taxpayers for how taxpayers' money is spent and the performance of public sector entities funded and controlled by the Government (Stewart, 1984): "The Government is the popularly mandated authority,

responsible to the electorate for its conduct of the administration" (Treasury, 1987, p. 60).

Accountability results from the Government having a fiduciary responsibility when spending taxpayers' money (Drebin et al, 1981):

"Where the general taxpayer has funded activities . . . they would seem to be entitled, through Parliament, to know whether those activities have been performed in the manner and to the extent intended" (Pallot, 1991a, p. 220).

Accountability of the New Zealand Government to taxpayers is manifested in Parliamentary elections held at least every three years. When making the decision whether to re-elect the existing Government, taxpayers who are also voters may take into account, inter alia, the way in which the Government, through its departments, have managed the resources entrusted to it. In this way, the Government is ultimately responsible to the taxpayer for the conduct and management of government departments. However, for voters to make an informed decision, they need information on the Government's performance (Gaffney, 1986).

#### D. Information and Accountability

In order to assess the performance of the accountor, the accountee requires information concerning that performance (Stewart, 1984; Van Peursem, 1990). The type of information required depends on the form of accountability that is being assessed. As policy accountability is the most judgemental form of accountability, it is the most difficult to provide information for (Stewart, 1984). However, as one moves down Stewart's accountability ladder, providing accountability information becomes easier as the requirements are more defined (Stewart, 1984). Thus, the New Zealand public sector reforms explicitly specified both the need for government departments to report on their performance, and the information that should be reported.

The State Sector Act (section 30(1)) and the Public Finance Act (section 35(1)) establishes the framework for annual reporting on the performance of government

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<sup>&</sup>lt;sup>16</sup> Section 17(1) of the Constitution Act, 1986.

departments, by requiring reports to be produced and presented to the appropriate Minister. The information to be included in the departmental annual report is set out in the Public Finance Act, which requires that the following reports must be prepared on the basis of generally accepted accounting practice (GAAP):

- Statement of financial position;
- Operating statement reflecting revenue and expenses;
- Statement of cash flows;
- Statement of objectives;
- Statement of service performance;<sup>17</sup>
- Statement of commitments;
- Statement of contingent liabilities;
- Statement of unappropriated expenditure, including appropriations administered by the department;
- Statement reporting actual expenditure or liabilities incurred against each appropriation administered by the department;
- Statement of accounting policies;
- Such other statements as are necessary to fairly reflect the operations and financial position of the department (section 35(3), Public Finance Act, 1989).

Departments are also required to prepare forecast financial statements at the beginning of each financial year, including:

• Statement of estimated financial position at the beginning and end of the current year;

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<sup>&</sup>lt;sup>17</sup> The requirements for the content of the statement of service performance are discussed in detail in Chapter Four.

- Forecast operating statement;
- Forecast cash flows;
- Statement of objectives, specifying:
  - forecast performance of each class of objectives;
  - expected revenue and costs for each class of outputs;
  - forecast financial performance;
- Statement of accounting policies (section 34A(3), Public Finance Act, 1989).

There is widespread acceptance of the premise that accounting reports containing only financial information are insufficient to discharge accountability obligations (Carpenter, 1986; Gray, 1982; Van Peursem, 1990). This is reflected in the inclusion of non-financial reports, such as output reports (or statements of objectives and service performance) in the Public Finance Act.

In addition to the Public Finance Act, the State Sector Act also requires government departments to disclose certain non-financial information. Section 58(2) stipulates that a department must report on its achievement of EEO targets, part of the 'good employer' provisions of the Act.

## IV. Personnel Provisions of the State Sector Act

The State Sector Act placed responsibility for employment and personnel policies on the individual government departments. This was a change from the previous system where all public sector appointments had been made by the central State Services Commission (Goldman and Brashares, 1991; Walsh, 1991; Wistrich, 1992). Chief executives are now responsible for the hiring, firing and promotion of staff within their departments, as well as the department's human resource policies and salary levels<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Section 59(2) of the State Sector Act states that "unless expressly provided to the contrary in this Act, the chief executive shall have all the rights, duties, and powers of an employer in respect of the persons employed in the Department for which the chief executive is responsible."

(Chapman, 1989; Goldman and Brashares, 1991; Scott et al, 1990; Walsh, 1991; Wistrich, 1992).

However, there are some limitations imposed on the discretion of chief executives in the forming of personnel policies. Section 56(1) of the State Sector Act requires the department to comply with the principle of acting as a 'good employer'. A 'good employer' is defined as, inter alia, operating an EEO programme (section 56(1)(b)).<sup>19</sup>

An EEO programme is defined in section 58(3) of the Act as:

"... a programme that is aimed at the identification and elimination of all aspects of policies, procedures, and other institutional barriers that cause or perpetuate, or tend to cause or perpetuate, inequality in respect of the employment of any persons or groups of persons."

Departments are also required to report on performance with regard to achieving EEO goals (section 58(2)). The State Services Commissioner is required by section 6 of the Act to "promote, develop and monitor equal employment opportunities policies and programmes for the Public Service" (section 6(g)). This monitoring involves reviewing the "outputs (the benefits achieved with the resources used) . . . compliance with the EEO and 'good employer' requirements of the State Sector Act . . . and the effectiveness of internal departmental operations" (Tremaine, 1991, pp. 358-359).

The inclusion of non-monetary human resource information in the statement of service performance (SSP) could assist in the assessment of the department's compliance with the 'good employer' provisions of the State Sector Act, from both an external perspective (such as that of the State Services Commissioner) and from an internal management perspective. This may be consistent with the overall accountability of the department for its operations and use of resources.

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Other requirements for a 'good employer' include good and safe working conditions, recognition of the employment requirements of women and the disabled, and recognition of the aims, aspirations and cultural differences of minority groups (section 56(1)).

#### V. Chapter Summary

The environment in which New Zealand government departments operate underwent major change with the introduction of the State Sector Act and the Public Finance Act. Departmental chief executives now have considerable autonomy in running departments, including responsibility for human resource management and human resource policies.

Concurrent with this increase in autonomy has been an increase in the accountability of departmental chief executives for the operations of, and use of resources by, departments. Consequently, it may be necessary for departments to report on performance and resource use in order for accountability to be assessed. This reporting is carried out through departmental annual reports, including both financial and non-financial information, as required by the Public Finance Act.

Departments are also held accountable for human resource policies. The State Sector Act requires departments to act as 'good employers', which includes operating an EEO policy. Departments must also report on their achievement of EEO targets.

This chapter has provided a review of the environment in which government departments currently operate, setting the scene for the following two chapters. It is contended in the following chapters that reporting non-monetary human resource information by government departments would be consistent with the accountability framework. The departments' performance as a 'good employer' under the State Sector Act could also be assessed using non-monetary human resource information.

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#### I. Introduction

A number of methods of disclosing human resource information exist, including: monetary; quantitative (excluding monetary); qualitative statements about measurements; and qualitative information without measurement (Flamholtz, 1975b, p. 54). However, the literature emphasises the provision of monetary human resource information. Similarly, previous research has concentrated almost exclusively on the private, for-profit sector.<sup>20</sup>

Consequently, there is a paucity of research concerning the provision of non-monetary human resource information by not-for-profit entities, such as government departments.<sup>21</sup> However, useful information can be gained through an examination of private sector literature and work concerning monetary information, and then relating these findings to government departments where applicable.

This chapter examines the nature of human resources and human resource accounting. A review of monetary human resource valuation methods (human resource accounting) is given, in order to demonstrate why they may not be applicable to government departments. A discussion of non-monetary human resource measurement variables, their applicability to New Zealand government departments, and the costs and benefits associated with these variables follows. The chapter concludes by considering the options available to government departments for disclosing non-monetary human resource information.

## II. Human Resource Accounting

#### A. Definition

Human resource accounting (HRA) has been defined as:

<sup>&</sup>lt;sup>20</sup> Euske and Rock (1983) and Pallot (1990) considered not-for-profit, public sector entities.

<sup>&</sup>lt;sup>21</sup> As stated in Chapter One, government departments are the focus of this thesis.

"... the process of identifying, measuring and communicating information about human resources to assist management decision making within an organisation" (Brummet et al, 1968, p. 15).

However, HRA information is of interest not only to managers, but also to external parties, such as taxpayers. Therefore, a more appropriate definition of HRA is:

"... the process of identifying and measuring data about human resources and communicating this information to interested parties" (American Accounting Association, 1973, p. 169).

The 'interested parties' include both internal users, such as managers; and external users, such as investors, unions, government and taxpayers (Flamholtz, 1985). Government and taxpayers are of particular relevance to government departments, as the government is responsible for setting policies and assessing government departments, <sup>22</sup> and taxpayers' money is used to fund government departments' operations.

#### **B.** Objectives of Human Resource Accounting

In addition to providing a quantitative measure of an organisation's human resources, HRA also represents a human resource paradigm, or a way of viewing human resource decisions and issues (Flamholtz, 1985, p. 8; Appelbaum and Hood, 1993). The aim of this paradigm is to improve human resource management and to motivate decision-makers to adopt a human resource perspective (American Accounting Association, 1974; Appelbaum and Hood, 1993; Sackmann et al, 1989).

Brummet et al (1968) describe the internal management objective of HRA as:

"... to provide management with relevant timely, quantifiable and verifiable information about human resources to encourage informed judgement and decisions" (Brummet et al, 1968, p. 224).

Externally, HRA aims to "... permit the evaluation of human resource maintenance and utilisation" (Brummet et al, 1969, p. 12).

<sup>&</sup>lt;sup>22</sup> Through the State Sector Act, 1988 and the Public Finance Act, 1989.

To achieve these objectives, HRA provides for both monetary and non-monetary measures of human resources, as shown in Figure 3-1. While non-monetary human resource information only reflects human resource value, monetary human resource information can reflect either human resource cost or value (Flamholtz, 1979).<sup>23</sup>

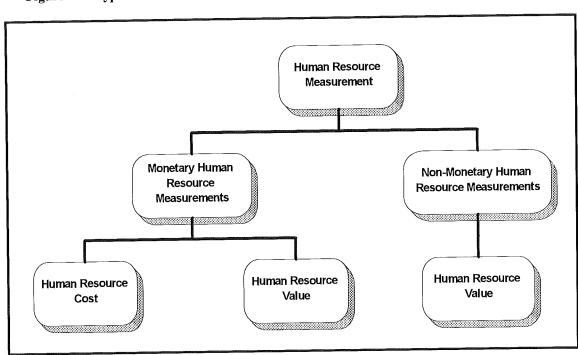


Figure 3-1: Types of Human Resource Measurement (Adapted from Flamholtz, 1979, p. 213)

# III. Monetary Human Resource Measures

Monetary measures of human resources consist of those that attempt to estimate human resource value, <sup>24</sup> and those that use human resource cost<sup>25</sup> as a surrogate for value. The measures presented in Table 3-1 below<sup>26</sup> are suggested for the private sector, however,

<sup>&</sup>lt;sup>23</sup> The terms human resource cost and human resource value are defined in Section III.

Human resource value is measured by the present (discounted) worth of an employee's expected future services (Appelbaum and Hood, 1993; Flamholtz, 1989). This notion of human resource value can be applied at either the individual or group level (Flamholtz, 1989).

<sup>&</sup>lt;sup>25</sup> Cost can be defined as "a sacrifice incurred to obtain some anticipated benefit or service. A cost may be incurred to acquire tangible objects or intangible benefits" (Flamholtz, 1985, p. 59).

A full discussion of these methods is beyond the scope of this thesis because, for the reasons described in the text, monetary valuation methods are not considered appropriate for government departments. However, for a more in-depth discussion of monetary human resource valuation, see Flamholtz (1985, 1989), Henderson and Peirson (1984), Parker et al (1989), Sackmann et al (1989).

these private sector methods must be considered to show why their applicability to government departments is questionable.

Table 3-1: Monetary Human Resource Valuation Methods

Valuation Method	Measurement Type (individual value/group value/cost)	References
Unpurchased goodwill	Group value	Hermanson (1964)
Adjusted present value	Group value	Hermanson (1964)
Discounted future organisational earnings	Group value	Brummet et al (1968)
Causal-Intervening-End Result model	Group value	Likert (1967); Likert and Bowers (1973)
Dollarised attitudes	Group value	Myers and Flowers (1974)
Stochastic Rewards Valuation model	Individual value	Flamholtz (1971, 1972, 1974, 1979)
Certainty Equivalent Net Benefits model	Individual value	Ogan (1976)
Discounted future earnings of individual employee	Individual value	Lev and Schwartz (1971)
Individual worth	Individual value	Roslender and Dyson (1992)
Historical cost	Cost	American Accounting Association (1973); Flamholtz (1979, 1985, 1989); Henderson and Peirson (1984)
Replacement cost	Cost	American Accounting Association (1973); Flamholtz (1979, 1985, 1989); Henderson and Peirson (1984); Sheppeck and Cohen (1985)
Opportunity cost	Cost	Hekiman and Jones (1967); Henderson and Peirson (1984)

Despite the large number of methods proposed, monetary valuation of human resources has not been widely adopted, principally because of limitations in measurement and valuation (Henderson and Peirson, 1984).

# A. Limitations of Monetary Human Resource Measures

The limitations associated with monetary human resource measures can be divided into technical problems concerning the reliability and validity of the measures, and practical difficulties, arising from the operation of monetary HRA systems. As explained below, some of these limitations relate only to public sector organisations, such as government departments, while others are applicable to both the public and private sectors.

#### (i) Reliability and Validity of the Measures

Scarpello and Theeke (1989) argue that validity, reliability and usefulness<sup>27</sup> are the three important criteria for assessing human resource measures. Validity is the extent to which the surrogate accurately reflects the actual human resource value. Reliability relates to the accuracy and objectivity of the measure.

Valuation methods based on discounting future income streams require a reliable estimate of future income, which is subjective and very difficult to determine in a constantly changing environment (Appelbaum and Hood, 1993; Lee, 1987). Such methods are inappropriate for government departments, as many do not have a future earnings figure to discount (McKinney and Ferris, 1984; Pallot, 1990). Moreover, all procedures that rely on discounting future amounts are restricted by the subjectivity associated with selecting the appropriate discount rate (Henderson and Peirson, 1984; Parker et al, 1989).

Techniques that discount future salaries to determine value are inherently limited because of the weak relationship between salary and value (American Accounting Association, 1973; Carper and Posey, 1976; Flamholtz, 1971; Henderson and Peirson, 1984; Jauch and Skigen, 1974; Parker et al, 1989; Scarpello and Theeke, 1989; Tsaklanganos, 1980). Other considerations frequently impact on salary levels, such as past performance, employee career movements within the firm, length of service, age, bargaining skills, corporate sense of obligation and known value to other employers (American Accounting Association, 1973; Hekiman and Jones, 1967; Parker et al,

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<sup>&</sup>lt;sup>27</sup> The usefulness of HRA measures is discussed in Section VI.

1989; Tsaklanganos, 1980). Estimating an employee's future salary is also highly subjective (Henderson and Peirson, 1984).

Some individual human resource valuation methods calculate group value through the aggregation of individual values. However, it is likely that the value of a group is different from the aggregate individual value of group members. These differences result from synergy effects and the existence of established interaction patterns and communication systems (Craft, 1975, p. 26; Edmonds and Rogow, 1986).

In addition to the technical problems of reliability and validity, a number of practical difficulties involved in monetary human resource valuation exist.

### (ii) Practical Difficulties of Monetary Human Resource Valuation

The most significant practical difficulty associated with monetary HRA in either the public or private sectors is the adverse behavioural reaction of both staff and management. Employees may react unfavourably to being monetarily valued or to being considered as 'assets' or 'resources', as both of these terms imply that they are a means to an end (Caplan and Landekich, 1974; Pallot, 1990, 1991a; Parker et al, 1989; Sackmann et al, 1989). Individuals who are rated as expendable, or who have a decreasing value to the organisation may be less motivated and even feel resentment towards the organisation (Pallot, 1990, 1991a; Sen, 1986). Differences between the value the entity assigns to a staff member and that staff member's own assessment of his or her value can also lead to similar dysfunctional consequences (Appelbaum and Hood, 1993; Sen, 1986). It is likely that resistance to HRA will be heightened if staff and managers are unfamiliar with the concepts of HRA (Gibson et al, 1991). HRA information could also be used by management to manipulate staff (Caplan and Landekich, 1974; Sen, 1986).

Gordon et al (1977) studied the effect of HRA disclosures and salary information on group atmosphere, interpersonal relations and group performance. They found that salary information significantly affected group relations, but not group performance. However, HRA information produced negative effects on both group relations and group performance.

Management resistance to HRA can arise for similar reasons to those discussed above for other employees. Additionally, managers may object to new HRA performance measures, especially if they feel they have insufficient control over the variables assessed (Parker et al, 1989). The complexity of HRA models may lead to their rejection by management, as may difficulties of understanding some of the new terms and concepts (Caplan and Landekich, 1974; Pallot, 1990, 1991a; Parker et al, 1989).

Management manipulation of HRA information is also a concern of some critics (American Accounting Association, 1974; Flamholtz, 1985; Sackmann et al, 1989; Sen, 1986). As the decision whether to capitalise or expense human resource costs is subjective, it would be possible for management to inappropriately capitalise some costs in an attempt to reduce human resource expenses in the current period. The rates and periods of amortisation for capitalised costs could also be adjusted to increase or decrease human resource expenses (American Accounting Association, 1974; Baker, 1974; Sackmann et al, 1989).

It is largely because of these difficulties, both technical and practical, that non-monetary variables have been suggested as an alternative to the provision of monetary human resource information.

# IV. Non-Monetary Human Resource Information

Scant research has been conducted concerning the provision of non-monetary information on government departments' human resources. Thus it is necessary to consider research regarding the proposed reporting of non-monetary human resource information in the private sector.

Non-monetary human resource information is expressed in non-financial, quantitative terms, and encompasses all aspects of human resources in an organisation. The measures suggested for the private sector are broader than monetary variables, and include behavioural information, staff demographics, and employee skill and training levels (Lee, 1987). Flamholtz (1975b) defines three types of non-monetary HRA data: quantitative; qualitative statements about measurements; and qualitative information without measurement.

Non-monetary human resource information can be used, either in isolation, or in conjunction with traditional financial information, such as the profit and loss account or the balance sheet. Flamholtz (1989) favours this joint approach:

"Monetary measures are needed because money is the common denominator of business decisions. Non-monetary measures are needed both because they are sometimes more appropriate than monetary measures and because they can serve as surrogates (proxies) when monetary measures are unavailable" (p. 481).

For example, if non-monetary measures show an unfavourable or downward trend in human resources, the income statement is overstating profit, as profits have been made by depleting human resources (Henderson and Peirson, 1984).

Non-monetary dimensions have been used as a basis for a number of monetary human resource measurement models. For example, Likert (1967) employs measures of managerial behaviour, and employee perception and motivation to derive financial end result variables. Both Flamholtz (1972) and Ogan (1976) include non-financial measures as inputs into models to calculate financial end results. Flamholtz (1974) suggests the use of measurement devices such as skills inventories, performance evaluations, trait assessments and attitudinal surveys.

Likert (1967) recommends that non-monetary variables be periodically measured and that "a record of these measurements [be] made a part of every production and financial report" (Likert, 1967, p. 153), even if it is not possible to quantify end result variables in monetary terms. Interperiod comparisons can be made and measures examined both in isolation and in conjunction with other financial reports (Henderson and Peirson, 1984). Any unfavourable changes in the causal and intervening variables may be an indication of deficiencies in the organisation's human resource management (Likert, 1967).

In addition to monetary measurement models that use non-monetary human resource dimensions as a basis, some non-monetary measurement models have been designed for the private sector.

### A. Non-Monetary Measurement Models

Likert and Bowers (1973) developed a model that measures multiple dimensions of human resources and relates any changes in these dimensions to end result performance variables, such as productive efficiency. Changes in human dimensions are multiplied by the coefficient of correlation between the causal variable and the end result performance variable to estimate the changes that can be expected in that performance variable (Likert and Bowers, 1973, p. 21). The human organisation variables measured by Likert and Bowers include: managerial leadership; group processes; peer leadership; satisfaction; and organisational climate.

Eggers (1971) also constructed a non-monetary human resource valuation model called the 'periodic evaluation' approach. This requires the periodic review of human resources in an organisation on a non-financial basis. The evaluation process can be divided into four steps:

- 1) Determining the positions which are, or should be, provided in the organisation. Questions asked at this stage include: Do we need this position? How valuable would the incumbent be? and Should a new position be established?
- 2) Each position is examined to determine how effectively it is staffed. This requires establishing the attributes that are required for each position and weighting those attributes by their importance.
- 3) A potential points value for each attribute is calculated and then compared to the actual points value assessed for each individual or organisation. In this way, the entity's or individual's attributes that are strong and weak can be identified, and action can be taken to develop the weak attributes.
- 4) The attribute figures from several periodic evaluations are collated into a trend statement to reveal the effectiveness of training programmes and to highlight any potential problem areas (Blau, 1978, p. 12; McNally, 1974, pp. 73-74).

Eggers' (1971) model provides an assessment of the quality of the organisation's human resources and would not require any adjustment to the accounting system.

However, if this review is performed periodically for each individual, it may prove to be costly and time consuming.

The models described above are theoretical attempts to use non-monetary variables to provide an analysis of an organisation's human resources. These models are very difficult to apply in practice, as the variables described are complex to measure, the information costly to obtain, and the end results can be difficult to interpret (Blau, 1978; Parker et al, 1989). Therefore, these models shall not be researched in this thesis. An alternative approach is to report the variables themselves and let the users draw their own conclusions from those measures (Acland, 1976).

### **B. Non-Monetary Human Resource Measures**

As a result of the diverse range of non-monetary variables suggested for measurement, it is not intended to cover each method in detail in this section. Listed below are the various measures recommended, mostly for the private sector, and relevant authors' support. <sup>28</sup>

- Employee morale.<sup>29</sup> Morale refers to the state of mind and emotions of an individual, which reflect the individual's attitude towards the work environment, management and the organisation (Acland, 1976, p. 135). This could be measured through attitude surveys or observation by behavioural scientists (Rhode et al, 1976).
- Employee motivation.<sup>30</sup> Motivation of employees is important as it is related to job satisfaction and therefore employee turnover (Flamholtz, 1972).
- Job satisfaction.<sup>31</sup> Job satisfaction is the "feelings of gratification, contentment and pleasure" derived from the job (Acland, 1976, p. 135). This is related to

Due to the number of references applying to each item of non-monetary human resource information, the references in this section will all be footnoted.

<sup>&</sup>lt;sup>29</sup> Acland (1976), Maisel (1992), Rhode et al (1976).

<sup>&</sup>lt;sup>30</sup> Acland (1976), Flamholtz (1972).

<sup>&</sup>lt;sup>31</sup> Acland (1976), Cannon (1974, 1976), Flamholtz (1972), Lee (1987), Scarpello and Theeke (1989).

employee turnover (Flamholtz, 1972). Job satisfaction can be measured through attitude surveys.

- Employee attitudes.<sup>32</sup> Attitudes of employees toward their job, pay, working conditions or the organisation as a whole (Flamholtz, 1985, p. 246). Employee attitudes are generally measured through questionnaires (Chastain, 1979; Flamholtz, 1985). It is also possible to use surrogate measures of employee attitudes, such as number of grievances, absenteeism and staff turnover (American Accounting Association, 1971).
- Staff turnover rate.<sup>33</sup> Personnel turnover provides an indication of how effectively an organisation has maintained its human resources (Flamholtz, 1972).
- Absenteeism.<sup>34</sup> This is another measure of employee job satisfaction and can be an indication of potential staff turnover problems (Gibson et al, 1991).
- Injuries/health and safety.<sup>35</sup> These statistics reveal the conditions under which employees work, and hence could be used to demonstrate to both internal and external parties the department's compliance with health and safety requirements (Lee, 1987).
- Grievances/industrial disputes (settled/unsettled).<sup>36</sup> The level of employee grievances is another indicator of employee attitudes and of potential staff retention problems (American Accounting Association, 1971).

<sup>&</sup>lt;sup>32</sup> American Accounting Association (1971), Chastain (1979), Flamholtz (1985).

<sup>&</sup>lt;sup>33</sup> American Accounting Association (1971), Cannon (1976), Flamholtz (1972), Lee (1987), Rhode et al (1976), Scarpello and Theeke (1989).

<sup>&</sup>lt;sup>34</sup> American Accounting Association (1971), Cannon (1974), Gambling (1976), George (1983), Rhode et al (1976).

<sup>35</sup> Beed (1988), Gambling (1976), George (1983), Lee (1987), Parker et al (1989).

<sup>&</sup>lt;sup>36</sup> American Accounting Association (1971), Gambling (1976), George (1983), Lee (1987).

- Recruitment, attendance and turnover figures, compared to budget and policy targets.<sup>37</sup> This comparison will show trends in employee morale and areas in need of improvement (Poate, 1987).
- Numbers of staff employed, joining and leaving during the period.<sup>38</sup>
- Breakdowns of the work force by sex, age, grades, ranges of pay, levels of education and training.<sup>39</sup> This provides a profile of departmental staff and can indicate whether the department is satisfying its Equal Employment Opportunities (EEO) obligations under the State Sector Act, 1988. Demographic comparisons with other entities can provide insight into the individual organisation's "relative impact on the [economy's] social economic and political patterns" (Poate, 1987, p. 26; Lee, 1987).
- Employees' educational backgrounds, work experience, years of service, special skills and personal traits (especially for management). Disclosure of this information could be used as a surrogate measure of the quality of human resources employed by the department during the period.
- Inventory of skills and capabilities of people within the organisation (including a matching of these with the future organisational plans). <sup>41</sup> A skills inventory is "an enumeration of the capabilities of organisational members. It may identify education, knowledge, and experience in addition to skills . . . and represents a type of balance sheet of the potential services that can be rendered by people at a specified time" (Flamholtz, 1985, p. 244). Although normally presented in tabular form, skills inventories can also take the form of line graphs, showing trends over several periods (Cannon, 1974).

<sup>&</sup>lt;sup>37</sup> Poate (1987).

<sup>38</sup> Beed (1988), Cannon (1974), Gambling (1976), George (1983).

<sup>&</sup>lt;sup>39</sup> Beed (1988), Gambling (1976), Lee (1987), Poate (1987).

<sup>&</sup>lt;sup>40</sup> Lee (1987), Maisel (1992).

<sup>&</sup>lt;sup>41</sup> American Accounting Association (1973), Chastain (1979), Flamholtz (1985), Meo (1992), Pallot (1990), Parker et al (1989).

Skills inventories show the quality of human resources employed by the department, and whether there has been an increase or depletion in this quality between periods. These inventories can also aid in personnel assignment within the organisation (American Accounting Association, 1973). They allow organisations to determine whether the employee skill level "is right for what [the organisation] is now, let alone whether it is right for [the organisation's] longer term objectives" (Meo, 1992, p. 265).

- Percentage breakdown of skill categories within the enterprise and changes within this structure.<sup>42</sup> This is similar to a skills inventory described above, revealing the number of people within certain skill brackets in the organisation, for example, the number of supervisors, trainees, and technical staff (Cannon, 1974).
- List of key organisational personnel and their personal credentials, such as their experience, and academic and professional qualifications. 43
- Flow of skills into and out of each section.<sup>44</sup> This measure demonstrates the organisation's ability to acquire and maintain sufficient trained staff (Cannon, 1976, p. 255).
- Employee productivity (output/employee ratio). "The time spent in activities directly related to producing the output can be combined and then compared with the level of output" (Heda and Shirk, 1979, p. 39).
- Performance evaluations.<sup>46</sup> The two evaluation methods relevant to HRA are ratings and rankings (Flamholtz, 1985). Ratings assess performance in relation to a set of scales, such as whether an employee possesses intelligence,

<sup>&</sup>lt;sup>42</sup> Cannon (1974), Meo (1992), Rhode et al (1976).

<sup>&</sup>lt;sup>43</sup> American Accounting Association (1973), Blau (1978), Pallot (1990), Parker et al (1989).

<sup>44</sup> Cannon (1976).

<sup>&</sup>lt;sup>45</sup> Cannon (1974), Heda and Shirk (1979), Lee (1987), Poate (1987).

<sup>&</sup>lt;sup>46</sup> Chastain (1979), Flamholtz (1985), Lee (1987), Pallot (1990), Parker et al (1989).

motivation and judgement. Rankings are an ordinal form of rating (Flamholtz, 1985, pp. 244-246).

- Potential assessments.<sup>47</sup> Measure the services employees are potentially capable of rendering to an organisation (Flamholtz, 1985, p. 246).
- Recruitment, promotion and reward policies.<sup>48</sup> This information could be used to assess the department's compliance with EEO policies.
- Remuneration averages and distributions classified by occupation. 49

  Information concerning staff remuneration could be used to evaluate the relative levels of payment between departments, and to hold departments accountable for remuneration levels.
- Training statistics, including measures of training effectiveness. Measures suggested for this include number of hours training, employee participation in training programmes and achievement of training objectives (American Accounting Association, 1971). These measures would show the department's effort to maintain and enhance the skills of its workforce.
- Organisational environment: "The atmosphere within which the employees and management . . . perform their organisational tasks. It is akin to the management style or management system" (Acland, 1976, p. 134).
- Retrenchment statistics and reasoning.<sup>52</sup> By providing an explanation of reductions in staff numbers, departments could be held accountable for maintenance of human resources.

<sup>&</sup>lt;sup>47</sup> Chastain (1979), Flamholtz (1985).

<sup>&</sup>lt;sup>48</sup> George (1983), Lee (1987).

<sup>&</sup>lt;sup>49</sup> George (1983), Poate (1987).

<sup>&</sup>lt;sup>50</sup> American Accounting Association (1971), Beed (1988), George (1983), Maisel (1992), Rhode et al (1976).

<sup>&</sup>lt;sup>51</sup> Acland (1976), Maisel (1992), Scarpello and Theeke (1989).

<sup>&</sup>lt;sup>52</sup> Lee (1987).

• Impact of technological changes on employees and assistance given to employees (such as retraining/reallocation). 53

It would be possible for government departments to report some of these measures. Consequently, this thesis seeks internal management opinion on the applicability of these non-monetary measures to government department reporting.

# C. Applicability of Non-Monetary Human Resource Measures to Government Departments

Little research has been conducted into the application of HRA, either monetary or non-monetary, in government departments. Martin and Kintzele (1981) proposed that more research was necessary before HRA could be utilised by not-for-profit organisations and the public sector.

Pallot (1990) suggests non-monetary information could be reported by public sector organisations, such as government departments. The reporting of these non-monetary human resource variables would avoid many of the problems associated with monetary HRA valuation (Acland, 1976; Flamholtz, 1989). However, there are costs and benefits associated with the reporting of non-monetary human resource information. Therefore a cost-benefit analysis is necessary when considering whether to report non-monetary human resource information (Caplan and Landekich, 1974; Henderson and Peirson, 1984; Filios, 1991).

# V. The Costs and Benefits of Providing Non-Monetary Human Resource Information

#### A. Costs

The costs associated with any accounting or information system can be divided into direct costs and indirect costs (Hendriksen, 1982). The costs discussed below for

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<sup>&</sup>lt;sup>53</sup> Lee (1987).

human resource information systems are a priori, as no empirical research has yet been conducted into the costs of establishing and maintaining a HRA system.

#### (i) Direct Costs

The direct costs of reporting information include the costs of installing and operating the system, as well as the costs of producing and maintaining the information required (Hendriksen, 1982).

There is scant literature concerning the direct costs of operating a HRA system, especially a system which collects non-monetary information. However, Filios (1991) speculates that the cost would be high, particularly when attempting to measure behavioural information and attitudes of individual employees. Furthermore, the time and effort required to operate such a system is considerable (Lee, 1987).

The sophistication of the department's existing information systems would affect the costs of the new system (Flamholtz, 1985). If the current system already collects some of the necessary information, then fewer adjustments will be required and hence, the cost should be lower. The extent of change required to implement the new human resource information system may also have an impact on the level of indirect costs to the department (Flamholtz, 1985).

#### (ii) Indirect Costs

Indirect costs cannot be related directly to the implementation and operation of an accounting system, but arise as a result of its implementation (Kaplan and Atkinson, 1989).

It is possible that there will be some behavioural costs to an organisation from the implementation of a non-monetary HRA system. Employees may resent, or feel threatened by, having to complete surveys which attempt to judge morale, attitudes and job satisfaction. This may lead to lower motivation and productivity, and higher absenteeism and turnover (Gibson et al, 1991). If management become overly concerned with meeting certain objectives (such as gender or racial balance targets), the department may operate at less than optimal human resource allocation, or management may artificially manipulate information (Lee, 1987).

Indirect costs may arise because managers fail to accept the HRA system (Pallot, 1991a; Rhode et al, 1976). The implementation of a comprehensive non-monetary HRA system may require the collection and maintenance of a large quantity of new information. Managers may object to the department's time and effort being directed towards these activities (McKinney and Ferris, 1984), and to the costs involved (Pallot, 1990, 1991a). Managers may not be familiar with some of the variables suggested, for example, attitude measurements.

The collection and reporting of non-monetary human resource information may add another dimension to management's accountability for resource use (Flamholtz, 1972; McKinney and Ferris, 1984; Pallot, 1990). Increased accountability could also limit management's discretion over the use and employment of human resources (Rhode et al, 1976). Management resistance to the new system could result from these effects (DiCarlo, 1983; Rhode et al, 1976).

The consequences of management resistance could be costly to the department, as it may lead to a reduction in motivation and efficiency. A disillusioned manager may resign, costing the department a valuable employee and the expense of hiring a replacement (Gibson et al, 1991). Furthermore, managers may take action to minimise the impact of the system on themselves, which is not in the best interests of the department as a whole (Hendriksen, 1982).

Pallot (1991a) believes that some of these negative behavioural consequences can be alleviated through the inclusion of managers and employees in the design and implementation of the HRA system.

Indirect costs also exist when non-monetary human resource information is disclosed to external parties. Disclosure of human resource information to competitors may be costly to the organisation (Poate, 1987), particularly for government departments that face contestability for the provision of services. Employees may use the information as leverage in pay negotiations (Lee, 1987; Poate, 1987). It is possible that employees or the public may misunderstand the information or regard it as propaganda, thereby impacting on the public perception of the department (Poate, 1987). If the human resource policies of the department are not consistent with the 'good employer'

provisions of the State Sector Act,<sup>54</sup> there may be external pressure (for example, from the Government or the public) to change the department's human resource policies (Lee, 1987).

In order to assess the feasibility and practicality of non-monetary human resource reporting by government departments, these potential costs have to be ascertained and then compared to the potential benefits that can be derived from such reporting.

#### **B.** Benefits

To determine the usefulness of the provision of non-monetary human resource information by government departments, it is necessary to refer to studies considering the use of monetary HRA in private sector entities, as little research regarding either non-monetary information or HRA in government departments exists. Consequently, potential uses of non-monetary human resource information regarding government departments are proposed, which are examined, from an internal management viewpoint, in Chapter Six.

The benefit of providing accounting information can be seen as the decision-usefulness<sup>55</sup> of that information (Hendriksen, 1982). Two categories of literature concerning the usefulness of providing HRA in the private sector are considered below, namely: actual studies of the usefulness of particular information; and uses proposed a priori.

### (i) Previous Studies of Usefulness

#### (a) Internal Decision-making

The results of empirical research have generally shown monetary human resource information to be useful for a variety of internal decisions. Zaunbrecher (1974) and Spiceland and Zaunbrecher (1977) examined the impact of HRA cost information on

<sup>&</sup>lt;sup>54</sup> The 'good employer' provisions of the State Sector Act were discussed in the preceding chapter.

<sup>55</sup> Decision-usefulness is defined as "... [the provision of] accounting data which are useful to statement users in their decision making" (Henderson and Peirson, 1984, p. 5; Barton, 1982).

personnel selection decisions, and found a relationship between the HRA information and the decision made. Tommassini (1974,<sup>56</sup> 1977), Oliver and Flamholtz (1978), Gul (1984) and Ogan (1988) all found differences in personnel layoff decisions between those made with and without HRA information. Ogan (1988, p. 34) concludes that "... HRA information reduces uncertainty and guides managers in their search for more accurate decisions".

Flamholtz et al (1988) reviewed the operation of a monetary HRA system in an accounting firm. The firm used the system for the following:

- Turnover analysis;
- Recruitment planning;
- Calculating human resource value.

Flamholtz (1976) found a difference in the staff allocation decisions made when using human resource information or traditional accounting information. However, no statistically significant difference was determinable between the importance of monetary and non-monetary information. Lombardi and Flamholtz (1979) established a difference between budget allocation decisions of those given HRA information and those given only traditional accounting information, yet no difference between the decisions made with various types of HRA information. The HRA measures considered were non-monetary, monetary without a profit measure and monetary with a profit measure.

Harrell and Klick (1980) did, however, find a difference between the usefulness of monetary and non-monetary human resource information, when considering promotion decisions. Their results indicated that "... the subjects placed a greater weight on the monetary human asset cue than on the non-monetary human asset cue in arriving at their decisions" (Harrell and Klick, 1980, p. 397). Furthermore, the subjects reached different decisions with the monetary information than with the non-monetary data,

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<sup>&</sup>lt;sup>56</sup> Cited in Sackmann et al (1989).

despite the fact that the research design emphasised that both measures conveyed exactly the same information.

#### (b) External Decision-making

The studies discussed below examine the uses to external users of human resource information. However, in this thesis it is intended to gain an internal perspective of the external uses. That is, internal management will be asked for their opinions regarding the potential external uses of human resource information. This perspective has been taken because of the size and complexity of a study involving actual external users. Furthermore, it is very difficult to define the specific population of government department financial statement users (Gaffney, 1986; Hay, 1991). The response rates to such surveys are often low (Hay, 1991).

Research studies have concluded that HRA provides useful information for decision-making by external parties. Schwan (1976) found human resource cost information effected ratings of management preparedness, with higher ratings assigned to companies with a HRA orientation.<sup>57</sup>

In the only study relating the provision of non-monetary human resource variables to external decision-making, Acland (1976) concluded that the majority of analysts considered the human resource behavioural information provided to them. The analysts' preferences for a firm with improving financial results but declining behavioural indicators decreased when human resource indicators were provided. The strongest relationship was found when narrative information was included with the behavioural indicators. However, some analysts stated that morale and other behavioural characteristics were not required for successful firm operation and were, therefore, irrelevant to their decision. The behavioural variables provided by Acland were presented in a 'Human Resource Indicator Report' and comprised measures of:

external investors and are not intended to make a profit.

<sup>57</sup> Schwan (1976) also determined a relationship between provision of human resource cost information and the level of net income predictions. Elias (1972), Hendricks (1976) and Paperman (1976) all found monetary human resource information to be useful in stock investment decisions. However, these findings are not relevant to this thesis, as government departments do not have

- Organisational environment;
- Employee morale,
- Management achievement motivation;
- Employee consentaneity with the system;<sup>58</sup>
- Managerial job satisfaction (Acland, 1976).

Despite Harrell and Klick (1980) and Acland's (1976) findings, non-monetary information is considered a surrogate for monetary information. The provision of non-monetary information enables the reporting of an organisation's human resources, while the reliability problems associated with monetary valuation are avoided (Acland, 1976; Flamholtz, 1989). Those researchers who favour the provision of non-monetary information regard the reliability of the measure as more important than the relevance or usefulness of monetary human resource information.<sup>59</sup>

#### (ii) Uses of Non-Monetary Human Resource Information

The proposed uses of HRA information can be divided into internal and external uses, and macro-economic effects over the whole economy. <sup>60</sup>

#### (a) Internal Decision-making

The internal uses of HRA information principally relate to human resource management.<sup>61</sup> While the uses of HRA in human resource management described below relate to the private sector, they may also be applicable to government departments. Government department chief executives are now responsible for human

<sup>&</sup>lt;sup>58</sup> An employee's willingness to stay with the existing system (Acland, 1976).

A more detailed discussion of the characteristics of relevance and reliability, the application of these external reporting concepts to internal management reporting and the trade-off between them can be found in Chapter Four.

<sup>&</sup>lt;sup>60</sup> The macro-economic effects of providing human resource information include a more efficient allocation of resources throughout the economy (Hermanson, 1964), and assisting the government in planning education programmes and immigration policies (Hekiman and Jones, 1967). However, as this thesis is concerned with a micro-economic study of the costs and benefits to individual government departments, an examination of these macro-economic benefits is beyond the scope of this study.

<sup>&</sup>lt;sup>61</sup> Human resource management refers to "... the philosophy, policies, procedures, and practices related to the management of people within an organisation" (French, 1986, p. 6).

resource policies, <sup>62</sup> therefore they will face similar human resource management issues to private sector organisations (Scott et al, 1990; Walsh, 1991).

Flamholtz (1989) and Lee (1987) propose that HRA could play a role in personnel planning and decision-making, as well as in the evaluation of the overall effectiveness of the organisation's human resource policy. More specifically, HRA information could contribute to all phases of the human resource management process: acquisition, allocation and utilisation, development, conservation, evaluation and reward (Flamholtz, 1979, 1985, 1989).

#### Human Resource Acquisition

Acquisition of human resources involves recruiting, selecting and hiring people to meet the organisation's present and future needs (Flamholtz, 1989, p. 474). HRA can provide information on current and future skill needs (Flamholtz, 1989), as well as ensuring that the organisation adheres to the appropriate employee demographic and skill balances. Non-monetary quantification of human resource dimensions also provides criteria upon which selection decisions can be made (Craft, 1975; Flamholtz, 1979, 1985, 1989; Meyers and Shane, 1984).

#### **Human Resource Allocation**

Human resource measures can aid in the allocation of human resources to appropriate organisational roles. Allocation is usually designed to maximise job productivity, human resource development and individual satisfaction (Flamholtz, 1979, 1985, 1989). Quantitative employee skill information would assist management in matching the skills required for a task with the skills of various employees, and maximising the productivity, development and satisfaction of human resources (American Accounting Association, 1973; Filios, 1991; Meyers and Shane, 1984).

Once allocated, human resource information can be used to monitor the effectiveness of employee utilisation (Brummet et al, 1969; Lee, 1987) and productivity (Myklebust, 1976). Effective resource usage and productivity are two important principles of

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<sup>62</sup> Section 59(2) of the State Sector Act.

current government department management philosophy<sup>63</sup> (Boston et al, 1991). Furthermore, Lee (1987) proposes using measures such as employee turnover, job satisfaction and working conditions to review the effectiveness and efficiency of an organisation's human resource management policy as a whole.

#### Human Resource Development

Employee development refers to the retention and enhancement of relevant employee skills, and employee career advancement (Craft, 1975, p. 28). If levels of employee skills and training are reported, management will have an indication of where their human resource development efforts should be directed (Craft, 1975). Also, HRA helps management assess the trade-offs between recruitment from outside the organisation and development from within (Flamholtz, 1979, 1985, 1989).

#### Human Resource Conservation

Conservation of human resources is "the process of maintaining the capabilities of people as individuals and the effectiveness of the human system developed by the organisation" (Flamholtz, 1989, p. 475). Human resource information can enhance management's conservation efforts by providing an indication of conservation problems through social-psychological and behavioural measurements (Brummet et al, 1979; Craft, 1975; Flamholtz, 1979, 1985, 1989). A useful measure of human resource conservation is an entity's skill level, to ensure that it is sufficient and relevant to meet the organisation's needs (Meyers and Shane, 1984). Robinson (1975) suggests the use of labour turnover, absenteeism and productivity measures.

#### Evaluation and Reward of Human Resources

Personnel evaluation and reward involves assessing the performance of an employee and offering a reward based on that assessment. Non-monetary human resource variables, such as an inventory of skills or job performance evaluations, can be used in the reward process, as they provide an indication of an employee's value to the organisation. Rewards can then be based on this value (Flamholtz, 1979, 1985, 1989).

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<sup>&</sup>lt;sup>63</sup> This philosophy was described in the previous chapter.

HRA information is also relevant to performance evaluation. Performance evaluation using non-monetary human resource variables would include productivity measures, such as units of output per hour of input (Heda and Shirk, 1979; Myklebust, 1976). Whether the department's human resources have increased, remained the same or decreased in absolute terms, as well as in skill levels and experience, would also be relevant in assessing managerial performance (Flamholtz, 1972; McKinney and Ferris, 1984; Pallot, 1990).

Roser (1983) proposes the use of HRA budget and variance reports for hiring, training and termination costs of an organisation. Performance can then be assessed based on these variances. Variance from planned objectives could also be assessed for non-monetary variables, such as turnover, absenteeism rates, productivity and number of employees.

### Problem Recognition and Solution

Brummet et al (1968) see HRA as a method of recognising and defining problems in an organisation. An example of a problem that could be recognised using non-monetary information is increasing employee turnover. Brummet et al (1968) argue that HRA is also useful in the next stage of evaluating alternative solutions to the problem, such as what action to take to reduce turnover, and in reporting the results of the actions taken.

#### Strategic Decisions

In addition to operational decisions, HRA information can assist managers in making strategic decisions (Roslender and Dyson, 1992). For example, significant changes have occurred in New Zealand government departments over the past decade (Boston et al, 1991; Scott and Gorringe, 1989; Scott et al, 1990). An organisation's "... capacity for change is constrained by a number of factors, not least the competencies, actual and potential, of its existing employees" (Roslender and Dyson, 1992, p. 323). Therefore, to make informed decisions, managers need to know employees' capacities to bring about, accommodate and benefit from change (Roslender and Dyson, 1992). Behavioural human resource measures could provide this information to managers and strategic planners.

The use of non-monetary human resource information in the above decisions should lead to a longer-term perspective being taken towards a department's human resources (Pallot, 1990). It will provide an overall paradigm to guide organisational thinking on human resources. Organisations can assess the future availability of human resources, as well as the need for training and development, and the promotability and transferability of staff (Flamholtz, 1985, p. 58).

The principal impact of HRA is that it encourages management to take human factors into account when making decisions (American Accounting Association, 1973; Flamholtz, 1976, 1985; Mee, 1982; Pallot, 1990; Sen, 1986):

"The very fact that human resource value is being monitored and reported may have as much impact as the numbers derived from the valuation process per se, because the measurement process directs attention to the variables being measured" (Flamholtz, 1976, p. 155).

### (b) External Decision-making<sup>64</sup>

Increasing Accountability for Performance

It is suggested that external reporting of human resource data will increase the accountability of managers for human resource management (Beed, 1988; Flamholtz, 1972, 1985; McKinney and Ferris, 1984; Pallot, 1990). External reporting of human resource information will indicate the extent to which the organisation's human resources have been increased, maintained or depleted (Pallot, 1990, p. 11). Given the accountability framework that applies to New Zealand government departments, the provision of non-monetary human resource information could be valuable.

Assessment of chief executive performance may be more accurate and informed using HRA information, as managers can be assessed on aspects of human resource management, such as human resource maintenance and utilisation (McKinney and Ferris, 1984; Unruh and Mathews, 1992; Weiss, 1975). Managers may also be

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<sup>&</sup>lt;sup>64</sup> As discussed previously, this thesis is intended to obtain an internal perspective of the potential external uses of non-monetary human resource information.

<sup>&</sup>lt;sup>65</sup> This framework was explained in depth in the previous chapter.

appraised on the organisation's ability to offer services in the future, as the external disclosure of non-monetary human resource information would reveal the future service potential of the organisation (McKinney and Ferris, 1984). This performance evaluation is pertinent to government departments, as the relevant Minister is responsible, through the State Services Commission, for assessing the performance of departmental chief executives. <sup>66</sup>

### Increasing Accountability for Employment Policies and Practices

In addition to management accountability to resource providers as described above, the social accountability of a department may also be enhanced through the external disclosure of human resource information. An organisation can show the contribution it makes to its employees' working lives and job satisfaction (Caplan and Landekich, 1974; Flamholtz, 1974, 1985; Lee, 1987; Poate, 1987; Sen, 1986).

Non-monetary HRA information can be used as evidence that an organisation is satisfying its obligations under industrial safety, minimum wage EEO laws. External human resource reports can disclose the demographics of employees, such as age, gender, race, nationality, and the positions and pay rates of various minority groups (Filios, 1991; Flamholtz, 1974; Gambling, 1976; Lee, 1987; Unruh and Mathews, 1992). Government departments are required to be 'good employers' under the State Sector Act, <sup>67</sup> so non-monetary HRA information could be used to illustrate compliance with these requirements.

Remuneration levels can be justified through the use of non-monetary human resource information, providing a bargaining tool available to either party. By estimating an employee's relative worth to the organisation, human resource information, particularly a skills inventory, can legitimise the remuneration paid to that employee (Filios, 1991;

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<sup>&</sup>lt;sup>66</sup> Sections 6(b) and 43 of the State Sector Act.

<sup>&</sup>lt;sup>67</sup> These requirements were discussed in the previous chapter.

Rhode et al, 1976). New Zealand government departments are responsible for setting staff compensation.<sup>68</sup>

#### Other Uses

External financial reports, such as statements of service performance and statements of resources, 69 containing human resource information can be used for a variety of decision-making purposes. Trends and ratios may be calculated and examined in an attempt to estimate the long-term profitability or viability of the organisation (Henderson and Peirson, 1984). Non-monetary trends and ratios that could be calculated for government departments include human resource productivity ratios, trends in skill levels and training hours, staff turnover and absenteeism patterns, and trends in the ethnic and gender balances of staff.

Lee (1987) believes that the inclusion of human resource variables in external financial reports provides valuable information to shareholders, investors, creditors, unions and government authorities. In addition to the organisation's stock of human resources, external reports would reveal the efficiency and effectiveness of the organisation's utilisation of its staff capacities (Lee, 1987, p. 10; Beed, 1988). Government authorities and taxpayers may be concerned with the utilisation of human resources by government departments, as these departments are funded by public money. Government authorities, as well as unions, may use this information to monitor the human resource policies of government departments.

Euske and Rock (1983) consider the application of HRA to United States Army officer training schools. They conclude that external reports containing human resource information could be used by Congress in funding and resource allocation decisions. A similar position in New Zealand would be Parliament or Cabinet Ministers using human resource information for government department funding decisions.

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<sup>68</sup> Section 68(2) of the State Sector Act provides that contract negotiations be conducted by the State Services Commission in consultation with the departmental chief executive. Section 70 allows the Commission to delegate its powers of negotiation to the chief executives of the individual departments.

<sup>&</sup>lt;sup>69</sup> These terms are defined in Section VII of this chapter.

The benefits described above, which could be applicable to government departments, will have to be compared with the costs of gathering and reporting non-monetary human resource information. The decision is made for government departments to report this information, the form of this disclosure must also be considered.

# VI. Disclosure of Non-Monetary Human Resource Information

Flamholtz (1985, pp. 38-39) and Lee (1987, p. 12) propose four methods for reporting human resource information in the private sector:

- President's letter or chief executive's report;<sup>71</sup>
- Statement of intangibles;<sup>72</sup>
- Unaudited pro forma financial statements; 73
- Conventional financial statements.

Additionally, Lee (1987) suggests disclosure through a value-added statement,<sup>74</sup> and Acland (1976) used a 'Human Resource Indicator Report' containing non-monetary human resource variables in his study. Pallot (1990) raises the possibility of reporting

<sup>&</sup>lt;sup>70</sup> See Chapter Six for the survey respondents' opinions of the cost effectiveness of the provision of non-monetary human resource information by government departments.

The chief executive's report is normally a narrative statement, included in the financial report by the chief executive, reviewing the operations for the period, explaining the information in the reports and discussing the significance of that information. Flamholtz (1985) suggests that the cost of human resource expenditure for the year be included in the chief executive's report, differentiating between expenditure on items for the current period and expenditure that will benefit future periods. Users can then analyse the extent to which the entity is paying attention to human resource development (Flamholtz, 1985, p. 38).

<sup>&</sup>lt;sup>72</sup> This statement "would indicate the expenditures made for various classes of intangibles for the current period as well as for prior periods. Notes could be used to describe the nature of the expenditures, the status of projects, and other relevant information" (Flamholtz, 1985, p. 38).

This is a set of financial statements showing "investments in human assets under proposed human resource accounting conventions" (Flamholtz, 1985, p. 39). Such statements would be included as supplementary information in the annual report.

<sup>&</sup>lt;sup>74</sup> Value-added statements show the value or wealth created by an entity during the period, that is, the difference between the price of their outputs and the price of their inputs. The value-added statement then attributes this value to the various groups associated with the entity, such as government, employees and owners (Hodgson, Holmes and Kam, 1992).

non-monetary human resource information in the statement of resources.<sup>75</sup> The statement of resources is designed to report resources under the control of the entity that are not capable of being measured in financial terms, and therefore of being included in the balance sheet (New Zealand Society of Accountants (NZSA), 1994, para. 12.9). The statement of resources reports the quantity of a resource, however, no attempt is made to place a monetary value on them, thus the issue of valuation is avoided. Non-monetary human resource information may also be reported in a statement of service performance (SSP).<sup>76</sup>

### A. Statement of Service Performance

The SSP reports, in non-monetary terms, the "performance for each class of outputs achieved by the department during the year as compared with the forecast performance for each class of outputs included in the statement of objectives". The Each output should be described in terms of quantity, quality, location and time (NZSA, 1994, para. 11.3), and a complete description of each output is to be provided (para. 11.4).

This thesis investigates whether the SSP is the preferable means of disclosure of non-monetary human resource information by government departments. Reporting human resource information in the chief executive's report or human resource indicator report would mean that some service input information would be in the SSP and some in another report. Disclosing human resource information in the SSP would also allow the presentation of all input information in one report.

It is also possible that the SSP is preferable to the statement of resources, as the statement of resources does not report on the input-output relationship. The SSP is able

A statement of resources describes, in physical, non-financial terms, the resources under the control of the organisation (New Zealand Society of Accountants, 1994).

<sup>&</sup>lt;sup>76</sup> Although the SSP is an external financial report, it also has possible applications for internal management. This is discussed further in Chapter Four.

<sup>&</sup>lt;sup>77</sup> Public Finance Act, section 35(3).

<sup>&</sup>lt;sup>78</sup> The SSP is discussed in detail in Chapter Four.

The conventional and pro forma financial statements, the statement of intangibles and the value-added statement all report monetary values, so are not appropriate for non-monetary disclosure.

to show human resource productivity through disclosure of the relationship between service performance and human resource input. Furthermore, it is not mandatory for a government department to produce a statement of resources, so it is conceivable that some government departments may publish human resource information and some may not. However, all government departments are required to produce a SSP. 80

If non-monetary human resource disclosure by government departments in a SSP is seen as useful and practical,<sup>81</sup> it could provide an alternative to monetary human resource valuation. Furthermore, the reporting of non-monetary information could avoid the problems associated with monetary valuation. Consequently, an investigation of internal management's perspective of this usefulness and practicality is made, and the results reported in Chapter Six.

## VII. Chapter Summary

Human resource accounting is a method of measuring and reporting an organisation's human resources to internal and external interested parties. HRA can produce either monetary or non-monetary measures of human resources.

Monetary HRA reports either human resource value or human resource cost. When cost is measured, it is used as a surrogate for human resource value. However, the reliability of monetary human resource valuations is often low, as a result of many measurement and estimation difficulties. Assigning a monetary value to human resources can also lead to a variety of dysfunctional behavioural consequences.

Consequently, non-monetary human resource measures have been suggested, such as behavioural information, staff demographics, and employee skill and training levels. It has been proposed that such measures could be reported by government departments, however, a cost-benefit analysis is necessary to determine the cost effectiveness of this option.

<sup>80</sup> Public Finance Act, section 35(3).

<sup>&</sup>lt;sup>81</sup> Practical in terms of costs and benefits, that is, cost effective.

The benefits from non-monetary human resource reporting by government departments arise through the usefulness of this human resource information. Uses of non-monetary human resource information include: internal decision-making, such as human resource management and performance evaluation; external decision-making, such as enhancing management accountability and improving performance evaluation of management; and macro-economic effects.

Non-monetary human resource information can be disclosed by government departments through a chief executive's report, a human resource indicator report, a statement of resources or a statement of service performance. By including human resource measures in the SSP, the management of human resources would become part of departmental performance, as the SSP is integral to performance reporting.

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# I. Introduction

The assessment of organisational performance can be executed using both financial and non-financial elements. The entity's management of its human resources is an important component of this performance. Financial performance is measured via the operating statement and statement of financial position, while non-financial performance measurement consists of quantitative and qualitative descriptions of various elements of the organisation's operation (Dalton, 1993, p. 64). Reporting on an entity's service performance is classified as non-financial performance measurement (New Zealand Society of Accountants (NZSA), 1994).

Service performance is "... the term used to describe an entity's performance in meeting its objectives of supplying goods and services" (NZSA, 1994, para. 10.2). It is primarily concerned with the achievement of an organisation's output and outcome goals and the efficiency<sup>82</sup> with which these outputs are produced (NZSA, 1989, para. 1.3). In New Zealand government departments, service performance is reported in the statement of service performance (SSP),<sup>83</sup> which is required by section 35(3) of the Public Finance Act, 1989. It may be possible for human resource information to be included in a SSP, as either inputs, outputs or outcomes.

Initially, the nature of, and rationale for, service performance reporting is discussed, and reasons for including human resource information in the SSP are proposed, followed by a review of the internal uses of service performance information. The content of government departments' SSPs is also examined, and an a priori list of users proposed. The quality of potential human resource information in SSPs can be assessed, for both internal and external purposes, by evaluating the relevance, understandability, reliability and comparability of that information. The chapter concludes with a review of these characteristics.

<sup>82</sup> The terms output, outcome and efficiency are defined later in this chapter.

<sup>83</sup> SSPs will be discussed in greater depth in a subsequent section of this chapter.

# **II. Service Performance Reporting**

# A. Rationale for Service Performance Reporting

The fundamental objective of service performance reporting is to:

"... provide more complete information about a governmental entity's performance than can be provided by the operating statement, balance sheet, and budgetary comparison statements and schedules to assist users in assessing the economy, efficiency and effectiveness of services provided. The measurement of a governmental entity's performance requires information not only on the acquisition and use of resources, but also on the outputs and outcomes of the services provided and the relationship between the use of resources and outputs and outcomes" (Governmental Accounting Standards Board (GASB), 1994, para. 55).

Kearney (1994a) restates this objective with respect to the New Zealand environment as:

"[improving] management of public sector organisations and resources by:

- focusing on objectives and performance to give improved performance;
- linking activities undertaken to organisational objectives;
- providing more and better information to serve as a basis for improved decision making" (Kearney, 1994a, p. 3).

Given these objectives, it can be argued that information about government departments' human resources be included in SSPs. Human resources are used, in conjunction with other resources, to produce the services of government departments and, in many cases, are the most costly input into the service. Moreover, failure to report on a material component of government departments' operations, such as human resources, appears inconsistent with the notion of accountability that underlies the New Zealand public sector reforms which initiated service performance reporting (Scott and Gorringe, 1989; Treasury, 1987).

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<sup>&</sup>lt;sup>84</sup> See the departmental budget figures presented in Chapter One. Because of the cost and importance of human resources to public sector entities, human resource information would be material for decision-making purposes.

<sup>&</sup>lt;sup>85</sup> This is discussed in Chapter Two.

Accountability, as well as the drive for economy, efficiency and effectiveness in the delivery of Government services, were principal reasons for the introduction of service performance reporting.

### (i) Service Performance Reporting and Accountability

The discharge of accountability is a significant reason for the implementation of a service performance reporting framework such as that applying to New Zealand government departments (Controller and Auditor-General, 1994a; Fountain, 1991; GASB, 1990; Grant, 1990; Hyndman and Anderson, 1991; Kearney, 1994a, 1994b; Mayston, 1985; Provost, 1992; Smith, 1990).

Accountability can be discharged by service performance reporting in many ways, including:

- Clarifying the organisation's objectives and priorities (Fountain, 1991; Grant, 1990; Mayston, 1985; Smith, 1990);
- Acting as a managerial incentive scheme, such as performance related pay (Mayston, 1985; Smith, 1990);
- Defining performance standards (Mayston, 1985; Smith, 1990);
- Acting as a device to measure progress towards performance targets and to monitor efficiency (Fountain, 1991; GASB, 1994; Grant, 1990; Mayston, 1985; Smith, 1990);
- Allowing an understanding of the various activities and functions undertaken by government departments (Kearney, 1994a);
- Providing a wider perspective of performance (Kearney, 1994a);
- Assisting resource providers who do not have direct knowledge of the goods and services provided, and who are not users of the goods or services, to assess departmental performance (Financial Accounting Standards Board (FASB), 1980, para. 51).

• Determining whether resources are being used legally and for the intended purpose (GASB, 1994).

To fulfil the accountability role "financial reports should reflect the nature and dimensions of performance that are relevant to the entity" (NZSA, 1993b, para. 3.4). Given the 'good employer' provisions of the State Sector Act, 1988, <sup>86</sup> it could be argued that a wide view of government department performance would include human resource and Equal Employment Opportunities (EEO) policies.

## (a) Human Resource Information and Accountability

The provision of non-monetary human resource information in the SSP may be consistent with departmental accountability in the following ways:

- Allow the management of human resources to be included in departmental and managerial performance assessment.
- Enable departmental chief executives, Ministers and the Government to be held accountable for government departments' human resource policies.
- Emphasise the importance of human resources and ensure they are considered as part of departmental performance.
- Assist resource providers, such as taxpayers, who have no direct knowledge of the operations of the department to assess departments' human resource policies.
- Facilitate examination of whether departments' human resource policies are consistent with their 'good employer' obligations under the State Sector Act.

The provision of human resource information would be useful to those who require information to assess the accountability of departmental chief executives with respect to remuneration and reappointment. Human resource information may be consistent with the accountability of both heads of department and Ministers for how those human

<sup>86</sup> See Chapter Two.

resources are used, and whether the number and skills of employees are maintained at an acceptable level.

Human resource information could also be considered in the performance evaluation of departmental chief executives, Ministers and the Government. This evaluation would consider the use of human resources by management, and whether these resources have been employed in the most efficient, effective and economic manner (Flamholtz, 1985; McKinney and Ferris, 1984). This could be largely achieved through non-monetary human resource data, such as the number and skills of staff and any changes in these between periods, how those staff are employed and how productive they are.

Disclosure of the number of employees, EEO information and salary brackets could also be consistent with the accountability of chief executives and Ministers. If the department is not meeting its obligations under the State Sector Act regarding EEO, or if the chief executive is being overpaid, then action can be taken to correct this. Such action may include reducing management compensation or increasing the performance-based component of it, or instituting 'Affirmative Action' employment policies. Public scrutiny of employment practices of departments may also increase the accountability of the Government itself for its public sector policies.

Reporting EEO information in the SSP could also discharge the department's obligations under the State Sector Act to report on their achievement of EEO targets. Section 58(2) of the State Sector Act requires:

"The chief executive of a Department shall include in the annual report of the Department -

- (a) A summary of the equal employment opportunities programme for the year to which the report relates; and
- (b) An account of the extent to which the Department was able to meet, during the year to which the report relates, the equal employment opportunities programme for that year."

The EEO Unit of the State Services Commission recommends these reporting obligations be satisfied through the preparation of three reports:

- 1) Management/action plan (or EEO programme);
- 2) Progress report;
- 3) Statistical report (Robson, 1988, p. 1).87

It may also be possible to report such information in the SSP, either as a substitute for, or a supplement to, the above three reports.

Thus, the provision of non-financial service performance information, and specifically non-monetary human resource information, is consistent with the accountability framework within which government departments operate. However, the discharge of accountability is one of a number of reasons for service performance reporting.

### (ii) Additional Reasons for Service Performance Reporting

In addition to the provision of information for the discharge of accountability, many other advantages of reporting service performance have been proposed. It is possible to relate many of these to the reporting of human resource information in the SSP. These reasons include:

- Motivating employees by providing incentives, rewards and sanctions based on the service objectives (GASB, 1990, p. 33; Grant, 1990), or human resource productivity targets.
- Encouraging improvement in Government programmes and policies, such as
  EEO policies. It provides government department chief executives and
  Ministers with an indication of their progress toward meeting their objectives
  and reveals areas in need of improvement (Baume, 1992; Fountain, 1991;
  GASB, 1990; Kearney, 1994b).
- Creating a basis for planning, monitoring, control and review (Grant, 1990;
   Hyndman and Anderson, 1991).

<sup>87</sup> Cited in Tremaine (1991).

- Stimulating the public to take a greater interest in the running of government departments (Fountain, 1991; GASB, 1990, p. 33), including their management of human resources.
- Decision-making and resource allocation (Hyndman and Anderson, 1991;
   Kearney, 1994b), such as the acquisition, allocation, development,
   conservation and reward of human resources.
- Strategic planning, and the setting and monitoring of long-term goals related to human and non-human resources (Controller and Auditor-General, 1994a, 1994b).
- Serving as an early warning device and an indicator of possible future problems with the organisation's performance (Baume, 1992; Controller and Auditor-General, 1994b; Mayston, 1985; Smith, 1990), for example, a shortage of appropriately skilled human resources.
- Helping explain the need for and value of public service programmes by focusing attention on outputs and outcomes rather than purely financial considerations. This would also have an effect on budgetary decisions (Fountain, 1991; GASB, 1990).
- Service performance measurement and reporting empowers workers. Keeping
  workers informed of their progress to date and areas in need of improvement
  provides information that empowers those workers (Baume, 1992, p. 61).

It will be noted that the preceding list contains advantages to both external parties and internal management. Service performance reporting serves an important role in the internal management process of a department, as well as providing relevant information to external parties. Provost (1992, p. 531) believes that "... the prime purpose of performance measurement must be as a management tool."

# (iii) Internal Use of Service Performance Information

The literature relating to service performance reporting provides substantial support for the use of service performance information by internal managers. For example, the GASB (1990), in a study of several areas of the US public sector, recommended the internal use of service performance information: "Internal management is a significant, if not primary, user of [service performance] data" (GASB, 1990, p. 32). For example, Tracy and Jean (1993) describe the use of service performance information by managers for operational control in Portland, Oregon.

The SSP is an externally focused report to be included as part of the general purpose financial reports designed to meet the needs of external users (NZSA, 1993a, paras. 2.1, 2.4). Despite the SSP being an external report, it is argued here that such a report could be used internally. The NZSA (1989) argued that the SSP should be a compilation of service performance information collected for internal purposes (para. 1.6), therefore such a summary of internal information could be useful to management. Other financial reports designed for external reporting purposes are also used internally by management because they provide useful and relevant information, such as a profit and loss statement (Anthony and Govindarajan, 1995; Hansen and Mowen, 1994; International Federation of Accountants, 1991; Kaplan and Atkinson, 1989; Micallef et al, 1994). The information contained in a SSP would enable management to determine if they are meeting their service objectives.

Dalton (1993) contends that non-financial SSP information is important and useful to management, while the Controller and Auditor-General (1994b, p. 26, emphasis added) recommends that SSP measures that are "... meaningless to external users and not used internally" be avoided. Further, the Controller and Auditor-General, when reviewing government departments' service performance information systems, investigated whether performance measures were being used as an internal management tool.

The Audit Office, in a draft framework for assessing the appropriateness of performance measures, specifies (Controller and Auditor-General, 1994b, p. 30):

"Failure to use the measures adopted for external reporting for internal management purposes raises questions about whether management:

- measures its performance at all;
- measures the wrong performance for external reporting; or
- has other measures it believes are more appropriate, which should be used for external reporting."

The Audit Office believe that external and internal reporting of service performance should be integrated (Kearney, 1994b), and that "... acceptable SSPs are unlikely to be produced if chief executives and their managers do not commit themselves to measuring and reporting non-financial performance in a manner that is useful both to themselves and Parliament" (Controller and Auditor-General, 1994a, p. 55, emphasis added).

Consequently, there is a valid argument for the internal use of SSPs. However, the GASB (1990, p. 19) note that often greater detail is required for internal management reports than for external reports. Therefore, it could be possible that two versions of the SSP need to be produced; one for internal management and one for external reporting, with greater detail and less aggregation in the internal report.

### **B. Nature of Service Performance Reporting**

Measurement and reporting of service performance generally involves using non-financial indicators and measures to assess and present the organisation's achievement of these output and outcome goals (Duquette and Stowe, 1992).

### (i) Non-Financial Measures

It is accepted that a single profit measure is an inadequate reflection of the overall performance of an organisation that has goals other than profit maximisation, such as government departments (GASB, 1994; Hyndman, 1991; Hyndman and Anderson, 1991; Miah, 1991; Oettle, 1986; Sutcliffe et al, 1991; Thompson, 1995). Furthermore, traditional managerial performance evaluation techniques such as the comparison of budgeted targets with actual achievements are also insufficient. "[Coming] in under budget does not say much about managerial performance, i.e., the estimate may have been too high [or] needed services may have been curtailed" (Brown and Pyers, 1988, p. 737).

Therefore, for a comprehensive picture of departmental performance, it is necessary to report non-financial variables reflecting alternative goals. Further, accountability requires that financial reports should reflect the elements of performance that are relevant to the entity (NZSA, 1993b, para. 3.4), and measure actual achievements against objectives and targets for those elements, some of which may be non-financial (para. 3.5). This may include human resource measures, as management of human resources is an element of government department performance.<sup>88</sup>

Information on service performance is reported primarily in non-financial terms, as "... [they] can describe many features of organisational performance more fully and appropriately than can the specialised monetary-oriented language of traditional financial accounting" (FASB, 1980, p. 15). As discussed in Chapter Three, it can be argued that non-monetary human resource information is more appropriate for government departments than monetary information. This could overcome the problems associated with monetary human resource valuation.

Non-financial measurement is "the process of determining quantitative representations of the non-financial elements of general purpose financial reports" (NZSA, 1993b, para. 9.12). Service performance is one such element (FASB, 1980, GASB, 1990; NZSA, 1993b, Sutcliffe et al, 1991; Thompson, 1995). The principal measures of service performance are inputs, outputs and outcomes.

### (ii) Inputs

Inputs are defined as "... the resources used to produce the goods and services which are the outputs of the reporting entity" (NZSA, 1993b, para. 8.2). Parry et al (1994) and the GASB (1994) distinguish between financial measures of inputs, such as costs and expenditures for labour and supplies, and non-financial measures of inputs, such as human resource hours and machine hours. Inputs include money, personnel, materials, facilities, equipment and purchased services (FASB, 1980, p. 6). These input measures can then be related to outputs to evaluate efficiency.

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<sup>88</sup> As discussed in Chapter Two, government departments are now responsible for their own human resource policies.

#### (iii) Outputs

Outputs are "the goods and services produced by the reporting entity" (NZSA, 1993b, para. 8.3). Outputs can include policy advice, the administration of regulations and transfer payments, and the provision of specific services, such as education and prison services (Pallot, 1991a, p. 172). Measures of the productivity or efficiency of human resources, or services produced per labour input hour, would constitute an output of the organisation. It is possible to further divide outputs into those that represent the quantity of a service provided and those that report the quantity of a service provided that conforms to certain quality criteria. An example of such criteria is the percentage of graduates that satisfy a predetermined standard of achievement (GASB, 1994, para. 50). There is considerable debate as to whether service performance reporting should focus on outputs or outcomes.

#### (iv) Outcomes

The Statement of Concepts for General Purpose Financial Reporting (SoC) describes outcomes as "... the impacts on, or consequences for, the community resulting from the existence and operations of the reporting entity" (NZSA, 1993b, para. 8.4). Outcomes represent the results of the operations of the government department. Examples would include a reduced crime rate, an increase in economic welfare (Pallot, 1991a, p. 172) and the scores of students on achievement tests (GASB, 1990, p. 15). Information on the gender balance of employees and other EEO information could be seen as an outcome, as this is a direct result of the employment policies of the organisation. However, departmental service performance reporting has tended to focus on outputs, as a result of the Public Finance Act, with the Government being responsible for the outcomes resulting from these outputs (Ball, 1992a; Kearney, 1994b).

# III. Statements of Service Performance

All New Zealand government departments are required by the Public Finance Act to prepare and forward to the Responsible Minister an annual SSP (section 35(3)(e)). The SSP reports, in non-monetary terms, the "performance for each class of outputs"

achieved by the department during the year as compared with the forecast performance for each class of outputs included in the statement of objectives" (Public Finance Act, 1989, section 35(3)(e)).

In addition to the Public Finance Act, the NZSA has also produced guidance on the nature and content of the SSP. The SSP is to be considered an integral part of the external reporting framework for those organisations that have non-financial performance objectives (NZSA, 1993a, paras. 2.3, 2.4, 1993b, para. 3.2). Service performance objectives and results are reported in non-financial terms, such as quantities of service rendered (NZSA, 1993b, para. 3.2). Such reporting discloses the "degree to which the reporting entity has met its service objectives" (NZSA, 1993b, para. 8.1).

# A. Information Disclosure in Government Departments' SSPs

Any information reported in the SSP must meet both of the recognition criteria for non-financial information contained in external reports set out in the SoC, that is:

- "the item has an appropriate basis of measurement; and
- it can be reliably measured" (NZSA, 1993b, para. 8.5).

The information used to describe service performance in the SSP is to:

"... provide a complete description of the delivery of each output (or aggregation of outputs) reported, but without undue emphasis on easily measured dimensions, and without resulting in an overload of only partially relevant statistics" (NZSA, 1994, para. 11.4).

This would appear to suggest the reporting of both inputs and outputs, although section 35(3)(e) of the Public Finance Act only requires the disclosure of outputs, as does paragraph 11.1 of FRS-2: Presentation of Financial Reports (FRS-2). There is no mention of the reporting of outcomes in either of these pronouncements, however, paragraph 11.5 of FRS-2 recommends that "for each output disclosed . . . where

<sup>&</sup>lt;sup>89</sup> Paragraph 11.1 states that "the statement of service performance shall describe and disclose the outputs of an entity" (NZSA, 1994).

practical and appropriate, the outcome(s) to which the output is intended to contribute is to be disclosed" (NZSA, 1994).

There could be a reluctance to report input and outcome human resource information in government departments' SSPs, as the Public Finance Act only requires reporting on outputs. Furthermore, the Audit Office recommends focusing on externally driven performance measures, rather than internal procedures (Audit Office, 1990, p. 12). However, if some input information is not disclosed, then departments are going to be unable to report on the efficiency of operations, as efficiency represents the relationship between inputs and outputs (Grant, 1990). If outcome information is not presented in the SSP, then it is not possible to report on effectiveness and the results of the operations of the department. Failure to report these dimensions of performance appears to contradict the nature and purpose of service performance reporting.

Materiality also needs to be considered when disclosing information in a SSP. The concept of materiality applies to both financial and non-financial information (NZSA, 1993b, para. 6.6). Any item presented in the SSP would have to satisfy the materiality requirement, that is:

"A statement, fact, or item is material if it is of such as nature or amount that its disclosure, or the method of treating it, given full consideration of the circumstances applying at the time that the financial reports are completed, is likely to influence users of financial reports in making decisions or assessments" (NZSA, 1993b, para. 6.5).

Given the importance of human resources to government departments, and the cost of human resources relative to other costs, <sup>90</sup> it is highly possible that human resources would satisfy the above materiality criterion.

The notion of materiality is similar to the Audit Office's stipulation that only critical performance measures<sup>91</sup> should be reported. Taken together, materiality and the critical performance measure criterion should ensure that only that major or important elements of a department's service performance are reported in the SSP.

<sup>&</sup>lt;sup>90</sup> Budgeted cost figures emphasising the importance of human resources are presented in Chapter One.

A critical performance measure is a measure "which, if omitted, would result in an unbalanced or incomplete picture of the organisation's performance" (Audit Office, 1990, p. 9).

#### (i) Method of Disclosure

There is no standard format or guide in regard to the content of a SSP provided in the Public Finance Act. Thompson (1995, p. 14) suggests that a SSP must contain both a linked hierarchy of entity, divisional and significant activity objectives and indicators to measure performance against those objectives. It is important to note that these indicators will reflect both objective and subjective measures of performance (NZSA, 1989, para. 1.10).

More specifically, guidelines recommend that, where relevant and appropriate, each output disclosed in the SSP be described in terms of:

- Quantity how much of the service was provided.
- Quality how well the activity was provided.
- Time when the activity was provided.
- Location where the activity was provided (Audit Office, 1990, p. 8; NZSA, 1993b, para. 9.12, 1994, para. 11.3).

Raaum (1992, p. 22) contends that service performance reports should contain dimensions of:<sup>92</sup>

- Inputs (cash expenditures, operating costs, resource quantities used);
- Outputs;
- Quality (output quality and process quality);
- Timeliness;
- Efficiency (unit costs, productivity, operating ratios);
- Economy (price per resource unit);

<sup>&</sup>lt;sup>92</sup> This list is an abridged version of the original, containing only those suggestions considered relevant to government departments.

- Customer satisfaction;
- Purpose achievement (programme/service results);
- Coverage (proportion of need met or target population served).

Of these variables, the two most difficult to measure are purpose achievement (or outcomes) and quality. The issue of outcome reporting has already been briefly discussed. Various techniques have been suggested for measuring quality in a SSP, including:

- Customer surveys;
- Measures of elected representatives' (for example, ministers) satisfaction;
- Error rates and number of attempts;
- Percentage of compliance with eligibility criteria;
- Percentage of processing accuracy;
- Acceptance levels or levels of valid objections (Provost, 1992, pp. 533-534).

## (ii) Comparative Data

While the service performance information described above will be reported for the period in question, such information is of little use if there is not some basis of reference with which to compare the year's results (GASB, 1994). Thus the NZSA requires that "the statement of service performance shall present both projected service performance and actual service performance" (NZSA, 1994, para. 11.6). Section 35(3)(e) of the Public Finance Act also stipulates that the SSP shall compare actual and forecast performance for the year. The level of projected service performance will be defined in the department's statement of objectives. Furthermore, a GASB study revealed that 91 percent of users surveyed believed actual versus original budget comparison was useful or extremely useful, while 84 percent felt the same about actual versus modified budget comparison (Ives, 1987, p. 230).

Other bases of comparison that have been suggested for service performance reporting include (GASB, 1990, pp. 24-26):

- Comparison with previous periods;
- Comparison with similar departments;
- Comparison with technically developed standards or norms;
- Comparison among geographical areas or target groups within the department.

Any comparison with similar departments would have to take into account the differences in environment and overall mission that may exist between the departments (GASB, 1990; Smith, 1988, 1990). One method of disclosing these distinctions is to use narrative explanatory information.

## (iii) Explanatory Information

The above elements of service performance can be supplemented in the SSP by qualitative explanatory data (GASB, 1990; NZSA, 1993b<sup>93</sup>). The Audit Office, while supporting the elimination of explanatory data from the SSP, does acknowledge that sometimes such commentary is appropriate. It therefore provides guidelines for the use of narrative information in the SSP. Narrative information should:

- "assist the reader to interpret the statement;
- relate to significant measures;
- relate to the level of performance achieved;
- be based on verifiable facts" (Provost, 1992, p. 535).

Furthermore, the GASB asserts that narrative explanatory information can either be provided on an ad hoc basis to explain irregularities in the information, or consistently from year to year (GASB, 1990, p. 27). Narrative explanatory information could initially be employed to explain the meaning and relevance of any human resource information included in the SSP.

<sup>&</sup>lt;sup>93</sup> The NZSA believes "[narrative] comment is particularly relevant in reporting service performance" (NZSA, 1993b, para. 3.7).

However, before human resources can be reported in the SSP, two important issues need to be considered; the costs and benefits of reporting human resource information in the SSP, and whether human resource information would satisfy the qualitative characteristics required of information in external financial reports.

The cost of maintaining and verifying the required human resource information could be prohibitively high. The NZSA suggests undertaking an examination of the costs and benefits of any financial reporting decision (NZSA, 1993b, para. 6.4), and the GASB and the Controller and Auditor-General recommend a cost-benefit analysis of any service performance reporting initiative (Controller and Auditor-General, 1994b; GASB, 1994). Consequently, it is necessary to conduct a cost-benefit analysis of the reporting of non-monetary human resource information in government departments' SSPs. 94

## **B.** Users of Statements of Service Performance

Part of assessing the benefits of providing human resource information in the SSP is to determine who would use this information. While no specific studies have been conducted to determine the users of SSPs, a list of probable users can be devised from the literature concerning the use of government general purpose financial reports. The studies listed below consider the users of government general purpose financial reports, not SSPs. However, as SSPs are part of general purpose financial reports (NZSA, 1993a), it is assumed that the users will be the same. Furthermore, these users are for SSPs in general, rather than non-monetary human resource information specifically. However, users of SSPs could be classed as potential users of non-monetary human resource information within those SSPs.

The list of possible users of New Zealand Government SSPs includes the following:95

• Oversight bodies, such as Select Committees and Treasury. 96 Oversight bodies are defined as "[those] responsible for reviewing the organisation's

<sup>&</sup>lt;sup>94</sup> The costs and benefits of a human resource information system were discussed in Chapter Three.

<sup>&</sup>lt;sup>95</sup> Due to the large number of references applying to each user group, the references in this section will all be footnoted.

conformance with various laws, restrictions, guidelines or other items of similar nature" (FASB, 1980, para. 29c).

- Cabinet Ministers. 97
- Parliament. 98
- Investors and creditors, and their analysts.
- Taxpayers, voters and the general public.<sup>100</sup>
- Grantors and voluntary resource providers. These are individuals or groups that donate resources with no expectation of a return on the funds contributed.

Australian Accounting Research Foundation (1987), Anthony (1978), Controller and Auditor-General (1995), Coopers and Lybrand (1978) (cited in Atamian and Ganguli, 1991; Jones et al, 1985), FASB (1980), General Accounting Office (1980) (cited in Jones et al, 1985), GASB (1987), Hay (1991), Henke (1977), Ives (1987), Jones et al (1985), Mayston (1985, 1992a), Municipal Finance Officers' Association (1980) (cited in Jones et al, 1985).

<sup>&</sup>lt;sup>97</sup> Ball (1981), Federal Government Reporting Study (1986) (joint research between the US General Accounting Office and the Office of the Auditor-General of Canada, cited in International Federation of Accountants, 1991), Mayston (1985, 1992a), NZSA (1993b).

Australian Accounting Research Foundation (1990), Ball (1981), Carpenter and Feroz (1990), Commonwealth Department of Finance, Australia (1991, 1992) (cited in Micallef et al, 1994), Canadian Institute of Chartered Accountants (CICA) (1980, 1984) (cited in International Federation of Accountants, 1991), Drebin et al (1981), Federal Accounting Standards Advisory Board (1993) (cited in Micallef et al, 1994), FASB (1980), Federal Government Reporting Study (1986), Hay (1991), Jonsson (1984), Likierman (1984), Mayston (1985, 1992a), NZSA (1987, 1993b), Rutherford (1992), South Australian Commission of Audit (1994) (cited in Micallef et al, 1994), Sutcliffe (1985).

Anthony (1978), Ball (1981), Commonwealth Department Of Finance (1991), CICA (1980, 1984), Coopers and Lybrand (1978), Davidson et al (1977) (cited in Atamian and Ganguli, 1991; Jones et al, 1985), Drebin et al (1981), FASB (1980), Federal Government Reporting Study (1986), General Accounting Office (1980), GASB (1987), Green (1987), Henke (1977), Ives (1987), Jones et al (1985), Karvelis (1987), Mayston (1992a), Municipal Finance Officers' Association (1980), National Committee on Governmental Accounting (1968) (cited in Atamian and Ganguli, 1991; Drebin et al, 1981; Jones et al, 1985), NZSA (1993b), Patton (1975) (cited in Atamian and Ganguli, 1991; Jones et al, 1985), Rutherford (1992), South Australian Commission Of Audit (1994), Van Daniker and Pohlman (1983) (cited in Atamian and Ganguli, 1991), Ward (1987).

Australian Accounting Research Foundation (1990), Anthony (1978), Ball (1981), Commonwealth Department Of Finance (1991, 1992), CICA (1980, 1984), Controller and Auditor-General (1995), Coopers and Lybrand (1978), Davidson et al (1977), Drebin et al (1981), Federal Accounting Standards Advisory Board (1993), FASB (1980), Federal Government Reporting Study (1986), Gaffney (1986), General Accounting Office (1980), GASB (1987), Hay (1991), Henke (1977), Mayston (1985, 1992a), Municipal Finance Officers' Association (1980), National Committee On Governmental Accounting (1968), NZSA (1987, 1993b), Rutherford (1992), South Australian Commission Of Audit (1994), Sutcliffe (1985), Van Daniker and Pohlman (1983).

Anthony (1978), Coopers and Lybrand (1971), Drebin et al (1981), FASB (1980), Henke (1977), National Committee On Governmental Accounting (1968), NZSA (1993b), Sutcliffe (1985), Van Daniker and Pohlman (1983).

- Service recipients.<sup>102</sup> These are the recipients of the services produced by government departments, such as beneficiaries (Social Welfare), customers (Valuation New Zealand, Survey and Land Information) and Cabinet Ministers receiving policy advice.
- Those providing a review of the service, such as media, analysts and auditors.<sup>103</sup>
- Citizens' groups, including special interest groups. 104
- Internal management. 105
- Employees and their representatives, such as trade unions. 106
- Others, including: researchers, <sup>107</sup> public sector accountants, <sup>108</sup> accounting standard setters, <sup>109</sup> parties contemplating external transactions with the Government, <sup>110</sup> and participants in the budget process. <sup>111</sup>

Controller and Auditor-General (1995), FASB (1980), General Accounting Office (1980), GASB (1987), Henke (1977), Mayston (1985, 1992a), Municipal Finance Officers' Association (1980), NZSA (1987), Sutcliffe (1985).

Australian Accounting Research Foundation (1990), Commonwealth Department Of Finance (1991, 1992), CICA (1980, 1984), FASB (1980), Federal Government Reporting Study (1986), General Accounting Office (1980), GASB (1987), Hay (1991), Mayston (1992a), National Committee On Governmental Accounting (1968), NZSA (1987, 1993b), Patton (1975), South Australian Commission Of Audit (1994), Sutcliffe (1985).

<sup>&</sup>lt;sup>104</sup> Ball (1981), Commonwealth Department Of Finance (1991), Federal Accounting Standards Advisory Board (1993), Federal Government Reporting Study (1986), GASB (1987), Green (1987), Hay (1991), Ives (1987), Jones et al (1985), Karvelis (1987), Mayston (1985), National Committee On Governmental Accounting (1968), Van Daniker and Pohlman (1983), Ward (1987).

<sup>&</sup>lt;sup>105</sup> Ball (1981), Controller and Auditor-General (1994b), Coopers and Lybrand (1978), Davidson et al (1977), Drebin et al (1981), FASB (1980), Goldin (1987), Mayston (1985, 1992a), National Committee On Governmental Accounting (1968), Patton (1975).

Coopers and Lybrand (1978), Davidson et al (1977), Drebin et al (1981), FASB (1980), General Accounting Office (1980), Green (1987), Karvelis (1987), Mayston (1992a), Municipal Finance Officers' Association (1980), Ward (1987).

<sup>&</sup>lt;sup>107</sup> FASB (1980), Federal Government Reporting Study (1986), GASB (1987), Hay (1991).

<sup>108</sup> Hay (1991), Patton (1975).

<sup>&</sup>lt;sup>109</sup> Hay (1991).

<sup>110</sup> Drebin et al (1981).

<sup>111</sup> Municipal Finance Officers' Association (1980).

If the non-monetary human resource information provided to the above groups of users is to be useful for decision-making, it should possess certain qualities. "The quality of the information provided in the financial reports determines the usefulness of those reports to users" (NZSA, 1993b, para. 4.1). The SoC specifies certain characteristics by which the quality of information can be measured.

## C. Qualitative Characteristics

There are four characteristics of information financial reports (including SSPs) must contain if it is to be decision-useful. These characteristics are relevance, understandability, reliability and comparability.

## (i) Characteristics of Internal Information

While these qualitative characteristics are intended to apply only to external reports (NZSA, 1993b, para. 1.1), it is useful to assess the quality of internal information by these standards as well, as it can be argued that they form the fundamental attributes of quality accounting information. To control the activities of a government department, management need information that is relevant to their decisions, timely, understandable, comparable with previous periods' figures and sufficiently reliable to form a basis for decision-making.

Tsay (1977) believes that managers and external users have different human resource information needs. Internal information needs relate primarily to decision-making, while external information needs concentrate on performance measurement (Tsay, 1977). However, Roslender and Dyson (1992) recommend providing the same human resource information to both user groups, with internal users receiving the information more frequently and in greater detail.

Differences may arise between the desired qualities of internal and external information. For example, managements' principal requirement is for relevant and timely information (Johnson and Kaplan, 1987; Johnson, 1992), whereas the auditors of external reports focus on reliability and verifiability (Johnson and Kaplan, 1987).

Hence, when examining whether human resource information in the SSP conforms to the desired qualitative characteristics, it can be argued that the same characteristics can be used to assess both the internal and external perspectives.

#### (ii) Relevance

"Information is relevant to users if it can be used to:

- (a) confirm or correct prior expectations about past events (feedback value); or
- (b) assist in forming, revising or confirming expectations about the future (predictive value)" (NZSA, 1993b, para. 4.2).

Information must be capable of making a difference to users' decisions (GASB, 1987, para. 65). Relevant information must also be timely, because "if information is not available when it is needed, it is of no use" (NZSA, 1993b, para. 4.4). Relevant SSP information should be consistent with the objectives of the department (Jackson, 1987<sup>113</sup>) and reflect what is agreed between the department and the Minister (Controller and Auditor-General, 1994b).

## (iii) Understandability

"Information is understandable when users might reasonably be expected to comprehend its meaning" (NZSA, 1993b, para. 4.5).

The meaning of an understandable performance measure should be self-evident, as should its scope and limitations (Controller and Auditor-General, 1994b, p. 31). Nevertheless, information should not be excluded from reports solely because it may be difficult for some users to understand (NZSA, 1993b, para. 4.8).

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<sup>&</sup>lt;sup>112</sup> Timeliness is "[Having] information available to a decision-maker before it loses its capacity to influence decisions" (FASB, 1980, para. 56).

<sup>113</sup> Cited in Guthrie (1992).

#### (iv) Reliability

- "Information is reliable when it:
- (a) corresponds with the actual underlying transactions and events (representational faithfulness);
- (b) is capable of independent verification (verifiability); and
- (c) is free from bias (neutrality)" (NZSA, 1993b, para. 4.9).

Representational faithfulness means that a transaction or event is presented in a manner "that corresponds with the substance of the actual underlying transactions and events", rather than their legal form (NZSA, 1993b, para. 4.10). Nothing material should be omitted from the information and nothing misleading should be included (GASB, 1987, para. 64). SSP information should represent all the significant activities of the department (Controller and Auditor-General, 1994b, p. 31).

However, this information must be verifiable. Verifiability exists when "knowledgeable and independent observers could be expected to concur that the presentation of a transaction or event agrees, with a reasonable degree of precision, with the actual underlying transaction or event" (NZSA, 1993b, para. 4.11).

## (v) Comparability

"Information in a financial report is comparable when users are able to identify similarities and differences between that information and information in other reports" (NZSA, 1993b, para. 4.13).

Comparability applies to both the reports of different organisations and the reports of the same organisation for different periods (NZSA, 1993b, para. 4.14).

## (vi) Trade-off Between the Characteristics

Information will possess these qualitative characteristics in varying degrees. Therefore, it is highly likely that trade-offs will be necessary between the four characteristics described above. For example, information may be subjective and therefore not verifiable, but be very relevant to decision-making, or reliable information may arrive too late to be timely (Henderson and Peirson, 1984; Hyndman and Anderson, 1991; NZSA, 1993b). Such trade-offs are explicitly recognised by the *SoC* (NZSA, 1993b, para. 6.1), and exist to different degrees in both external and internal information.

## IV. Chapter Summary

Service performance reporting measures the achievement of an organisation's output goals and the efficiency with which outputs are produced. The recent focus on service performance reporting in New Zealand can be attributed largely to reforms of the government department operating environment; in particular, the focus on accountability of departmental chief executives for the economy, efficiency and effectiveness of their operations.

In New Zealand, service performance is reported in a statement of service performance. The SSP contains non-financial information relating to the department's production of outputs. The quality of this information can be assessed, both internally and externally, by comparing it to the qualitative characteristics specified in the *SoC*, that is, relevance, understandability, reliability and comparability.

If non-monetary human resource information possesses these characteristics, and satisfies either the input, output or outcome definitions, it is possible that this information could be reported in the SSP. However, as discussed previously, a review of the usefulness and practicality (cost effectiveness) of such reporting is necessary (Caplan and Landekich, 1974; Controller and Auditor-General, 1994b; GASB, 1994; Henderson and Peirson, 1984; Filios, 1991; NZSA, 1993b). The method used in conducting this examination, and the results obtained, are presented in the following chapters.

# **Chapter Five: Research Method**

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## I. Introduction

The issues in this thesis were examined through a mail survey of the government department population. The results of the survey were complemented with information collected from detailed personal interviews with a two of the survey respondents. The use of these two methods provided both the depth and breadth of coverage required for theory-building exploratory research.

This chapter reviews the method of investigation used. The validity of the survey is established through an examination of how scientific activity is defined, followed by a discussion of the specific survey method used. The chapter concludes with a justification of the use of personal interviews in addition to the survey, and a review of the interview method employed.

## II. Scientific Research

Several definitions of science have been suggested. Bunge (1967a) proposes that science is the use of the scientific research method, while Kuhn (1970) and Lakatos (1974) believe that science relates to the subject under study, rather than the method of examination. Feyerabend (1975) asserts that any method that advances knowledge is science. To justify the use of a survey and personal interviews, it is necessary to examine whether the current research is scientific according to each of the above definitions of science.

#### A. Scientific Method

Bunge (1967a, p. 28) states: "there is no science proper unless the scientific method is applied to the attainment of the goal of science: the building of theoretical images of reality, and essentially of its web of laws". Furthermore, Bunge continues: "anything is turned into a scientific subject, [that is] into an object of scientific inquiry, if treated with the method of science in pursuit of the goal of science" (p. 31). Hence, it is not the subject matter that determines if a subject is scientific, rather it is the way the analysis of the problem is carried out (Bunge, 1967a).

There are two methods of scientific inquiry: Deduction and induction. The relationship between the two is shown in Figure 5-1. Deduction is the process of reasoning from the general to the specific. It takes existing laws and premises and derives conclusions through a process known as inference, whereby the conclusion is inferred from the premises given: "once a scientist has universal laws and theories at his disposal, it is possible for him to derive from them various consequences that serve as explanations and predictions" (Chalmers, 1982, p. 5): Therefore, deduction is the process of drawing logically valid conclusions from given premises, which consist of laws and facts, both general and specific.

Consequently, deduction can be used to explain and predict outcomes given certain laws and fact situations. Deduction does not, however, establish the truth of the premise upon which the conclusion is based (Chalmers, 1982). This role is performed by induction.

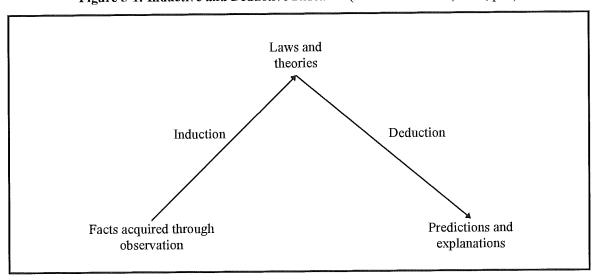


Figure 5-1: Inductive and Deductive Research (source: Chambers, 1982, p. 6)

Induction is the process of deriving general theories from a number of specific observations. The inductivist approach either tests existing theories by comparing the theory to real-world observations, or forms new theories based on these observations (Chalmers, 1982).

The use of the inductive approach in accounting research generates positive accounting theories (Henderson and Peirson, 1983). Positive accounting theories "... [seek] to explain observed accounting phenomena by searching for the reasons that events

occur" (Hodgson, Holmes and Kam, 1992, p. 357). Theories derived in this way generally explain and/or predict events (Henderson and Peirson, 1983).

The research in this thesis will employ both the inductive and deductive approaches, and can thus be classed as scientific research according to Bunge (1967a). The inductive approach is as follows: The preceding literature review led to a conjecture that government departments could report non-monetary human resource information in the SSP. An attempt was made to transform this conjecture into a theory by obtaining observations from the government department population and comparing these results with the conjecture. Thus, a general theory for government departments was derived from a number of specific observations. The data was accumulated through a survey of the government department population, with personal interviews of a sample of this population used to obtain more in-depth information.

The personal interviews can be seen as both inductive and deductive research. They are inductive in that the results of the interviews were used to further refine the theories developed from the survey data. The interviews were also an opportunity to provide explanations concerning specific departmental situations, based on the general theories formulated from the survey. Thus the interviews were also based partly on deductive reasoning.

Consequently, this research satisfies the criteria of both inductive and deductive scientific research, and is therefore scientific according to Bunge (1967a). However, there are different views as to what constitutes scientific research, and these other views must also be examined.

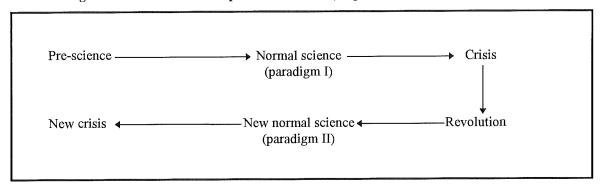
## **B.** Kuhnian Paradigms

Kuhn (1970) believes that science advances in an evolutionary manner, through paradigm shifts where the existing paradigm is replaced by a new paradigm. "Scientific theories are replaced by others which are incompatible with them" (Henderson and

<sup>&</sup>lt;sup>114</sup> Note that the theory derived from this research relates to government departments only; no attempt is made to generalise to the wider public sector.

Peirson, 1983, p. 19). The progress of science according to Kuhn is depicted in Figure 5-2.

Figure 5-2: Kuhnian Development of Science (adapted from Chalmers, 1982, p. 90)



The Kuhnian representation of science is an open-ended progression beginning with pre-science, followed by normal science, crisis, revolution, new normal science and then a new crisis and revolution. Such a process is both infinite and irregular, with the paradigm shifts, or revolutions, occurring when, and only when, dissatisfaction with the existing paradigm becomes widespread and fundamental (Chalmers, 1982).

Pre-science is the stage where there are no dominant ideas or procedures. Different viewpoints on how research should be carried out compete with one another to become the generally accepted research paradigm. This period is typified by "total disagreement and constant debate over fundamentals" (Chalmers, 1982, p. 92). Eventually, one viewpoint will become dominant and this will be the generally accepted paradigm.

A paradigm is the dominant way of thinking on a particular subject. The paradigm sets the standard for "legitimate work within the science it governs" (Chalmers, 1982, p. 90), and directs the "puzzle-solving" activities that take place within the paradigm. Its components will include explicitly stated laws and theoretical assumptions, as well as a conceptual framework that governs the way the world is viewed (Chalmers, 1982).

Any solutions that are found to be contrary to the existing paradigm are said to be "anomalies". As the number of these anomalies increases, and they become more fundamental, dissatisfaction with the existing paradigm grows amongst the scientific community, in what is known as a "crisis".

Crises can be resolved in one of three ways:

- 1) Normal science may devise a way of dealing with the problem that caused the crisis;
- 2) Scientists may decide that the problem is outside the scope of their discipline, and it may be deferred to future generations with more advanced tools; or
- 3) A new paradigm candidate may emerge, with an ensuing battle over its acceptance, eventually resulting in a paradigm shift (Kuhn, 1970, p. 84).

A paradigm shift, or revolution, involves the substitution of one paradigm with another, in response to a crisis that has developed in the existing paradigm. The new paradigm will replace the existing one because it is "more successful than [its] competitors in solving a few problems that the group of practitioners has come to recognise as acute" (Kuhn, 1970, p. 23). The decision to adopt a new paradigm always involves a comparison of both the old and the new paradigms, both with nature and with each other (Kuhn, 1970, p. 76).

When a paradigm shift occurs, the new paradigm will be very different from, and indeed incompatible with the previous one (Kuhn, 1970). Each paradigm will regard the world as being composed of different things and will take a different perspective. Furthermore, each paradigm will differ in what it regards as the important or fundamental questions in need of research (Chalmers, 1982).

However, this process only applies to disciplines that have achieved scientific status (Van der Linden, 1986). Van der Linden (1986) argues that accounting does not comprise normal science in the sense of a Kuhnian paradigm. Instead, accounting exhibits the characteristics of the pre-science stage of scientific development.

"For accounting to have a paradigm the profession must have had a recognised and generally acknowledged scientific achievement, which had led to a group of people accepting the paradigm and practising puzzle solving/predictions within it" (Van der Linden, 1986, p. 9).

Accounting has not yet achieved this status, as there is no generally accepted basis of accounting research or practice (Van der Linden, 1986; Peasnell, 1978). The

predominant valuation base for modern financial accounting is historical cost (Hodgson, Holmes and Kam, 1992). However, historical cost is not universally accepted. Alternatives, such as Current Cost Accounting, Exit Price Accounting and Continuously Contemporary Accounting, have all been proposed. These methods are competing against each other for acceptance, a condition consistent with the pre-science stage of development (Henderson and Peirson, 1983; Van der Linden, 1986). Furthermore, Chua (1988, p. 12) argues that accounting has not progressed in the revolutionary manner associated with paradigm shifts. Instead, accounting has exhibited evolutionary growth, refining gradually with the changing needs of society.

If accounting is not a science as defined by Kuhn (1970), then human resource accounting (HRA) cannot be a science either, as HRA is a branch of accounting (Chua, 1988; Henderson and Peirson, 1983). It appears, therefore, that the research in this thesis is not scientific if a Kuhnian (1970) definition of science is applied.

#### C. Lakatosian Research Programmes

Contrarily, Lakatos (1974) believes science consists of a series of research programmes. A research programme is the overall framework within which research takes place. It consists of a hard core and a surrounding protective belt of auxiliary hypotheses.

The hard core of a research programme is the fundamental group of theories upon which the research programme is built; it forms the "defining characteristic of a program" (Chalmers, 1982, p. 80). The theories contained in this hard core are considered to be inviolate and unfalsifiable, and no research within the programme is directed towards testing these fundamental theories (Lakatos, 1974). Because of the assumed inviolability of these theories, the hard core of the programme is referred to as the 'negative heuristic'. If a researcher moves away from these hard core theories, or begins to question these, it is considered that the researcher is working in another research programme.

This hard core of theories is surrounded by a belt of protective auxiliary hypotheses. It consists of hypotheses that supplement the hard core, as well as the underlying assumptions of the hypotheses and the observation statements (Chalmers, 1982;

Lakatos, 1974). This group of hypotheses makes up the 'positive heuristic' that guides research in the programme, as the research takes place within this protective belt of hypotheses. Research will consist of testing the existing auxiliary hypotheses, as well as formulating new ones; it will also involve the development of suitable mathematical and experimental techniques (Chalmers, 1982). The positive heuristic is a means of making the hard core capable of explaining and predicting real phenomena (Chalmers, 1982). Lakatos summarises this as:

"the positive heuristic consists of a partially articulated set of suggestions or hints on how to change, develop, the 'refutable variants' of the research program, how to modify, sophisticate, the 'refutable' protective belt" (Lakatos, 1974, p. 135).

Research programmes can be either 'progressive' or 'degenerating'. A research programme is progressive if it both:

- 1) has a positive heuristic, that is, it still provides avenues for research; and
- 2) results in the discovery of new phenomena from time to time (Henderson and Peirson, 1983, p. 21).

A research programme that is not progressive is degenerating, and is generally abandoned in favour of a progressive research programme (Henderson and Peirson, 1983). Scientific revolutions occur through one research programme superseding another (Lakatos, 1974). However, because of the uncertainty surrounding the success of future research in a particular programme, it is never possible to say that a particular programme has degenerated completely. It is always possible that some future research development could transform a formerly degenerating programme into a progressive one (Lakatos, 1974).

HRA can be viewed as a Lakatosian research programme. The hard core of this programme is the identification, measurement of and provision of information about an entity's human resources, either internally or externally (Chua, 1988; Flamholtz, 1981). The positive heuristics comprise the avenues of research that can be undertaken in the field of HRA. These include studies of the usefulness of HRA, attempts at monetary valuation of human resources, discussions of the provision of non-monetary human resource information, reviews of the application of HRA in organisations and the

presentation of human resource information to users (Henderson and Peirson, 1983; Gleeson, 1975).

However, HRA is regarded is a degenerating research programme, as very few recent developments have occurred in the field (Chua, 1988; Henderson and Peirson, 1983). Nevertheless, the research undertaken in this thesis falls within the positive heuristic of the HRA research programme, and is an attempt to recommence research in the area of HRA, therefore restoring HRA as a progressive research programme. Consequently, examinations of HRA will constitute scientific research according to Lakatos (1974), and hence, scientific methods can be validly employed in HRA research.

### D. Anarchistic Theory of Knowledge

Feyerabend (1975) propounds that there is no one scientific method, there is no single scientific way of getting ideas:

"... there are no overriding rules which are adhered to under any circumstances; there is no 'scientific methodology' that can be used to separate science from the rest" (Feyerabend, 1981, p. 162).

For the advancement of knowledge, any method is scientific, as long as it is discovering knowledge. Scientists should not be constrained by the rules of the methodologist (Chalmers, 1982). However, Feyerabend sees it as necessary to impose some limits on what is regarded as science:

"... the distinction between the crank and the respectable thinker lies in the research that is done once a certain point of view is adopted.... It is this further investigation, the details of it, the knowledge of the difficulties, of the general state of knowledge, the recognition of objections, which distinguishes the 'respectable thinker' from the crank" (Feyerabend, 1964, p. 305).

This thesis is aimed at discovering knowledge, and is sufficiently in-depth to satisfy Feyerabend's (1964) criteria for 'respectable thinking', as described above. Therefore, if the Feyerabend approach to knowledge is accepted, then the research in this thesis would be classed as scientific.

#### E. Does This Thesis Constitute Scientific Research?

It appears that this investigation constitutes scientific research under all views of science examined, except Kuhnian paradigms. Under Kuhnian philosophy, this research would be working in the pre-science stage of development. Yet, this itself does not dismiss the use of scientific research methods as a means of gathering data (Van der Linden, 1986).

### III. Research Method

It has been established in the foregoing discussion that scientific research methods and techniques can be validly employed to examine the issues under study. A survey is one of the scientific techniques available (Emory and Cooper, 1991; Oppenheim, 1966).

#### A. Survey

A survey was chosen as the principal method of investigation over other research methods, such as field studies and experiments, for several reasons:

- Insufficient prior research has been performed in the area to formulate specific questions and scenarios for an experiment.
- An in-depth field study was not considered appropriate, as this thesis does not require observation of respondent behaviour.
- A survey would provide the breadth of coverage of the entire government department population, unlike a field study of one or two departments.
   Breadth of coverage was considered important because this is the first study of its kind, and hence is exploratory in nature.
- Conducting interviews with a large number of government departments would have incurred a much higher cost than the use of a survey (Emory and Cooper, 1991; Hanke et al, 1984; Moser and Kalton, 1972).

A survey can be defined as "a form of planned collection of data for the purpose of description or prediction as a guide to action or for the purpose of analysing the

relationship between certain variables" (Oppenheim, 1966, p. 1). There are three types of survey: mail survey; telephone survey; and interview survey (Dane, 1990; Emory and Cooper, 1991; Hanke et al, 1984).

A mail survey has been employed. A mail survey is a self-administered questionnaire that is sent by mail to the respondent, who completes the questionnaire and returns it by mail to the researcher (Emory and Cooper, 1991). Mail surveys are perceived as more anonymous than other methods (Emory and Cooper, 1991) and enable respondents to collect the necessary facts and consider replies at length (Emory and Cooper, 1991; Hanke et al, 1984; Moser and Kalton, 1972). The lower cost of mail surveys, relative to interviews, enables the collection of a larger number of responses for a similar cost (Emory and Cooper, 1991; Hanke et al, 1984; Moser and Kalton, 1972; Oppenheim, 1966). As a result of these advantages, a mail survey was chosen as a method of investigation in this thesis.

To review how the survey was conducted, it is necessary to examine: the survey population; the subjects surveyed; the procedures followed, including the design of the questionnaire; the questions asked; and the techniques used to analyse the results.

#### (a) Survey Population

The mail survey was sent to all 39 New Zealand government departments. Government departments were chosen as the population for this study because they are not-for-profit organisations in the public sector. It was asserted at the outset that the provision of non-monetary human resource information is relevant to not-for-profit entities, as they often do not receive a direct monetary return from the services of employees. Several monetary human resource valuation methods rely on discounting the expected cash inflows from an employee's future services and are therefore not readily applicable to not-for-profit organisations, such as government departments (McKinney and Ferris, 1984; Pallot, 1990). Furthermore, a significant percentage of

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<sup>115</sup> The term 'government department' is defined in Chapter One. The list of members of the population was obtained from the Public Service Association, as at 1 June, 1995 and from the Government Sector Directory as at 30 April, 1995. The list of government departments sent questionnaires can be seen in Appendix Four.

<sup>116</sup> See Chapter Three for a more detailed explanation of these valuation methods.

government departments' costs are human resources, and they employ a substantial number of people. 117

Government departments, frequently referred to as the 'core public sector', <sup>118</sup> provide a convenient and readily accessible population suited to a study of this nature. Surveying all government departments provided a greater depth of information than would be obtained through a survey of a sample of the wider range of public sector entities. <sup>119</sup> Moreover, the wider category of public sector entities contains profit-making bodies not considered relevant to this study.

Furthermore, the external validity of the findings will be increased by surveying the whole population, in that valid statements can be made about government departments generally (Birnberg et al, 1990), and sampling error will be eliminated. However, no attempt is made to generalise the results of this study to the wider public sector, as the intention of this study is to build a base of knowledge from which recommendations for further research can be developed.

#### (b) Survey Subjects

Questionnaires were sent to the Chief Financial Officer (CFO), or financial controller, of each department, as this position generally has responsibility for both the internal and external reporting functions. The CFO was then asked to either complete the questionnaire, or pass it to those responsible for internal and external reporting within the organisation. It was intended to gain both internal and external perspectives for this research.

#### (c) Survey Procedure

Covering letters were included with the questionnaire, <sup>120</sup> asking for participation, explaining the purpose of the research, assuring respondent confidentiality, and offering

<sup>117</sup> This is evidenced by the statistics presented in Chapter One.

<sup>118</sup> See, for example, Scott and Gorringe (1989), Chapman (1989); Scott et al (1990).

<sup>119</sup> In 1993-94, there were 3,541 public sector entities audited by the Audit Office (Audit Office 1993-94 Annual Report).

<sup>&</sup>lt;sup>120</sup> A copy of the questionnaire is included in Appendix One.

the respondents both a copy of the results of the study and the chance to win a fifty dollar book voucher if they respond. One letter was addressed to the CFO, requesting the CFO to complete the questionnaire or to pass it to the person(s) responsible for the internal and external reporting within the organisation. The other covering letter was attached to the questionnaire and briefly explained the nature and purpose of the study.

A reminder letter, along with another copy of the questionnaire, was sent to non-respondents 19 days after the survey was sent. A further 30 days later a follow-up telephone call was made to non-respondents.

Thank you letters, along with a summary of the results, were sent to all respondents.

#### (d) Survey Questions

The questions in the survey were based on the literature concerning accountability, HRA and SSPs, reviewed in Chapters Two to Four. The questionnaire consisted principally of closed questions, <sup>123</sup> generally multiple choice. Closed questions take less time for the respondent to answer, and are used to classify the respondent's point of view, which is what is sought for this research (Emory and Cooper, 1991; Oppenheim, 1966).

Disadvantages of closed questions include loss of spontaneity of responses and a reduction of detail, as the respondent may select the category closest to their preferred answer if that answer is not given as an alternative (Dillman, 1978; Moser and Kalton, 1972).

To overcome these disadvantages, this survey contains many partially closed questions, consisting of a list of alternative options followed by an 'other' category. Furthermore, seven-point Likert scales were used for questions which seek respondents' opinions or

123 Closed questions provide the respondent with a limited number of specific alternative answers. They are either dichotomous (two way) or multiple choice (Emory and Cooper, 1991; Moser and Kalton, 1972; Oppenheim, 1966).

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<sup>&</sup>lt;sup>121</sup> Copies of the covering letters can be seen in Appendix Two.

<sup>&</sup>lt;sup>122</sup> A copy of this reminder letter can be viewed in Appendix Three.

ratings. The question wording was pre-tested on 12 colleagues at the University of Canterbury.

#### (e) Data Analysis

Descriptive statistics, such as frequency distributions, percentages, and measures of location and dispersion, were used to analyse the survey results. More complex statistical techniques were unnecessary, as this study did not examine in-depth relationships or correlations (Blalock, 1972; Emory and Cooper, 1991; Hanke et al, 1984; Moser and Kalton, 1972).

In addition to the survey, a second method of enquiry was used to supplement the survey results. In-depth personal interviews were conducted with two of the survey respondents, to provide the detailed information unable to be obtained through the mail survey.

#### **B.** Personal Interviews

If questionnaires are long or complex, respondents may not read and answer all the questions (Hanke et al, 1984), or may misunderstand the questions (Emory and Cooper, 1991; Moser and Kalton, 1972). Using a single survey to obtain all of the detail required for this exploratory research may make the survey too long or complex.

Consequently, detailed personal interviews were conducted with a small sample of the questionnaire respondents. The results of these interviews supplement the overview gained from the survey. This is consistent with the recommendations of Birnberg et al (1990) who support data triangulation, or the use of multiple research methods: "... any area of research that strictly uses a single method could fail to realise the benefits of using other methods" (Birnberg et al, 1990, p. 52).

Personal interviews can be seen as scientific under Feyerabend's (1975) view of science. The interviews are used to discover knowledge and are sufficiently grounded in previous theory and the results of the survey to satisfy Feyerabend's (1975) requirements of a science. Personal interviews are also a method of observation for inductive science, as they are a technique for gathering data. Furthermore, interviews can be seen as another method of conducting research in the positive heuristic of the

HRA research programme. Therefore, personal interviews are a legitimate method for conducting scientific research.

The detail of information obtained through interviews is high because interviewees are often more open (Dane, 1990; Hanke et al, 1984) and the interviewer can enquire further with additional questions and clarify any ambiguities in the question wording (Abdel-khalik and Ajinka, 1979; Emory and Cooper, 1991). The use of personal interviews also involved surveyor-subject interaction, which allowed the provision of highly detailed explanations and examples to the interviewee (Abdel-khalik and Ajinka, 1979; Emory and Cooper, 1991; Oppenheim, 1966). Furthermore, interviews are more flexible than surveys, a feature which is desirable for exploratory research (Hanke et al, 1984). The principal disadvantages of interviews are their cost and the existence of interviewer bias in interpreting the responses (Emory and Cooper, 1991; Hanke et al, 1984).

The sample of respondents selected for the follow-up interviews was determined on a judgemental basis. Judgemental sampling is a non-random sample selection method where the researcher chooses the composition of the sample in accordance with predetermined criteria (Emory and Cooper, 1991; Hanke et al, 1984). This is a valid sample selection method for exploratory research, enabling the researcher to select the sample of respondents which it is anticipated will provide the most information (Emory and Cooper, 1991). In contrast, a random sample of interviewees from the population could include non-respondents or those with little interest in the topic. The sample that would provide the most information was sought for this thesis. However, the use of a judgemental sample means the interview results are not generalisable to the government department population (Emory and Cooper, 1991; Hanke et al, 1984; Jessen, 1978; Weisberg and Bowen, 1977).

The sample of interviewees was chosen from the survey respondents, based on their responses to the survey questions and their willingness to participate in further interviews. The composition of the sample was designed to provide the maximum amount of information to supplement the survey results. Potential interviewees were contacted by telephone and asked to participate in the follow-up interview. Respondents who held extreme views, evidenced by answering questions at either end

of the Likert scales, or who provided conflicting responses were included in the sample. The interview sample contained respondents both in favour of, and opposed to, the reporting of non-monetary human resource information in the SSP. Two interviews were conducted, this number being determined judgementally, based on time and cost considerations.

The respondents selected were the general manager of finance for a large government department, who was strongly in favour of reporting human resources in the SSP, and the strategic planner for a small government department strongly opposed to such reporting. 125

Interviewees were asked to elaborate on their survey responses, and to provide reasons for their opinions. Although some pre-determined questions were asked in the interviews, the interviews were largely unstructured to provide for flexibility and to allow the interviewer to seek more information where necessary. Consequently, the focused interview technique was used (Dane, 1990).

The use of this focused interview method limits comparison between the answers of different respondents, as each respondent may be asked different questions (Dane, 1990). However, the purpose of the interviews was not to make generalisations about the government department population, rather it was to obtain further in-depth information to complement the insight gained through the mail survey.

## IV. Chapter Summary

This research was conducted through a mail survey of the government department population, followed by in-depth personal interviews with a judgementally determined sample of two survey respondents.

Size is measured here in terms of the number of employees. This department had mixed responsibilities of policy advice and program implementation.

<sup>125</sup> This department had a small, geographically dispersed workforce, and was principally a policy advice department.

It was determined that the research in this thesis constitutes scientific research, as HRA constitutes a Lakatosian research programme, it employs the scientific method, and it advances knowledge under Feyerabend's anarchistic theory of scientific development. Therefore, the use of scientific research techniques, such as a survey and personal interviews, is valid.

Two methods were necessary, as a mail survey cannot obtain the detailed information necessary for an exploratory or theory-building study such as this. Therefore, in-depth personal interviews were also conducted with a small sample of the survey respondents. The results of both the survey and the interviews are presented in the next chapter, with the interview findings being used to supplement and explain the results of the survey.

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VI CHAPTER SIIMMARV

## I. Introduction

The results of the survey and interviews are presented in this chapter. These results are then compared with the previous research and the contentions made in this thesis, as discussed in Chapters Two to Four. The findings of the interviews are used to supplement and explain the survey results. However, because of the small number of interviews conducted, and the use of judgemental sampling to select interviewees, the findings of the interviews cannot be taken as representative of the government department population. 126

A profile of the respondents is provided to put the results in context, and then the results themselves are presented. The results examine where and how non-monetary human resource information should be reported and the costs and benefits of such reporting. The qualitative characteristics respondents believed relevant to non-monetary human resource information contained in the statement of service performance (SSP) are also considered.

## II. Respondents

A response rate of 87% was obtained, that is, 34 out of 39 questionnaires. However, the number of usable responses was reduced to 31 (79%), as two respondents did not fill in the survey and one completed only half the questions. The non-respondents, with one exception, tended to be smaller organisations, in terms of staff numbers. Furthermore, two organisations that returned uncompleted questionnaires suggested they were small departments and did not have time to fill in surveys.

One possible reason for the non-response is that the questionnaire was sent to government department financial controllers and at that time, the year-end accounts were being prepared. The non-respondents were telephoned as a final follow-up, and many gave this as a reason for their non-response. Other reasons for non-response were

<sup>126</sup> This limitation is further explained in Chapter Seven.

that the recipient had just returned from extended leave and that the person assigned to complete the questionnaire was no longer employed by the department.

A cross-section of both internal and external reporting perspectives was gained from the questionnaire, as shown in Table 6-1.

Table 6-1: Reporting Responsibilities of Respondents

Reporting Responsibility	Number of Respondents
External reporting	3 (10%)
Internal reporting	2 (6%)
Both internal and external	26 (84%)

## A. Non-Response Bias

The responses were tested to establish the likelihood of there being non-response bias, that is, the risk that the opinions of non-respondents differed significantly from the opinions of respondents. The completed questionnaires were stratified into those returned before follow-up letters were sent and those received after the follow-up letter, and t-tests performed on the two groups of data for the questions containing Likert scales. With one exception, the results of these t-tests revealed no statistically significant differences (at the 0.05 level) between the two groups of respondents. These results can be extrapolated to conclude that the opinions of non-respondents did not differ significantly from the opinions of respondents (Moser and Kalton, 1972; Oppenheim, 1966).

However, one question did show a statistically significant difference between the two groups of respondents. This question related to the potential indirect costs of reporting non-monetary human resource information in the SSP. It was found that the later group

Parametric statistical tests, such as t-tests, can validly be applied to Likert scale data, as the measurements are interval data (Emory and Cooper, 1991; Hanke et al, 1984). The t-test is appropriate to use in this case, as the population is approximately normally distributed, the sample size of the two groups is less than 30, and the standard deviation of the population is unknown (Emory and Cooper, 1991; Mason and Lind, 1993; Moore and McCabe, 1989).

of respondents expected the potential indirect costs to be higher than the earlier group, which could have contributed to an unfavourable attitude toward human resource reporting. An unfavourable attitude toward reporting human resource information in the SSP could be a reason why this group was later in responding.

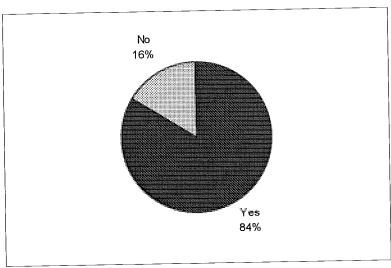
However, the statistical tests revealed little evidence of non-response bias, and this combined with a usable response rate of 79%, suggests that the results of this survey are generalisable to the population under study, that is New Zealand government departments.<sup>128</sup>

## III. Reporting Human Resources

## A. Method of Reporting

The majority of survey respondents (84%, or 26 departments) considered it necessary to report human resources in non-monetary terms (as shown in Graph 6-1). Additionally, one respondent indicated that non-monetary human resource reporting was not necessary but may be useful. Further support for internal, but not external, reporting of human resources was evident in the interviews.





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However, it will be noted that the results of the interviews are not generalisable to the government department population as a whole.

The importance attached to the reporting of human resources reflects the arguments advanced in Chapter One regarding the significance of human resources and the need for government department chief executives to be held accountable for human resource management. This result is to be expected considering the proportion of government department operating costs that human resources comprise (average of 47.6% of total operating costs).

This result supports the assertion in Chapter Three that reporting non-monetary human resource information provides an opportunity to disclose human resource information without the problems associated with monetary valuation. Nevertheless, one interviewee expressed a desire for partial monetary human resource information, such as the cost of labour, which could be used for benchmarking purposes. In this way, information could be provided to enable informed human resource decisions by both internal and external parties (Brummet et al, 1968, 1969).

However, there was difference of opinion regarding where this information could be presented. The survey respondents' opinions are shown in Table 6-2. 130

Table 6-2: Potential Reports for Disclosing Non-monetary Human Resource Information

Number of Respondents
19 (61%)
15 (48%)
14 (45%)
13 (42%)

The reasons why monetary human resource valuation is unsuitable for government departments were discussed in Chapter Three.

The percentages in Tables 6-2 and 6-3 sum to more than 100%, as respondents were able to select more than one option. Furthermore, the percentages in all of the tables throughout this chapter were calculated based on the number of respondents who answered that particular question, rather than the total number of respondents. All information contained in the tables relates to the survey findings.

The SSP was selected by 61% of respondents, and this was the most favoured option for the publication of non-monetary human resource information. This supports the contention made in Chapters Three and Four that the SSP would be an appropriate medium through which to report non-monetary human resource information. The inclusion of human resource information in a SSP would result in all service input information being contained in the one report, and the input-output relationship being disclosed. It would provide an indication of the "quality of the work undertaken by the staff and the quantity of the work that they can undertake". <sup>131</sup> Various output classes or organisational divisions can then be compared and discrepancies investigated.

However, not all survey respondents believed the SSP to be the appropriate medium for disclosure of human resource information. The main reason suggested by the participants was that the SSP is output focused, while human resources represent inputs. However, if incomplete input information is disclosed, it will be difficult for departments to report on the efficiency of operations, as efficiency represents the relationship between inputs and outputs (Grant, 1990).

Another reason suggested by one interviewee was that the SSP is "a statement of accounts and achievement of objectives against the policy outputs", and thus should not contain human resource information. Furthermore, the SSP is an external report and "the department has never seen the need to report on [human resources] externally . . . it's for internal consumption only".

However, it was suggested by one survey respondent that the SSP could be used in conjunction with other reports. The SSP would contain human resource output information, while input information could be included in the statement of resources.

Other means of reporting non-monetary human resource information discussed in Chapter Three include the chief executive's letter (Flamholtz, 1985; Lee, 1987), a statement of resources (Pallot, 1990) and a separate human resource report (Acland, 1976). These options found varying levels of support amongst the survey respondents,

<sup>&</sup>lt;sup>131</sup> Unless otherwise referenced, all quotations in italics in this chapter refer to quotations from the interviews.

as shown in Table 6-2. One interview participant suggested that the statement of resources and/or a separate human resource report could be used to communicate human resource information internally, for use particularly by the chief executive and branch managers.

The survey respondents were also asked in the questionnaire to suggest alternative reports in which human resource information could be disclosed. Reports proposed include quarterly reports, estimates and departmental forecast reports, and a management information statement containing Equal Employment Opportunities (EEO) information, good employer requirements, Treaty of Waitangi responsibilities and office accommodation. During the interviews, it was indicated that human resource information could also be included in long-term strategic business plans, in order to plan ahead for the department's human resource requirements. Thus the provision of human resource information satisfies both the planning and reporting function.

## B. Type of Human Resource Information in the SSP

The types of non-monetary human resource measures that could be disclosed in the SSP are displayed in Table 6-3.

Table 6-3: Potential Non-monetary Human Resource Information Included in the SSP

Human Resource Measure	Input	Output	Outcome	None
Number of staff	27 (87%)	3 (10%)	1 (3%)	3 (10%)
Remuneration averages and distributions classified by occupation	14 (45%)	2 (6%)	1 (3%)	17 (55%)
Recruitment, promotion and reward policies	13 (42%)	1 (3%)	6 (19%)	12 (39%)
Equal Employment Opportunities (EEO) information	11 (35%)	2 (6%)	10 (32%)	10 (32%)
Inventory of skills and capabilities of people within the organisation (including a matching of these with the future organisational plans)	13 (42%)	3 (10%)	4 (13%)	13 (42%)
Productivity (output/employee ratio)	5 (16%)	18 (58%)	2 (6%)	6 (19%)
Training and retraining statistics, including measures of training effectiveness	12 (39%)	8 (26%)	4 (13%)	10 (32%)
Staff turnover	14 (45%)	1 (3%)	8 (26%)	10 (32%)
Absenteeism	8 (26%)	1 (3%)	7 (23%)	16 (52%)
Health and safety information	16 (52%)	1 (3%)	4 (13%)	10 (32%)
Industrial relations information	12 (39%)	1 (3%)	4 (13%)	13 (42%)
Retrenchment statistics and reasoning	10 (32%)	2 (6%)	4 (13%)	16 (52%
Employee morale	9 (29%)	2 (6%)	3 (10%)	19 (61%

The information in Table 6-3 reflects the three types of non-monetary human resource information proposed by Flamholtz (1975b), that is, quantitative, qualitative statements about measurements, and qualitative information without measurement.

Disclosure of the number of staff as an input in the SSP received the most support (87% of survey respondents). There was also support for the reporting of other non-monetary human resource variables as inputs, such as: staff remuneration (45%); recruitment, promotion and reward policies (42%); an inventory of skills (42%); staff turnover (45%); and health and safety information (52%).

This support was unexpected, as government departments are only required to report on outputs in SSPs (section 35(3)(e), Public Finance Act, 1989). Nevertheless, the interviews revealed that inputs are still regarded as very important, especially for internal management. Although the reporting and funding regime for government departments is based on outputs, "inputs are still a very, very major concern".

These results indicate scope for further research into the expansion of the service performance information required by legislation, as discussed in Chapter Seven. The findings of this study also provide support for the arguments advanced in Chapter Four for the inclusion of input information in the SSP. Furthermore, the results reflect the recommendation of the New Zealand Society of Accountants (NZSA) that SSPs "... provide a complete description of the delivery of each output" (NZSA, 1994, para. 11.4).

These results are contrasted with low levels of support from survey respondents for the inclusion of human resource outcome information. EEO information, staff turnover and absenteeism were the only outcomes to receive greater than 20% support. This could be a reflection of the statutory environment in which government departments operate. Government departments are not responsible for the attainment of outcome goals, therefore departmental chief executives could be reluctant to report on human resource outcomes.

However, if human resource outcome information is not presented in the SSP, it may be difficult to report on the effectiveness of the department. Failure to report on outcome performance is seen by one interview participant as contradictory to the nature and purpose of service performance reporting: 132

<sup>132</sup> As discussed in Chapter Four.

"Outcomes are what we are all about. . . . To justify ourselves, our very existence, we really have to look at outcomes. Human resource outcomes would be included in this."

Disclosure of human resource productivity<sup>133</sup> in a SSP also received significant support (58% of survey respondents recommending disclosure as an output). This result reflects the importance attached to efficiency in the production of outputs, as discussed in Chapter Two. It is also consistent with the importance placed on benchmarking and comparisons of human resource productivity by one interviewee:

"we can see . . . why it is that some [areas] can handle only 5.5 [projects] per month per [employee], and others can handle up to . . . nine."

The results in Table 6-3 reflect the different types of non-monetary human resource information proposed in Chapter Three. With the exception of specific EEO information, the results of this study are consistent with prior empirical and a priori research.

Furthermore, the support for disclosure of many of the above variables was greater than the 61% of respondents that recommended a SSP for reporting human resource information. This anomaly implies that support for the inclusion of human resource information in the SSP may be higher than the 61% suggested in Table 6-2.

The survey responses indicate that the provision of non-monetary human resource information is desired for public sector organisations, such as government departments. Furthermore, the results of this study reveal a belief among government department financial controllers that human resource measures suggested for the private sector are applicable to public sector organisations. This represents an extension of the existing private sector HRA literature, discussed in Chapter Three.

The HRA literature emphasises the need to assess the costs and benefits, or cost effectiveness, of human resource reporting. Such reporting will only be carried out if the expected benefits are greater than the expected costs.

...

<sup>133</sup> Defined as output/employee ratio.

#### IV. Costs and Benefits

#### A. Costs

The potential costs of implementing and operating a system capable of reporting non-monetary human resource information in the SSP are discussed in Chapter Three. These costs can be divided into direct and indirect costs.

#### (i) Direct Costs

The level of direct costs expected by the respondents is shown in Table 6-4. This table shows the significance ratings (one to seven) for each type of direct cost. A rating of one represents a negligible level of costs, while a rating of seven represents an extremely high level of costs.

Table 6-4: Direct Costs of Reporting of Non-monetary Human Resource Information 134

Level of Costs	Negligible 1	2	3	4	5	6	Extremely High 7
System installation	2 (6%)	5 (16%)	5 (16%)	7* (23%)	6 (19%)	6 (19%)	0
System operation	2 (6%)	5 (16%)	8 (26%)	9* (29%)	5 (16%)	2 (6%)	0
Report preparation	1 (3%)	6 (19%)	8 (26%)	6 (19%)	8* (26%)	2 (6%)	0

Survey respondents were also asked to list other direct costs likely to be incurred by their department. Costs suggested include the "setting and determination of measures to be monitored and the standards against which to assess achievement" (survey response - significance rating six). Similarly, two respondents expected a high cost for

<sup>&</sup>lt;sup>134</sup> In all of the following tables, the number with the asterisk represents the statistical mode, as calculated by the Microsoft Excel computer package. The statistical mode represents the most common response (Emory and Cooper, 1991).

ensuring the variables measured were relevant and meaningful (significance rating seven).

It was found that a moderate level of direct costs are expected through the reporting of non-monetary human resource information in the SSP. The modes for both installation and operation costs were four, indicating a moderate level of expected costs, while for report preparation costs, the mode was five, representing a moderate to high level of expected costs. In no cases were the costs expected to be extremely high. Furthermore, neither of the interview participants saw the direct costs of reporting human resource information as being very high, suggesting that the actual level of costs would depend on the sophistication of the desired system. They also expected costs to reduce over time. These findings refute previous a priori research which speculated that direct costs could be high (Filios, 1991; Lee, 1987).

However, there is potential for the costs of report preparation to be high if a lot of information is sought by external parties:

"The more they [Treasury] get, the more they want and . . . it's just a matter of time before they want all the human resource stuff . . . in a standard format [and] they want all the other departments to do it. That's when the costs start coming in."

One survey respondent replied that the department's systems could already provide most of the non-monetary human resource information suggested, so the information costs to that department would be low or negligible. Both interviewees agreed their systems could already provide much of the information, with one suggesting:

"There wouldn't be a lot of cost for installation because we've basically set up [an operating system], it's just a staffing matter in terms of getting the information out. Preparation of reports would be no great cost either, because we can incorporate it within our existing quarterly report."

This lends support to Flamholtz's (1985) hypothesis that the sophistication of an organisation's existing system will affect the costs of the new system. Support for this proposition was also present in the examination of indirect costs.

#### (ii) Indirect Costs

The levels of expected indirect costs from reporting non-monetary human resource information in the SSP are shown below in Table 6-5.

Table 6-5: Indirect Cost of Reporting Non-monetary Human Resource Information

Level of costs	Negligible 1	2	3	44	5	66	Extremely High 7
Employee resistance	7 (23%)	8* (26%)	6 (19%)	2 (6%)	4 (13%)	2 (6%)	2 (6%)
Management failure to accept the system	2 (7%)	8* (27%)	6 (20%)	8 (27%)	5 (17%)	0	1 (3%)
Management resistance to increased accountability	3 (10%)	5 (16%)	7 (23%)	8* (26%)	7 (23%)	0	1 (3%)
Management action to minimise the impact of the system on themselves	2 (6%)	9 (29%)	10* (32%)	5 (16%)	2 (6%)	2 (6%)	1 (3%)
Cost of external parties having the information	3 (10%)	3 (10%)	4 (13%)	5 (16%)	11* (35%)	4 (13%)	1 (3%)
External pressure to change human resource policies	4 (13%)	7* (23%)	6 (19%)	6 (19%)	6 (19%)	1 (3%)	1 (3%)

The expected levels of most indirect costs were below the mid-point of four on the Likert scale. The costs of employee resistance, management failure to accept the system, and external pressure to change human resource policies all had modes of two, indicating low expected cost levels. The distribution of responses reinforced this result, with 68%, 54% and 55%, respectively, of the responses being three or below, reflecting a belief that these costs would not be high. As with direct costs, there were very few survey participants who believed the indirect costs would be extremely high.

However, one indirect cost perceived as important was external parties having access to human resource information. The mode for this cost was five, indicating high potential costs associated with external parties having access to government department human

resource information. Examples of such parties would include competitors (where services are contestable) and employees (for wage negotiations) (Lee, 1987; Poate, 1987). The public may also misunderstand the human resource information, or regard it as propaganda, thereby impacting on the public perception of the department (Poate, 1987).

The HRA literature discussed in Chapter Three acknowledges the existence of indirect costs associated with reporting human resource information. However, little attempt is made to estimate the significance of each of these costs, or the relative importance of direct and indirect costs. This study indicates that many of the costs suggested in Chapter Three are, in fact, not perceived as very significant. Further, an analysis of variance (ANOVA) revealed that there was no statistically significant difference (at the 0.05 level) between the expected levels of direct and indirect costs. The follow-up interviews revealed mixed opinions on the relative importance of direct and indirect costs, with one interview participant suggesting direct costs would be higher, and the other participant expecting higher indirect costs.

These costs must be compared to the benefits of reporting human resources in the SSP (Caplan and Landekich, 1974; Controller and Auditor-General, 1994b; GASB, 1994; Henderson and Peirson, 1984; Filios, 1991; NZSA, 1993b). Therefore, survey respondents were also asked to suggest what benefits could arise from this reporting.

#### **B.** Benefits

For the purposes of this thesis, the benefits of reporting human resource information are defined in terms of the decision-usefulness of the information. That is, the benefits are assumed to be the potential uses of the information. Before assessing these benefits, it is necessary to consider the potential users of the information.

# (i) Users of Human Resource Information in the SSP

Chapter Four contains a list of potential users of human resource information reported in government departments' SSPs. The potential users proposed by the survey participants are presented in Table 6-6. As explained in Chapter Three, Table reflects internal management's perspective of both the internal and external users.

Table 6-6: Potential Users of Human Resource Information in the SSP

User Group	Very Unlikely	2	3	4	5	6	Very Likely 7
	1			<u> </u>			
Internal management	4 (13%)	2 (6%)	2 (6%)	1 (3%)	4 (13%)	7 (23%)	11* (35%)
Parliament	3 (10%)	1 (3%)	4 (13%)	11* (37%)	7 (23%)	3 (10%)	1 (3%)
Oversight bodies	1 (3%)	3 (10%)	0	3 (10%)	7 (23%)	10* (32%)	7 (23%)
Taxpayers, voters and other citizenry	5 (17%)	7 (23%)	8 (27%)	8* (27%)	0	1 (3%)	1 (3%)
Investors/ creditors	15* (52%)	5 (17%)	4 (14%)	5 (17%)	0	0	0
Grantors and other voluntary resource providers	12* (40%)	7 (23%)	5 (17%)	5 (17%)	0	1 (3%)	0
Customers and service recipients	6 (20%)	7* (23%)	3 (10%)	6 (20%)	5 (17%)	1 (3%)	2 (7%)
Employees and their representatives	2 (6%)	2 (6%)	0	2 (6%)	11* (35%)	8 (26%)	6 (19%)
Public interest groups	(7%)	3 (10%)	3 (10%)	7* (24%)	7 (24%)	5 (17%)	2 (7%)
Independent auditors	2 (7%)	2 (7%)	4 (13%)	8* (27%)	7 (23%)	6 (20%)	1 (3%)

These results show agreement among government department financial controllers regarding the likely users of human resource information provided in the SSP. The responses for each user type were generally grouped around the mode, indicating similar opinions among the survey participants. Opinions were also relatively strong, with the mode situated at either end of the scale.

Those groups considered most likely to use human resource information in the SSP were management, Parliament, oversight bodies, employees and their representatives, public interest groups and independent auditors. These user groups received importance ratings of five or higher from the majority of survey respondents, meaning these groups were considered likely or very likely to use human resource information. It is noted that the two internal user groups, management and employees, are both considered likely to use human resource information. The other user groups perceived as likely to use human resource information performed a supervisory or oversight role, such as Parliament, oversight bodies and auditors.

The survey respondents were asked to list other potential user groups not included in the questionnaire. Suggestions included the media (two respondents, importance ratings six and seven) and Select Committees in review of Votes (one respondent, importance rating seven). These users also carry out the oversight or public interest roles performed by the user groups suggested in the main body of responses.

Other oversight bodies were suggested as potential users during the follow-up interviews. The State Services Commission is seen as a potential user in its role of overseeing the human resource and EEO policies of departments. The Prime Minister's department was considered important because of its general oversight role. The Responsible Minister, Cabinet, Treasury, Audit New Zealand and Parliamentary committees (such as Select Committees and the Expenditure Control and Revenue Committee) were other potential users suggested by interviewees. Providing this information to Treasury was considered important for funding purposes:

"Treasury is far and away the most important, because if we get them on side, they might agree with additional funding . . . or a capital contribution of some description."

One interview subject suggested some additional users of government department human resource information, such as human resource consultants, employment agencies and other government departments. However, these user groups would be satisfied by the provision of human resource information in general, not specifically in the SSP.

<sup>135</sup> See section 6 of the State Sector Act, 1988.

Those groups considered unlikely to use human resource information were taxpayers and voters, investors and creditors, grantors, and customers and service recipients. The importance ratings for these groups were generally gathered at or below the mid-point of four, and had mean ratings of approximately three or below (as shown in Table 6-7). Internal management regarded these external groups as being either unlikely or very unlikely to use human resource information published in a SSP.

Table 6-7: Mean Ratings of Potential User Groups

	Mean Rating (out of 7)
User Group	Witan Rating (out or 1)
Internal management	5.06
Parliament	4.03
Oversight bodies	5.26
Taxpayers, voters and other citizenry	2.93
Investors/ creditors	1.97
Grantors and other voluntary resource providers	2.23
Customers and service recipients	3.27
Employees and their representatives	5.13
Public interest groups	4.28
Independent auditors	4.27

These results are similar to those of other user studies, as discussed in Chapter Four. Oversight bodies, Parliament, employees, public interest groups and the media were all found to be significant users by previous a priori and empirical research. The inclusion of internal management as a user was not as common in prior research, however, this was because many studies only considered external users. Yet it is well documented that internal management do use reports designed for external users <sup>136</sup> and this could include SSPs.

<sup>136</sup> See Chapter Four.

The results of this thesis extend the previous literature regarding the users of government financial reports. Previous studies generally considered financial statements, whereas this study examines the potential users of a non-financial statement, the SSP, and reveals a similar, though not identical, group of users.

Nevertheless, some of the above results do appear inconsistent with previous literature. Grantors, taxpayers and voters, service recipients, and investors and creditors are all frequently documented as users of government financial reports, yet none of these groups received significant support in this study. It was expected that human resource information would have been of particular interest to service recipients, as it would provide an indication of the future service potential of the department (McKinney and Ferris, 1984).

However, explanations can be offered for some of these inconsistencies. Government departments in New Zealand obtain funding from Parliament, therefore grantors, voluntary providers, investors and creditors play insignificant roles in financing government departments. Furthermore, this study considers the users of non-monetary human resource information in the SSP only, whereas previous studies have examined general financial information.

Given the expected significance of various user groups, a consideration was made of the potential internal and external uses of non-monetary human resource information disclosed in the SSP.

### (ii) Internal Uses of Human Resource Information in the SSP

The internal uses expected to be made of non-monetary human resource information reported in the SSP are shown in Table 6-8.

Table 6-8: Expected Internal Uses of Non-monetary Human Resource Information in the SSP

Internal Use	Very Unlikely 1	2	3	4	5	6	Very Likely 7
Human resource recruitment	6 (19%)	5 (16%)	5 (16%)	3 (10%)	6* (19%)	4 (13%)	2 (6%)
Human resource allocation	5 (16%)	6 (19%)	4 (13%)	5 (16%)	8* (26%)	1 (3%)	2 (6%)
Monitoring human resource productivity	5 (16%)	2 (6%)	3 (10%)	6 (19%)	7* (23%)	6 (19%)	2 (6%)
Human resource development and conservation	4 (14%)	3 (10%)	2 (7%)	9* (31%)	5 (17%)	5 (17%)	1 (3%)
Assessment and reward of human resources	7* (23%)	5 (16%)	6 (19%)	3 (10%)	4 (13%)	6 (19%)	0
Justifying employee remuneration	5 (16%)	0	3 (10%)	11* (35%)	5 (16%)	5 (16%)	2 (6%)
Recognition and solution of organisational problems	3 (9%)	3 (9%)	2 (6%)	6 (19%)	12* (39%)	3 (9%)	2 (6%)
Strategic decisions, such as major change, and objective and goal setting	4 (13%)	3 (10%)	3 (10%)	7* (23%)	6 (20%)	4 (13%)	3 (10%)
Evaluating effectiveness of department's human resource management	5 (16%)	0	2 (6%)	5 (16%)	8 (26%)	8* (26%)	3 (10%)
Ensuring that human resources are considered in management decisions	2 (6%)	3 (10%)	5 (16%)	8* (26%)	8 (26%)	3 (10%)	2 (6%)

Opinion appears divided over the internal usefulness of providing human resource information in the SSP. The range of responses for many uses was wide, indicating diversity of opinion amongst survey respondents. However, during the interview process it was suggested by one financial controller that the potential internal uses of this information were more important than the potential external uses.

There was substantial support in the survey for the internal use of human resource information reported in the SSP. The most likely expected use was for the evaluation of the effectiveness of human resource management, with 78% of respondents rating it at four or greater (representing a moderately to very likely use). Approximately 67% of survey participants rated the likelihood of use for monitoring human resource productivity as four or greater. The potential for use in human resource development and conservation was rated four or higher by 68% of respondents, while 73% assigned the same rating to justifying employee remuneration.

Other potential internal uses received only moderate support. Over half (58%) of the survey subjects believed the recognition and solution of organisational problems to be a moderately likely use of this information (rating of four or five). Both strategic decisions and ensuring human resources are taken into account were considered to be moderately likely uses of human resource information. The mode for these two uses was four, the mid-point on the scale, and the responses were tightly grouped around this mid-point, indicating agreement between respondents.

There was less agreement regarding other possible uses of non-monetary human resource information. Both human resource recruitment and allocation had modes of five and means of approximately 3.5, but both had a wide distribution of ratings, therefore distinguishing a pattern of responses was difficult. Nevertheless, an examination of Table 6-8 reveals that responses tended to be toward the lower end of the scale, indicating that less use was expected of non-monetary human resource information for these purposes. Assessment and reward of human resources exhibited a similar pattern of responses.

The internal uses of non-monetary human resource information found in this study can be compared to the uses proposed in Chapter Three. However, it will be noted that the uses in Chapter Three were derived a priori from previous research on monetary HRA, as little prior research had been conducted concerning the use of non-monetary human resource information.

The lack of support for using human resource information in human resource recruitment and allocation decisions is surprising. Skills inventories could help management match the skill needs of the organisation with those currently available from existing staff (American Accounting Association, 1973; Filios, 1991; Meyers and Shane, 1984).

It would also have been expected that reporting non-monetary human resource information would help ensure human resources are considered in decision-making. It has been stated that the mere fact that human resources are measured encourages managers to take human factors into account when making decisions (American Accounting Association, 1973; Flamholtz, 1976, 1985; Mee, 1982; Pallot, 1990; Sen, 1986). The reporting of human resources also leads to a longer-term perspective being taken in the management of human resources (Flamholtz, 1985; Pallot, 1990).

One possible reason for some financial controllers not supporting the internal use of non-monetary human resource information reported in the SSP is that the department does not use any SSP information internally. One interview subject indicated that the department did not use any SSP information internally, and could not see this occurring in the immediate future.

Nevertheless, it would appear that there is support for the internal use of non-monetary human resource information reported in the SSP. Such a finding is consistent with the literature regarding the internal use of monetary human resource information, and with the contention made in Chapter Four that SSP information will be used internally.

This represents an extension of the existing literature in three areas. Firstly, it was found that the internal uses proposed for monetary human resource information are, on the whole, also applicable to the provision of non-monetary human resource

information. Secondly, the findings of the private sector literature concerning non-monetary human resource information have been extended to the public sector, specifically government departments. Finally, the majority of responses support the a priori contention that SSP information may be used internally as well as externally.

However, three survey respondents indicated that detailed management reports would be more useful for internal decision-making than SSPs prepared for external reporting purposes. These responses add support to the Governmental Accounting Standards Board's (GASB's) (1990) proposal for two different reports; a detailed internal report for management, and a less detailed external report to satisfy external disclosure requirements. The results of the interviews also supported this contention, with both interview subjects indicating that internal reports should have more human resource detail than external reports, mainly because of the different types of decisions made internally and externally:

"A lot of the internal information has to be used to manage the place . . . efficiently. And a lot of the external information has to be to ensure that what the department's doing is effective."

# (iii) External Uses of Human Resource Information in the SSP

For the purposes of this thesis, internal management were asked what they believed to be the potential external uses of non-monetary human resource information reported in the SSP. Consequently, the results reveal an internal viewpoint of the external usefulness of this information. These findings are shown in Table 6-9.

<sup>137</sup> It will be noted that Harrell and Klick (1980) found monetary human resource information more useful than non-monetary information for internal promotion decisions. However, the relative usefulness of monetary and non-monetary human resource information was not considered in this study.

<sup>138</sup> Chapter Four lists the authors making this contention.

Table 6-9: Expected External Uses of Non-monetary Human Resource Information in the SSP

External Use	Very Unlikely 1	2	3	4	5	6	Very Likely 7
Assessing the accountability of internal managers to external parties	3 (10%)	5 (16%)	2 (6%)	11* (35%)	5 (16%)	5 (16%)	0
Assessment of chief executive performance by external parties	2 (6%)	4 (13%)	3 (10%)	7* (23%)	5 (16%)	6 (19%)	4 (13%)
Assessing the accountability of management for the department's employment policies and practices, eg EEO	0	1 (3%)	4 (13%)	7 (23%)	6 (19%)	9* (29%)	4 (13%)
Government funding and resource allocation decisions	4 (13%)	5 (16%)	6 (19%)	6 (19%)	7* (23%)	3 (10%)	0
Monitoring human resource trends	0	/ 2 (6%)	3 (10%)	7 (23%)	7 (23%)	8* (26%)	4 (13%)

The above survey results reveal significant support from respondent financial controllers for the external uses proposed in Chapter Three. One external use that received particular support was the assessment of the effectiveness of the department's employment policies and practices, with a mode of six (indicating high likelihood of use for this purpose). The mean rating for this option was just under five, and 84% of respondent financial controllers assigned it a rating of four or greater (that is, moderately likely or higher). The disclosure of non-monetary human resource information, such as turnover rates, in the SSP would provide an indication of the effectiveness of departmental human resource management policies. This information will reveal whether the department's human resources have been increased, maintained or depleted (Pallot, 1990, p. 11, 1991a).

Monitoring human resource trends was another external use suggested for human resource information. The mode was six, with a mean response of just under five,

while 85% rated its use for this purpose as moderately likely or higher. Hence internal management believe non-monetary human resource information will be used externally to monitor human resource trends. Monitoring human resource variables will provide an indication of the department's ability to offer services in the future (McKinney and Ferris, 1984).

Less support from survey respondents was evident for the use of human resource information for managerial performance assessment, as suggested in Chapter Three by McKinney and Ferris (1984), Unruh and Mathews (1992) and Weiss (1975). While the mean level of support was just under 4.5, the mode was four, or the mid-point on the scale, and 71% of financial controllers rated its use for this purpose as moderately to very likely. These levels of support, while substantial, are lower than the support for using human resource information as a monitoring device, or to assess the effectiveness of the department's human resource policies.

The respondent financial controllers appeared divided over whether external parties would use non-monetary human resource information reported in the SSP to assess the accountability of chief executives. The mode was four, the mid-point on the scale, with other responses evenly divided either side of this point, as can be seen from Table 6-9. However, this result still indicates a moderate likelihood that human resource information would be used to assess management accountability.

A difference of opinion was also evident with respect to government funding and resource allocation decisions, although the distribution of responses was more weighted towards the lower end of the scale. This indicates a belief by respondent financial controllers that non-monetary human resource information disclosed in the SSP would generally not be used for government funding and resource allocation decisions.

Such a finding is inconsistent with the contention of Euske and Rock (1983) that external reports containing human resource information could be used by the United States Congress in funding and resource allocation decisions. However, Euske and Rock consider the use of monetary human resource information, whereas this study is concerned with non-monetary information.

The interview subjects suggested that non-monetary human resource information included in the SSP could be used for funding and resource allocation. However, while Parliament was regarded as a likely user of information for this purpose, the principal user was expected to be Treasury:

"... if you can prove on your formulas [sic] that you need so many people to do this work or that work, ... and you can convince Treasury ... then you can get funded."

Government departments are also required by the State Sector Act, 1988 to report on the attainment of EEO goals and to be 'good employers'. However, the Act does not specify a particular format for this reporting. It was contended in Chapters Three and Four that disclosure of non-monetary human resource information through the SSP could help establish compliance with EEO legislation. Approximately 73% of survey respondents supported the inclusion of EEO information in the SSP as either an input, output or outcome in Table 6-3, and a high number of respondents supported the use of human resource information reported in the SSP to disclose EEO information.

Reporting on staff turnover and absenteeism could be used to demonstrate departments' compliance with the 'good employer' provisions of the State Sector Act. Departments are not required to report on employment policies other than EEO programmes, yet the publication of favourable information may enhance the public image of a department.

However, neither of the interview respondents believed that using non-monetary human resource information disclosed in the SSP to report on EEO, or the 'good employer' requirements, was practical. One interviewee stated that the brief comment in the annual report and the report to the State Services Commission three times per year was sufficient disclosure. The other interviewee supported the idea in theory, but in practice "nobody reads it [the SSP]".

Overall, the external uses of non-monetary human resource information found in this study reflect previous HRA literature. However, the current study extends this

<sup>139</sup> See Chapter Two for details of these requirements.

literature by examining the external uses of non-monetary information and the applicability of previous results to public sector organisations.

However, these findings concerning the external usefulness of human resource information must be viewed with some caution. As discussed previously, this study took an internal perspective of external usefulness, that is, the opinions of internal management were sought on external usefulness. Nevertheless, this research proposes external uses which can then be presented to actual external users for their opinions.<sup>140</sup>

One external use of non-monetary human resource information reported in government departments' SSPs is assessing the accountability of departmental chief executives. The effect of human resource disclosures on the statutory framework within which government departments operate requires further examination.

# (iv) Effect of Human Resource Disclosures on Accountability

The expected effect of the provision of non-monetary human resource information on the accountability of government departments is shown in Table 6-10.

Table 6-10: Expected Effect of Reporting Non-monetary Human Resource Information on the Accountability Framework

Form of Accountability	No Effect 1	2	3	4	5	6	Strongly Effect 7
Accountability of departmental heads to the Minister	3 (10%)	4 (13%)	6 (19%)	7* (23%)	7 (23%)	4 (13%)	0
Accountability of Ministers to Parliament	3 (10%)	9* (29%)	7 (23%)	5 (16%)	6 (19%)	1 (3%)	0
Accountability of Parliament to taxpayers	4 (13%)	13* (42%)	5 (16%)	6 (19%)	1 (3%)	2 (6%)	0

<sup>&</sup>lt;sup>140</sup> This avenue for further research is discussed in the following chapter.

The accountability framework within which government departments operate was outlined in Chapter Two. In Chapters Three and Four, it was argued that the disclosure of non-monetary human resource information in a SSP would be consistent with the three forms of accountability shown in Table 6-10. However, only limited support for this contention was obtained.

The accountability of departmental chief executives to the relevant Minister for departmental performance<sup>141</sup> was most likely to be affected by the disclosure of non-monetary human resource information. However, even support from survey respondents for this was not strong. The mode for this form of accountability was four, the mid-point on the scale, with a mean response of 3.7. Furthermore, the responses were approximately evenly distributed either side of the mid-point, suggesting few strong opinions, and no respondents believed accountability would be 'strongly affected'.

This is consistent with the responses shown in Table 6-9, where no firm opinions were expressed on the likelihood of human resource information reported in the SSP being used by external parties (including ministers) to assess the accountability of departmental chief executives.

The respondent financial controllers did not expect the accountability of Ministers to Parliament, or the accountability of Parliament to taxpayers, to be significantly affected by the disclosure of non-monetary human resource information in the SSP. The modes for both these forms of accountability were two, indicating very little effect, and the distributions were both weighted strongly towards the 'no effect' end of the scale. This finding contradicts the contentions made in Chapters Three and Four, that the disclosure of human resource information in the SSP would be consistent with the New Zealand public sector accountability framework. A possible reason for the contrary finding is that such information could be reported in another statement, specifically designed for this purpose, as was recommended by one survey participant.

<sup>&</sup>lt;sup>141</sup> In accordance with the Public Finance Act, 1989 and State Sector Act, 1988.

Other possible reasons for these findings concerning accountability were indicated during the follow-up interviews. One interviewee suggested that the information is not required to assess accountability:

"I don't think the Minister's actually ever asked for anything on [human resources]. We've had a couple of things from the Select Committee, . . . where they've wanted to know how many staff we've had, and how many consultants we've engaged, and the sort of work staff undertake. But those are generally answered quite quickly. There's been no real need for any constant reporting in terms of [human resources]."

The other interviewee believed Treasury, and not Ministers, Parliament or taxpayers would use human resource information contained in the SSP when holding departments accountable:

"If . . . all government departments, including ourselves, provided these numbers and further information on human resources, it would allow benchmarking across government departments by Treasury, and it would give them one measure of showing the efficiency of departments."

However, it must be noted that the opinions expressed in this study are those of government department financial controllers, and Ministers may have different views of the impact of human resource information on ministerial accountability. Nevertheless, it is an unexpected result, as government departments are responsible to Ministers for resource management, and are required to report on the achievement of EEO goals. It was postulated that the SSP may have provided a suitable medium for these disclosures, as one of the benefits of providing human resource information in the SSP is that it discloses the composition and use of the department's human resources.

# (v) Overall Usefulness of the Provision of Non-Monetary Human Resource Information

Except in the specific cases described above, the findings of this research provide support for the a priori uses of non-monetary human resource information proposed in Chapter Three. The uses proposed for non-monetary information in the public sector were largely adapted from the literature concerning the provision of monetary human resource information in the private sector, and were thus speculative in nature.

<sup>142</sup> See Chapter Two for a discussion of these requirements.

However, the results of this study confirm that the disclosure of non-monetary human resource information can provide most of the benefits, in terms of decision-usefulness, that arise from the reporting of monetary information. Furthermore, this study found that the uses made of human resource information in the private sector are similar to the potential uses in the public sector.

Therefore, there is support for the argument that the provision of non-monetary information enables the reporting of a government department's human resources, while avoiding the reliability problems associated with monetary valuation.

# C. Costs and Benefits Compared

As stated previously, before any decision is made to report non-monetary human resource information in the SSP, it is necessary to compare the costs and benefits of such reporting (Caplan and Landekich, 1974; Controller and Auditor-General, 1994b; GASB, 1994; Henderson and Peirson, 1984; Filios, 1991; NZSA, 1993b). The potential costs and benefits, as seen by government department financial controllers, have been discussed. The opinions of these financial controllers regarding the relative costs and benefits of this reporting are shown in Table 6-11.

Table 6-11: Assessment of the Relative Costs and Benefits of Reporting Human Resource Information in the SSP

Cost-Benefit Analysis	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
Reporting would be useful and practical in terms of costs and benefits	3	3	8*	7	3	4	2
	(10%)	(10%)	(27%)	(23%)	(10%)	(13%)	(7%)

The above survey results reveal a mixed opinion regarding the usefulness and practicality of reporting non-monetary human resource information in the SSP. The mode was three, which is less than the mid-point, however, 23% of respondents chose the mid-point of four. The distribution either side of these points was evenly spread. These results indicate that the opinions of government department financial controllers

were mixed concerning the cost effectiveness of reporting non-monetary human resource information in the SSP, with a small majority indicating that it was not cost effective.

This is an interesting result, as 84% of the survey participants considered it necessary to report non-monetary human resource information, and 61% believed the SSP to be an appropriate medium for this reporting. There was also significant support for the disclosure of several items of non-monetary human resource information in the SSP. Neither direct nor indirect costs of reporting were expected to be high, and there was substantial support for many of the internal and external benefits proposed. Yet, when asked to assess the costs and benefits of this reporting, only 30% of survey respondents regarded it as being potentially cost effective (that is, rating five or higher). Hence, while there is support in theory for the reporting of non-monetary human resource information in government departments' SSPs, there are reservations over the practicality of such reporting.

A possible reason for this conclusion is the difficulty in accurately quantifying some of the indirect costs and benefits of providing the information. It is possible that some of the costs were over-estimated due to the negative connotations associated with the provision of monetary human resource information. It is also possible that some of the potential benefits were under-estimated due to an unfamiliarity with the concepts.

The explanations of the interview subjects may also provide insight into this discrepancy. One interviewee indicated that reporting human resource information in the SSP was not supported in terms of cost effectiveness simply because "it's nothing that's . . . been requested before, so we'd probably be reluctant to . . . provide it". The other interviewee, while supporting the idea in theory, expressed scepticism that anyone would read it, therefore it may not be practical: "If people read the SSP it could be [a practical suggestion]". However, this statement was qualified by saying that human resources should only be reported in the SSP in summary form, not allocated to each individual output class, if it is to retain its practicality and meaningfulness:

<sup>&</sup>quot;[Reporting] it in each individual SSP... would be too difficult allocating staff... it would be just another basic allocation process which would end up being sort of meaningless in a way, but you could, in the SSP, have a sort of subsection, or a one page or two page at the end [regarding human resources]."

If, after comparing the costs and benefits, the decision is made to report human resources in a SSP, the information must be useful to gain the full potential benefits from this reporting. Usefulness can be evaluated by assessing the degree to which the information satisfies the requirements of the *Statement of Concepts for General Purpose Financial Reporting (SoC)*, and possesses certain qualitative characteristics, also listed in the *SoC* (NZSA, 1993b).

# V. Characteristics of Human Resource Information in the SSP

As stated in Chapter Four, the NZSA produces guidance regarding the dimensions of service performance that should be included in the SSP. The extent to which government department financial controllers believe non-monetary human resource information should reflect those dimensions is presented in Table 6-12.

Table 6-12: Dimensions of Human Resource Information Disclosed in the SSP

Dimension	Not Important 1	2	3	4	5	6	Very Important 7
Quality	2 (6%)	0	0	3 (9%)	2 (6%)	13* (41%)	12 (38%)
Quantity	3 (9%)	1 (3%)	4 (13%)	6 (19%)	10* (31%)	5 (16%)	3 (9%)
Location	6 (19%)	7 (22%)	5 (16%)	9* (28%)	2 (6%)	2 (6%)	1 (3%)
Time	4 (13%)	1 (3%)	3 (9%)	14* (44%)	5 (16%)	2 (6%)	3 (9%)

The survey results reveal that the quality of human resources is regarded as a very important dimension for reporting in the SSP. The mode was a rating of six, and 79% of the respondents rated quality at either six or seven. The quality of human resources is difficult to measure, but the desire to measure quality is consistent with the objective of human resource measurement, that is, to estimate employee value.

A possible measure of quality suggested by one interview subject is benchmarking. It would be possible to assess the quality of human resources by comparing the outputs and/or effectiveness of different geographical or functional areas.

Quantity was also considered an important dimension of human resource reporting by survey respondents, with a mean importance rating of 4.4 and a mode of five. Approximately 75% of respondents rated the disclosure of human resource quantity information as being moderately important or higher.

There was less support for the dimensions of time and location. The survey respondents were evenly divided over the importance of time as a dimension of human resource reporting, with 44% selecting the mid-point of four and an even distribution either side of this point. However, location of the performance of human resource services was not considered to be an important dimension, with a mean rating of 3.1 and a mode of four. The perceived unimportance of location is reinforced by 85% of respondents rating it at moderately important or lower. Location was considered moderately important by the interview respondents, as both these departments had geographically dispersed offices nationwide.

Additional dimensions were suggested in the follow-up interviews. One interview participant indicated that reporting on equity and legality was becoming increasingly important. There was a potential need to report on issues such as "are we doing things that are fair, and are we doing things that are legal in terms of the Government, . . . in terms of the law?", with respect to human resources.

With the exception of equity and legality, the dimensions considered important for human resource reporting are largely consistent with the literature and with survey respondents' opinions shown in Table 6-3. Most of the variables in Table 6-3 measure dimensions of quantity, while some (such as staff skill and training levels) could be used as surrogate measures of quality. Narrative information could also be used to describe human resource quality. A time factor could be introduced to these variables by considering them on a per period basis.

If human resource information was provided on a per period basis in the SSP, interperiod comparisons would be possible. This would require the disclosure of

information pertaining to previous periods. This is one type of comparative human resource information that could be included in the SSP. The survey respondents' opinions of what comparative information should be included are shown in Table 6-13.

Table 6-13: Types of Comparative Human Resource Information in the SSP

Type of Comparative Data	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
Data from previous periods	3 (10%)	1 (3%)	1 (3%)	7 (23%)	6 (19%)	8* (26%)	5 (16%)
Data from similar departments	13* (42%)	4 (13%)	3 (10%)	3 (10%)	4 (13%)	2 (6%)	2 (6%)
Standards or norms	3 (10%)	1 (3%)	7 (23%)	3 (10%)	7 (23%)	8* (26%)	2 (6%)
Budget or plan data	4 (13%)	2 (6%)	2 (6%)	6 (19%)	2 (6%)	13* (42%)	2 (6%)
Data from other geographical areas	8* (28%)	5 (17%)	8 (28%)	4 (14%)	3 (10%)	1 (3%)	0
Data from other target groups within the department	5 (17%)	5 (17%)	5 (17%)	6 (20%)	3 (10%)	6* (20%)	0

The publication of comparative data from previous periods received the most support, with a mode of six and 61% of respondents rating it higher than the mid-point of four. This means the majority of survey participants either agree or strongly agree with the use of previous periods' human resource data for comparative purposes. One further respondent suggested that data from previous periods could be used if it were relevant, adding further support to the survey findings. This result is to be expected, as the *SoC* explicitly recommends the presentation of corresponding information from preceding periods to increase the usefulness of financial statements (NZSA, 1993b, para. 4.16).

Standards or norms also received support as comparative information. Approximately 55% of respondents either agreed or strongly agreed with the use of standards or norms for comparative purposes. The mean rating was 4.4 and the mode six. These results

indicate support for the use of standards or norms as comparative information, although this support is not as strong as for previous periods' data.

Comparison of actual with budget or plan human resource data was recommended by a significant number of respondents. The mode for this option was six, with a mean of 4.5 and 54% of participants rating it higher than the mid-point of four. These results suggest strong support for the use of budget or plan data for comparative purposes. This was expected, as both the NZSA (1994) and the Public Finance Act, 1989 require the SSP to report both actual and projected performance data. This is to ascertain the degree of success in achieving objectives (NZSA, 1994, para. 11.8). Comparison between budget and actual is also of prime importance for management reporting (Hansen and Mowen, 1994).

All of the methods recommended by the survey respondents were consistent with previous research, as discussed in Chapter Four. For example, two previous studies have revealed that 91% and 84%, respectively, of users found actual versus budget comparisons to be useful. However, it should be noted that no prior research has been conducted into comparative information specifically concerning human resources. In this respect, the results represent an extension of the existing literature.

However, there were some types of comparative information suggested in the literature that were not supported in this study. The majority of survey participants strongly disagreed with the provision of data from similar departments for comparative purposes. A possible explanation is that, for many departments, there may be no comparable organisations. Furthermore, any comparison with similar departments would have to consider differences in the environment and overall mission that may exist between departments (GASB, 1990; Smith, 1988, 1990).

Nevertheless, one of the financial controllers interviewed believed that comparison with other departments, or benchmarking, in the area of human resources would provide very relevant information. Yet the importance of comparing like with like was emphasised, and the interviewee believed the department could be compared with several other departments, or sections of other departments, performing similar roles.

Inter-departmental comparisons would focus particularly on human resource productivity and efficiency.

Little support was evident for comparison with data from other geographical areas, although one survey participant suggested comparison with data from other countries. This general lack of support could be because many New Zealand government departments do not have separate geographical areas to compare. The purpose of many departments is to provide policy advice to the Government, so they only operate in one geographical area.

The aim of providing comparative figures in financial statements is to increase the comparability of information (NZSA, 1993b, para. 4.16). Comparability is one of four qualitative characteristics suggested in the *SoC* as a means of enhancing the usefulness of information. These characteristics are discussed in Chapter Four.

The survey respondents' opinions as to the extent non-monetary human resource information included in the SSP should exhibit these qualitative characteristics are shown in Table 6-14.

Table 6-14: Qualitative Characteristics Preferred in Human Resource Measures

Characteristic	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
Relevance	1 (3%)	0	0	2 (6%)	5 (16%)	11 (35%)	12* (39%)
Understandability	1 (3%)	0	0	1 (3%)	5 (16%)	14* (45%)	10 (32%)
Reliability	1 (3%)	0	1 (3%)	6 (19%)	3 (10%)	9 (29%)	11* (35%)
Comparability	2 (6%)	2 (6%)	3 (10%)	11* (35%)	5 (16%)	4 (13%)	4 (13%)
Materiality	2 (6%)	0	1 (3%)	5 (16%)	6 (19%)	11* (35%)	6 (19%)

The characteristics of relevance, reliability, and understandability were all rated as important by the majority of respondents. The modes for these characteristics were

seven (relevance and reliability) and six (understandability), with 90%, 74% and 93%, respectively, agreeing that non-monetary human resource information reported in the SSP should exhibit these characteristics.

Comparability received less support, with a mode of four (the mid-point on the scale) and a mean rating of 4.4. Opinion was divided on the importance of comparability, with 35% neither agreeing or disagreeing, and 42% agreeing (that is, rating it above four). One possible reason for this relatively low importance rating is the definition of comparability in the survey instrument. Comparability was defined as in the *SoC*, that is comparability between different organisations and different periods. Two survey respondents expressed unease with comparability between different organisations but supported comparisons between different time periods. It is possible that the inclusion of inter-organisational comparisons in the definition caused respondents to rate comparability lower than they otherwise would have. This would be consistent with the low rating given to the use of data from other departments and other geographical areas for comparative purposes, as shown in Table 6-13.

The concept of materiality was regarded as important by the majority of survey participants. The mode was six, with a mean rating of 5.3, while 73% agreed that non-monetary human resource information should satisfy the materiality criterion to warrant disclosure in the SSP. This is in accordance with the importance attached to materiality in the *SoC*, which states that whether an item is material is a significant consideration when deciding whether to disclose it in financial reports (NZSA, 1993b, paras. 6.5-6.8). It can also be seen as related to the Audit Office's stipulation that only critical performance measures 143 should be reported.

The overall agreement that non-monetary human resource information reported in the SSP should exhibit the qualitative characteristics discussed above is in accordance with the SoC. These characteristics provide the criteria by which the quality of information contained in a report can be assessed (NZSA, 1993b, section 4), so it is to be expected that the respondents regarded them as important.

<sup>143</sup> A critical performance measure is a measure "which, if omitted, would result in an unbalanced or incomplete picture of the organisation's performance" (Audit Office, 1990, p. 9).

While the SoC criteria apply only to external reports, it was argued in Chapter Four that these same characteristics can also be used to evaluate the quality of information intended for internal reporting. Therefore, as no distinction was made in the questionnaire between the characteristics required for internal and external reporting, it is assumed that the above responses apply to both forms. One interviewee suggested that, while the same characteristics would apply, the primary quality of information for internal use should be relevance for decision-making. This is consistent with Roslender and Dyson (1992), who recommend providing the same human resource information to both user groups, with internal users receiving the information more frequently and in greater detail.

The three characteristics of relevance, reliability and understandability all received high ratings of importance. The majority of survey respondents strongly agreed that non-monetary human resource information disclosed in the SSP should possess these characteristics. Therefore, this human resource information has to be: readily understandable; relevant, that is, decision-useful, timely and consistent with the objectives of the department; and reliable, that is, neutral, verifiable, <sup>144</sup> show substance over form, and represent all significant activities of the department.

However, as discussed in Chapter Four, it may not be possible to completely satisfy all of these characteristics. Thus a trade-off may be necessary between these characteristics, especially with respect to relevance and reliability (Henderson and Peirson, 1984; Hyndman and Anderson, 1991; NZSA, 1993b). It was also contended in Chapter Three that a trade-off between relevance and reliability is implicit in the decision to adopt non-monetary rather than monetary human resource measures. No indication was given in either the survey or interview responses of a trade-off between the various characteristics being necessary, although no direct question was asked on this issue.

The ability to audit non-monetary human resource information reported in the SSP is beyond the scope of this thesis, but provides an interesting avenue for further research, as discussed in Chapter Seven.

# VI. Chapter Summary

A usable response rate of 79% was obtained from the mail questionnaire sent to New Zealand government departments and, of these responses, 84% considered that non-monetary human resource information should be reported. The SSP was the most favoured report for this disclosure, and there was significant support for the inclusion in the SSP of a number of human resource variables as inputs, outputs or outcomes.

A number of costs and benefits were identified by respondents as being associated with the disclosure of human resource information in the SSP. These costs included system installation and operation, report preparation, and indirect costs such as resistance to the system, action to minimise the impact of the system, and costs of external parties having access to departmental human resource information. However, there were also a number of internal and external benefits, that is, it was expected that the disclosure of human resource information would be decision-useful. Internal uses included human resource management, evaluating a department's human resource policies, and organisational problem solving. External uses included chief executive performance assessment, determining the effectiveness of human resource policies, and the monitoring of human resource needs. However, when comparing the overall costs and benefits, the majority of respondents did not expect such reporting to be cost effective, or practical.

Respondents were generally in agreement over the dimensions of non-monetary human resource reporting in government departments' SSPs. Quality was considered to be the most important dimension, with quantity the next most important. The most common comparisons suggested were with budget or plan data, data from previous periods, and predetermined standards or norms.

There was a belief amongst respondents that if non-monetary human resource information reported in the SSP was to be useful, it should exhibit the qualitative characteristics of relevance, reliability, understandability and comparability. However, a trade-off between these characteristics may be necessary. Exactly what balance is ideal for this trade-off is one of the areas for further research arising from this study, which are discussed in the following chapter.

# Chapter Seven: Limitations and Further Research

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#### I. Introduction

This thesis examined the usefulness and practicality of the reporting of non-monetary human resource information by government departments. As a result of its exploratory nature, the emphasis was on breadth of coverage rather than depth. Consequently, the results presented in the preceding chapter provide scope for further research.

However, in order to place the results in perspective, it is necessary to consider the limitations of the research method used. This chapter reviews the primary limitations arising from the use of a mail questionnaire and two follow-up interviews, before examining the principal opportunities for further research.

# II. Limitations of the Research

The main limitations associated with this research relate to the questions in the survey instrument and the use of follow-up personal interviews.

## A. Limitations of the Survey Instrument

#### (i) Terminology

As a mail survey does not allow for any surveyor-subject interaction, there is potential for misunderstandings to arise over the definition of terms used in the questionnaire (Abdel-khalik and Ajinka, 1979; Emory and Cooper, 1991). In this study, some of the terminology used was specific to human resource accounting or human resource management. Some definitions were included in the questionnaire in an attempt to alleviate definitional problems. However, the length of the questionnaire prevented every term from being defined. It is possible that misunderstandings or ambiguities arising from the definitions of some of the terms in the questionnaire may have affected the results. However, the two follow-up interviews revealed an understanding among those participants of the intended meaning of the terms. This provides a degree of confidence that the survey respondents understood the terms used.

Particular difficulties may have arisen over the definition of the human resource dimensions used in question four of the survey instrument. The terms 'quality',

'quantity', 'location' and 'time' were taken directly from FRS-2: Presentation of Financial Reports (NZSA, 1994). While quantity, quality and time can be related to human resource measurement, variables representing location are not as readily apparent. Consequently, some respondents may have had difficulty in relating the dimension of location to human resource measurement, thus affecting their rating of the importance of location.

#### (ii) Survey Error

There are many different types of survey error that can reduce the validity of the results. Only those types specifically relevant to this survey are discussed, that is, response bias, non-response bias and questionnaire design error.

#### (a) Response Bias

Response bias exists when the respondent provides incomplete or inaccurate answers (Beed and Stimson, 1985). Possible reasons for this are that the respondent: is unreliable; has little knowledge about the issue but does not want to admit this; deliberately misleads the researcher; or is reluctant to participate (Beed and Stimson, 1985; Oppenheim, 1966). As discussed in Chapter Six, tests revealed little statistically significant difference between the answers of early and late respondents. Hence, it appears that reluctance to participate had little effect on the results of the survey.

Specific types of response bias include: contamination bias; extremity bias; and the halo effect. Contamination bias can result when the respondent gets someone else to complete the questionnaire, or asks the opinions of others when responding (Dillman, 1978). As with all mail surveys, little can be done to prevent the occurrence of contamination bias (Emory and Cooper, 1991). An extremity bias can exist, as respondents are often reluctant to answer at the extremes of Likert scales (Emory and Cooper, 1991). The questionnaire used seven point Likert scales to allow for this bias and still provide a large number of options for respondents to select (numbers two to six on the scale). There is also the possibility of a halo effect, whereby respondents carry over a generalised impression of the subject from one question to the next, thus influencing their answers (Emory and Cooper, 1991). Attempts were made, through the wording and order of the questions in the survey instrument, to reduce the halo effect.

#### (b) Non-Response Bias

Non-response bias exists where those that participate in the survey hold different opinions from those that do not participate (Hoinville and Jowell, 1978). The survey techniques, including two follow-up contacts and incentives for completing the questionnaire, were designed to minimise non-response bias. Tests were carried out on the responses to estimate the existence of non-response bias in the results of this study. However, with the exception of one part of one question, no such bias was present. The potential for non-response bias was also reduced by the high response rate (87%) achieved. Furthermore, most non-respondents failed to respond because of lack of time, not because they were opposed to the topic under study.

#### (c) Questionnaire Design Error

In addition to the definitions of terms discussed above, it is possible that other limitations in questionnaire design may have impacted on the results. As explained in Chapter Five, the questionnaire was pre-tested, however, it is still possible that some of the questions were phrased in a way that indicated the desired answer. This may have been exacerbated by the covering letter, which explained that the survey was examining the usefulness and practicality of reporting human resources in the SSP.

As a result of an error in question wording, the questionnaire did not differentiate between internal and external information. It was argued in Chapter Four that internal users require different types of information to that required by external users (GASB, 1990; Tsay, 1977). With respect to characteristics of the information, it was contended that internal users value different attributes, such as relevance and timeliness, than do external users. However, the questionnaire did not address these differences. It was intended to do so, but despite pre-testing, an error in question wording resulted in a repeated question instead of addressing these differences. This provides an avenue for further research, examined later in this chapter, and was one reason for conducting follow-up interviews with two of the survey respondents.

<sup>145</sup> See Chapter Six.

#### **B.** Limitations of the Interviews

The principal limitations associated with the use of personal interviews were small sample size, the use of judgemental sampling and potential interviewer bias.

#### (i) Small Sample Size

As a result of the small number of interviews conducted, it is impossible to generalise the findings of these two interviews to the population of government departments. Nevertheless, the information gained from these interviews added depth to the survey results and provided an indication of the reasons for respondents' opinions. Potential areas for further research were also highlighted by the interviews.

#### (ii) Judgemental Sampling

As explained in Chapter Five, the interviewees were selected on a judgemental basis. The subjects were deliberately chosen because of their survey responses, that is, those who offered extreme responses at either end of the Likert scale were chosen. Hence, they were not representative of the government department population, thus limiting the generalisability of the findings (Emory and Cooper, 1991; Hanke et al, 1984; Jessen, 1978; Weisberg and Bowen, 1977). However, as stated above, no attempt was made to generalise the findings of the interviews to the government department population as a whole. The data gathered in the interviews were used merely to help understand and explain the survey responses.

#### (iii) Interviewer Bias

The conduct of the interviewer can bias the data gathered from an interview. The way questions are asked, the order of the questions, any explanations offered of the meaning of the question, and the way the interviewer interprets the respondent's answers can all reduce the validity of data gathered by interview (Dillman, 1978; Emory and Cooper, 1991; Hanke et al, 1984; Moser and Kalton, 1972). However, the interview questions were pre-tested so as to reduce these effects where possible.

Furthermore, research shows that the use of a tape-recorder to record interviews can influence respondents' answers (Richardson et al, 1965). Both interviews were

recorded, however, prior permission for this was sought from the interviewees in an attempt to reduce any impact on results.

Any consideration of the results of this thesis must have regard to these limitations. Nevertheless, several areas requiring further research are apparent from these results.

# III. Recommendations for Further Research

As this study was exploratory in nature, extensive opportunities for further research arise from the results. These opportunities include examination of the following issues.

Further investigation is required to clarify an anomaly in the results of this research. The reporting of non-monetary human resource information in the SSP was supported by approximately 61% of respondents, yet only 30% of respondents regarded such reporting as being practical in light of the costs and benefits associated with the reporting. However, neither the direct or indirect costs were expected to be high and there was substantial support for many of the internal and external benefits proposed. Possible reasons for this finding were suggested in Chapter Six, but further research is needed to explain this discrepancy.

Another anomaly arising from the survey results was that a number of respondents indicated support for reporting human resource information in the SSP, yet did not select any of the types of human resource information suggested for inclusion in the SSP. This requires further analysis, as these respondents may have considered other human resource information important for disclosure in the SSP, information not obtained through the survey or interviews. This would indicate a need for the literature to be expanded.

In addition to the SSP, respondents suggested other reports which could be used to disclose non-monetary human resource information. Reports recommended were the statement of resources, the chief executive's letter in the annual report and a separate human resource report. The potential of these reports for human resource disclosure needs to be examined, as they may be preferable to a SSP. This examination could be conducted using a similar method to that employed in the current investigation. The

usefulness, potential users, costs and benefits of reporting human resource information in these alternative reports could all be examined, as well as the human resource content of these reports.

Differences in the qualitative characteristics required of human resource information for internal and external reporting need to be examined. Previous research suggested that internal and external users seek different qualities in the information they receive. The possible existence of a trade-off between these characteristics requires investigation. Furthermore, if significant differences are found to exist, then it may be necessary to operate a differential reporting system, that is, separate SSPs containing human resource information for internal and external purposes.

This study briefly examined the type of non-monetary human resource information that could be included in government departments' SSPs. However, more research is needed into the specific content and form that human resource reporting in the SSP would take. If human resource reporting in the SSP is developed for external reporting purposes, it may be necessary for the New Zealand Society of Accountants to publish guidance or an accounting standard on the form and content this reporting should take.

Further investigation is necessary into the possibility of changes to the Public Finance Act, 1989, with respect to the provisions covering SSPs. The results of the questionnaire, and particularly the interviews, reveal support for the inclusion of input and some outcome information in the SSP, while the Public Finance Act requires the reporting of outputs only. Upon further enquiry during the follow-up interviews, it was revealed that support for the reporting of input and outcome information was not restricted to human resource information, but applied to service performance information in general.

If quantitative non-monetary human resource information is to be included in the SSP, a means of measuring the variables must be devised. Some variables, such as staff numbers, would only require counting, yet employee attitudes, motivation and job satisfaction would be more difficult to measure reliably and validly. Furthermore, some

<sup>146</sup> Section 35(3)(e).

basis of comparison is needed, so research is necessary into ways of producing relevant and meaningful comparative human resource data.

Reporting on the quality of a department's human resources was found to be very important. Therefore, methods of measuring human resource quality need to be devised and tested for validity and reliability. Furthermore, the follow-up interviews revealed that the dimensions of legality and equity are also potentially important, so human resource variables that report these dimensions need to be found.

Human resource information included in the SSP for external reporting purposes will have to be audited to establish the truth and fairness of the information. This issue was considered beyond the scope of the current study, but will have to be examined before a decision is made to report human resource information. An examination of this issue would involve seeking the opinions of external auditors, such as Audit New Zealand, as to the verifiability of non-monetary human resource information.

This thesis obtained an internal view of external users and usefulness, that is, internal management were asked what external parties would utilise non-monetary human resource information reported in the SSP, and how this information would be used. Based on the opinions of internal management gained here, potential external users themselves can be surveyed to determine what use they would make of human resource information reported in government departments' SSPs.

It was proposed in Chapters Three and Four that reporting non-monetary human resource information in the SSP may be one way of discharging the statutory obligation to report on the department's Equal Employment Opportunities (EEO) policies. However, the findings on this issue were mixed. Further research is needed to clarify whether or not this is a valid use of non-monetary human resource information contained in the SSP. This issue is important, as government departments are required by the State Sector Act, 1988, to report on their EEO programs and the attainment of the goals within these programs.<sup>148</sup>

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<sup>147</sup> One interviewee commented on the difficulty of getting new SSP measures verified by external auditors.

<sup>148</sup> Section 58(2).

The results of this study indicate that human resource information disclosed in government departments' SSPs would have little effect on the accountability of those departments. This was contrary to what was expected given the legislative reporting requirements and 'good employer' provisions faced by government departments. While some tentative explanations were offered for this finding in Chapter Six, further investigation is required. A survey of Cabinet Ministers may be useful in this regard, as they are the end-users of some of the accountability reports.

The costs, both direct and indirect, of reporting non-monetary human resource information in the SSP were expected to be moderate. Empirical research is required to determine the actual level of these costs, the relative importance of direct versus indirect costs, and whether these costs will reduce over time, as suggested by the results. Moreover, research needs to be conducted into ways of minimising these costs, especially indirect costs, such as resistance to the reporting and management action to reduce the impact of the system on themselves. If these costs can be minimised, then the implementation of a system of reporting non-monetary human resource information in government departments' SSPs may become more likely.

### IV. Chapter Summary

The principal limitations associated with the findings of this study are: possible ambiguity of some of the terms used in the questionnaire; response and non-response bias; possible questionnaire design error; the small number of interviews conducted; the use of judgemental sampling to select the interview subjects; and the effect of possible unintentional interviewer bias on the interview results.

Nevertheless, several opportunities for further research are apparent from these results. This further research will help develop a base theory, or body of knowledge, to build on and extend the conclusions of this study.

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<sup>149</sup> See Chapter Two for a discussion of these requirements.

### **Chapter Eight: Conclusion**

This thesis has examined the usefulness and practicality of reporting non-monetary human resource information in New Zealand government departments' SSPs. The majority (84%) of government department financial controllers believed it was necessary to report non-monetary human resource information. A SSP received 61% support as the method of disclosure, followed by a statement of resources (48%), a separate human resource report (45%), and a chief executive's report (42%). There was considerable support for disclosure in the SSP of several items of human resource information as inputs, outputs or outcomes.

A number of costs and benefits were also identified by respondents as resulting from the disclosure of human resource information in the SSP. The expected costs included system implementation and operation, report preparation, and indirect costs, such as resistance to the system, action to minimise the impact of the system, and costs of external parties having access to departmental human resource information. The benefits identified were both internal and external, that is, it was expected that the disclosure of non-monetary human resource information would be decision-useful to both internal and external users. Internal uses included human resource management, evaluating a department's human resource policies, and organisational problem solving. External uses included chief executive performance assessment, determining the effectiveness of human resource policies, and the monitoring of human resource needs.

However, when comparing the overall costs and benefits, the majority of respondents did not expect such reporting to be cost effective. These results indicate support in theory for the reporting of non-monetary human resource information in government departments' SSPs, however, there are reservations over the practicality, or cost effectiveness, of such reporting.

Nevertheless, human resource costs comprise a significant proportion of New Zealand government departments' operating expenditure, thus, reporting on these resources is important. Yet, to date, a practical alternative to the monetary valuation and reporting of human resources has still to be found.

This thesis was a preliminary investigation into one alternative, the provision of non-monetary human resource information in a SSP. The results have extended the literature concerning disclosure of human resource information. Many costs and benefits associated with the provision of monetary human resource information have been found to apply to the reporting of non-monetary information. Furthermore, many of the non-monetary human resource measures suggested for the private sector were found to be applicable to public sector organisations, specifically New Zealand government departments.

However, this was an exploratory study. Further research is necessary to determine the form and content of non-monetary human resource information reported in a SSP, as well as to reduce the costs and accentuate the benefits of such reporting to make it cost effective. If this can be successfully achieved, the complex question of how to report on an entity's human resources may finally be solved.

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#### **Appendix One: Questionnaire**



# The Reporting of Human Resources in the Statements of Service Performance of Government Departments



Questionnaire



Researcher: Mark Sowden



Department of Accountancy, Finance and Information Systems University of Canterbury Phone (03) 3642 709 <u>Instructions</u>: Please complete the following questionnaire by ticking the appropriate box(es) and filling in the relevant details where applicable. For those questions with numerical scales, please circle the number that most corresponds to your level of agreement with the statement. Thank you.

Demographic information (To be used for administrative purposes only):
Name:
In your organisation, are you primarily responsible for:
External reporting
Internal reporting
Both
Do you think it is necessary to report non-monetary human resource information?
Yes
□ No
Which of the below suggested reports could contain non-monetary human resource information?
Statement of Service Performance (SSP)
Separate Human Resource Report
Statement of Resources
Chief Executive's Report
Other (please specify)

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- Раде	1/0

Even if you did not select the Statement of Service Performance in Question 2, please consider the following questions.

What kind of non-monetary human resource information could be included in a Statement of Service Performance (SSP)?

Please tick the appropriate column if, in your opinion, the information should be included as an input, output or outcome. (You may choose more than one of these options.) If you do not think the information should be included, tick the 'none' box.

**Inputs:** resources used to produce the goods and services of the entity.

Outputs: goods and services produced.

**Outcomes:** impacts on, or consequences for, the community resulting from the existence and operations of the entity.

Information	Input	Output	Outcome	None
Number of staff				
Remuneration averages and distributions classified by occupation				
Recruitment, promotion and reward policies				
Equal Employment Opportunities (EEO) information				
Inventory of skills and capabilities of people within the organisation (including a matching of these with the future organisational plans)				
Productivity (output/employee ratio)				
Training and retraining statistics, including measures of training effectiveness				
Staff turnover				
Absenteeism				
Health and safety information				
Industrial relations information				
Retrenchment statistics and reasoning				
Employee morale		П		П

If non-monetary human resource information is to be reported in the Statement of Service Performance, what characteristics of that information do you believe are important?

Quality	Not Importa	ant					Very Important
	1	2	3	4	5	6	7
	Not Imports	ant					Very Important
Quantity	1	2	3	4	5	6	7
Location	Not Import	ant					Very Important
Location	1	2	3	4	5	6	7
Time	Not Import	ant					Very Important
	1	2	3	4	5	6	7

What comparative data should be provided on human resource information in the Statement of Service Performance?

Data Type	Strong Disagr	•	Strongly Agree				
Data from previous periods	1	2	3	4	5	6	7
Data from similar departments	1	2	3	4	5	6	7
Standards or norms, such as EEO targets	1	2	3	4	5	6	7
Budget data	1	2	3	4	5	6	7
Data from other geographical areas	1	2	3	4	5	6	7
Data from other target groups within the department	1	2	3	4	5	6	7
Others (please specify)	1	2	3	4	5	6	7
	1	2	3	4	5	6	7

To what extent do you believe human resource information in the Statement of Service Performance should possess the following characteristics:

Characteristic		Strongly Disagree						Strongly Agree			
Relevance: providing information that is useful for decision making	n-	1	2	3	4	5	6	7			
Understandability: users might reasonably be expected comprehend its meaning	to	1	2	3	4	5	6	7			
Reliability: corresponds to the actual underlying transaction event; is capable of independent verification; is free from bias		1	2	3	4	5	6	7			
Comparability: valid comparisons can be made using treports, both between different organisations and difference periods	he ent	1	2	3	4	5	6	7			
Materiality: if an item is of such nature or amount that disclosure or method of treating it is likely to influence use when making decisions		1	2	3	4	5	6	7			

To what extent do you believe human resource information in the Statement of Service Performance should possess the following characteristics: 150

Characteristic		Strongly Disagree						Strongly Agree			
Relevance: providing information that is useful for decision making	n-	1	2	3	4	5	6	7			
Understandability: users might reasonably be expected comprehend its meaning	to	1	2	3	4	5	6	7			
Reliability: corresponds to the actual underlying transaction event; is capable of independent verification; is free from bias		1	2	3	4	5	6	7			
Comparability: valid comparisons can be made using treports, both between different organisations and difference periods		1	2	3	4	5	6	7			
Materiality: if an item is of such nature or amount that disclosure or method of treating it is likely to influence use on making decisions		1	2	3	4	5	6	7			

<sup>150</sup> This question is a repeat of the previous question. This is the result of an error in question wording which was explained in Chapter Seven.

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Who do you envisage would use non-monetary human resource information, if it were provided in **your department's** Statement of Service Performance?

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Users	Very Unlikely							
Internal management	1	2	3	4	5	6	7	
Parliament	1	2	3	4	5	6	7	
Oversight bodies, such as State Services	1	2	3	4	5	6	7	
Taxpayers, voters and other citizenry	1	2	3	4	5	6	7	
Investors/creditors	1	2	3	4	5	6	7	
Grantors and other voluntary resource providers	1	2	3	4	5	6	7	
Customers and users of government department service	s 1	2	3	4	5	6	7	
Employees and their representatives	1	2	3	4	5	6	7	
Public interest groups	1	2	3	4	5	6	7	
Independent auditors	1	2	3	4	5	6	7	
Others (please specify)	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	

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Do you think that non-monetary human resource information, if disclosed in the Statement of Service Performance, would be used by **external users** (that is, users outside the department) for any of the following purposes:

External Uses	Very Unlikely						Very Likely		
Assessing the accountability of internal managers to external parties, such as Government, Ministers and taxpayers		2	3	4	5	6	7		
Assessment of Chief Executive performance by external parties	7 1	2	3	4	5	6	7		
Assessing the accountability of management for the department's employment policies and practices, eg EEO		2	3	4	5	6	7		
Making governmental funding and resource allocation decisions	ı 1	2	3	4	5	6	7		
Monitoring human resource trends, including human resource productivity ratios, skill levels, staff turnover etc.		2	3	4	5	6	7		
Others (please specify)	1	2	3	4	5	6	7		
	1	2	3	4	5	6	7		

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Although Statements of Service Performance are required to be prepared as external reports, do you think that non-monetary human resource information, if disclosed in the Statement of Service Performance, would be used by **management** for any of the following **internal decisions**:

Internal Uses	Very Unlikely						Very Likely
Human resource recruitment	1	2	3	4	5	6	7
Human resource allocation (i.e., the assignment of human resources to organisational roles)	f 1	2	3	4	5	6	7
Monitoring human resource productivity (i.e., the relationship between human resource input hours and units of output)		2	3	4	5	6	7
Human resource development and conservation (i.e., training and employee career advancement and maintaining the appropriate skill levels)	1	2	3	4	5	6	7
Assessment and reward of employees	1	2	3	4	5	6	7
Justifying employee remuneration to external parties, such as unions	1	2	3	4	5	6	7
Recognition and solution of organisational problems, e.g. an increase in employee turnover	1	2	3	4	5	6	7
Strategic decisions, such as organisational change and the setting of objectives and goals	1	2	3	4	5	6	7
Evaluating overall effectiveness of the department's human resource management	1	2	3	4	5	6	7
Ensure that human resources are taken into account in management decisions	1	2	3	4	5	6	7
Others (please specify)	,	2	2	4	_	_	_
	1	2	3	4	5	6	7
	1	2	3	4	5	6	7

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In your opinion, would the disclosure of non-monetary human resource information in the Statements of Service Performance enhance the accountability of your department?

Form of Accountability	No Effect						Strongly Enhance
Accountability of departmental heads to the Minister, in accordance with the Public Finance Act	1	2	3	4	5	6	7
Accountability of Ministers to Parliament for the performance of the departments under their control	1	2	3	4	5	6	7
Accountability of Parliament to taxpayers for the performance of government departments	1	2	3	4	5	6	7

What, if any, level of **direct** costs (that is, costs directly traceable to the implementation and operation of the human resource system) do you see **your department** incurring through the reporting of non-monetary human resource information in the Statement of Service Performance?

Cost	Negligible				Extremely High		
Installation of the system	1	2	3	4	5	6	7
Operation of the system	1	2	3	4	5	6	7
Report preparation	1	2	3	4	5	6	7
Other (please specify)	1	2	3	4	5	6	7
	1	2	3	4	5	6	7

What, if any, level of **indirect** costs (that is, costs that cannot be directly traced to the implementation and operation of the system) do you see **your department** incurring through reporting non-monetary human resource information in the Statement of Service Performance?

Cost Ne	legligible					Extremely High		
Employee resistance to the system, e.g., lower motivation and productivity	1	2	3	4	5	6	7	
Costs of management failure to accept the system	1	2	3	4	5	6	7	
Management resistance to the increased accountability which may result from the disclosure of non-monetary human resource information	1	2	3	4	5	6	7	
Management action to minimise the impact of the system on itself, even if not in the best interests of the department	1	2	3	4	5	6	7	
Costs to the department of external parties having non- monetary human resource information, e.g., competitors (where services are contestable) or employees (where human resource information is used in wage negotiations)	1	2	3	4	5	6	7	
External pressure (e.g., from Government) to change the department's human resource policies	1	2	3	4	5	6	7	
Others (please specify)								
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	

The reporting of non-monetary human resource information would be practical and useful in your department, in light of the above costs and benefits.

Strong Disagr						Stron Agree	
1	2	3	4	5	6	7	

End of questionnaire. Thank you. Your participation, time and effort are greatly appreciated.

#### **Appendix Two: Covering Letters**

Covering letter sent to the chief financial officer of each department:



## Department of Accountancy, Finance and Information Systems University of Canterbury

Private Bag 4800 Christchurch New Zealand 8001 Fax Number: Local (03) 364 2727 International +64-3-364-2727 Email: M.Sowden@AFIS.CANTERBURY.AC.NZ

> Telephone : Local (03) 364 2709 International +64-3-364-2709

«Title» «FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«City»

4 August 1995

Dear «FirstName» «LastName»

My name is Mark Sowden, and I am a graduate student at the University of Canterbury. For my Master of Commerce thesis, I am examining the usefulness and practicality of reporting human resources in government departments' Statements of Service Performance. Human resources play a vital role in the operation of government departments, and in many cases comprise the largest operating expense. Consequently, the results of my research could be useful to your department in managing these resources, in industrial negotiations, managerial performance assessment and for the purposes of external accountability. All respondents will receive a copy of the results. Although I intend to publish this study, no individual responses will be disclosed.

The opinions of those responsible for both internal and external reporting are very important. I ask that you pass the enclosed questionnaire(s) to the person(s) in charge of both the internal and external financial reporting in your organisation. If you fulfil either of these roles, please complete one of the questionnaires yourself.

In recognition of the time taken to complete this survey, all respondents will go into the draw to win a \$50 book youcher.

Your assistance in this matter would be greatly appreciated. Thank you.

Yours sincerely

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#### Covering letter attached to questionnaire:



## Department of Accountancy, Finance and Information Systems University of Canterbury

Private Bag 4800 Christchurch New Zealand 8001 Fax Number : Local (03) 364 2727 International +64-3-364-2727

Email: M.Sowden@AFIS.CANTERBURY.AC.NZ

Telephone : Local (03) 364 2709 International +64-3-364-2709

4 August 1995

Dear Sir/Madam

My name is Mark Sowden, and I am a graduate student at the University of Canterbury. For my Master of Commerce thesis, I am examining the usefulness and practicality of reporting human resources in government departments' Statements of Service Performance. Human resources play a vital role in the operation of government departments, and in many cases comprise the largest operating expense. Consequently, the results of my research could be useful to your department in managing these resources, in industrial negotiations, managerial performance assessment and for the purposes of external accountability. All respondents will receive a copy of the results.

Although I intend to publish this study, no individual responses will be disclosed. The demographic information requested in the questionnaire will be used for administrative purposes only and will not be disclosed in any way.

Your opinion is very important. I ask you to complete the attached questionnaire, which should only take ten minutes of your time. Would you please return it, in the stamped addressed envelope provided, by 18 August.

In recognition of the time taken to complete this survey, all respondents will go into the draw to win a \$50 book voucher.

Your assistance in this matter would be greatly appreciated. Thank you.

Yours sincerely

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#### **Appendix Three: Follow-up Letters**

Follow-up letter sent to the chief financial officer of non-respondent departments:



## Department of Accountancy, Finance and Information Systems University of Canterbury

Private Bag 4800 Christchurch New Zealand 8001 Fax Number: Local (03) 364 2727

International +64-3-364-2727

Email: M.Sowden@AFIS.CANTERBURY.AC.NZ

Telephone: Local (03) 364 2709 International +64-3-364-2709

«FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«City»

23 August 1995

To: «JobTitle»

My name is Mark Sowden, and I am a graduate student at the University of Canterbury. For my Master of Commerce thesis, I am examining the usefulness and practicality of reporting human resources in government departments' Statements of Service Performance. Recently I sent you a survey concerning this issue. Human resources play a vital role in the operation of government departments, and in many cases comprise the largest operating expense. Consequently, the results of my research could be useful to your department in managing these resources, in industrial negotiations, managerial performance assessment and for the purposes of external accountability. All respondents will receive a copy of the results. Although I intend to publish this study, no individual responses will be disclosed.

In my previous letter, I asked you to pass the questionnaire(s) to the person(s) in charge of both the internal and external financial reporting in your organisation, or if you fulfilled either of these roles, to complete one of the questionnaires yourself. If you have not yet done this, please do so. In case you have not received the original survey, please find enclosed questionnaires which can be completed and returned in the pre-paid envelopes provided. Your participation is important to form a conclusion that represents the sample of respondents chosen.

In recognition of the time taken to complete this survey, all respondents will go into the draw to win a \$50 book voucher.

Your assistance in this matter would be greatly appreciated. Thank you.

Yours sincerely

#### Follow-up letter attached to questionnaire:



## Department of Accountancy, Finance and Information Systems University of Canterbury

Private Bag 4800 Christchurch New Zealand 8001

Fax Number : Local (03) 364 2727 International +64-3-364-2727

Email: M.Sowden@AFIS.CANTERBURY.AC.NZ

Telephone : Local (03) 364 2709 International +64-3-364-2709

23 August 1995

Dear Sir/Madam

My name is Mark Sowden, and I am a graduate student at the University of Canterbury. For my Master of Commerce thesis, I am examining the usefulness and practicality of reporting human resources in government departments' Statements of Service Performance. Human resources play a vital role in the operation of government departments, and in many cases comprise the largest operating expense. Consequently, the results of my research could be useful to your department in managing these resources, in industrial negotiations, managerial performance assessment and for the purposes of external accountability. All respondents will receive a copy of the results.

Although I intend to publish this study, no individual responses will be disclosed. The demographic information requested in the questionnaire will be used for administrative purposes only and will not be disclosed in any way.

Your opinion is very important. In a previous letter, I asked you to complete the attached questionnaire, which should only take ten minutes of your time. If you have not yet done this, please do so. In case you have not received the original survey, please find attached another copy. Would you please return it, in the stamped addressed envelope provided, by 2 September. Your participation is important to form a conclusion that represents the sample of respondents chosen.

In recognition of the time taken to complete this survey, all respondents will go into the draw to win a \$50 book youcher.

Your assistance in this matter would be greatly appreciated. Thank you.

Yours sincerely

## **Appendix Four: Population of Government Departments**

The following is the population of government departments to which the mail survey was sent. The list was obtained from the Public Service Association, as at 1 June, 1995, and the *Government Sector Directory*, as at 30 April, 1995.

Ministry of Agriculture and Fisheries

Audit New Zealand

Ministry of Civil Defence

Ministry of Commerce

Department of Conservation

Ministry of Consumer Affairs

Crown Law Office

Department of Corrections

Department for Courts

Ministry of Cultural Affairs

Department of Customs

Ministry of Defence

Ministry of Education

**Education Review Office** 

Ministry for the Environment

Ministry of Fisheries

Ministry of Foreign Affairs and Trade

Ministry of Forestry

Government Superannuation Fund

Ministry of Health

Ministry of Housing

Inland Revenue Department

Department of Internal Affairs

Ministry of Justice

Department of Labour

Ministry of Maori Development

National Library of New Zealand

Office of the Controller and Auditor-

General

Ministry of Pacific Island Affairs

Department of the Prime Minister and

Cabinet

Ministry of Research, Science and

Technology

Serious Fraud Office

Department of Social Welfare

State Services Commission

Department of Survey and Land

Information

Ministry of Transport

The Treasury

Valuation New Zealand

Ministry of Women's Affairs

Ministry of Youth Affairs