Barriers to effective Human Resource Measurement in New Zealand

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INTRODUCTION

With the emergence of the knowledge economy, organisational human capability is increasingly recognised as a unique source of competitive advantage. Measuring this capability is an important skill for organisations who want to expand and grow their competitive advantage. Whilst many organisations seek a systematic approach to the measurement of their current and potential human resource capabilities, many experience an ongoing struggle to overcome the practical challenges of developing and implementing appropriate measures.

This paper reports on the experiences of six New Zealand organisations actively involved in human resource measurement.

For each of the organisations, a range of barriers was encountered relating to the development, acceptance and implementation of measurement. Conceptual understanding of measurement, the degree of support from senior management, and skill in designing measures were all significant factors in developing an effective measurement system.

This paper proposes that barriers can be usefully categorised as either environmental or process oriented and further, that the ability of an organisation to progress human resource measurement initiatives is determined by the extent to which environmental barriers can be overcome.

LITERATURE REVIEW

Human resource measurement is about valuing the contribution people make to the success of an organisation, and the term 'human capital' describes the contribution made by human skills and knowledge to the production of goods and services (Becker, 1993).

There are a number of drivers for organisations to become involved in HR measurement including the need for greater efficiencies in internal management practices, greater visibility of the HR function and a consequent movement towards greater professionalism, the need to be globally competitive, and recognition of employees as a key factor in developing and maintaining competitive advantage.

Scarbrough and Elias (2002) argue that the need for a more systematic approach to the measurement, management and development of human resource is underlined by a growing

disparity between the contribution that human capital makes to firm performance and the existing means of identifying and valuing that contribution. The proliferation of technology and the demands of a global economy have combined to make human capital and other intangible assets the major drivers of economic competitiveness. Despite the increasingly critical role human capital and intangible assets play in business success, they contend there has not been a corresponding advance in measurement and management practices to enable a better understanding and management of that role.

Moving from recognising that human capital is important to being able to understand it, and then measure it, is something of a quantum leap. Designing measurement systems is a challenge because of the nature of what is being measured. People are both the most valuable and also the most volatile organisational asset. The factors that make people important and valuable to an organisation are the very factors that make measuring their contribution so problematic. Consequently, while the concept of human resource measurement may be valued in principle, knowing how to accomplish it in practice presents a challenge to many organisations (Johansson, 1999).

There are both ideological as well as practical challenges for organisations in the pursuit of effective HR measurement. The need to quantify human capability presents a dilemma for many HR managers, given the dynamic, tacit and distinctive nature of the individuals within an organisation. It is difficult to assess, through traditional financial or accounting methods, the value added by human resources to the business performance of an organisation (Johansson, 1999). While it is straightforward to measure the monetary costs associated with some HR initiatives, identifying and quantifying the benefits is comparatively complex (Bontis & Dragonetti 1999; Leadbetter, 2000).

Despite a general acceptance that measurement is crucial to establish the value of an organisation's workforce and HR practices, Grossman (2000) contends that the reluctance to engage in measuring people arises from a 'metrics phobia' amongst HR professionals. This finding is not new; in the early 1980s Fitz-enz (1984) found widespread resistance to measurement amongst HR practitioners. He suggested the reasons for this included fear, lack of conceptual understanding, lack of ability to measure, and resistance to introducing new ways of working. These findings were corroborated by Toulson & Dewe (2001) in their study of HR measurement in New Zealand. As the most likely drivers of any effective measurement program, many HR practitioners, it is argued, resent the notion of quantifying the worth of people, and lack the necessary quantitative skills to carry out or develop relevant

measures. There is a perception that human resource measurement could be seen as knowing the cost of everything and the value of nothing.

A key deterrent to the development of effective HR measurement practices rests in the perception of the HR function as a cost centre. This may arise from the relative simplicity of measuring the costs of labour, compared with measuring the benefits of labour. Bassi, Baruch, Low, McMurrer and Siesfeld (2000) suggest information on employee competencies is highly contextual and quickly becomes outdated as organisational and individual dynamics shift. Costs associated with the collection and analysis of data measuring human performance may inhibit resource support for its measurement, particularly where the measures are perceived to lack reliability or future relevance. However, without investing resources to develop effective HR measures, organisations will remain limited in their ability to apply crucial human capital information to strategic business decision-making.

Schmidt and Lines (2002) suggest that organisations are only now gaining the conceptual understanding, analytical tools and data to develop and implement sophisticated people measurement systems. Scarbrough and Elias (2002) see the investment in information technology (IT) or human resource information systems (HRIS) as essential to addressing issues of resource constraint and resistance, from other business functions, concerning the reliability of HR. Johansson (1999), researching the inhibiting factors in the use of human resource costing and accounting systems (HRCA), also found common challenges across several organisations to include inadequate IT systems, insufficient time and knowledge to develop measures, and ambivalent or lack of top management support. Interestingly, Johansson (1999) also suggests that a resistance to new ideas within the organisational culture hampers the development of HRCA systems in these organisations

Human resource measurement systems generally fit into three broad categories: Human Resource Accounting approaches; intangible asset reporting approaches, such as triple bottom line reporting where economic prosperity, environmental quality and social justice are balanced; and balanced scorecard approaches such as Kaplan and Norton's Balanced Scorecard. Human resource accounting evolves from the idea that the organisation's capital can be valued in terms of its ownership and legal form, its revenues and profits, but beyond conventional factors the company exists as a group of committed people engaged productively for mutual benefit (Storey, 1995). Triple Bottom Line (TBL) reporting was developed by Elkington (1998). At the heart of the TBL philosophy is an acknowledgment that an organisation impacts on society and the environment as well as financially on its stakeholders, and that such impacts may be positive or negative. The balanced scorecard is

both a management and measurement system which provides feedback around internal business processes and external outcomes in order to continuously improve strategic performance and results. It suggests that the organization be viewed from four perspectives - the Learning and Growth Perspective, the Business Process Perspective, the Customer Perspective and the Financial Perspective - and to develop metrics, collect data and analyze it relative to each of these perspectives (Kaplan and Norton, 1996).

The complexity involved in defining and quantifying human resource measurement is not disputed in the literature. More research needs to be undertaken to deepen our understanding of the opportunities and complexities facing organisations involved in human resource measurement so that development of more robust measurement systems is both possible and practicable.

HR Measurement in New Zealand

Toulson and Dewe (2001) suggest that a desire to implement more sophisticated human resource measurement techniques is a relatively new phenomenon for New Zealand organisations. They conducted a quantitative baseline survey investigating human resource measurement in organisations throughout New Zealand in 2000. The survey sought to understand current human resource measurement practice in organisations and how that practice was perceived by Human Resource Managers, senior management and financial management. This research identified three main barriers that inhibited organisations from measuring human resources. These barriers were perceptions of a lack of precision in HR measures; that HR measures were too difficult to develop; and that HR practitioners lacked expertise in measurement. Despite an acknowledgement of these difficulties, however, the majority of respondents believed that measuring human resources was important to the business strategies and competitive advantage of their organisation.

The aim of the enquiry reported here was to build on Toulson and Dewe's work and explore in more depth the factors involved in the development, acceptance and implementation of measures. We were interested in gathering qualitative information regarding how and why organisations chose to implement measurement policies and procedures, and what barriers they encountered in this process. What were the commonly experienced barriers and how were these dealt with? What enabled effective measurement and what inhibited it? Were some organisations more successful in their attempts to overcome these barriers, and why?

METHOD

It was important to the success of this research that participating organisations were actively involved in human resource measurement. Therefore, the six organisations in New Zealand that agreed to participate in the second study were identified through the use of opportunistic snowball sampling (Yin, 2002). The organisations varied in size, but were large by New Zealand standards with over 100 employees (Cameron & Massey, 1999). They were also at varying stages in the development and use of human resource measurement, the more experienced having been involved in measurement for a number of years, and completed at least three cycles of measurement. None had been involved in measurement for less than year (see Table 1).

We chose case study analysis because our purpose was to theory build rather than to theory test. This methodology allowed us to take a between and within organisations approach, and provided us with a fuller picture of the unit of analysis through the use of a variety of research methods (McNeill, 1990). It also enabled us to use anecdotes to illustrate more generalised findings and was a useful method for gaining more substantial insights into the organisations (Ghauri, Gronhaug & Kristianslund, 1995; Isaac & Michael, 1991).

For this research we used semi-structured interviews, both group and individual, and documentary analysis (company reports, human resource policy documents and intranet publications). We chose interviews because they allow participants to speak with their own voices and control their responses and yet have the space to introduce and reflect on issues that they perceive as relevant (Mishler, 1986). Interviews also permit the development of a personal narrative (Cochran, 1990) which gives context to the particular work events. Interviews were therefore an appropriate method for this research which focuses on individual understandings.

We interviewed a total of 53 individuals across the 6 organisations and also carried out one group interview with 14 participants. This group interview was conducted because it enabled a larger number of people to be interviewed than would have been possible under the given time and budgetary constraints. In all of the participating organisations the interviewees ranged in level and function, including chief executive officers, senior management, HR practitioners, line managers, and clerical/administrative staff. Our purpose in having a cross section of interviewees was to gather perspectives from a variety of HR measurement users concerning development, acceptance and implementation. We asked participants to explain their understanding of human resource measurement; how important they considered

measurement was in their organisation, and why; whether it was more or less important than measuring finance or other areas of the business; the usefulness of measures in strategic decision making; their responses to the findings of the first survey; the barriers they encountered in the development and implementation of measures; and the future directions they believed measurement should take. The questions were developed using the existing literature on human resource measurement, in tandem with the results from phase one of the study.

Thematic analysis of interview and documentary data following the case studies included the identification of specific measurements being attempted in organisations, the success of such measures, the weight given to the measures and their findings, the use of findings in the decision making process, the difficulties associated with developing measures, and the challenges that must be overcome. Barriers were identified through an iterative process. As a research team we examined the data independently, then met and discussed the themes, then re-examined the data (Smith, 1995). The barriers are set out in the findings section.

While it is acknowledged the small sample size does not allow for generalisability, (Zikmund 1991), the richness of the data generated raised some interesting questions, which we seek to test in further iterations of this project.

The following table sets out details of the six case study organisations.

Table 1 Organisational Profiles

Organisation	Ownership	Industry Sector	Human Resource Measurement	Number of Participants
A	International	Fast Moving Consumable Goods	Completed 3 cycles of measurement.	8 individual interviews
В	New Zealand. Multi site.	Hospitality	In the first cycle of measurement.	8 individual interviews
С	Global	Information Technology Services	Been using measurement for the last 2-3 years.	10 individual interviews
D	New Zealand (not-for- profit)	Environmental research	Second year of Triple Bottom Line reporting.	7 individual interviews 1 group interview with 14 participants
Е	New Zealand multi- national	Research & Development Business Unit (Agriculture)	In the early stages of measurement.	11 individual interviews
F	New Zealand	Retail	Measurement in early stages.	9 individual interviews

FINDINGS

This section presents the barriers that were most commonly encountered in relation to the development, acceptance and implementation of measurement. Interview data was integrated with analysis of company reports, human resource policy documents and intranet publications, in an attempt to identify common themes.

1. Development of measures

All the participating organisations reported a variety of difficulties in developing measures, both conceptual and practical. Of these, lack of knowledge of HR measures and models; lack of skill in the design of measures, and poor analytical skills were the most consistently reported barriers to effective measurement and securing buy-in.

Lack of knowledge of different HR measures/models

Examination of company documents and responses to interview questions indicated that the only model that most participants were aware of was the Balanced Scorecard. Organisations A and B actively used a variation of the Balanced Scorecard.

This general lack of awareness among the participating organisations proved to be a limiting factor in the development of measures, because difficulties were not able to be resolved using alternative frames of reference. The systematic lack of knowledge encountered in all stakeholder groups applied not only to alternative models, but the range of measures available as well. Interview participants were provided with a list of effectiveness and efficiency measures and asked to identify both those they were currently using and those with which they were familiar. All organisations were generally more familiar with efficiency/cost measures and less familiar with the measures relating to effectiveness.

"I think sort of trying to measure HR in the business and I think we're going through that at the moment of looking at our KPI's and thinking are they actually measures of HR...are they actually business measures. Some of the things we're measuring are probably not actually measuring HR. They measure more a business function, like turnover and things like that. It's probably more tied up with the business as opposed to actually measuring HR performance in some measures we use. Because I notice when originally you sent through the sheet...like I did all our KPI's and that's what we did and then you sent through the measure sheet ... and we looked at it and we went, "wow, look at all these HR measures that we could be doing, that we just don't do, we do in a different sort of way but not into...like oh wow, we don't do that, we don't do that". (Organisation B)

Lack of skills in designing measures

Despite the recognition of their potential value, HR practitioners and senior managers acknowledged their lack of skills in being able to conceptualise and design effectiveness measures in particular; for example, intellectual capital or impact of training on the bottom line. This contrasted with efficiency measures, which they described as being relatively straightforward to develop.

"Current measures focus on efficiency because they're easier. But they're not always measuring the right things." (Organisation A)

"The ones we use are very accurate. Some of the ones we'd like to get into are not widely understood and they lack a lot of precision, because we are still struggling with how to measure some of those things." (Organisation C)

Some interviewees also commented that there was a lack of systematic development of measures; measures tended to be reactive, as dictated by immediate needs. In particular, measures in Organisations C, E and F had been developed in this ad hoc manner.

Poor analytical skills

Results from the quantitative survey suggested that financial professionals did not perceive human resource professionals as having the skills necessary to undertake the measurement task. However, senior management and HR professionals themselves did not endorse this view. Responses from a broader variety of stakeholder groups in this project suggested a more mixed response to the perception that some HR professionals did not have the analytical skills necessary to understand and interpret measures. All stakeholder groups however, identified that this potential lack of analytical skills was actively detrimental to the development of measures in terms of fit, appropriateness and meeting needs:

"It is imperative that even if HR managers don't conduct the measures they must be able to understand both the purpose of the measurement process and the meaning of the outcomes." (Organisation E)

"A huge barrier for the HR profession is a lack of skill in measurement techniques. There are a lot of amateurs in HR who are making things up as they go along. This has the potential to be damaging for a long, long time." (Organisation C).

2. Acceptance of measures

We identified a number of barriers to the acceptance of measurement including the history of HR within the organisation; the perceived relevance of the measures; and the degree of support from senior management.

History of HR within the organisation

Responses to interview questions revealed that in two of the case study organisations (E and F) there was a resistance to viewing HR measurement as a valuable tool. In both organisations there was a history of HR being viewed as subjective and not contributing to the bottom line. The source of this resistance was twofold - from other business functions, and from established HR practitioners. In a third organisation there was resistance from employees who were committed to the old ways of doing things.

"It has been simpler to develop a shared vision at the group level, as there are more new staff and less history to undo." (Organisation B)

Perceived relevance and credibility of measures

Acceptance of measures was made more problematic where employees could not see the relevance of particular measures, irrespective of the importance ascribed to them by senior management.

"Lack of understanding about what the measures are about leads to a lack of acceptance." (Organisation D)

Further, it was suggested that there was little acceptance for HR measures that are inherently subjective.

"barriers to measurement include acceptance, because the perception of HR is that it is soft and fluffy." (Organisation C)

This was particularly significant where the measures had implications for individual or team performance.

"[there is] resistance to measures particularly where it has impact on your own performance." (Organisation B)

The organisations that had well developed communication systems, as evidenced though their intranet and documentation, reported greater acceptance and perceived relevance of measurement from all stakeholder groups.

Support from Senior Management

In those organisations where support for measuring was clearly articulated by the CEO and senior management team (Organisations A and B), measurement was widely accepted and used to inform both strategic and operational decision-making.

'in the past HR measurement was more of a one off exercise for specific decisions as the measures weren't there. The introduction of a general manager for HR, reporting directly to the CEO, has been a deliberate attempt to create new vision, direction and strategic HR role.' (Organisation B)

Where measurement was not fully embraced as a strategic and analytical tool, it was less effective. Senior management in Organisations C & D, espoused the benefits of measurement in theory, but reported difficulties in its development. In those organisations where support for measurement was driven from the HR department (Organisations E and F), and particularly when members of the HR department were not on the senior management team, this lack of senior management support led to measurement that was retrospective, that focussed mainly on efficiency measures and that was not included in decision-making.

3. Implementation of measurement

In addition to the more contextual barriers identified, a number of barriers to the process and implementation of human resource measurement became apparent. These included; inadequate technology, lack of time and financial resources, poor dissemination and inappropriate or non-use of information.

Inadequate technology

Despite the size of the organisations investigated, only two of them (A and C) had a Human Resources Information System (HRIS) that could efficiently collect, analyse and disseminate a wide range of information for end users. The remaining case study organisations highlighted this absence of adequate technology as a major barrier to effective measurement, pointing out that without an HRIS in place the collection of data was a long and labour intensive process.

"Not having an established HRIS is a big barrier, makes measurement slower to compile and analyse." (Organisation F)

Insufficient time and financial resources

Insufficient time was identified as a significant barrier to effective measurement. This included time to design and implement measures, as well as time to collect the data. This lack of time was resented by managers in some organisations, who felt that they were being asked to perform multiple roles within an unnecessarily pressurised environment.

"The biggest barrier is the manpower required to be as accurate and diverse as possible." (Organisation D)

The cost of data collection, particularly for large qualitative initiatives, such as climate surveys, was an inhibiting factor for Organisations (B, E and F).

"I mean, there are definitely problems with respect to cost. That side of things. It's a big company. There's a lot of people. If you're frequently going to assess performance, it's not a truth exercise" (Organisation F)

Poor dissemination

Implementation of measurement was inhibited by poor dissemination of measurement information. In half the organisations, collected data was not reported back to appropriate stakeholders and, therefore, had limited use in strategic decision-making.

"Communication between functions and levels of management is critical for strategic involvement. And our biggest problem is a lack of communication to the right people." (Organisation C)

Poor use of information

Further, where information may have been well disseminated, measures that were complex were sometimes misunderstood and put to one side. This resulted in them not being used by the information receivers in their decision-making.

"Some use the information well and develop strategies. Other groups don't even bother to read it." (Organisation B)

"We give them loads of information, but I doubt sometimes whether they understand or use it, because of some of the questions we get back." (Organisation C)

Process versus Environmental Barriers

On further examination of these barriers to development, acceptance and implementation of measurement we found that a useful distinction presented itself - barriers could be viewed as either environmental or process. Environmental barriers refer to the organisational context in which measurement takes place. In the light of the above findings these barriers include the history of HR within the organisation, the perceived relevance and credibility of measures and the level of support from senior management.

Process barriers are those relating to the way in which measures are developed and implemented within the organisation. Process barriers include lack of knowledge or skills surrounding measures or models; insufficient or inadequate resources, including time, money and technology; and poor dissemination and use of measurement information.

DISCUSSION

Our study shows managers, human resource practitioners and other stakeholder groups grappling with the problems of human resource measurement. Many of the challenges identified in our study are highlighted in the literature, and underscore both the conceptual and practical difficulties involved in the development, acceptance and implementation of measurement. Commonly experienced barriers included lack of awareness and understanding of different theoretical models; lack of skill in designing and analysing measures; perceived relevance not only of measurement in general but specific measures in particular; the level of support for measurement from senior management; whether adequate resources are allocated to measurement; and how measures are used or not to inform decision making. Measuring is acknowledged as a valuable but difficult activity.

We sought to identify what enables effective measurement and what inhibits it, and whether some organisations are more successful in overcoming barriers than others. Evidence from these case studies suggests that environmental barriers are pivotal in the success of measurement and that where process barriers exist they can be overcome if the environment is conducive to, and supportive of, measuring.

One organisation, Organisation A, appeared to be significantly more successful than the others in the implementation of human resource measurement. It reported greater success and acceptance of Human Resource Measurement from multiple stake holders than the other case study participants. It has a well established measurement philosophy that is underpinned by a clear theoretical base, namely the Kaplan and Norton Scorecard model (1996). While Organisation A experienced many of the challenges faced by other organisations in this study, it nevertheless had secured widespread organisational buy-in to developing a systematic approach to measurement. What are the environmental factors that enabled this?

In Organisation A, the CEO had some HR experience, and the HR manager had a varied business experience and this appeared to facilitate an ability to view problems from multiple perspectives, and reinforce the value of measurement. The management team, (especially the CEO and HR director) had a strong conceptual grasp of HR measurement and a clear vision of the benefits of a balanced scorecard approach. Their clarity of vision and understanding of human resource measurement worked to great advantage in creating a climate of acceptance.

In Organisation A, measures were seen as credible and relevant. Measurement is largely conducted by functional managers, is fed through to the CEO and Human Resource Manager, and is used in performance appraisals and strategic planning. A cascading approach to setting goals and the consultative development of measures work constructively towards a positive alignment between the goals and measures of different stakeholders. Measurement is seen as a valuable and relevant tool.

Of the three environmental factors, support from senior management appears to be pivotal in determining the success of a system of measurement. At Organisation A, support for measuring was clearly articulated by the CEO and senior management team and measurement was accepted and used to inform both strategic and operational decision-making. Senior management from Organisation A reported little resistance from staff to HR measurement. Interviews with individuals from varying levels within Organisation A supported this, and attributed low resistance to the organisation's policy of communicating to all staff the rationale and process of the measurement system.

Allocation of additional key resources of time and money (as well as technology) went hand in hand with the use of measurement in operational and strategic decision making, and support from senior management. Because measurement was valued and supported in Organisation A sufficient resources were put into place to maximise its effectiveness. In addition, well developed internal communication systems in Organisation A delivered greater acceptance and perceived relevance of measurement to all stakeholder groups because they enabled the support from senior management to be articulated at all levels throughout the organisation.

In other organisations, where commitment from senior management was less strong, it was harder for proponents of measurement in those organisations to progress the development and implementation of effective measures. Previous experience of the HR manager also impacted commitment. In those organisations where the CEO or HR director followed a linear path to their positions, with limited experience of other aspects of business, it was unlikely that they readily accepted the value of Human Resource Measurement.

There appeared to be a relationship between organisations that have overcome environmental barriers and the developmental stage of their human resource measurement system. It was apparent that where the organisation is committed, particularly at senior levels, to the concept of measuring human capability, there was energy and desire to overcome process barriers. Organisations did this, for example, by allocating funds to developing HRIS systems; or buying in HR analysis skills. They also were actively engaged in discussing, at senior levels, ways of overcoming difficulties.

Another factor we considered may have contributed to success (and one which could be the subject of further research) was the difference in industry sector. Three of the organisations in the study, (A, B and F) were located in the manufacturing and service industries, producing tangible goods, so the business processes had a shorter turnaround and rewards were more immediate. The knowledge industry organisations (C, D and E) on the other hand which we investigated appeared to require individuals who are accustomed to dealing with more complex challenges, where cycles are longer term, results less immediately visible, and solutions are more multi-dimensional and multi-faceted. Those organisations located within knowledge based industries operated more complex organisational structures, including both project based and matrix structures. Reporting lines were not as clear, and communication channels were not as well established leading to more problematic consultation and involvement in the development of measures. A question then for future research would be *is human resource measurement easier in some industry sectors than others?*

CONCLUSION

The findings provide support for, and insight into, the challenges experienced in the development of effective HR measurement. Despite the acknowledged value of measurement, there are significant barriers to its development, acceptance and implementation. The critical success factor which enables effective measurement is the strong commitment of the organisation, especially from senior management, to the concept of measuring human capability and the allocation of appropriate resources to it. The ability of an organisation to progress human resource measurement initiatives appears to be determined by the extent to which environmental barriers can be overcome.

With environmental barriers overshadowing process barriers as the most significant hurdle for the case study organisations, the need for continued research into the sources of cultural and historical resistance, particularly at strategic decision making levels is important. We believe further research into the resistance to measurement by HR practitioners would add to the existing findings. Although acceptance of the need to measure has improved since the Fitzenz study (1984), resistance to measuring by practitioners is still evident, particularly with regards to limited knowledge of measurement tools, and lack of confidence in their ability to measure and analyse.

In conclusion, while this paper highlights a number of barriers to HR measurement, all of the participant organisations were involved in this research because of their commitment to measuring their human resources and improving their current practices. This is an encouraging indicator of increased acceptance amongst organisations of the value of measurement as a tool to improve business performance.

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