THE HUMAN CAPITAL CLASSIFICATION PROCESS: EVALUATING COMPANIES USING A QUALITATIVE LENS

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THE HUMAN CAPITAL CLASSIFICATION PROCESS: EVALUATING COMPANIES USING A QUALITATIVE LENS

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Abstract

This paper stresses the importance of human capital analysis for investment recommendations and decisions. Current non- financial qualitative human capital metrics cannot be systematically adopted by analysts and fund managers without breaching the regulatory boundaries, as those metrics rely on an in depth understanding of an organisation which could only be gained by access to privileged and confidential company data. Even so, the metrics reviewed concentrate on effects and not causes. Evidence from large empirically based studies Bassi et al(2001), Watson Wyatt (2002) Hueslid (1995) and Mayo (2001) suggest that the finance industry would benefit from a future research agenda, based on non financial quantitative research which seek to examine other conceptual models and frameworks that link human capital as a lead indicator of future financial performance. Critics of the qualitative analysis process suggest that clearer tools should be available to provide more practical approaches to analysis of the human capital of the firm. Qualitative company case study research methodology, within an industry sector would be an important complementary research tool in the investment process. To this end, the academic models/tools and underlying framework presented in the Human Capital Classification process goes someway to filling in the gap that currently exists and is a significant improvement on the limited number of

approaches to analysing non-financial data for investment purposes, at the company level. The Human Capital Classification is to be analysed in conjunction with traditional financial, social and environmental data, as well as other human capital people management measures for the purposes of making an overall assessment of Corporate Sustainability. This process seeks to distinguish patterns of human resource management practices and systems which are likely to be sustainable over time. The Human Capital Classification process used in this academic research should not be taken as an indicative measure of Corporate Sustainability or investment.

1. INTRODUCTION - EVIDENCE OF MEASURING HUMAN CAPITAL AND HIGH PERFORMANCE: EXISTING APPROACHES TO MEASURING PEOPLE.

There are a wide variety of approaches to measuring people, and many studies have examined whether human capital practices are directly linked to financial performance or parameters of business success. A recurring pattern within these studies is the importance of understanding and analysing human capital as a driver of value within a firm. Additionally, critics of the qualitative analysis process suggest that clearer tools should be provided to create more practical approaches to analysis of the human capital of the firm. This paper notes some human capital literature then presents a qualitative model for analysis of human capital.

Huselid's (1995) longitudinal study set out to examine the relationship between human resource policies and organisational performance. Data collected in 1995 from 986 firms' related HR practices to attrition, productivity, and financial results. The findings indicated that those organisations, which are strategic in their approach to employee development, performed better than others.

Pffefer (1998) examined seven practices that successful organisations needed to have in order to make a difference. These practices were highlighted in his book *'The Human Equation'* and include employment security, selective hiring, self-managed teams and decentralized decision making, comparatively high compensation linked to organizational performance, extensive training, minimal status differences and extensive openness in sharing information.

In a groundbreaking study, American researchers, O'Reilly and Pfeffer, (2000) found that even ordinary people can create successfully competitive companies if the organization has: clear values, puts culture first and has consistent people-centred practices to express the values which are maintained by senior management.

Ulrich (2001) published the *HR Scorecard,* an instrument that enables the management of HR as a strategic asset and demonstrates HR's contribution to financial success. The scorecard has four components designed to balance cost control with value creation. The components include human resource deliverables, which essentially concerns people - related outcomes, need for business success, high performance work systems, identifying alignment in the HR system and HR efficiency measures.

Research by Watson Wyatt Worldwide Research (2002) links specific human resource management practices to above average returns to shareholders. The data indicates that human capital significantly affects current and prospective financial future performance. Furthermore, the data suggest, superior human capital management is a leading - rather than lagging - indicator of improved financial success.

Using survey data from 51 organisations in North America and Europe, administered in 1999 and 2001, the researchers divided organizations into three groups based on their overall *Human Capital Index* (HCI) scores. The HCI was derived from matching survey data to market value, returns to shareholders and Tobin's Q to create an index of human capital. Using the organizations' five-year total returns to shareholders, the researchers found that organizations with a low HCI averaged a 21% five-year return, those with a medium HCI averaged 39% and those with a high HCI averaged 64%. This analysis noted that human capital is the chief resource for innovation in the knowledge-based economy, and, once it can be measured, it can be managed and exploited to increase shareholder value.

Mayo (2001: 12-14) in "The Human Value of the Enterprise' discusses the *human capital monitor* which includes processes for measuring and tracking three areas: people as assets, which involves measuring employment costs plus acquisition, retention and growth factors, people motivation and commitment, where leadership effectiveness, the nature of the workgroup and the systems for reward are measured: and people contribution to added value which encompasses organisation-wide indicators of contribution.

A study by Collins (2001) compared companies in the same industry, which sustained success over many years with those that had not. The methodology used by Collins was an innovative combination of traditional financial analysis, complemented by a selection of qualitative approaches. Collins screened companies using Fortune 500 data, then CRSP data, then by industry and was left with eleven companies from which demonstrated long-term sustainability of both financial and human capital. He found those companies, which achieved sustained long-term performance behaved differently from those whose performance was erratic or poor. Visionary companies put a greater percentage of year's earnings back into the company, returning less in cash dividends to shareholders. Visionary firms invested more heavily in management practices and human capital - specifically in training, recruiting and the professional development of staff - and in R&D and property and plant. These companies were also early adopters or innovators in their industry (Collins & Porras, 1994). This distinctive pattern of behaviour has had some impressive results; visionary companies outperformed the US market by a factor of 15 at the time of the study. They were six times more successful than the comparison companies.

Schuster's (1986) study also aimed to assess the critical contribution of human capital. He used employee surveys and interviews of 1300 of the largest U.S. industrials and non-industrials to research whether a significant relationship exists between the way in which organisations manage their employees and profitability. His findings included a statistically positive relationship between the use of employee-centred management practices and superior financial performance. Also, an average return on equity of those firms at the time using one or more innovative HR practices was 11% higher than those firms not using any of the practices.

An Australian study, (Royal, 2000, 2001, 2002) and separate studies by American researchers (Kalleberg, Marsden and Spaeth, 1996) found that people-centred management practices which emphasise long-term relationships with their employees, and which encourage organisational membership, perform better with regard to innovation, product development, attracting and retaining good staff, and financial performance. Another Australian study (Stace and Dunphy, 2001) found that organizations performed better when they were strategically well positioned within a changing environment and pushed the pace of internal organisational change at a rate appropriate to the external environment. They particularly stress the importance of leading edge HR practices. There is an important link between retaining key knowledge workers, and retaining critical intellectual capital

Other Australian researchers, Turner and Crawford (1998) after extensive case study analysis, derived the clusters of capabilities which drive corporate renewal. Business technology and market responsiveness shape operational performance, performance management is important to operational and reshaping capabilities, engagement and development are key to reshaping capabilities. Corporate cultural change was researched in the US (Kotter and Heskett, 1992). The researchers found that performance-enhancing corporate cultures emphasise meeting the needs of all stakeholders, not just shareholders.

These studies clearly indicate the value of understanding and valuing the contribution of human capital.

2. HUMAN CAPITAL ANALYSIS AND INVESTMENT RECOMMENDATIONS

The underlying academic research question behind the search for appropriate metrics by which to assess human capital for the purpose of making more transparent investment recommendations and decisions is: How can analysts and fund managers use a human capital lens and keep within the regulatory framework for the financial services industry?

The increasing levels of controversy and concerns about the objectivity and independence of sell -side research and the current moves both globally and locally to take a number of actions to improve credibility call for a range of possible solutions to be debated. Such actions are likely to be more substantial if they address the critical issue associated with the exact nature of what is included, and what is excluded, in the securities analysts' research product. Central to this is the pressing need, in the continuous disclosure environment which has been operational in Australia since 1994 (Gallery, Gallery & Hsu, 2002) and, specifically, the voluntary industry guidelines, to provide the investing public with transparency in investment recommendations.

This is a substantive issue, as research Szarycz (2001) indicates that more than 50% of shares issued by US based companies have become controlled by institutional investors who are becoming increasingly concerned with the evaluation of a firm's internal performance. Often, these measures are primarily quantitative and financial, and use measures such as Economic Value Added (EVA), Cash Flow Return On Investing (CFROI), Balanced Scorecard, Value Based Management (VBM) and Activity Based Costing (ABC). In addition, post-Enron, a clearer understanding of the intangible drivers of a firm's value becomes increasingly important. Professor Chris Ittner, (2002) Wharton accounting professor, notes that companies often move beyond the obvious deduction of tangible assets from market value to gain a value of intangible assets, and, in fact, do not have systematic measures for intangible assets. Wharton researchers have created an index linking firms' market values to a series of characteristics called the Value Creation Index. One of the lowest ranked characteristics was mastery of technology. Innovation ranked first, followed by management and employee quality. To fully access the data available on these characteristics, tools other than traditional financial analysis tools are required.

The trend to increased disclosure of intangible drivers of value in the post - Enron environment will increase pressures on firms to understand and to disclose these drivers. One researcher has responded by calculating the costs of human capital within firms (Mayo, 2002:59). A recent extensive survey by Deloitte Touche examines the variety of approaches to analysing and measuring human capital. The concomitant pressure on financial markets to report on these intangible drivers is equally likely to increase. This is not to say that major re -regulation is required, but more a harnessing of the strength of the existing funds management and equity culture by complementing it with valid human capital analysis. To this end ethical or socially responsive investing (SRI) which is estimated to account for up to $35- $40 billion within 10 years in Australia has made some small developments in this area (AFR, 2002:21). The recent interest in SRI and the development and offering of managed SRI products by groups such as Rothschild, AMP and Westpac Investment Management has led to the need for specialised, resourced and skilled research providers.

Specialised research providers provide positive screening on a number of factors: Product, Environment, Workplace, Governance, and Compliance. These are not treated equally in terms of the level and depth of analysis. Currently, specialised research providers analyse and assess the social and environmental history of each company listed in the S&P/ASX 300. During this process, they engage with these companies to provide reliable and consistent data. However, the emphasis is on labour law standards and occupational safety regulations within the Workplace factor, the social component of the screening process. Typically, there is little in-depth research examining sustainable human resource practices, even though they are strongly linked to high performance. Understanding sustainable HR practices is extremely important not only to the SRI sector but also to all managed funds and to the work of securities analysts.

Generally, a brokerage firm, bank, investment bank and fund management institution employ securities analysts whose role is to conduct thorough research into all aspects of the current and prospective financial condition of a listed company. Recommendations are made on a "relative basis comparing a companies' performance within a sector or industry and examinations should cover all pertinent publicly available information about the company and its business. It is not limited to financial statements, [and includes] research on the company, industry, product or sector, and public statements by and interviews with executives of the company, its customers and suppliers" (Fernandez 2001: 3).

Research conducted in the investment banking and broking industry in Australia by Royal (2001) and Royal and Althauser (2002) suggests that this usually results in a research report, forming the basis of an investment recommendation. Analysts' main source of data is the financial variety, drawn from publicly available accounts and their own modelling. This suits the skill set of most analysts where ninety three percent in the field, have overwhelmingly undergraduate and post graduate qualifications in finance and business, or in specialised quantitative fields such as engineering or actuarial studies (Royal, 2001).

Further research by Royal and O'Donnell (2002a & 2002b) in the industry indicates that whilst most analysts and fund managers draw on some qualitative non -financial data such as "management quality' in the investment process, these professionals believe that their repertoire of qualitative human capital skill sets are severely limited by the lack of specialised training in the qualitative human capital field. This has lead to the unsystematic analysis of human capital data.

Compelling research evidence by Bassi, Lev, Low, McMurrer, and Sissfield (2001:347) indicates that non-financial insights make up a large proportion of investment decisions. In their survey of 275 active Us institutional investors on their basis for investment , approximately 35% of investment decisions were reported as based on non- financial data, of which over half is HR related. Other non-financial data includes marketing, strategy and quality. Over 60% indicate that between 20-5-% of decisions are non financial. Bassi, et al (2001:348) note that, although ' the quality of the business plan or strategy is important, investors ultimately place more weight on the ability of the management team to deliver. The focus is on action'.

Looking to the future, qualitative research skills will become increasingly important in making those all-important earnings forecasts. These skills include an understanding of sustainable human resource management practices, organisational change and organisational behaviour. Appropriate analysis methods include case studies, observing participants, surveys, oral histories and document analysis. Most analysts do not systematically use these. The driving force is increasing evidence that the way in which a company manages its human resources (HR) does have a tangible impact on share increase pressures on firms to understand and to disclose these drivers.

3. QUALITATIVE FORMS OF ANALYSIS IN INVESTMENT RECOMMENDATIONS.

Both qualitative and quantitative forms of organisational analysis can be used for equity research in order to provide a clearer indication of which organizations will have sustained high performance over the medium to long term.

Sustainable human resource practices are those practices, which stress the importance of long-term employment and organisational membership and performance. Organisational contexts, in which many skills are acquired, mobility and career advancement take place and higher earnings are often attained, are important positive incentives. These contexts create strong ties between the organisation and employees (Royal, 2000; Kalleberg, Knoke, Marsden & Spaeth, 1996). In addition, as we move into the post-industrial era, intellectual capital and skills formation become major contributions to wealth creation.

Qualitative research can complement quantitative analysis, the more traditional form of organisational analysis for the financial markets. Quantitative financial primary data is very valuable and most often, "hard", objective and rigorous. Conversely, qualitative data tends to use "softer" information, which can still be subjected to formal analytical tools refer Table 1. Financial data has the disadvantage of being primarily historical. Qualitative HR data is, however a strong predictor of future performance (Collins & Porras, 1994).

Table 1: Selected Examples of Qualitative Research Techniques For Human Capital Analysis

Structured interviews (designated company officers permitted under the regulatory environment)
Semi - structured interviews (designated company officers permitted under the regulatory environment)
Industry performance analysis
Media analysis
Archival analysis
Oral histories (designated company officers permitted under the regulatory environment)
Corporate ownership analysis
Participant observation through site visits (keeping within regulatory framework)
Content analysis of interview data and documentary sources.
Historical analysis

Academic researchers find that primary financial analysis on its own can impede true analytical understanding of an organisation's performance because such data often show that properties shared by all organizations in a sample or a sector, such as the Australian large retail banking sector, may be superficial, obvious or unimportant. Measures applicable to all organizations in an industry sector may ignore or understate differences between organizations. In the case of the banking sector, a systematic examination of the human capital systems and practices does provide insights which are otherwise unavailable. Primary financial analysis may also neglect the individuality, complexity and variety in organizations, even within the same industry sector and geographic location. For example, the corporate head offices of the four major retail banks differ in their corporate culture, which can be partly explained by their differing corporate histories.

Qualitative analysis can preserve some richness in data and can preserve a chronological flow of change management/people management strategies. For instance, in some organizations, such as the ASX listed company, Lend Lease Corporation, understanding the history of the company and strength and determination of the vision of its founder provides insights into current board membership and corporate strategy. In this example, qualitative data can produce a clearer picture of an organisation.

As the research discussed above indicates, the way in which a company manages its human resources does have an impact on the financial performance of firms. Therefore, it is likely that there will be increasing pressure on firms to understand and to disclose these drivers.

Distilling Which Metrics to Use In The Investment Recommendations

Measuring human capital in companies is fraught with complexity. For the most part choosing the right measures and the appropriate process has been fundamental to integrity. In essence, most metrics consider the effects rather than causes. Mayo (2001) stresses that most existing approaches to people measurement fall into a number of categories which include valuing people as assets by applying accounting valuations. These include an index of good human resource practices and relating those to business outcomes. Also included are statistical reports for measuring productivity and output of people. In addition, return on investment is assessed by measuring the efficiency of human resource functions and processes and integrating people - related measures in a performance management framework. Mayo notes that accounting based measures are often presented as static numbers, when the dynamic nature of contemporary business requires trends, comparisons and directions.

With the plethora of measures, there can be confusion between accounting based measures, such as are used for other accounting definitions of "intangibles", like brand names, and the deeper issue of the creation of value.

In principle, all these approaches are relevant to the measurement of people. However, for the most part these categories could not be systematically adopted by analysts, fund managers and their industry without breaching the regulatory boundaries, since such metrics rely on an in-depth understanding of an organisation which could only be gained by access to privileged and confidential company data. Furthermore, even if such access was permitted, the metrics that have been analysed indicate that the numbers are often presented as absolute and static. Most importantly, little attention is paid to measuring effects rather than identifying the underlying causes, demonstrated in the patterns of timeless, sustainable systems and practices.

As Collins and Porras (1994:1-3, 16) remark with respects to visionary companies, 'individual leaders, no matter how charismatic or visionary, eventually die, and all visionary products and services all great ideas - eventually become obsolete. Yet visionary companies prosper over long periods of time and do not have perfect unblemished records but display a remarkable resiliency, an ability to bounce back'. Likewise, timeless human capital systems and practices identified through insights gained from history, and evolution of the firm by way of patterns, trends and comparisons are likely to highlight differences between companies. Finally, this analytical model which highlights a firm's history and evolution as a mechanism for identifying timeless, human capital systems can be applied to publicly available data at any given point in time and is furthermore in keeping with the regulatory framework which provides boundaries for analysts, fund managers and their industry.

Deriving A Model For Analysing Human Capital

Studies carried out by Royal (2000, 2002), in the investment banking industry used surveys and interviews across all levels of the organization, participant observation, archival and business documentation, oral histories and content analysis, (see Table 1) to determine key indicators, and drivers of performance. In light of these studies and those discussed in the previous section which examines sustainable human resource indicators in assessing future financial performance lead Royal to develop the model which appears in Figure 1. `The Model of the Drivers of Sustainable People Management Systems' (Figure 1) indicates the important role of human capital analysis in understanding the drivers of the value of the firm. It illustrates the drivers of sustainable people management systems and the importance of various interrelated features that recur throughout a company's history. These features include changing internal and external pressures and managerial beliefs and perceptions, all of which interact and shape management strategy, ultimately resulting in the adoption of internalised labour market structures that are appropriate to a company and within its industry.

More specifically, internal influences that affect managerial beliefs and perceptions and management strategy include the state of the employment relations, cultural factors, costs associated with the need to secure commitment of employees (such as reward, performance management, career and development systems) and insider-outsider relations.

External influences that affect managerial beliefs and perceptions and management strategy include historical trends, the competitive nature of the economic environment, institutional factors, the nature of the product, technological changes and the costs associated with recruitment. It is crucial to state in any qualitative analysis of this kind that whilst the internal and external influences are interrelated, they have not evolved in a linear fashion.

By considering a company's development over time, the features discussed in the model above should serve only as a guide to what drives sustainable people management systems and not necessarily as a blueprint for the conclusive reasons for their existence in every company, across a variety of industries at any one time. The model cannot explain the exact order of their occurrence, for the simple reason that each company has its own unique history, often with gaps, which over time lends itself to more or less emphasis on one or more features discussed in the model.

While it is unlikely that one can simply ascertain the exact casual relationship, the application of this qualitative model (as seen in Figure 1) will provide a level of analysis which would form the basis of a complementary equity research product. Using this model, securities analysts and fund managers would be able to identify timeless, human capital systems and practices and emerging patterns and trends that ultimately affect financial performance and market valuation while keeping within their regulatory environment. This would go some way to providing the investing public a more accurate and transparent information about the nature of a publicly listed company's current and future financial performance.

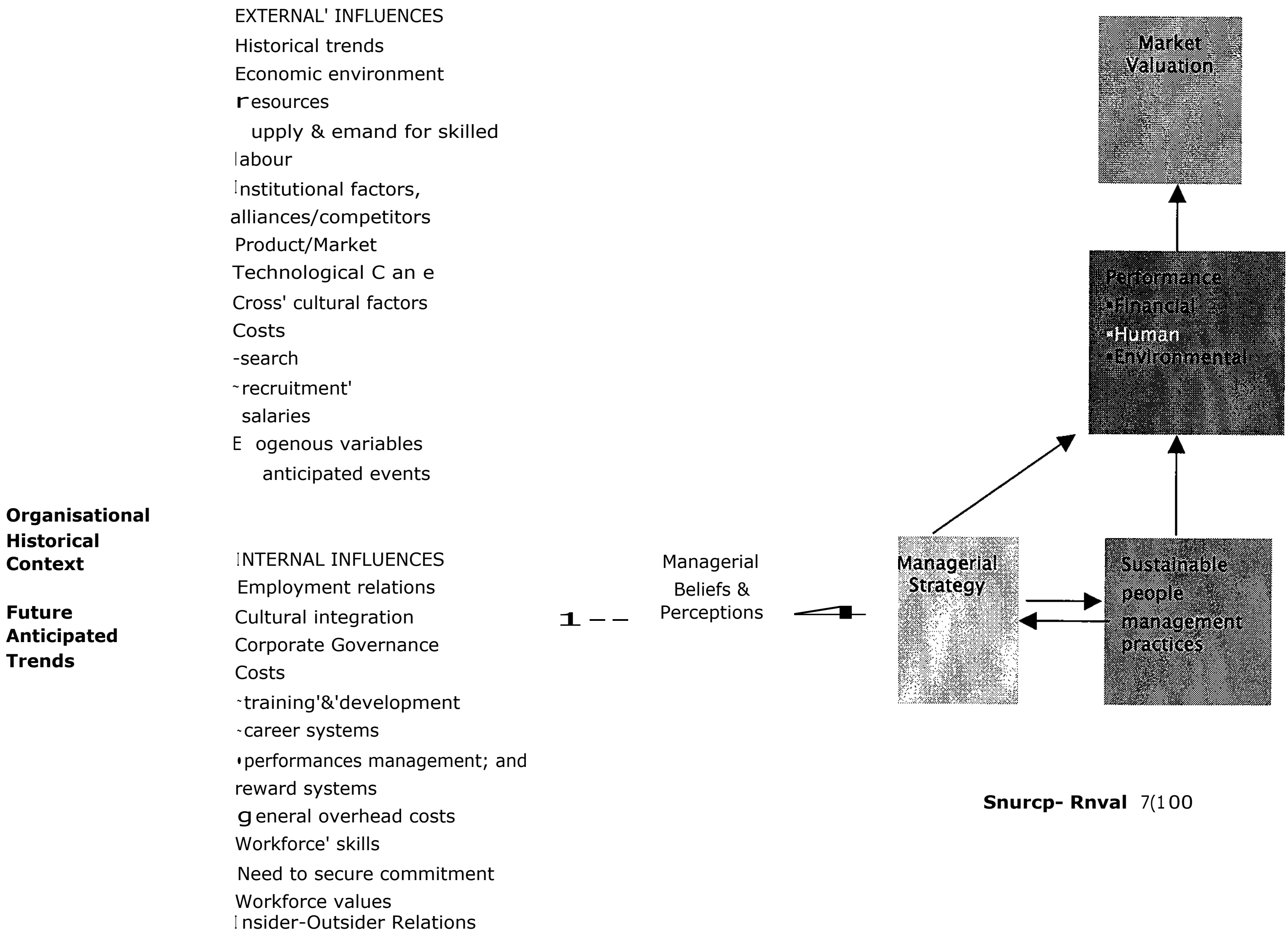
4. HUMAN CAPITAL METHODOLOGY AND SOCIALLY RESPONSIBLE INVESTMENT METHODOLOGIES

The value of human capital can be seen in the fundamentals of internal labour market theory (Doreinger and Piore, 1971, Althauser and Kalleberg, 1981, Althauser, 1989). Specifically, the idea of sustainable human resource practices is those practices which stress the importance of long-term employment and organisational membership and performance. In addition, as we move into the post-industrial era, intellectual capital and skills formation become major contributions to wealth creation. (Royal and O'Donnell, 2002).

Current practices in the Socially Responsible Investment community vary in terms of the approaches used to assess the relative value of a company. The methodology for measuring human capital for investment purposes has some similarity with the work of organisations such as the Monash Sustainability Enterprises (MSE) which measure environmental issues, Greene (2001:34). The human capital process, like environmental analysis, incorporates qualitative techniques such as secondary source interviews, publicly available data on human resource systems and practices and academic journals including case studies.

Figure 1

Drivers of Sustainable Human Capital Management Systems



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As with environmental analysis, and also the Dow Jones Sustainability Index, companies are ranked within industry groups based on the qualitative data described above. In the Australian context, other methodologies are used by SIRIS (Sustainable Investment Research Institute), which creates a sustainability profile of companies, describing their performance on key issues as well as risks and opportunities which are relevant to their operations (Greene, 2002: 32). Another example is the monthly magazine, *Ethical Investor,* which rates each of the triple bottom line elements which are relevant to a selection of Australian companies.

Keeping within the boundaries of the regulatory framework for the financial services industry, Royal and O'Donnell (2002a & 2002b) built on the pioneering work of Althauser and Kalleberg, (1981), Althauser, (1989) occupational internal labour market theory, have developed the Human Capital Classification Process (HCC) which can be used by the financial markets in their current analyses. As outlined in the earlier in the introduction, this process is not new. It is what researchers (Royal 2003, Royal and Althauser, 2003, 2002, Dunphy and Stace 2001, Collins, 2001, Dunphy and Stace 2001, Ulrich 2001, O'Reilly and Pfeffer, 2000, Dunphy 2000, Pffefer, 1998, Dunphy and Griffith, 1998, and Kalleberg, Marsden and Spaeth 1996)in the field of Human Capital in fact do. That is, to bridge the gap between the academic theory and the practice by providing strategies in sustainable human capital management practices to corporations. To this end these academic researchers/consultants are sharing those insights with investment market professionals and their financial community.

As was mentioned earlier analysing the elements fundamental to the Human Capital Classification, that is, sustainable human resource practices has been adopted to some extent by the Socially Responsible Investment sector however it is extremely important not only to the SRI sector but to all managed funds and to the work of securities analysts. More qualitative research skills will become increasingly important in making earnings forecasts. These skills include an understanding of sustainable human resource management practices, organisational change and organisational behaviour (Royal and O'Donnell, 2002).

Most importantly, the HHC process developed by Royal and O'Donnell (2002) is based on an understanding of patterns of behaviour of a system of human capital management. De Bono (1990:21) noted that "cause and effect no longer have much meaning, one looks instead at points of change which can trigger off patterns." This is relevant because patterns, by De Bono's definition, are recognisable, repeatable and give rise to expectancy of an outcome. In the case of the HCC process, deliberate attempts to recognise the patterns of behaviour of human resource systems can allow for four advantages: selection (being able to distinguish a pattern); triggers or causal events; a communication of what may otherwise be coded information; and most significantly, the anticipation which allows the careful observer to react before an event, as a pattern can pull events out of their time sequence. Observers of patterns allow one to carry around a personal map of the environment and creates a potential short cuts. De Bono (1990) notes one simple example of the value of being able to distinguish patterns. An experienced accountant, looking at a balance sheet, can quickly uncover a pattern from what would simply be confusing data to someone else. Similarly, in the HCC process, an experienced analyst of human capital would be able to distinguish patterns of human resource systems and practices which provide meaning and anticipate future events. Conversely, an inexperienced human capital observer may be simply overwhelmed by the complexity of qualitative data, and not be able to see the patterns which may be recognisable, potentially repeatable and give rise to expectancy, which are more evident to the trained eye.

Pattern recognition, however, has its own limitation. Too much seeking for patterns can diminish the ability to think laterally (De Bono, 1990). At times, when totally new information emerges, and it does not fit into old patterns, even experienced observers may find it difficult to codify the new insights. Furthermore, "if patterns grew only by extension they would get further and further away from reality (as defined by all the information available). Without insight, restructuring a pattern could be adequate only when the information had been considerate enough to arrive in exactly the right sequence" (De Bono, 1990:41). Updating thinking about patterns can occur either naturally or laterally. Natural updating has some inefficiencies: new information can be distorted to fit into old patterns; new information which fits old patterns only may be accepted; unless the new information is compelling, it will not be taken seriously. De Bono summarises this plight within the context of the business world:

> *What this amounts to is that the natural restructuring of a pattern to bring it up to date always lags far behind the possible restructuring in terms of available information. It is this time lag which is so important. It may be months or years or even decades.* In the business world where timing, quickness of reaction, and initiative are so vital a part of the process, one cannot simply wait for natural updating.
>
> AN IDEA WILL CHANGE OF ITS OWN ACCORD LONG AFTER IT COULD HAVE BEEN CHANGED. (De Bono, 1990:41)

In summary, the HCC process provides insights into patterns of human capital practices in an organization, within its industry, in order to better anticipate future events within that organisation. The current system of analysis of financial data typically creates a situation where natural updating only occurs, that is, as the financial data becomes available. It is then analysed by professional observers (fund managers and analysts) who then react accordingly eg by investing/recommending the buying or selling shares in a company. The HCC process allows for a more reactive, or lateral approach, which looks at underlying drivers of the performance of the firm, and can then offer opportunities for the experienced observer to respond more quickly than those who rely on the natural updating process.

5. THE SUSTAINABLE HUMAN CAPITAL CLASSIFICATION PROCESS - EVALUATING COMPANIES USING A QUALITATIVE LENS

This study is part of a much wider, five year study, using quantitative models and frameworks, to examine human capital in the finance industry. More recently, this research was extended to include human capital analysis of the Australian Stock Exchange Top 50 publicly listed companies which make up eighty percent of the All Ordinaries Index. Data gathering was completed in November, 2002. The Human Capital Classification provides insights to patterns of enduring and timeless, non-financial qualitative Human Capital Indicators on major ASX publicly listed companies that are Australian domiciled, except listed investment and property trusts.

Qualitative human capital data focuses on lead indicators of future performance and highlight the human capital indicators that drive the value of the firm rather than only lag indicators associated with financial data. Additionally, it is worth noting that that the Bassi research noted earlier indicates that even though a large percentage of decisions made by fund managers are based on non-financial data, there is a lack of relatively systematic analysis of non-financial data. As the authors of this paper have communicated to the Australian corporate regulator, Australian Securities and Investment Commission, (Royal and O'Donnell, 2002a) in an invited paper, this lack of transparency in non-quantitative models creates an increase in variability of analytical tools, and therefore variability in outcome of analysis. One feature of the current system is the "celebrity analyst" who may or may not document his/her approach to analysis, and may take his/her innovative insights when they leave the financial services firms which employs them, again increasing variability of analysis and analytical techniques. Overall, a more transparent process of qualitative human capital data can enhance the analytical understanding of an organisation's performance by:

- identifying which Human Capital indicators in an organisation are important (financial indicators shared by all organisations in a sector may be superficial, obvious or unimportant);

- indicating differences between organisations within an industry sector (financial measures within an industry sector may ignore or understate differences);

- highlighting complexity and variety in organisations often neglected by primary financial analysis.

Definitions

Human Capital refers to human resource management systems which consider overtime the complexity of internal and external interdependencies and intradependencies of the organization. Human capital analysis links Human Resource Management systems to the future performance of the firm. (Royal & O'Donnell, 2002a).

Sustainable People Management Practices are those which are enduring, timeless and stress the importance of long-term employment and organisational membership. They are internally consistent and consistent with the broader context in which the firm is operating. Practices that encourage recruitment, and retention, skill acquisition, internal career mobility and advancement create strong ties between an organisation and its employees will perform better with regard to financial performance. (Royal & O'Donnell, 2002a).

The Human Capital Classification Process

The classification process gathers a wide range of publicly available information and published academic sources, including business journals, annual reports, websites, academic journals, working papers, archival and historical materials, structured and semi-structured interview material, media analysis and documentary sources.

Academic research provides access to excellent and learned research about a company and its industry sector which permits a company profile to be developed.

The process involves analysis of the Drivers of Sustainable People Management Systems (see Figure 1 as previously discussed on page 12), and interrelated variables in a company's organisational historical evolution affecting the value of the firm, including:

- changing internal and external pressures, and
- managerial beliefs and perceptions.

These variables interact and shape management, ultimately resulting in the adoption of sustainable people management practices that are appropriate to a company within its industry sector.

Internal Influences include:

- employment relations,
- cultural integration,
- executive team/board,
- costs
    - training and development,
    - career systems,
    - performance management and reward systems,
    - general overhead costs,
- workforce skills,
- need to secure commitment,
- workforce values,
- insider-outsider relations.

External Influences include;

- historical trends,
- economic environment,
- resources,
- supply and demand for skilled labour,
- institutional factors,
- alliances/competitors,
- product/market,
- technological change,
- cross cultural factors,

- costs
    - search,
    - recruitment,
    - salaries,
    - exogenous variables (unanticipated events).

Sustainable Human Resources Practices

A Figure (see Figure 2) is constructed which compares, on a company by company basis, the strategic "rhetoric" vis a vis a company's human resource practices versus the "reality", based on other published company information. Specifically, this table contrasts the Corporate Business/Human Resources Strategy espoused by a company and the execution of that strategy, by examining the following sustainable human resource practices indicators:

- Job Characteristics,
- Recruitment,
- Training,
- Careers,
- Rewards,
- Professional/Identity/Culture.

Professionalism: Human resource practices which encourage an employment relationship where recruitment and career progression is across all levels of the firm (senior and junior entry level hires). Senior hires have a career progression which spans across several firms in the industry or associated occupations).

Individualism: Human resource practices which closely support short term, subcontract labour market arrangements, where the employment relationship lacks security, there are no differentiating career levels/progression, frequent movement in and out of firms.

Sustainable Human Resources Practices Figure 2

ABC Company

	Traditionalism	Professionalism	Individualism
Job Characteristics			
Recruitment			
Training			
Careers			
Rewards			
Professional/Identity/Culture			

Key
N.B. For practices to be sustainable, 2/3 weighting is given to Recruiting, Training & Career Opportunities as per Traditionalism, Professionalism Types

= Execution

O = Corp Bus/HR Strategy Link

Source: Royal and O'Donnell (2002)

* Based on Internal Labour Market Theory

Human Capital Classification

Table 2: A commonly used 5 star classification system is adopted. An interpretation of each classification follows:

Classification	Sustainability Gradation
*****	High
****	Medium/High
***	Medium
**	Low/medium
*	Low

The Human Capital Classification process classifies each company from one to five based on all the information gathered. Companies can be ranked within an industry sector. The basis of the rankings is shown in Table 1 below.

Table 2: Identification of Enduring Sustainable Human Capital Practices applied in the Classification process.

*******Five star:**

industry best practice for its own industry sector

- human capital practices are internally consistent and consistent with corporate strategy and encourage long-term commitment and organisational membership.
- HR systems of recruitment, training, career planning and performance management are highly sustainable.
- Human capital practices are highly consistent with rhetoric espoused in public documents

******Four star:**

- Approaching industry best practice for its own industry sector
- human capital practices are relatively internally consistent and consistent with corporate strategy on key long term elements
- HR systems of recruitment, training, career planning and performance management are create a medium to high level of sustainability.

- There appears to be a high correlation between the rhetoric of public documents and the practices demonstrated by the organization

*****Three star:**

- Interested in becoming industry best practice for its own industry sector, currently operating in the midrange arena

- human capital practices are not well integrated into corporate strategy and may be internally inconsistent. Key long-term elements are not always well articulated and executed.

- HR systems of recruitment, training, career planning and performance management are not yet as sophisticated as others in the industry but operate at a medium level of sustainability.

- The gap between rhetoric on the value and primacy of human capital and the practices may be relatively large

****Two star:**

- Not operating within the formal or informal guidelines for industry best practice for its own industry sector

- human capital practices are internally inconsistent and not structured to efficiently execute corporate strategy. Practices focus on the short term.

- HR systems of recruitment, training, career planning and performance management are embryonic or working at odds with corporate strategy and are operating at a low level of sustainability.

- The gap between rhetoric on the value and primacy of human capital and the practices may be quite large

***One star:**

- The organisation is not aware of or is operating outside the formal or informal guidelines for industry best practice for its own industry sector

- human capital practices are internally inconsistent and not designed to be able to execute corporate strategy

- HR systems of recruitment, training, career planning and performance management are unsophisticated relative to the pressures of the industry sector and are, in the long term, likely to be unsustainable.

A very large gap exists between human capital practices and the rhetoric of public documents

> There is a high risk of unwanted turnover of staff or staff working at less than optimal levels.

For practices to be sustainable, a 2/3`d weighting is given to the Recruitment, Training and Career opportunities indicators as per the Traditionalism and Professional types.

Table 3: ASX Top 50 Human Capital Classification

November 2002

National Australia Bank	****	General Property Trust	**
Commonwealth Bank	***	Westfield America	****
BHP Ltd	* * * *	Macquarie Infrastructure Group	
Telstra	***	Tabcorp Holdings Ltd	**
Westpac Bank	****	Macquarie Bank	**
ANZ Bank	***	Lend Lease Corporation	****
News Corporation	***	Coca-Cola Amatil	***
Mirvac Group	* * * *	The Australian Gas Light Co.	
AMP Ltd	**	QBE Insurance Group Ltd	***
Rio Tinto	* * * *	Suncorp Metway	
Woolworths	****	Telstra Corp. Ltd	****
Wesfarmers	****	IAG Insurance	***
Foster's Group Ltd	**	Santos	****
St George Bank	****	Stocklands	****
Woodside Petroleum	*****	AXA Asia Pacific Holdings	***
Westfield Holdings Ltd	****	Southcorp Ltd	***
Western Mining Corp.	* * *	Mayne Group	* *

Brambles Industries Ltd	***	James Hardie Industries	***
QANTAS	*****	Leightons Holdings Ltd	****
Amcor Ltd	***	Patrick Corp. Ltd	**
Coles Myer Ltd	**	Orica	***
Suncorp-Metway Ltd	****	Singapore Telecom Ltd	**
Publishing and Broadcasting	**	Boral Ltd	***
CSR Ltd	****	Harvey Norman	****
CSL	***	Cochlear	****

As Table 3 indicates, this star summary provides an application of the human capital process, as of November 2002. By examining all publicly available data on these listed companies, it is possible to derive a summary of the firm's relative position on human capital, at a point in time. This analysis can be applied to all companies listed on the Australian Stock Exchange irrespective of size. Analysis needs to be done regularly, for example, monthly, to keep observers up to date on human capital changes within a firm. This table is in contrast to the tables provided by such research services as Corporate Monitor, sponsored by Perpetual Investments (an institutional fund manager), and published monthly in Ethical Investor magazine. While superficially the tables they present in the arenas of corporate governance and social issues (as well as environmental issues) provide a snapshot of a firm's performance in these key areas, this Human Capital Classification process incorporates macro strategic, economic and environmental data, as well as drilling down to the company level within an industry sector and analysing the human capital and organisational change indicators. The HCC process incorporates a five star rating system, applicable across companies and industries, giving insights into the relative sustainability of human capital practices.

For instance, in the September 2002 issue of Ethical Investor, (Corporate Monitor research well recognised for its survey ratings of publicly listed companies in terms of environmental, social and governance filters), AMP a large Australian life insurance and investment management business was rated as two stars on governance and four stars on social issues. Based on publicly available data available to security analysts, broking houses fund managers and their industry but which was not adopted in their investment process to any large extent, the HCC process detailed by the authors research rated it as a two stars overall. The HCC analysis included governance and the deeper human capital management issues. Drilling down to the human capital issues and the indicators highlighted earlier in Figure 2 the authors were able to uncover not only a lack of transparency in terms of corporate governance issues which rated AMP a two by Corporate Monitors analysis but problems with some of the other human resource indicators (Fig 2) at AMP, including the company's recruitment systems and practices associated with making board appointments, as well as problems associated with the retention of key senior staff, ie the sudden resignation of the chief financial officer and two other financial finance executives in August 2002. There were also issues associated with the job characteristics (another indicator shown in Figure 2) of senior management in terms of leadership, power and decision making which suggest a heavy top down approach with little evidence of consistent transparency or quality disclosure. Furthermore a corporate culture which fostered embedded behaviours where dominant and sub dominant culture clashes between various key businesses and markets that AMP operate in were evident. There was minimal evidence of these human capital indicators being addressed in securities analysts commenting on such in their recommendation reports.

By drilling down using a social, governance and human capital lens the HCC process developed by the authors uncovered these early warning signals a year and a half before the unveiling of severe financial problems with AMP's British operation Pearl Assurance and the sudden departure of the Chief Executive on September 24`h, 2002. The sudden departure coincided with a revelation amongst other problems of a breach of the Australian Stock Exchange's (ASX) continuous disclosure rules. 'The breach was discovered in a statement buried in a prospectus for $ 1 billion hybrid equity issue, that AMP's subsidiary, Pearl Assurance had fallen below the minimum capital requirement of the Financial Service Authority (FSA) in Britain, by an unspecified amount' (BRW, 12`h September, 2002). AMP's share price took a downhill ride from $14 at the end of September to 2002 to $8.50 at the beginning of February 2003 However, the HCC process revealed the tell tale sales of poor human resource management practices some eighteen months prior and rated AMP in its assessment of the human capital management performance as two stars when the stock price was $19 (Aspect Financial Pty, Ltd, Ethical Investor Magazine, Issues 15-19:44-45).

In summary then as can be performed with all listed companies, the HCC process highlighted in AMP's case that the gap between the rhetoric espoused by management and reality was large and had been for some eighteens prior to the string of financial problems which occurred in the last six months. Similarly, AMP's human capital practices were internally inconsistent over that period and not structured to efficiently execute the corporate strategy which in the words of the new chief executive when outlining AMP's 'Driving Reform Strategic Review Outcomes' to the investment community will now focus on 'disciplined execution against strategy and candour open and honest communication'. (AMP,2003).

CONCLUSION: ***Dangers of Over Emphasising The Human Capital Classification Process***

This paper provides evidence linking human capital to financial performance. It stresses the importance of human capital analysis for investment recommendations. Applying an appropriate metrics to assess human capital in the financial industry whilst keeping within the regulatory framework has been addressed. Current metrics cannot be systematically adopted by analysts and fund managers without breaching the regulatory boundaries, since those metrics rely on an in-depth understanding of an organisation which could only be gained by access to privileged and confidential company data. In addition, the metrics reviewed concentrate on effects and not causes.

The Human Capital Classification process highlighted in this academic research should not be taken as an indicative measure of Corporate Sustainability or investment merit. The purpose of the Classification process is to highlight on a company by company basis evidence of sustainable people management practices (i.e. practices which are enduring and timeless) and which stress the importance of long - term employment and organisational membership. The process seeks to indicate how internally consistent these practices are (as well as consistent with the broader context in which the company is operating) and seeks to compare the strategic `rhetoric' vis a vis a company's human resource practices versus the `reality', based on publicly available company information. The process is also based on an understanding of patterns of behaviour of a system of human capital management and emphasises points of change which can trigger patterns as opposed to simply identifying cause and effect. The Human Capital Classification process allows the experienced observer to distinguish patterns and decode information. By pulling events out of their time sequence a human capital expert can restructure a pattern based on new insights and available information, rather than waiting for a natural updating process which lags months or even decades behind. Such time lags are inefficient within the context of the business world. Anticipation and being able to react before an event is a crucial element to the Human Capital Classification process discussed in this research paper.

The final outcome of the Human Capital Classification process is to locate graphically and evaluate, based on publicly available data sources, where a company is situated in terms of its human capital systems and practices, at a given period in time, while also managing to keep within the regulatory environment of the financial services sector. The Human Capital Classification is to be analysed in conjunction with traditional financial, social and environmental data, as well as other human capital people management measures for the purposes of making an overall assessment of Corporate Sustainability.

Similarly, when applying the Human Capital Classification process, academic researchers in the fields of finance, accounting and business, regulatory bodies, the financial services industry and the investment community need to recognise that as with any other qualitative metric this classification process is to be used as a complementary form of analysis alongside traditional primary and secondary financial analytical tools for the purpose of making transparent investment recommendations and/or investment decisions. Although a human capital lens and indeed the Human Capital Classification process will provide an increase in the degree of transparency used in the evaluation process of investments, it is only one tool, although an important one. It provides no short cuts to successful investment outcomes, and to this end the finance industry and the regulators would need to strongly recommend to the investment community the need for independent, professional advice before making decisions based on any qualitative academic or technical analysis related to the investment markets.

As this paper has alluded to, whilst there is strong evidence from large empirically based studies, academic research and the finance industry would benefit from a future research agenda, based on qualitative company case studies within an industry sector which seek to examine other conceptual models and frameworks that link human capital as a lead indicator of future financial performance. To this end, the academic models/tools and underlying framework presented in the Human Capital Classification process goes someway to filling in the gap that currently exists. It is a significant improvement on the limited number of approaches to analysing non-financial data for investment purposes, at the company level. It is a process of identifying patterns of human resource management practices and systems which show evidence of sustainable performance over the long term. Inevitably, there is a cost to applying Human analysis to investment recommendations and investment decisions, and yet, there is potentially a greater cost in terms of transparency to the investment community if Human analysis is ignored.

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