LEND LEASE CORPORATION
INCORPORATING HUMAN CAPITAL ANALYSIS IN INVESTMENT RECOMMENDATIONS: A CASE STUDY

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Abstract

Evaluating publicly listed companies using a human capital lens is becoming increasingly important to the work of fund managers , securities analysts and the financial services industry at large. This paper applies the lens of Human Capital Analysis using publicly available data to an Australian Stock Exchange listed company in order to firstly demonstrate the richness and complexity of data which is obtainable through publicly available sources. Secondly, to illustrate the value and significance of adopting the Human Capital Analysis process as a complementary form of analysis to that applied to traditional financial data when evaluating current and future financial organisational performance. In this specific case, after a thorough analysis of the elements of human capital, using the Drivers of Human Capital model and the Sustainable Human Resource Practices template, Lend Lease Corporation exhibits signs of a highly sustainable organisation. It is argued that this process is a significant improvement on current approaches to analysing non-financial data for investment purposes currently used by the financial services industry. The paper concludes by stating that in the post corporate collapse context inevitably there is potentially a great cost to the investment community if Human Capital Analysis is ignored.

1. INCORPORATING HUMAN CAPITAL ANALYSIS IN INVESTMENT RECOMMENDATIONS

Both qualitative and quantitative forms of organisational analysis can be used for equity research in order to provide a clearer picture 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 and semi – structured interviews
Content analysis of interview data and documentary sources.
Industry performance analysis
Survey instruments (application of statistical analysis)
Media analysis
Archival and historical analysis
Focus Groups
Oral histories
Corporate ownership analysis
Participant observation

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 banking, may be superficial, obvious or unimportant. Measures applicable to all organizations in an industry sector may ignore or understate differences between organizations. Primary financial analysis may also neglect the individuality, complexity and variety in organizations, even within the same industry sector and geographic location.

Qualitative analysis can preserve some richness in data and can preserve a chronological flow of change management/people management strategies. Qualitative data can produce a clearer picture of an organisation.

Adopting and Integrating The Process whilst Keeping within the Regulatory Framework for the Financial Services Industry.

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 (Andrew Mayo, quoted in AFR, 22 October, 2002, p.59). 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, Feb. 2001). 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 or investment bank employs securities analysts and their role is to conduct thorough research into all aspects of the current and prospective financial condition of a listed company. This usually results in a research report, forming the basis for 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, who overwhelmingly have undergraduate qualifications in finance and business, or in specialised fields such as engineering or actuarial studies.

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. These are not systematically used by most analysts. The driving force is increasing evidence that the way in which a company manages its human resources does have a tangible impact on share price.

2. EVIDENCE - QUALITATIVE RESEARCH AND HIGH PERFORMANCE

The following qualitative research studies indicate that data other than financial data can be highly useful when assessing which organizations are likely to outperform others within their sector. Qualitative research has a certain appeal (techniques are shown in Table 1), as there is minimum retrospective distortion and as a result this has the tendency to reduce researcher bias. Such research is particularly valuable in identifying which factors have led to poor corporate performance (Miles, 1979; Royal, 2002).

A major study by Collins and Porras in the US (Collins & Porras, 1994) defined the differences between companies which sustained financial success over many years, with those that did not. In brief, they found visionary companies outperformed the market by a factor of 15 and were 6 times more successful than the comparison companies. Visionary companies put a greater percentage of year’s earnings back into the company, returning less in cash dividends to shareholders, invested more heavily in management practices and human capital, specifically in training, recruiting and professional development, and in R&D and in property and in plant and tended to be early adopters or innovator in their industry. Schuster (1986) assessed the critical contribution of human capital and profitability in 1300 of the largest industrial and non-industrials in the US. He found a statistically positive relationship between the use of employee centred management practices and superior financial performance. Also, average return on equity of those firm using one or more innovative human resource management 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 within the firm.

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. 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.

Deriving A Model For Analysing Human Capital

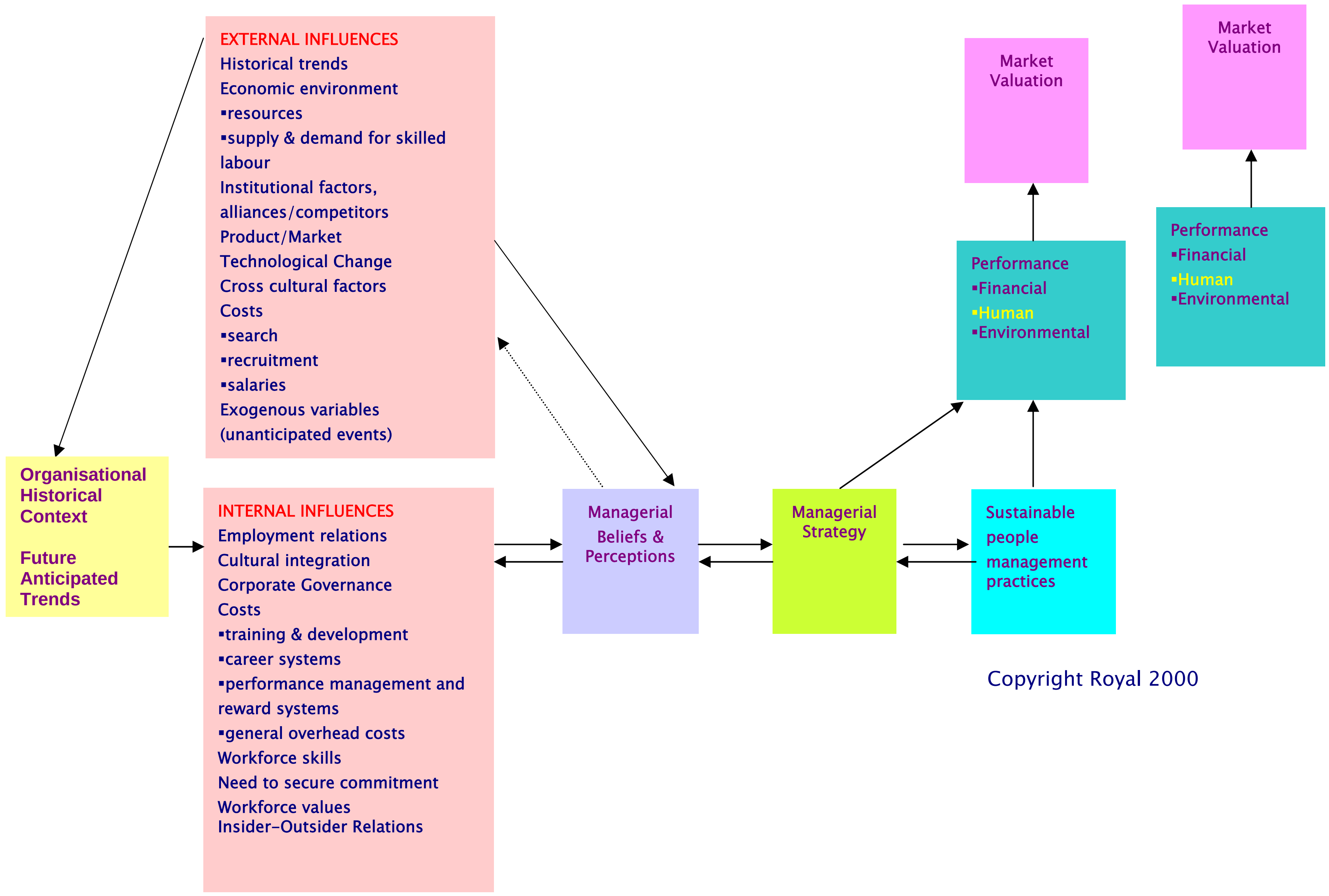
Studies carried out by Royal (2000, 2002), in the investment banking industry used surveys and interviews across all levels of the organization, participant observation, archival and business documentation, oral histories and content analysis, (see Table 1) to determine key indicators, and drivers of 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.

Figure 1: Drivers of Sustainable Human Capital Management Systems



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However, 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 would be able to identify emerging patterns in human capital that ultimately affect financial performance and market valuation. 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.

A template for classifying sustainable human resource practices.

A template for classifying sustainable human resource practices is presented in the following table;

Table 2: Sustainable Human Resource Practices

HRM PRACTICE	TRADITIONALISM	PROFESSIONALISM	INDIVIDUALISM
<u>Job Characteristics</u>			
competencies (knowledge, skills, creativity)	Well defined routine positions, low order contextual & theoretical knowledge, low levels of creativity	Occupational specialist, high order contextual & theoretical knowledge, high levels of creativity	Occupations defined by labour market requirements, combination of high & low order contextual & theoretical knowledge, moderate levels of creativity
management control	high levels of mgt control, low levels of employee discretion	low levels of mgt. control, high levels of employee discretion & control	low levels of mgt. control, high levels of employee discretion
co-worker relations/work organisation/team work/communication	low levels of formal/vertical information communication, restricted co-worker interdependency; individualised work, formalised pyramidal hierarchy, coordination by management, little use of teams	high levels of vertical and horizontal communication; information shared; co-worker interdependency ; team-based with flatter hierarchy, coordination mainly by employees	low levels of formal communication; higher levels of social communication; co-worker interdependency; generally individualised work, formalised pyramidal hierarchy, coordinated by mgt., some use of work teams
power/decision making/leadership	autocratic, task oriented, controlling mgt. Role	participative & democratic task & employee oriented, facilitative role	autocratic with consultation, employee oriented, controlling supervisory role
<u>Recruitment</u>			
Basis of recruitment	Entry at the bottom	Entry at the bottom and at higher levels	External; there are no differentiating levels.
Criteria	Dependability, loyalty and commitment to organisation's goals	Qualifications & experience	Experience & interpersonal skills
Training: Main source	The organisation.	Professional institutions, tertiary institutions	Typically technical colleges and industry associations
Nature of	Formal company provided training programs	Formal degree/diploma courses, on-the-job training	Formal technical programs, minimal internal training, some on-the-job training

Career Opportunities			
Internal/ External	Entirely internal	Internal and external opportunities	Mainly a reliance on the external labour market
Employment security	Employment security	Variable employment security	No employment security
Reward System			
Fixed/ Variable pay	Reward system has a high fixed basis to reward dependability	Reward system has a high variable element, reflects performance	Reward system has a moderately high variable element tied to individual element
Criteria for pay rises	Seniority and experience	Performance-related element	External labour market
Professional Identity/Culture/ Networks	Identify more with the organisation and the culture; networks are top down	Identify more with the profession than with the organisation and the culture; networks are vertical	Identify more with the profession than with the organisation and the culture; networks are vertical

Most organisations contain several different types of sustainable human resource management practices operating with different policies and procedures. However, in reality these practices fall into three distinct ideal types. The first of these is classified as the Traditionalism (refer Table 2) set of human resource practices. The Traditionalism set of practices refer to those practices which encourage a long term employment relationship, security and career progression based on junior level entry and career movement within one firm. The Professionalism set of human resource practices are those which encourage an employment relationship where recruitment and career progression is across all levels of the firm (junior entry and senior level hires). Career progression for senior level hires spans across several firms in the industry and or associated occupations. The third set of human resource practices are the Individualism set of practices which closely support short term, external subcontract market arrangements, where the relationship lacks security, there are no differentiating career levels/progression, frequent movement in and out of the firm as a result of a lack of job security and status attainment is evident.

The ideal types are derived from internal labour market theory (Althauser and Kalleberg, 1981) where out of the six human resource practices indicators (refer Table 2) the three most important defining indicators that distinguish the Traditionalism, Professionalism and Individualism types are the Recruitment, Career Opportunities and the Training Indicators. The Traditionalism set of human resource practices highlight recruitment at junior entry level, the existence of a career ladder and movement up the ladder associated with a progressive development of knowledge and skill. The Professionalism set of human resource practices also indicates recruitment at junior entry level as well as recruitment at senior levels. The career ladder is evident within the firm and across the industry or associated occupations suggesting that it may not only be possible to climb career ladders within a single firm. The acquisition of skills and knowledge often through formal qualifications and training is essential for assisting career progression.

The Individualism set of practices lack the three basic indicators discussed above. As a result the Individualism set of practices mirror the external labour market where recruitment is piecemeal there is no career ladders associated with the progressive development of knowledge and skill. Unlike the Traditionalism and Professionalism classifications job security under these set of practices is tenuous and such practices are applied to the periphery rather than the core employees of an organisation. Therefore the adoption Traditionalism practices to any large extent by an organisation would lead to extreme imbalance between the core workforce of an organisation and the periphery flexible subcontracted external workforce which would ultimately threaten the sustainability of the company.

Other sustainable human resource indicators shown in Table 1 include Job Characteristics, Rewards and Professional Identity/Culture/ Networks. These indicators are important in shaping the three main indicators and in driving the Sustainable Human Capital Management Systems referred to in Figure 1.

With respects to high performance in organisations, the research evidence (Kalleberg et al, (1996), Watson Wyatt (2002), Collins and Porras (1999), Hubbard, Samuel, Heap and Cocks (2002) suggests that organisations who adopt sustainable human resource practices and processes such as attracting and retaining employees, providing internal career ladders, investing more in training and development and who are able to execute these practices and maintain alignment between these practices and management will benefit in terms of enhanced organisational performance. Hence these organisations will have a majority of their practices falling within the Traditionalism or Professionalism classification types, or some combination of the two, with a small tendency to the Individualism set of practices (see Table 2).

3. LEND LEASE - UNPACKING THE MODEL FOR ANALYSING HUMAN CAPITAL.

In order to apply the Human Capital Analysis approach, the following analysis is an application of the concepts described above to the key elements of human capital of one ASX listed company, Lend Lease Corporation (LLC). Lend Lease was chosen as an example of an Australian company going global (with over 50% of sales overseas) and with a diverse range of HR systems and practices. It is one of the relatively few Australian companies to have progressed through all of Hubbard's (Hubbard, 2002:22) strategic cycles, moving from: focused, to focus with geographic spread, to related expansion, international experiment, international growth (Lend Lease managed large scale property developments in the UK and the US), consolidation (Lend Lease sold its Australian funds management operation), portfolio of international businesses and global products/businesses (real estate development and property funds management) as part of a global system.

This analysis of the human capital of Lend Lease is taken from publicly available data, including academic literature.

Links between corporate strategy and human resource strategies and systems

Lend Lease's stated corporate strategy is: "Providing the best real estate solutions to clients globally".

The vision is of a "transformative company" whose goal is to ensure the creation of long term value for shareholders, including ways which are not immediately reflected in accounting profits (Lend Lease website, 2002).

This strategy has key implications for human resource management. Of fundamental importance is the level of consistency between the stated corporate strategy and the human resource management systems designed to execute this strategy. This level of internal consistency is examined in the following discussion of management control systems in project approval at Lend Lease.

As described by researchers (Hubbard, 2002:39), Lend Lease's business is heavily project based and Lend Lease is credited with developing most of the major elements of project management used in Australia. It is very difficult to get a project approved at Lend Lease because:

- An enormous amount of due diligence is required to be undertaken in order to understand all the risks
- It must be clear that the project has drawn on existing expertise and experience within Lend Lease
- The project faces high financial hurdles for approval
- The project must have access to the management and organisational expertise necessary to carry it out
- There must be an exit strategy available, in case the project does not meet expectations.

As Hubbard *et al* note, the operating schedules and financial outcomes of projects are expected to be achieved. The reward system of individual bonuses based on KPIs and the management systems of weekly project meetings with performance outcomes help employees to achieve this. This approach also minimises layers of bureaucracy. One former Lend Lease executive has been quoted as saying:

> *[Lend Lease} has a unique entrepreneurial culture that embraces change and innovation, that empowers people. The culture is the core of the company. It is the competitive advantage of the company* (Hubbard, 2002:79).

At the same time, the Lend Lease culture has shown over time that "provided the person responsible for the error could learn from it, it can actually be seen as a positive experience in the longer term for a person to have survived a mistake and prospered subsequently" (Hubbard, 2002:44). In addition, Lend Lease shares its savings from innovative approaches to managing projects with clients. This creates incentives for both client and service provider to work together and separately in order to save money for themselves and each other. This also implies a breaking of the common mindset in this industry. In essence, it is also a risk management tool.

In Lend Lease's approach, which they term the 'community of interest' concept, the aim has moved from building a building for a profit to building a building that would satisfy all stakeholder groups (Hubbard, 2002:301). One element of this principle is manifested in employees spending one paid day per year working in a community group, of their own choice. Given this principle and this approach, it would appear that Lend Lease has a high level of internal consistency with its HR systems, and those systems are, in turn, consistent with the overall corporate strategy.

The real estate and property industry is inherently cyclical. Observers are keen to see sophisticated levels of labour market flexibility to allow for changing economic circumstances. This appears to be part of the culture of Lend Lease, at a micro level, as noted by one former executive:

> *They don't tolerate non-success. They would review performance, monitor you and coach you, but they will terminate you quickly if necessary* (Hubbard, 2002:229).

Flexibility of employment has also been felt at the top, with the recent departure of Managing Director, David Higgins, after criticism by the market for failing to fully capture on the potential gains from the sale of MLC and failing to meet targets of doubling the profits of BLL within two years (BRW, March 2, 2001). Although there may be some loss of talented staff in the context of the departure of Higgins, this loss of staff would appear to be manageable given the HR strategy of the firm.

At a macro level, this needs to be done in the context of an appropriate balance of traditionalism, professionalism and individualism models as outlined below. In the case of Lend Lease, the human resource management strategies indicate a high level of flexibility, with different types of employment contracts available for different circumstances.

For instance, in high growth economic times, such as the late 1990s, Lend Lease grew from a firm of 4,500 people to 12,000 by mid 2000, including the acquisition of Bovis, BFG, CEL, Amresco and others. Conversely, the Lend Lease culture was also in evidence during the mid 1980s when, after purchasing the MLC insurance group, Lend Lease embarked on "frame breaking change" and created a 40% workforce reduction, with 85% of executives retrenched within MLC (Dunphy and Stace, 2001). This level of labour market flexibility with regards to hiring and retrenchment is likely to be important in changing economic conditions within the real estate industry.

It is worth noting that staff hold 17% of company shares, which is one way to align corporate strategy with individual performance. It is also in line with the vision of founder, Dick Dusseldorp who viewed the needs of employees as equal to the needs of shareholders. He had a view that the rest, including making money, would look after itself (Hughes, 2002:45).

Positioning Lend Lease as a " solutions provider" implies a requirement for strong investment in technical expertise, in this case, of engineering, design, project management and building related skills, as well as sophisticated financing strategies.

According to publicly available information, Lend Lease has invested heavily in training and development in technical areas, and recruiting strategies underpin this investment, through their emphasis on recruiting highly trained graduates in disciplines such as engineering, finance, accounting and marketing. This appears to be a key sustainable strength in Lend Lease's human resource management systems. Specific training and recruitment systems are examined in more detail later in this report. Appropriate levels of outsourcing to subcontractors also appear to be part of Lend Lease's ongoing success in project completion.

The terminology within Lend Lease's strategy is 'clients' rather than customers. This implies a professional, knowledge worker environment rather than a building company with contractual ties as a basis for its operations. A professional services organization needs to be maintained by a professional code of ethics, which govern the tone of decision making at all levels. Lend Lease publishes its own Code of Ethics which, if it is applied to all key decisions, indicates a high level of commitment to honesty, integrity, legality and other professional values. The Code of Conduct, listed on the corporate website, states:

> *We say to our employees that if you are in doubt as to whether anything you are contemplating might breach the Code, apply the following test: "Would I be willing to see what I'm doing or about to do described in detail on the front page of a national newspaper to be read by my family and friends?*

This is the front page test, proposed by Northcott (Northcott, 1996), which is often debated in firms, but not always used. The danger of taking this principled stand is if even small breaches are seen to be allowed, so that the integrity of the overall philosophy can be damaged. Management are thus committed to following the rules and the intention of this principled stand.

Lend Lease has created a professional services firm, not a building firm, or a real estate firm. An example of the requisite high level of investment in knowledge management appears to be the new iKnow system, as described in more detail later in this paper.

However, even with best practice formal systems for knowledge management, Lend Lease was considered by some researchers (Caddy, Guthrie and Petty, 2001) to be at medium risk of creating "orphan knowledge" that is, knowledge which isolated and is not widely shared in the organization. The key to widespread knowledge dissemination, the researchers suggest, is in the application and utilisation of these systems. They note there is an individual competence focus in terms of intellectual capital, even at the corporate level. Unless this is overcome by specific elements within the performance management systems, this can pose a barrier to genuine, organization-wide knowledge sharing.

Without such systems, the corporation is also vulnerable to losing critical knowledge capital and skills when key individuals leave. The knowledge can simply "walk out the door". Capturing knowledge in the organisational systems significantly reduces this risk.

The strategy is clearly defined as a "global" strategy. This implies a need for the main board of Lend Lease to have a global focus, preferably through geographic as well as skill based diversity. International operations need to be clearly integrated into the culture of the parent organization.

According to public sources, the main board of Lend Lease is unusual in Australian terms for including, not only a woman as Chair, formerly an academic historian, but also representatives from Europe, Asia and the United States. Another female Board member, Diane Grady, resigned recently. The reasons for this resignation would be interesting to assess. The overall Board composition in terms of geographic spread is appropriate as these are the key targeted markets, according to the stated strategy. Regularly, board meetings are held outside of Australia, and at times include top layers of management. Regular video and telephone conferencing occurs at board level, which is highly appropriate in this organisation.

Responsibilities for main board directors appear to be clearly established (Grady, 1999), including the requirement to sit on appropriate committees.

This has been tested in an extraordinary way through the recent decision of the Board to operate without a Chief Executive, and is being run, in part, by a committee of non-executive directors and chairman Jill Ker Conway (Condon, 2002:34) Even though the company is currently leaderless in a traditional sense, and the share price has suffered somewhat as a result of that, as well as the poor performance of the US funds management business, the entity is continuing to move forward, e.g. via acquisitions.

Although Lend Lease's main board demonstrates a higher level of diversity and skill level than many comparable boards, it does not appear to include a diversity of age groups. About half of main board members appear to be Australian-based men. Most board members demonstrate experience in building, construction, finance or law. Two board members stand out as being from outside traditional board recruitment paths. Both are women, with one from academia and one, who has recently resigned, with a strategic consulting background.

The five international board members, from a total board of twelve, include representatives from: the United States (Jill Ker Conway, Diane Grady, Albert Aiello), Singapore (Yong Hau Chua), and Switzerland (Rudi Mueller). This diversity of viewpoints minimises, but does not necessarily eliminate, insularity of decision-making, or "groupthink". Even more diversity might be an advantage for a company based around proactive, innovative strategies.

The inherent danger in a completely global focus is a perceived disconnection from the primacy of the home base. Lend Lease's former CEO has been criticised for "arrogance…. detachment from the Australian market." (Condon, 2001). If this perception is widespread, communication strategies need to be clearly articulated.

In terms of integrating the parent organization culture into the international operations, one specific example is given by Leanne Fry, a group executive. She describes (Condon, 2001) one element of the behavioural dimension of the global knowledge management system as the "three phone call " principle (where a Lend Leaser should only have to make three phone calls to get to the right person). This is perceived as an integrating principle throughout international operations.

A "transformative company" implies a highly sophisticated ability to manage change on an ongoing basis. Within a knowledge worker, professional services firm, high levels of internal and external consultation with key stakeholders would typically assist this.

Within Lend Lease, the ability to transform ailing businesses appears to be relatively sound, in spite of the relatively unstable macro economic climate particularly in evidence in the United States, which affects a considerable portion of Lend Lease's business.

Lend Lease has cultivated the ability to transform ailing businesses. The ability to transform its own strategy, given current and future tougher economic times, is less clear. Clearly, this has happened in the past, but he company leadership has changed since then. It is unclear whether this capability is firmly embedded in the organization.

Although the Chairman noted in her recent speech at the AGM that these were "bracing times" for real estate, both in Australia and in the US, the changed strategy to accommodate changing economic times is less clear. Although Bovis Lend Lease was quick to be the key part of the lucrative clean up of the debris of the World Trade Centre, a powerful indication of their ability to engage key stakeholders, an ongoing strategy to cope with international uncertainty in their industry has not yet been fully communicated. Communication is a critical factor in any change program, and Lend Lease have been criticised for not clearly communicating their new, post - MLC, business model to the market (Condon).

Lend Lease's strategy is also defined as the creation of long term value for shareholders, including ways which are not immediately reflected in accounting profits.

Long-term value for shareholders may include, in the near future, a break up of the company into divisions. This may still create separate viable entities. Long-term value for shareholders can be assisted by appropriately sustainable human resource management practices. Specific practices which academic researchers have found to be relevant to high performing companies over the long term are described in more detail later in this report. In general terms, long term value for shareholders requires that Lend Lease adopt the principles of the sustainable organization, (Crosbie & Knight, 1995) which insists that organizations balance the need for profit with the need for environmental balance.

In terms of sustainable human resource management systems in particular, the concept of sustaining ongoing levels of creativity and commitment to the organization through balanced work/life initiatives (or family friendly work policies), which are valued at all levels of the organization, is also not clearly communicated to the business community, even as part of Lend Lease's recruitment strategy. Some efforts to create healthy lifestyles and to undergo personal interest training are made, according to public information. However, systemic approaches to balancing work and life, for instance, through senior level, permanent part-time work for both men and women, is not clearly communicated or possibly does not exist. Public documents are not clear on this. It is common knowledge that Lend Lease has created a high pressure, goal-oriented culture, typical of project management operators.

This is a strength in terms of meeting deadlines, and is a potential weakness if taken to extremes.

Lend Lease has created the ACTU-Lend Lease Foundation for community work, self-funded through earnings on shares held in trust for employees. The aim of the Foundation is to provide real jobs for real people, especially as apprentices in the building industry, especially in some of Australia's disadvantaged communities. The program has been extended to Indonesia and the UK. Critics of the Foundation may suggest that the noble purpose of increasing jobs in disadvantaged communities might also be served through more open recruitment systems within the main businesses of Lend Lease. The Foundation appears to be one activity where long- term value is being created for the community, but not necessarily for shareholders, and these activities are not immediately reflected in accounting profits. The activities of the Foundation have been curtailed since the divestment of MLC and the acquisition of Bovis.

Overall, long term value creation is an appropriate strategy within this industry, in which the underlying asset itself, coupled with the highly skilled and professional workers, can generate higher long-term earnings. A challenge for the Board will be to communicate the appropriate timing of the profitability of activities which will not be immediately reflected in accounting profits.

Even though a human capital analysis of Lend Lease would appear to place it within a 'highly sustainable' classification, the authors of this paper would suggest that there are issues which are as yet unclear in terms of the publicly available information. These include the notion that international operations need to be systematically integrated into the culture of the parent organization. Specifically, Lend Lease Board and management need to ensure that it is able to transmit its culture to the much larger Bovis.

The current lack of leadership at the MD level, while not halting the momentum of the organization, is likely to have an impact on human capital in all its dimensions in the medium term. The Board need to ensure that the momentum can continue at an appropriate pace while the search for the new MD continues. At the same time, it is likely that observers will be interested in seeing evidence of succession plans at the MD level, to mitigate against a perceived lack of executive leadership for an extended period.

Given the success of the Bluewater project in the UK, the Board and management need to ensure that the knowledge management system is able to capture the learning from this project and share it throughout the global organization, in order for the benefits to be fully realised.

It is not yet clear from the publicly available data as to whether, given that the integration of global decision making in the top team, now reconstituted, and of the cultures of the various companies are critical for ongoing success, will the Board decide on one set of HR strategies worldwide, or differentiated. Observers of Lend Lease's approach to human capital will be interested in the articulation of the underlying principles for deciding what strategies to remain national and what ones to be global. For example, in the US and the UK, it is not clear as to the desired level of unionism in blue and white-collar workers. This will have an impact on workplace bargaining and wage rise issues as well as the global cultural implications. On a more specific level, it is not clear which policies of work/life balance are available, and are taken up by strategic core workers, as well as support staff, for both the national and the international employees. This is just one example of the cross cultural challenges, in the human capital arena, which the organization will be challenged by as it becomes increasingly global.

4. LEND LEASE - UNPACKING THE TEMPLATE OF SUSTAINABLE HUMAN RESOURCE PRACTICES.

Using publicly available data, the current practices at Lend Lease Corporation are analysed against the template of Sustainable Human Resource Practices (refer Table 2).

Job Characteristics

Competencies

The template examines the Job Characteristics as the first sustainable human resource practice. Job characteristics can be divided into a number of key competency areas. Knowledge, Skills and Creativity competencies refer to the knowledge skills and abilities characterised by the job or work. Knowledge has been used as a basis for distinguishing professional work from more routine white-collar work and skilled from semi skilled manual labour (Frenkel et al, 1999). Professional work can require abstract complex and scientific knowledge or knowledge that is base on principles such as mastery and application of complex bodies of empirical information (Frenkel et al, 1999; Royal 2000).

Lend Lease: Publicly available data suggests that Lend Lease's individual knowledge competencies are high order in both a contextual and theoretical sense. Technological knowledge competencies (Murray, 1999) are very evident. The organisation encourages and provides employees with the means by which they are able to continually update and develop their knowledge of the technical process requirements of the various jobs throughout the organisation. As part of its knowledge creation competencies (Murray, 1999) Lend Lease creates procedures that allow key forms of knowledge to be captured, stored and shared throughout the organisation, through the means of a qualitative auditing system, which evolves into a dynamic learning system (Beckett & Murray, 2000). It has recently made specific effort to create knowledge manager positions and to establish a global knowledge-base system, with global network capabilities. The global knowledge network will be an intranet designed to link its information and skills worldwide. The system, called iKnow, has already been piloted in Europe in 2000 and is about to be used in Lend Lease's US operations. Lend Lease stands out quite significantly in this area. The knowledge management tool will provide storage, identification and access to knowledge and expertise for all parts of the company.

In terms of the Skills competency, it can be said that occupations and jobs vary depending on the tasks undertaken. An employee's level of skill will vary in any particular occupation depending on the their formal training, on-the-job learning experience and emotional intelligence.

Lend Lease: On Murray's Construction competencies model (Murray, 2000) the evidence suggests that Lend Lease as an organisation creates truly innovative ways of performing work. The organisation is the industry leader in developing an employee progression matrix that recognises key operational skills. It uses established competency tests which allow employees to progress from a basic level of competency to a more advanced one. Lend Lease creates timely and relevant administrative procedures to improve efficiency to assist all operations rather than hinder them. The organisation also creates and uses financial systems that are beneficial and easily understood by people. Operational and administrative competencies form a key part of Lend Lease's organising process. These competencies are not standard throughout its businesses but form a unique part of how work is organised, integrated and scheduled.

The Creativity- competency is often defined as ones ability to solve original problems and in so doing generate original, relevant, and complete solution (Milgram, 2000; Frenkel et al, 1999). It can be thought of as a continuum ranging from high to low.

Lend Lease: Publicly available data sources indicates that Lend Lease is on the high end of the continuum. Lend Lease encourages and espouses creativity and has adopted a slogan around its intellectual capital project of "Think more create more and see more" (Caddie, Guthrie and Petty, 2001). New ideas are regularly encouraged at every level of the organisation. This has been supplemented with more specific programs and incentives tailored to individuals. Lend Lease has heavily invested in the area of creativity and individual competence over recent years and that is reflected in its human resource strategy and the measurement, reward and reporting system. Other important innovations include the Lend Lease Foundation for employees, as noted above, and the establishment of a virtual university and other such projects (BRW, Feb 23, 2001).

Management Control

The extent to which employee participation and employee discretion is evident is based on whether the relationship between employer/manager is considered active consent or simply accommodation to superior power (Frenkel et al, 1999; Royal 2000). Management control can be thought of as a continuum ranging from high to low.

Lend Lease: The evidence suggests that Lend Lease has high levels of management control over key factors as well as high levels of employee discretion and employee control. Management create a culture for planning so that everyone feels part of the decision-making process. Employees have the opportunity to design their work, and receive feedback as individuals on a regular basis. There is also the opportunity to improve their skills (Murray, 2000).

Co-Worker Relations/Work Organisation/Teamwork/Communication

Co-worker relations and the extent to which there is high/low levels of co-worker interdependency and communication are considered an important dimension of the nature of work. Co-worker relation interdependency and communication have a strong impact on the way work is organised, i.e. whether it is individualised work in a formalised pyramidal hierarchy or team-based within a flatter hierarchy (Frenkel et al, 1999; Long, 2000; Royal, 2000).

Lend Lease: Publicly available information indicates that there are high levels of communication and co-worker interdependency at Lend Lease. The scheduling and planning of work is used as a constant form of communication with both teams and individuals who meet often on a daily, weekly, and/or fortnightly basis, to discuss solutions as to how work is organised, integrated and improved. The meetings are a communication mechanism for discussing problems and finding practical solutions whilst also providing a means for generating new ideas. Operational and administrative competencies are underpinned by audit programs for communicating various job roles as well as the part an individual plays in the scope of the work overall (Murray, 2000).

Power/Decision Making/ Leadership

Power and the ability to make decisions is closely linked to the levels of management control and communication aspects discussed above. In an active consent relationship employees enjoy high levels of both participation and discretion which are intrinsic rewards from the work itself. Internalization of company goals is seen to be an important motivating factor. There are high levels of vertical and horizontal communication and employee power is seen to be significant. In the active consent relationship, decision-making and leadership is participative and employee-oriented. Management takes on a facilitative role. However, the accommodation to a superior power relationship is closely associated with supervision rules, punishments and extrinsic rewards as a central means for motivating employees. Communication is formal and vertical. Information in this relationship is restricted to a select group (senior management). There is limited amount of power, since the leadership engages in autocratic decision-making and work strategies are task-oriented, requiring a controlling supervisory role (Royal, 2000; Long, 2000).

Lend Lease: Lend Lease sits in between the active consent employee/ employer/manager relationship and the accommodation to a superior power paradigm. Publicly available data suggests that the decision-making and leadership are autocratic with consultation. Although employee-oriented, the supervisory role tends to be of a controlling nature. Lend Lease actively encourages employee power, participation and decision-making, particularly in building shared visions. This is done through the dissemination of information and by communication from the manager/supervisor to encourage employees, subcontractors and stakeholders to see the bigger picture. The instigation of weekly team meetings, to discuss the vision as well as operational, administrative and financial matters as key outcomes may be a result of a specific leadership style.

This style rests on clearly defined leadership competencies that stress the ability of managers to influence and motivate workers and to create a culture of planning, organising and scheduling. This distinctive leadership is highlighted by the processes for managing other key organisational outcomes which are deliberately planned, for instance the directive which stresses the constant participation by employees in the review of such areas as standard procedures, including general operational and administrative. Directive management is traditional, and appropriate, in the construction industry. Lives depend on accurate and timely decisions.

Overall, the leadership model is described by researchers as being characterised by: empowerment; delegation; autonomy, responsibility and authority; feedback, coaching and mentoring; strategic interdependencies – inside and outside and collaboration. The researchers note that this model is focused on structural issues, supporting mechanisms and external networking (Hubbard, 2002:174).

This model appears to have key elements of which assist the sustainability of the organization and is in line with international research conducted by Ashkanasy and Trevor-Roberts, and quoted in Hubbard (Hubbard, 2002:175), which derived types of values based leadership within Australia. They noted that values based leadership provides vision and inspires people if done tactfully, diplomatically, but in a decisive manner. Leadership must be unselfish and collaborative with friends and workmates – generous, compassionate, group-oriented eg egalitarian. The leader should be honest, sincere and modest while building a collaborative team. Leadership should not be individualistic or self-centred. Leadership should not be bureaucratic – formal and needing to follow routines or patterns.

Recruitment

Basis of and Criteria

Decisions about how an organisation structures its employment relations focuses on key issues relating to recruitment and selection, training and development, career opportunities and rewarding employees. More specifically, recruitment issues include the skills and knowledge required of relevant employees and features of the recruitment process. Organisations make strategic choices as to whether employees are hired from outside or inside the organization. They also decide the criteria used in the selection process. One strategic choice is where the basis of recruitment occurs at the bottom of the organisation. Juniors may be recruited externally at the base of the job ladder within an organisation and subsequent positions are filled internally according to the organisations' policies and practices. Selection criteria in this instance include: dependability, loyalty and commitment to the organisations goals. Organisations where the job characteristics refer to well-defined routine positions adopt this selection process.

A second strategic choice is for organizations to recruit externally at the base of the organisation but also have external recruiting at high levels. Organisations where the job characteristics infer occupational specialists usually adopt this process, where emphasis is on qualifications and experience. Positions requiring qualified and experienced employees are typically advertised internally and externally. A third strategic choice is to recruit externally for both junior entry positions and more experienced hires. In this instance, there are no differentiating levels. Selection criteria requirements rely heavily on experience and interpersonal skills. Organisations where the job characteristics are defined by the labour market requirements such as sales people, sub contractors adopt such a selection process.

Lend Lease: Publicly available information suggests that the recruitment and selection processes and practices adopted by Lend Lease appear to be similar to strategic choice two identified above. Recruitment occurs externally at the junior (graduate level) of the organisation but also externally at higher levels (experienced hires). In terms of selection criteria, Lend Lease firstly emphasis the importance of a degree in a relevant discipline particularly in accounting, marketing, project management or retail property management. Secondly, they place strong emphasis on recruiting at junior levels. Qualities that Lend Lease looks for are: the ability to develop and maintain customer relationships, leadership potential, innovative problem solving, openness to change and diversity and flexibility (Lend Lease Recruitment Document, 2001).

At the same time, the culture of performance is introduced very early in the experience of the new hire. One former executive described his orientation session in this way:

> *They told you that two-thirds of you wouldn't be there in a year's time. It was very tough, even brutal. It was based on performance, but it got the best people coming to the top. It was run internally by retired and semi-retired Lend Lease people who could bring real experiences to the program* (Hubbard, 2002:224).

The potential downside of this approach is the highly internally competitive culture it can engender. Policies and practices which genuinely create opportunities for teamwork need to be used as a counterbalance to this approach. In the case of Lend Lease, the weekly project meetings as well as the mentoring system create opportunities for more thoughtful collaboration, as well as intensive internal competition.

The overall approach to recruiting has been summarised by researchers as: hire the best, hire young, empower them, support them and reward them, to get high-quality, innovative solutions (Hubbard, 2002:216). This approach requires high levels of overt support mechanisms for every new hire. It appears, from publicly available data, that Lend Lease does provide support systems for its employees.

Training

Main Source and Nature of Training

Training and training decisions in an organisation relate to the predominant or main sources of training: either internal or external to the organization, and the nature of training itself. Organisations can provide in-house training where the nature of the training tends to be formal. Formal training focuses exclusively on ensuring immediate job proficiency. Those organisations that exhibit job characteristics necessary to occupy well-defined routine positions and where recruitment occurs at the bottom of the organisation (junior levels) adopt company-provided (internal) formal training. Other organisations rely on a combination of internal and external training where the nature of the internal training is on-the-job-training from colleagues and peers. The external training has been acquired from a tertiary or professional institution, providing a formal degree or diploma. Those organisations who classify employees' job characteristics as occupational specialists, where there is high order complex theoretical and conceptual knowledge required, and where recruitment takes place at the graduate entry level and at higher more experienced levels, and where the selection criteria place heavy emphasis on qualifications and experience adopt an internal/external training philosophy.

The nature of the internal training is on-the-job and plays an important role in underpinning external, formal, degree courses. Organisations that provide minimal training internally, and rely on external training through formal certification by a technical college or industry association, are found in those organisations who exhibit job characteristics where the occupations are defined by the market (contractors, insurance sales). Recruitment occurs externally for all levels as the market requires and experience and interpersonal skills are seen as important selection criteria. Any minimal internal training is focused on- the-job.

Lend Lease: The evidence suggests that Lend Lease adopts training strategies that encompass both internal and external modes and fits within the occupational specialists category (refer above). Lend Lease invests heavily in growing and developing highly skilled and deeply knowledgeable employees.

Lend Lease has worked with the ACTU for three decades and, as a result of this collaboration, 21,000 apprentices have been trained in varied aspects of the building and related trades. In association with the Dusseldorp Skills Forum, a Lend Lease initiative, Year 11 and 12 high school students can complete some studies in retail and commerce as part of their Higher School Certificate (Hubbard, 2002:221).

Acquiring a formal degree externally from a tertiary institution is an imperative to embark on a job with Lend Lease (Lend Lease recruitment document, 2001). Lend Lease has a commitment to lifelong learning, through innovation in learning. For example, Lend Lease is embarking on a number of projects including a virtual university. Lend Lease demonstrates how an organisation can integrate learning with normal business processes through internal mechanisms which aim to develop a range of learning competencies. Learning competencies are developed individually on a regular basis through individual training methods such as on–the–job training and, for example, by in-house skill card modules for groups of employees at various stages. Progression matrices have been designed by Lend Lease to encourage high-level learning.

The individual training begins with skill equipping and on-the- job learning but is supplemented by developing individual's integrative and interpretive skills. Teamwork and constant communication is important for developing the necessary skills sets (Beckett & Murray, BRW, 2001). Middle and senior management take responsibility to groom and shape new leaders.

High levels of trust and delegation by management to employees are a major part of Lend Lease's dynamic learning process. Complex learning competencies have also been integrated into normal business processes. Lend Lease helps to provide individuals with the ability to interpret changes both of an internal and external nature through the knowledge creation system that is shared throughout the organization (Beckett & Murray, BRW, 2001). The knowledge creation system helps individuals to develop and solve current and future problems in a participative environment. Internal training extends to strong communication with Lend Lease customers through various programs, which provides familiarisation about the Lend Lease learning system (Beckett & Murray, BRW, 2001).

A noteworthy feature of the Lend Lease approach to training is the willingness of the organization to subsidise employee-directed courses and training activities for personal as well as professional development. This is in line with the research by Hubbard (2002:222) which indicates that most of Australia's high performing companies offer similar benefits.

Career Opportunities

Internal/External and Employment Security

By establishing career ladders internally, organisations can offer employees opportunities for promotion and job security. Internal career ladders occur in those organisations that have well-defined routine positions and where recruitment occurs at entry level (i.e. at the bottom) and where training is internal, through company-provided formal training programs. Career opportunities in other organisations are available internally (although the ladder is short/flat 3 to 4 rungs). As a result, career ladders are also sought externally. In this instance, inter-firm mobility across the occupation or industry is a means for accessing career opportunities. The dual career opportunities occur in organisations which have occupational specialists, where recruitment occurs at the entry level and at higher more experienced levels and where training is essentially external through degree courses supplemented by internal on-the-job learning. Employment security is variable.

In some organisations there is no establishment of career ladders and career opportunities are predominantly external and employment security depends on the external market. Such organisations exhibit occupations that are defined by labour market requirements such as sales and contractors. Recruitment occurs externally for most positions, and training is external through formal certification by a technical college or industry association and is supplemented by some internal on-the-job learning.

Lend Lease: The publicly available data suggests that Lend Lease has "clear management guidelines in order to achieve consistency across all our businesses" (Lend Lease Categorised People content document 2001). Career path strategies at Lend Lease seek to encourage "inspirational leadership, strategic thinking, commercial acumen, strong skills, flexibility and balance in all aspects of conduct" (Lend Lease Categorised People content document 2001). There are dual career opportunities at Lend Lease.

There is strong evidence of the potential to climb ladders internally. Progression matrices invented by Lend Lease are a mechanism for encouraging high-level learning and a means for developing leaders (Beckett and Murray, BRW, 2001). Lend Lease has a commitment to providing meaningful career opportunities. The CEO has stated that whilst "some people spend a lifetime searching for a career that is stimulating and rewarding, by starting with Lend Lease, you'll be on the right track" (Lend Lease website, Recruiting section, 2002). Publicly available data supports Lend Lease's corporate internal career strategy.

A number of middle/senior executives from Lend Lease have been with the organisation for more than 15 years. Lend Lease has a history of retaining staff with Morschel and Hornery (both of whom have now retired from the organization) having worked together at Lend Lease for a quarter of a century (Santora & Sorras, 1998). Long term internal career opportunities appear to be evident at Bovis Lend Lease, Lend Lease Real Estate Investments and other associated businesses, and employment security is high. In terms of the dual career opportunity strategy, there is also evidence of experienced people joining Lend Lease from outside (externally) at higher points on the career ladder. Employment security is not as variable as expected due to the commitment of the organisation to foster innovation, self-development and a people oriented culture (Stace & Dunphy, 2001, Lend Lease website 2002).

Reward Systems

Fixed/Variable Pay Criteria For Pay Rises

Organisational reward systems are based on features relating to the payment system, but particularly the extent to which pay is fixed or variable and based on performance or other criteria. An organisation's reward system can have a high fixed component, to reward dependability, where the criteria for pay rises is based on seniority and experience. Organisations which adopt this reward system are those with employees who are in well defined routine positions, and who have been recruited at the bottom of the ladder (junior entry level) and where the training is internal/company provided. Career ladders are also internal, providing employees with the means to become senior and experienced in order to qualify for further pay rises.

Organisations where the reward system has a high variable element, reflecting performance, and where criteria for pay rises has a high performance related element, are those organisations whose employees are occupation specialists, and where recruitment occurs at both entry and at higher, more experienced levels, and where training is predominantly external, coupled with on-the -job training. Dual career ladders exist, (internal and external), and qualifications and experience and the complex occupational specialisation require a high variable and performance-related element to avoid specialists exiting the organisation as a result of the flat-tiered career ladders. Organisations where the reward system has a moderately high variable element tied to an individual element, either fixed time related or tied to individual results or contracts, the criteria for pay rises are determined externally by the labour market. These criteria are based on seniority rights according to duration of time in the market. Organisations which adopt this reward system are those with employees whose occupations are defined by labour market requirements (e.g. sales, contractors) and who are recruited externally for most positions. Training is external, and there are no career ladders and no employment security.

Lend Lease: Publicly available information suggests that the Lend Lease reward system is essentially based on a fixed and variable component. The total reward and remuneration structure is designed to recognise the "interaction between accountability and responsibility" and to encourage individuals within the organisation to address both. Salaries are competitive and the base pay or fixed components are determined by market conditions reflecting each individual's skills and capabilities. The minimum performance objectives for bonus payments are defined as the successful achievement of, predetermined initiatives and goals, customer/ service focus, financial targets (delivery of profits, cost management etc), and people targets: recruitment, mentoring, succession planning and communication of core values (Lend Lease People Content Overview document, 2001). Lend Lease offers a wide range of employee benefits, including; profit share, an employee acquisition plan and a non-contributory superannuation scheme.

The approach to employee share ownership apparently comes from the principle of 'community of interest' noted above. This principle attempts to balance the needs of its people, clients, shareholders and the broader community. Out of this principle, employees are part of the share ownership plan, so that by 1981, employees were the largest shareholding group, with 17% of total shares. Profit sharing has been operational since 1973, and raised to 5% of pretax profit since 1981. All employees are eligible for the shares available as part of the profit share scheme. The company pays for an employee health plan which covers families, and has been operational since 1980. Subcontractors are covered by disability insurance since 1982 (Hubbard, 2002:108). Benefits are now available within a cafeteria style system, in which the individual can customise their benefits package to suit their own needs.

Data clearly states that the Lend Lease reward system carefully measures and monitors achievement. Bonus or variable payments are tied directly to success rates. For senior executives, a minimum of 60% of goals are to be achieved before any bonus payments are made. The more senior an employee one is, the more these payments are tied to broader corporate business and cultural objectives (Lend Lease website, 2002). This was recently evident when the former CEO had his package cut from "$4.8 million to $2.1 million last year following Lend Lease's poor performance" (BRW, 2001).

Non-financial rewards and recognition schemes can often be of value to employees. Lend Lease offers a Chairman's Award, which is a high profile award. Researchers (Hubbard, 2002:233) have noted that this award, like similar ones within Macquarie Bank and Qantas, is peer-based and is regarded extremely highly by employees.

Professional Identity/Culture/Networks

Professional Identity, Culture and Networks are strongly interconnected

Organisations differ in terms of the level of professional identity of their employees, the prevailing culture, and the networks that are used. Organisations where employees identify more with the organisation rather than the profession are those in which there is a strong dominant culture and where the networks are top down. Organisations where the employees identify more with the profession rather than with the organisation are those in which there is collegial culture that promotes shared values and where networks are vertical (top down). Lateral organisations where employees identify more with the profession than with the organisation are those where the culture is driven by the business culture and the nature of the profession. Networks are vertical in this instance (Royal, 2000).

Lend Lease: Publicly available data and published sources indicate that Lend Lease is more closely matched with the first paradigm. The organisation has a strong and distinctive culture with a history that goes back to the organisation's founder, although other elements have also evolved over time. The culture is "directive, results orientated and pragmatic, focusing on providing high value to customers and stakeholders" (Stace & Dunphy, 2001). The networks are predominantly top down. Lend Lease has the ability to change strategy quickly while communicating openly with employees about changing business directions. The core values shape the way work is conducted at Lend Lease. Those values are centred on: integrity, innovation and continual enhancement of current systems processes and practices. Such a distinctive culture implies that employees identify with the organisation rather any of the professional groups that make up Lend Lease's workforce.

CONCLUSION

This paper applies the lens of Human Capital Analysis, using publicly available data, to one organization listed on the Australian Stock Exchange. In this specific case, after a thorough analysis of the elements of human capital, using the Drivers of Human Capital Model and the Sustainable Human Resource Practices template, it appears that Lend Lease exhibits signs of a highly sustainable organization. As noted above, in recent months, this sustainability has been tested with the resignation of the Managing Director, and the subsequent lack of senior executive leadership. In spite of this, the organization apparently has adequate HR systems and practices to continue the momentum of growth.

This type of analysis demonstrates the richness and complexity of data which is obtainable through publicly available sources. Currently, fund managers or securities analysts in fundamental research for investment purposes do not systematically use this type of data. This is so even though Bassi (2001) have verified the importance of non-financial data qualitative human capital data used in decision making by US fund managers. In addition, research by Watson Wyatt (2002) is conclusive on superior human capital practices acting as a lead indicator of above market returns to shareholders.

It is the view of the authors of this paper that the investment community would benefit from accessing Human Capital Analysis as a complementary research product to traditional financial analysis, for the purpose of increasing the transparency of decision making for investment purposes.

While further research is needed into the details of human capital as a lead indicator of future financial performance, the process outlined in this paper is a significant improvement on current approaches to analysing non-financial data for investment purposes.

In the post -corporate collapse context a clearer understanding of the intangible drivers of a firm's value, including its human capital, becomes increasingly important. Inevitably there is potentially a great cost to the investment community if Human Capital Analysis is ignored.

REFERENCE LIST

Ashkensay, N. & Trevor-Roberts, E., 2001, 'Leading in Australia: The Egalitarian Visionary Suits our Style', Mt Eliza Business Review, Summer-Autumn, pp. 33-39. (quoted in Hubbard, 2002).

Australian Financial Review, February 2, 2002. 'Growth in SRI Funds'.p.21

Australian Securities and Investment Commission 2000/2001, Annual Report 2000/2001, ASIC: 1-108.

Bassi, L.J., Lev, B., Low, J., McMurrer, D.P., & Sissfield, G.A.G. (2001) 'Measuring Corporate Investments in Human Capital,' in *The New Relationship: Human Capital in the American Corporation*, M. M. Blair & T. A. Kochan (eds.), Brookings Institute, New York, pp. 334-382.

Beckett, R. & Murray, P. (2000) 'Learning by Auditing: A Knowledge Creating Approach', The TQM Magazine. Vol 12 No 2, pp 125-136.

Bernstein, R. (2001) *Navigate the Noise: Investing in the New Age of Media and Hype,* Wiley, New York.

Caddy, I., Guthrie, J. & Petty. R. (2001) "Managing Orphan Knowledge: Current Australasian Best Practice", Journal of Intellectual Capital.

Carlopio, J. & O'Donnell, L. (1994) 'Interpersonal Communication,' in *Effective Management*, R. Collins, (ed.), CCH, Sydney.

Collins, J. C. & Porras, J. I. (1994) *Built to Last: Successful Habits of Visionary Companies* Harper Collins, New York.

Collins, J. (2001) *Good to Great: Why some companies make the leap, and others don't* Harper Business, New York.

Collins, L. (2002) 'Stock brokers under pressure', *Australian Financial Review*, May 23rd (2002): 21, Sydney.

Condon, Turi, *Lend Lease spending impresses no one*, BRW, August 15, 2002: 34.

Condon, Turi, *The risks for Lend Lease*, BRW March 2, 2001: 55.

Condon, Turi, *Too Late, Lend Lease,* BRW February 23rd, 2001.

Crosbie & Knight (1995) Strategy for Sustainable Business: Environmental Opportunity and Strategic Choice. McGraw Hill, London.

Dunphy, D. (ed.) (2000) *Sustainability: The Corporate Challenge of the 21st Century* Allen and Unwin, Sydney.

Dunphy, D. & Griffiths, A. (1998) *The Sustainable Corporation: Organisation Renewal in Australia* Allen and Unwin, St Leonards.

Fernandez, F. A. (2001) 'The Role and Responsibilities of Securities Analysts.' *Securities Industry Association Research Reports* (August): 3-10.

Fox, C., *Australian Financial Review*, October 22, 2002. 'The Challenge of Measuring Up', p.59

Frenkel, S. J., Korczynski, M., Shire, K.A. & Tam, M. (1999) 'On The Front Line, Organization of Work in The Information Economy', ILR Press, Cornell University Press, London.

Gallery, G., N. Gallery & Hsu, C-M. (2002) 'The Associations Between Management and Analysts' Earnings Forecasts in the Australian Continuous Disclosure Environment', AANZ Conference, Cairns, (2002): 10.

Gasparino, C. (2001) 'Deals and Deal Makers: Outlook for Analysts: Skepticism and Blame' *Wall Street Journal* June 13, c1. New York.

Grady, D. (1999) 'No More Board Games!', *The McKinsey Quarterly Review,* Summer (1999): 17.

Graham, B., Dodd, D.L. & Tatham, S.C. (1962) *Security Analysis: Principles and Techniques*, McGraw Hill, New York.

Harris, L. C. & Ogbonna, E. (2001) ‘Strategic human resource management, market orientation and organisational performance’, *Journal of Business Research*, vol. 51, pp. 157-166.

Hughes, A., *How David helped downsize the Lend Lease goliath*, Sydney Morning Herald, SMH 25-6/5/02:45

Hubbard, G., Samuel, D., Heap, S. & Cocks, G., *The First XI: Winning Organisations in Australia*, Wrightbooks, Milton, Qld., 2002.

Kalleberg, A.L., Knoke, D., Marsden, P.V. & Spaeth, J.L. (1996) *Organizations in America: Analyzing their Structures and Human Resource Practices*, Sage Publications, Inc., Thousand Oaks, CA.

Kotter, J. & Heskett, J. (1992) *Corporate Culture and Performance* Free Press Macmillam, New York.

Lend Lease Website (2002), www.lendlease.com.au

Miles, M. (1979) ‘Qualitative Data as an Attractive Nuisance: The Problem of Analysis’, Administrative Science Quarterly (24:590 – 601).

Murray, P. (1999) unpublished doctoral dissertation, University of Western Sydney. Macarthur.

Northcott, P.H. (1996), ‘Normative Ethical Theories: An Overview’, Business Ethics in Australia and New Zealand, ed. K. Woldring, Nelson, Melbourne.

O’Donnell, L. (1994) ‘Managing the Network Organisation’. *Management Matters*, CCH, Sydney.

O’Reilly, C.A. & Pfeffer, J. (2000) *Hidden Value: How Great Companies Achieve Extraordinary Results with Ordinary People* Harvard Business School Press, Boston.

Royal, C. (2000) *Internal Labour Markets and Human Resource Management in an International Investment Banking Institution: Deal Makers in the Global Economy*, PhD dissertation, University of NSW.

Royal, C. (2001) ‘Recruitment, Selection and Internal Labour Markets - Evidence from Three Divisions of an International Investment Bank’, *Working Paper Series: School of Industrial Relations and Organisational Behaviour, University of New South Wales*, 137.

Royal, C. & Althauser, R. (2002) ‘Working in the Turbulence of Mergers and Acquisitions: The Shape of Careers and Labour Markets in Three Divisions of an International Investment Bank’, *Working Paper Series: School of Industrial Relations and Organisational Behaviour, University of New South Wales*, 143.

Royal, C. & O’Donnell, L. (2002) ‘The Human Factor: Taking a Less Subjective Approach to Investment Decisions’, Banking and Financial Services Journal, Vol 118, No 6.

Santora, J.V. & Sarros, J.C. (1998), ‘Dismissal of Australian CEOs’, Career Development International, Vol 3 No 1 (1998) 26-30.

Schuster, F.E. (1986) *The Schuster Report: The Proven Connection Between People and Profit*, Wiley, New York.

Stace, D. & Dunphy, D. (2001) *Beyond the Boundaries: leading and recreating successful enterprises* McGraw Hill, Sydney.

Trevelyan, R. & O’Donnell, L. (2001) ‘Systems for Sustaining Change,’ in *Systems for Change - Course Material for Executive MBA Program*, Rose Trevelyan (ed.), AGSM, University of NSW, Sydney.

Turner, D. & Crawford, M. (1998) *Change Power: Capabilities that drive corporate renewal* Business and Professional Publishing, Sydney.

Watson Wyatt Worldwide Research (2002) *Human Capital Index: Linking Human Capital and Shareholder Value*, Watson Wyatt Worldwide Research, Washington, D.C.