

**A HUMAN CAPITAL FRAMEWORK FOR INCLUSION IN COMPANY  
ANNUAL REPORTS**

**A South African Perspective**

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for the degree PhD: Organisational Behaviour

in the Faculty of Economic and Business Sciences,

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## DECLARATION

I hereby declare that “A HUMAN CAPITAL FRAMEWORK FOR INCLUSION IN COMPANY ANNUAL REPORTS - A South African Perspective” is my own work and that all the sources used by me and referred to in this regard has been duly acknowledged and listed.

I also declare that the content of this thesis has not been, nor will be, handed in for any other qualification at any other tertiary institution.

The language in this dissertation was edited by Melody Edwards.

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Reuphillan Kasselmann

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April 2006\_

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Thank you.

**To God all the glory for blessing me with the talent to add value in this  
and in so many other ways.**

## ABSTRACT

A company's ability to support its business strategy with its Human Capital is an important indication of the company's future business performance. No standard or framework to enable the inclusion of Human Capital information in company reporting to demonstrate the effect on performance currently exists.

Traditional HR metrics fail to report on the level of performance, knowledgebase or value of Human Capital, making it virtually impossible for stakeholders or valuers of companies to take this most important asset into account in valuing the company against its competitors.

This exploratory study has been commissioned to add new theory which would span further research with the objective of improving the reporting systems and/or methodologies to value Human Capital for South African industry.

The study poses the following questions:

1. What insight should investors and other external stakeholders have into the Human Capital employed by a specific organisation?
2. How best to ensure that Human Capital is reported and the information is trusted by investors and other stakeholders as seen as relevant, reliable and consistent, adding value to shareholders?
3. Which Human Resource Management components can form a basis for comparative external reporting on Human Capital (if any)?

The study created an innovative framework for reporting which, is viewed as an improved, practical and theoretical approach and method relating to Human Capital and value creation for Human Assets.

Triangulation was used to include a number of different metrics used by HR, linked to a framework that allows those who uses it to link quantitative calculations to Human Capital dimensions. Further

testing may be required due to the limited insight and knowledge of current practitioners which may have skewed some of the results.

This framework also links to a number of business questions and metrics which in turn, link to broader HR strategic themes and recommendations for reporting as part of company annual reports and which Human Capital aspects should be included as standard in such a report.

The study provides Human Resource practitioners with the ability to counter the one-sidedness of viewing people as purely costs, demonstrating the value of Human Assets in quantitative terms.

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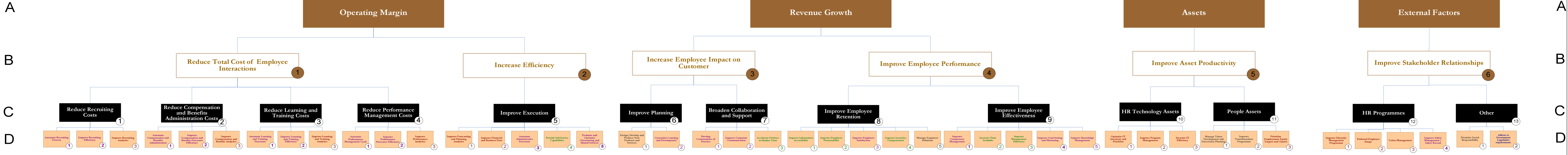
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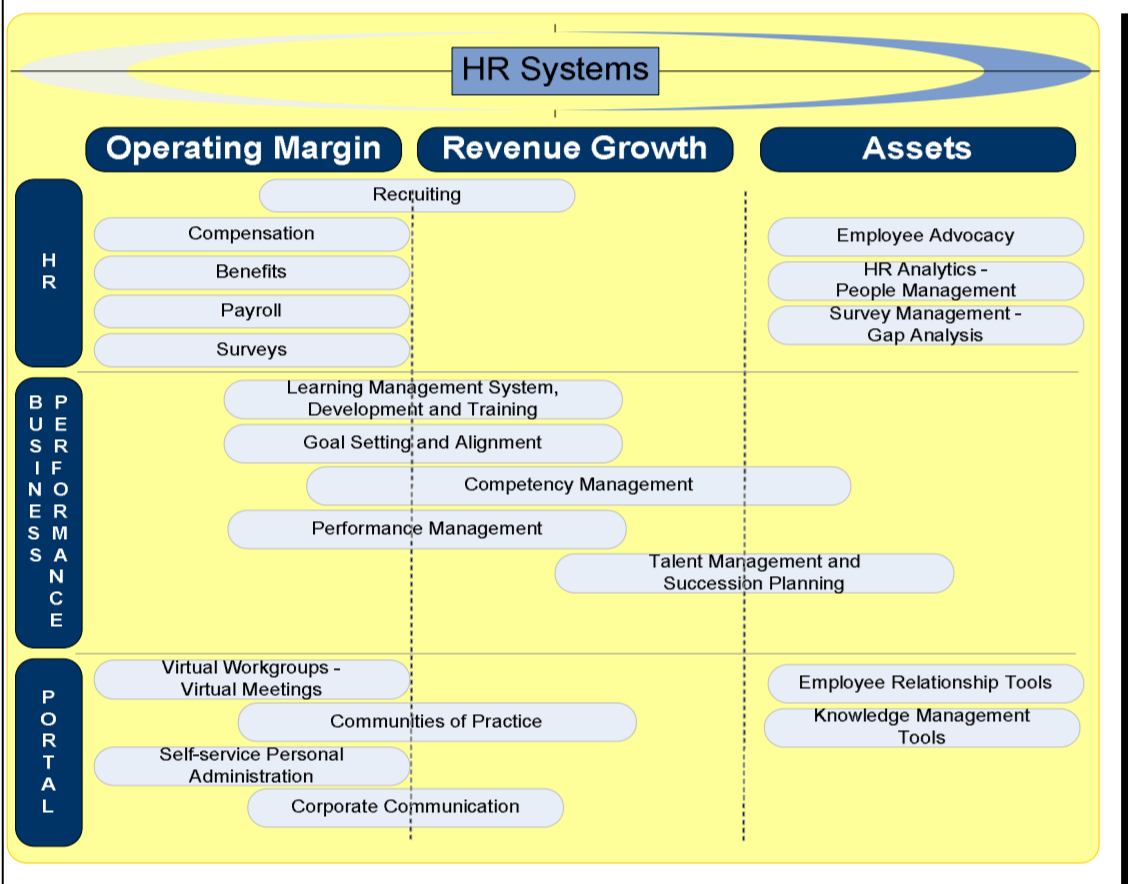


Human Capital Reporting Framework

Increase Shareholder Value



HR Efficiency Themes  
Improve Employee Productivity  
Develop a Continuous Performance Culture  
Strengthen Knowledge Sharing and Learning  
Elevate People Management to a Strategic Level  
Increase Value to Customers through Employees



HR Efficiency Themes  
Improve Employee Productivity  
Develop a Continuous Performance Culture  
Strengthen Knowledge Sharing and Learning  
Elevate People Management to a Strategic Level  
Increase Value to Customers through Employees

**Operating Margin**  
This analysis tracks and understands the various costs that contribute to the total cost of employee interactions. It evaluates the length of service of your workforce, the distribution of employees by recording agency throughout the organization in terms of length of tenure/service, and the distribution of employees throughout the organization in terms of length of tenure/service. It also evaluates the quality of your workforce, the distribution of employees by recording agency throughout the organization in terms of length of tenure/service, and the distribution of employees throughout the organization in terms of length of tenure/service. It also evaluates the quality of your workforce, the distribution of employees by recording agency throughout the organization in terms of length of tenure/service, and the distribution of employees throughout the organization in terms of length of tenure/service.

**Revenue Growth**  
Monitor the level of job satisfaction experienced by your workforce and compare period on period - comparing the satisfaction rating improved since last assessment. This information may be used to identify undervalued employees and plan future training needs. This information may be used to identify undervalued employees and plan future training needs. This information may be used to identify undervalued employees and plan future training needs.

**Assets**  
This analysis highlights the processes that are most successful in increasing the value to employees for a particular job role. This information may be used to identify undervalued employees and plan future training needs. This information may be used to identify undervalued employees and plan future training needs. This information may be used to identify undervalued employees and plan future training needs.

**External**  
This analysis tracks and understands the various costs that contribute to the total cost of employee interactions. It evaluates the length of service of your workforce, the distribution of employees by recording agency throughout the organization in terms of length of tenure/service, and the distribution of employees throughout the organization in terms of length of tenure/service.

**HR Metrics**

Metric	Description	Formula
Recruitment Costs (COSTS)	Recruitment costs per hire	Total Recruitment Costs / Number of Hires
Separation Costs (COSTS)	Separation costs per employee	Total Separation Costs / Number of Separations
Employee Lifecycle (COSTS)	Employee lifecycle costs per employee	Total Employee Lifecycle Costs / Number of Employees
Headcount Summary (COSTS)	Headcount summary costs per employee	Total Headcount Summary Costs / Number of Employees
Training Summary (COSTS)	Training summary costs per employee	Total Training Summary Costs / Number of Employees
Recruitment Summary (COSTS)	Recruitment summary costs per employee	Total Recruitment Summary Costs / Number of Employees
Satisfaction Survey (COSTS)	Satisfaction survey costs per employee	Total Satisfaction Survey Costs / Number of Employees
Tenure Distribution (COSTS)	Tenure distribution costs per employee	Total Tenure Distribution Costs / Number of Employees
Length of Service Distribution (COSTS)	Length of service distribution costs per employee	Total Length of Service Distribution Costs / Number of Employees
Benefit Optimisation (COSTS)	Benefit optimisation costs per employee	Total Benefit Optimisation Costs / Number of Employees
Quality of Hires (COSTS)	Quality of hires costs per employee	Total Quality of Hires Costs / Number of Employees
Skills Gap (COSTS)	Skills gap costs per employee	Total Skills Gap Costs / Number of Employees
Separation Analyses (COSTS)	Separation analyses costs per employee	Total Separation Analyses Costs / Number of Employees
Headcount Trend (COSTS)	Headcount trend costs per employee	Total Headcount Trend Costs / Number of Employees
Skill level by Employee (COSTS)	Skill level by employee costs per employee	Total Skill Level by Employee Costs / Number of Employees
Succession Planning (COSTS)	Succession planning costs per employee	Total Succession Planning Costs / Number of Employees
Compensation and Benefits (COSTS)	Compensation and benefits costs per employee	Total Compensation and Benefits Costs / Number of Employees
Development and Training (COSTS)	Development and training costs per employee	Total Development and Training Costs / Number of Employees
Employee Demographics (COSTS)	Employee demographics costs per employee	Total Employee Demographics Costs / Number of Employees
Professional Employer (COSTS)	Professional employer costs per employee	Total Professional Employer Costs / Number of Employees
Social Responsibility (COSTS)	Social responsibility costs per employee	Total Social Responsibility Costs / Number of Employees



## CHAPTER 1 - THE PROBLEM AND ITS CONTEXT

***Cliché: Our people are our greatest asset***

***Fact: People costs constitute up to 65% of company costs***

***Reality: Very little strategic reporting on people - Human Assets- in private or public sectors***

### 1.1 Introduction

Very few of the important aspects of an organisation in the 21<sup>st</sup> century can be measured objectively. Industry information around products, services, distribution channels and even strategies are widely available and no longer considered a competitive advantage, leaving the “fuzzy” items such as culture and people. Traditional HR metrics, however fail to report on the level of performance, knowledgebase or value of their Human Capital, making it virtually impossible for stakeholders or valuers of companies to take this most important asset - Human Resources - into account in valuing the company against its competitors. In today’s economy, an organisation’s success is the product the competence of the people within the organisation. It is this value added by the people of the organisation which should be visible and available to all stakeholders.

Peter Drucker (1993:8) wrote “The basic economic resource - ‘the means of production’ to use the economist’s term - is no longer capital, nor natural resources (the economist’s ‘land’), nor ‘labour.’ It is and will be knowledge”. He also stated in another publication a few years later “The most valuable asset of a 21<sup>st</sup> century institution, whether business or non-business, will be its knowledge workers and their productivity” (Drucker, 1999:135).

A company’s ability to support its business strategies with Human Capital is an important indication of the company’s future business performance. It cannot be denied that human issues and their effect on the organisation provide useful information for stakeholders; however, no standard or framework to enable the inclusion of this information in company reporting currently exists in South Africa, or even globally.

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Human Capital metrics as a construct not only embraces Human Capital performance-capacity factors that are immediately apparent to the short-term success of the organisation, but also the long-term strategic imperative issues critical to transcendental accomplishments of the enterprise (Gilley, Callahan & Bierema, 2003) The objective of company reports is “a method to communicate economic measurements and information about the performance of the organisation to the stakeholders of the organisation” (Le Clerc, Moynagh & Boisclair, 1996), yet this very important component - especially in today’s knowledge economy - is not included in such reports.

Most executives would agree with the statement that Human Resource Management has an impact on the company’s’ bottom line and that Human Resources are the most valuable resource a company has. Many will even admit that measuring and reporting Human Capital can lead to the improvement of competitiveness of the organisation and add to the bottom line; however, when asked how or what needs to be measured or reported on, even HR Executives seem to be unclear. A view by Dr Greg Wang of Performtech LLC, confirms that investment in Human Capital will occur at two levels: “People cannot be treated as assets because assets will depreciate over time. But the value of people will appreciate with accumulated experience and organisation development strategies. Employees are the organisation’s investors. Employees as investors are expecting an increased return from their investment. This is not only in the form of salary and benefits, but also in individual competency, development, and career growth” (Wang, 2002).

In their book, *The HR Scorecard*, (Becker, Huselid & Ulrich, 2001) states that, according to Lawrence R. Whitman, deputy CFO at GTE, “Once we are able to measure intangible assets more accurately, I think investors and finance professionals will begin to look at Human Capital metrics as another indicator of a company’s value” (Becker et al., 2001). Accounting systems used today were developed for financial and physical assets, and considered the main source of company’s value, thus access to money and equipment provides companies with the greatest competitive advantage whilst intangible assets are treated as expenses rather than investments, which in today’s economy shouts out at inaccuracy.

## **1.2 Need for research in this field**

There is increasing evidence from both consultants and academics that Human Capital practices are linked to competitiveness and performance, measured through shareholder value with a noticeable increase in international scientific research on this type of study (Becker et al., 2001; Fitz-end, 2000;



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Drucker, 1999; and Becker, 1994). This study has been commissioned as an attempt to add new theory which would span further research with the objective to improve the reporting systems and/or methodologies to value Human Capital for South African industry.

The study touches on the broader topic of intangible assets, however, it focuses on the most important asset in the company of the 21<sup>st</sup> century: Human Assets. The study provides a framework that allows for the quantification and extraction of the value of Human Assets in an organisation. It should initiate further research in this field as many of the intangible assets which have an effect on the bottom line of companies are not accurately being reported.

The focus of this study is thus to create an innovative framework for reporting which, as it's outcome, should be viewed as an attempt to establish an improved, practical and theoretical approach and method relating to Human Capital and value creation for Human Assets in organisations.

### **1.3 Problem Statement and Objectives**

Investors, partners and shareholders as well as the public require information regarding the long-term sustainability of a company's performance. Employees need to understand the company's sustainability to increase motivation and commitment to assist in developing their own careers. This requires that the value of Human Capital and the related value of Human Assets is reported accurately and fairly. More importantly, the information needs to be trusted to be relevant, reliable, consistent and complete.

The King II Report (2004) on Corporate Governance in South Africa recommends that management accounting should, as a matter of best management practice, reflect requirements of Human Capital development. This implies that companies should lay out, in publicly reported accounts, the principles, standards and goals adopted for the development of their Human Capital, making appropriate reference to the accounting policies adopted to support adherence to them. Furthermore, King II recognises that the development of Human Capital does not only serve the economic interests of the company, but also serves the requirements of the society within which the company operates.

The reporting of intangibles such as Human Capital is certainly no easy task. According to Huselid (1995), this is because of two major issues:

- 
1. No common framework that goes beyond historical measures to provide more detailed information on workforce quality and;
  2. Many companies lack the infrastructure and information that can give strong, relevant and audited information to stakeholders.

Reporting systems are limited in several ways (Walker, 1996), including:

- GAAP (Generally Accepted Accounting Principles ) rules;
- Measurements expressed in monetary values;
- Categories included in the COA (chart of accounts);
- Lack of predictive power;
- Rewarding of the wrong behaviour; and
- High levels of aggregation of information.

Since the introduction of the first internal reporting model for Intellectual Capital, a number of methodologies have been developed to help organisations assess and monitor their Human Capital as part of a broader evaluation of Intellectual Capital or on their own. Examples of the more well-known approaches include HR Scorecard, Skandia Navigator/IC index, EFQM Excellence Model, and the Economic Value Added/Saratoga Institute approaches.

A study by Deloitte & Touche Human Capital ROI (Brown, 2002) answers this question by measuring Human Capital practices and linking them to corporate financial performance. The results suggest that Human Capital practices may account for as much as 43% of the difference between a company's market-to-book value and that of its competitors'. The survey showed that HR Benchmarking & HR metrics (used by 50% of respondents) and Balanced Scorecard methodologies (used by 32% of respondents) are the two main approaches used for measuring Human Capital.

Here 48% of respondents used more than one approach. Deloitte further showed that each type of approach was associated with a different profile of benefits, but that data accessibility/collection problems, doubts about the ability to locate Human Capital value in the organisation, and the level of resources required, were seen as key limitations across the approaches (Brown, 2002).

The results of the survey clearly show that, while the evaluation models can help organisations to identify key Human Capital issues, none is widely regarded as providing a complete answer. Each of the approaches is subject to continuing development, with some signs of convergence between those approaches whose original aim was to account for Human Capital as intangible assets and those developed originally to provide a strategic tool for management. Companies, however, do not report externally - the focus remains on internal reporting.

### **1.3.1 Problem Statement**

No standard or framework to enable the inclusion of Human Capital information in company reporting to demonstrate the effect on performance currently exists. A company's ability to support its business strategy with Human Capital is an important indication of the company's future business performance. This means that a company's most significant asset (Human Capital) cannot be included in the valuation of the business.

### **1.3.2 Objectives of this research**

The objective of this study is to provide an exploratory framework which can be used by Human Resource practitioners to identify and leverage activities, interventions and/or actions which will provide qualifiable results that demonstrate shareholder value for the organisation. This reporting framework with categories provides a holistic, future-orientated account of the Human Assets in a company.

The study includes an investigation into, and an attempt to answer, the following questions:

4. What insight should investors and other external stakeholders have into the Human Capital employed by a specific organisation?

- 
5. How best to ensure that Human Capital is reported and the information is trusted by investors and other stakeholders as seen as relevant, reliable and consistent, adding value to shareholders?
  6. Which Human Resource Management components can form a basis for comparative external reporting on Human Capital (if any)?

The impact of the report on companies has the potential to constitute further consequences (benefits) such as:

- 1 Strategic alignment of Human Capital development related initiatives.
- 2 Enhanced ability for companies to attract and retain talent.
- 3 Related value propositions for key stakeholder groups with a framework against which measurements can take place, and against which HR development policies, procedures, guidelines and/or initiatives can ultimately be aligned.

The study reviews various topics relating to Human Capital, measurement, value and Corporate Reporting.

#### **1.4 Conclusion**

Human Capital (people) comprise up to 65% of operating costs for most organisations. Nevertheless, many companies don't measure or manage this (their people) effectively. Unless they begin to treat employees as an investment - in a way that enables continual improvement - they will be unable to attain their optimum value. Shareholders need to have access to information regarding the methods deployed by companies to extract value from their Human Resources to enable them to make an informed decision that includes an understanding of the Human Assets of the organisation.

External reporting of Human Capital costs and benefits must be included in company reports.

## CHAPTER 2 - LITERATURE REVIEW

*Though your balance-sheet's a model of what a balance-sheet should be,  
Typed and ruled with great precision in a type that all can see;  
Though the grouping of the assets is commendable and clear,  
And the details which are given more than usually appear;  
Though investments have been valued at the sale price of the day,  
And the auditor's certificate shows everything O.K.;  
One asset is omitted-and its worth I want to know,  
The asset is the value of the men who run the show.  
- Archibald Bowman, 1938*

### 2.1 Introduction

This study is conducted in the field of Organisational Behaviour and relevant literature has been reviewed which pertains to the issues related to the research problem, objectives and questions.

The focus of the literature review is to:

- 1 Provide background information regarding the principles of valuing Human Capital and how this relates to organisational behaviour in order to have a clear understanding of the concepts and techniques currently applied (if any);
- 2 Provide information and define what is meant by the "value" of Human Capital within growth organisations, within South Africa.
- 3 Provide information regarding the application of employee relations and employee value in growth-focused companies to identify the key levers for ensuring a return on investment in Human Capital in the knowledge-based 21<sup>st</sup> century.

- 4 Propose a framework to calculate the value of Human Capital for the organisation which can be included in Corporate Reporting.

The literature review also included investigating the field of Management Accounting and Corporate Reporting to ensure an understanding of the requirements for Generally Accepted Accounting Principles and Corporate Reporting.

## **2.2 Studies focused on HR Practices linked to business success**

According to Mayo (2001), there is substantial research that has set out to study whether good people management practices are directly linked to parameters of business success.

A study in the UK sponsored by the Institute of Personnel and Development at Sheffield Business School and the London School of Economics looked at 110 manufacturing companies, and related a variety of supporting processes to profitability (Mayo, 2001). The researchers calculated that “employee commitment” accounted for 12% of the variation between companies in their profitability, and 17% in their productivity. Those firms with a strong human relations ethos showed more consistently good results than the others.

Mark Huselid (1995) of Rutgers University in the US, studied the relationship between a company’s personnel policies and its business performance. He collected data from 968 firms related HR practices to attrition, productivity, and financial results. His analysis showed that one standard deviation in the “index of work practices” accounted for a 16% increase in productivity. Organisations that make development of their people a fully strategic goal performed much better than others (Mayo, 2001).

Jeffrey Pfeffer of Stanford University, in his book *The Human Equation* (1998), argues for the “seven practices for successful organisations”. These are listed as

1. Employment security,
2. Selective hiring,
3. Self-managed teams and decentralised decision making,

4. Comparatively high compensation linked to organisational performance,
5. Extensive training,
6. Minimal status differences, and
7. Extensive openness in sharing financial and performance information.

The Corporate Leadership Council, in conjunction with Coopers and Lybrand surveyed 1,500 companies on “high performance work practices,” i.e. a range of HR systems and approaches. The findings were matched against criteria of business alignment and financial results. The researchers computed that each standard deviation improvement in their index of good HR systems led to an increase of \$40,000 per employee in market value and \$27,000 in sales.

Watson Wyatt, a firm of consultants, developed a Human Capital Index (HCI). They surveyed over 400 US and Canadian companies in 1999 and linked human resource practices with market value by tracking shareholder returns over a five-year period (Pfau & Kay, 2001). They found a strong correlation between their index, a consolidation of 30 key HR practices, and increases in shareholder value - acknowledging that correlations are not the same as direct causal links. Over five years the third of the sample showing the lowest index had risen 53% in market value, as compared with 103% for the upper third. The 30 practices were split into five groups. The figures shown in brackets below are the increases in shareholder value creation over the years associated with one standard deviation of improvement in that part of the Human Capital Index:

- Recruiting excellence (10.1%).
- Clear rewards and accountability (10.2%).
- A collegial and flexible workplace (3.8%).
- Communications integrity (5.0%).

- Prudent use of resources (–10.0%).

*Note:* Not all HR initiatives were found to be effective. The last category covered some popular HR initiatives, such as 360° assessment. Watson Wyatt (1999) concluded that undue investment was put into practices that in fact yielded very little benefit and could even be counter-productive. Importantly, the research found that there is a negative impact where the activity does not directly support the objectives of the organisation.

The European Foundation for Quality Management (EFQM) developed the EFQM Model in 1992, originally a model for quality management which is now often used as a monitor of organisational excellence. It balances “enablers” against “results,” and comprises audit questions resulting in a set of scores placed against an ideal. The relevant areas for Human Capital are Leadership, People, and People Results. The latter is assessed through opinion surveys of people satisfaction.



**Figure 1: The European Business Excellence Model – EFQM Website: <http://www.efqm.org> (2005)**

This model is closely related to the Malcolm Baldrige National Quality Awards in the USA. This has a series of criteria for performance excellence, in Business, Education and Health Care, aimed at:

- Ever-improving value to customers.
- Improved organisational effectiveness.



- Organisational and personal learning.

Seven categories are used and 1,000 points are distributed between them: 550 points are shared between Leadership, Strategic Planning, Information and Analysis, Customer and Market Focus, Human Resources Focus, and Business Results; the remaining 450 cover Business Results, with 80 allocated to Human Resource Results.

The Human Resource Focus covers:

- Works systems, aimed at high performance.
- Employee education, training, and development.
- Employee wellbeing and satisfaction (focusing on the work environment).

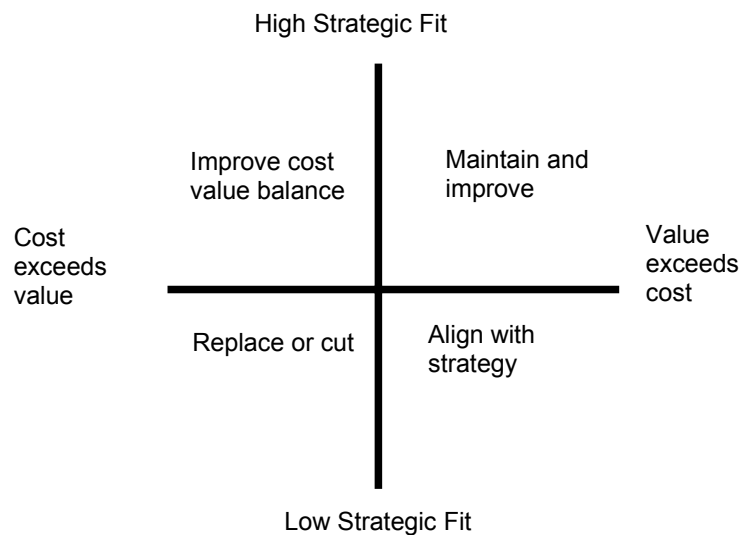
William Mercer, another leading specialist HR consultancy, has developed a “wheel” divided into six segments entitled “people” (capability and experience), “structure” (hierarchy and organisation), “processes” (how work is organised), “decision making,” “information flow,” and “reward.” Concrete measures exist for each (Mayo, 2001). Changes that have happened in each sector over the previous three to five years are plotted on the wheel. These are then related to measures of performance and quality, such as added-value per employee, or another measure of productivity. In a large organisation, separate business units can be compared on the relationship between their success and their positioning on the sectors of the wheel.

A system which is known as Human Capital Appraisal™ was developed by three partners in Arthur Andersen (Friedman, Hatch & Walker, 1998), and consists of a matrix of systematic intervention steps vs. five HR areas of activity. The steps are: clarify, assess, design, implement, and monitor; and the areas of activity covered are:

- Recruitment, retention and retirement.
  - Performance management and rewards.
-

- Career development, succession planning, and training.
- Organisation design.
- Human capital “enablers”—compliance, employee relations, communications, IT.

These two dimensions of steps and activities result in a 5 × 5 matrix that acts as an audit checklist for good Human Capital management practices. They also developed the Arthur Andersen’s Fit-Cost-Value™ framework (see Figure 2 Fit-Cost-Value framework below).



**Figure 2: Fit–Cost–Value™ framework – Arthur Anderson (1998)**

Each program or initiative is plotted on two dimensions of high/low strategic fit and cost > value/value > cost. “Strategic fit” rates each HR approach against business strategy, best practice, and (where relevant) the market. Value is determined by the consolidated impressions of employees in each of the five areas, very similar to employee satisfaction surveys. This model measures only the value to one stakeholder.

All the above approaches start with the structural capital of HR processes and initiatives and with the existing culture which makes them useful in benchmarking HR practices. This seems to prove that treating your Human Capital well yields good results and adding value effectively to employees as stakeholders add to the bottom line. These models, however, lack a focus on measurable outcomes

and focus rather on the existence of systems and processes which makes it virtually impossible to calculate a monetary value for including a line item on the company's balance sheet - one called Human Assets.

### **2.3 Key Theoretical Concepts**

There are a number of different concepts which need to be understood to be able to define the scope of this research and the definition of what is known as Human Capital or Human Assets.

Key concepts are defined at the outset to ensure a common understanding. Some important concepts related to the study and/or similar to the concept of Human Capital have been identified in existing literature. As the study investigates a very complicated topic, or range of topics, in order to establish the framework, it is important to understand a number of theoretical concepts. In order to measure both the value of Human Capital and Human Assets, an understanding of the methods employed in measuring intangibles and the model for Intellectual Capital is required. Understanding reporting and financial statements, as well as methods to value assets is of key importance. The following is a list of the key methods for measurement (discussed later in this Chapter). The concepts are depicted in Table 1.

Company Reporting	Elements of Financial Statements
	Reporting Non-Financial Measures
	Reporting (Accounting) for Human Capital
Measuring Human Capital	Human Capital ROI
	Human Capital Index
	Best Investment in Human Capital
	Balanced Scorecard
	HR Scorecard
Measuring Intellectual Capital	Intellectual Capital (IC) Index
	EFQM Excellence Model
	Economic Value Add (EVA)
	Scorecard Methods (SC)
Measuring Intangibles	Direct Intellectual Capital Methods (DIC)
	Market Capitalisation Methods (MCM)

	Return on Assets (ROA)
	Skandia Navigator / Intangible Assets Monitor
Valuing Assets	Cost Based Methods
	Market Based Methods
	Income Based Methods
	Calculated Intangible Value Method
Measuring Human Assets	Individual Human Asset Worth
	Collective Human Asset Worth

**Table 1: Key Methods / Models for measurement****2.3.1 Invisible (Intangible) Assets**

Invisible assets have been defined as the flow of information between the company and the environment, or inside the company that creates invisible assets (Roos, Roos, Edvinsson & Dragonetti, 1997). These assets are semi-fixed; i.e. they need to be built over a long period of time, can be employed for more than one use at a time and are enhanced by increased use. As such, they provide a source for competitive advantage.

Because of the reluctance of banks to lend for investment in intangible assets, the development of intangible assets is mostly self-financed (Morey, Maybury & Thuraisingham, 2000). In other words, the invisible assets are matched on the financing side of the balance sheet by equally invisible finance, most of which in the form of invisible equity.

Knowledge organisations like Deloitte and Touche, Microsoft, Morgan & Banks or WM-data have little typical assets (machinery) other than their employees, thus they are both the minders of the

machines and the “machines” (revenue creators) themselves. For the most part, their competence is directed outwards, to the task of generating revenue, by solving customers’ problems.

These employees create the relationships, networks, and image that comprise the organisation’s external structure. Similarly, it is the smaller amount of human competence that is directed inwards that creates, maintains, develops (or erodes) the organisation’s internal structure and processes. As can be seen in Figure 3, it is the intangible assets that make up the biggest part of the value growth for companies, not the financial capital.

### WM-data Intangible Assets and Market Value

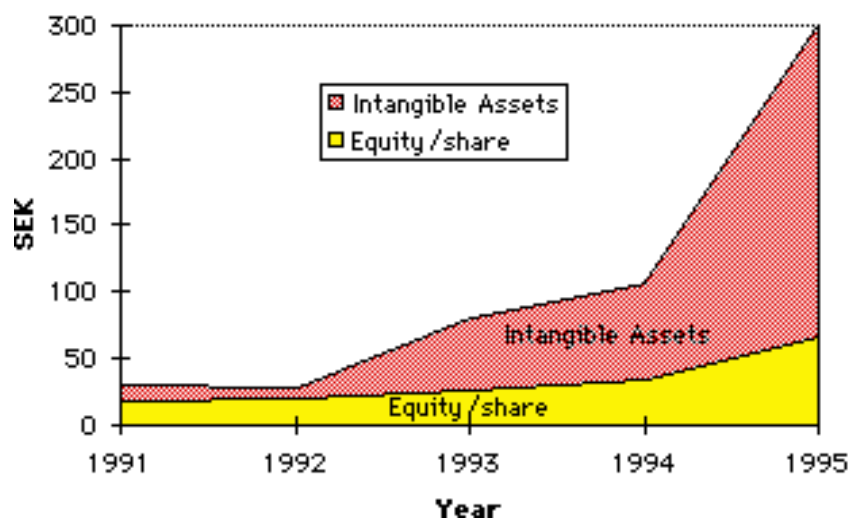


Figure 3: WM-data Intangible Assets per share - WM-data Annual Report (1995)

WM-data uses traditional indicators like return on equity and return on investment only at group level. In their WM-data’s Annual Report of 1997 (as referenced by Sveiby, 1998) they state that “Traditional financial controls are of limited use in managing, understanding and assessing a knowledge-based company. This requires more in-depth analysis of the knowledge-based company’s critical business targets and concepts”. WM-data adopted the original Konrad theory for measuring and presenting in their Annual Reports.

A theory about measuring intangible assets was developed by a Swedish working group in 1987 and published in a report in Sweden (Sveiby, 1998). The “Konrad theory” has since become widely used

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in Scandinavia. More than 40 Swedish companies measured and reported their intangible assets according to these principles according to Öhman (Sveiby, 1998).

### **2.3.2 Intellectual Capital (IC)**

Consensus on the definition and measurement of Intellectual Capital (IC) seems lacking in the academic literature. The definitions include not just human brainpower, but also brand names, trademarks. Assets booked at historic costs and transformed into greater value over time are also defined as Intellectual Capital. Further definitions include factors such as technology leadership, on-going employee training, and even customer relationships. This all implies that Intellectual Capital is a large field; however the difference between perceived value and accounting value is still open to debate.

The OECD (Organisation for Economic Co-operation and Development) defines Intellectual Capital as the economic value of two categories of intangible assets of a company - organisational and Human Capital (OECD, 1996). Nahapiet and Ghoshal (1998:245) state that Intellectual Capital refers to the “knowledge and knowing capability of a social collectivity, such as an organisation, intellectual community, or professional practice”. Black, Wright, and Bachman (1998) argue that Intellectual Capital is a factor that includes Human Capital, social capital and organisational capital. Gratton and Ghoshal (2003) argue that Intellectual Capital is part of Human Capital; that is, Human Capital subsumes Intellectual Capital, and also includes within it social capital and emotional capital. For most commentators however, such as Kaplan and Norton (1993), Harvey and Lusch (1999), and Sveiby (1997), Intellectual Capital is very broad and includes Human Capital as one of its key dimensions.

It is important to understand that Intellectual Capital should not be equated to Employee Value Add or Human Capital Value, although some of the measures and calculations may have a relevancy in quantifying Human Capital assets. In the publication, *Intellectual Capital*, IC is defined as a knowledge-based; i.e. a personal, subjective process, emerging from previous experiences and current events (Roos et al., 1997a).

For the purposes of this study, Intellectual Capital is defined to include all the processes and the intangible assets of an organisation which are not normally shown on the balance sheet including trademarks, patents and brands.

### 2.3.3 Human Capital (HC)

The term 'Human Capital' was first used by Nobel Laureate, Theodore W. Schultz, (Schultz, 1961). The term is today most frequently used to refer to a combination of skills, experience and knowledge in the Human Resources within an organisation. Human Capital makes an individual potentially productive and thus equips him or her to earn income in exchange for labour.

Human Capital is thus an all-encompassing term for the knowledge, skills, competencies and other attributes embodied in individuals or groups of individuals acquired during their life and used to produce goods, services or ideas in market circumstances.

Roos & Roos (1997b) categorise and define Human Capital as follows:

- **Competence.** Essentially about knowledge and skills. Knowledge meaning specifically the “technical or academic knowledge of things,” related to education, i.e. something that “has to be taught.”
- **A skill is** the practical counterpart of competence.
- **Attitude.** Depends mostly on personality traits and cannot be changed much. It is influenced by “motivation, behaviour and conduct.”
- **Intellectual agility.** Covers innovation, flexibility, and adaptability-traits seen at a group or organisational level as much as in individuals.

*Note:* This approach is reflected in many of the measures used by the pioneering Scandinavian companies.

Sveiby (1997) uses the term “professional competence” for Human Capital. This he defines as a combination of educational attainment levels and years of experience. He then breaks it down, as for the other components of Intellectual Capital, into aspects of growth/renewal, efficiency, and stability; defining his overall framework for measuring Intellectual Capital components.



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Gary Becker, a Nobel Prize-winning economist includes personality, appearance, reputation and credentials to the mix. This work, based on detailed empirical analysis, redressed the prevailing assumption that the growth of physical capital is paramount in economic success (Becker, 1994). In reality, physical capital explains only a relatively small part of the growth of income in most countries' GDP.

Rastogi (2000:196) stated "The concept and perspective of Human Capital stems from the fact that there is no substitute for knowledge and learning, creativity and innovation, competencies and capabilities; and that they need to be relentlessly pursued and focused on the firm's environmental context and competitive logic".

For the purposes of this study, Human Capital is defined as the sum of knowledge, skills and abilities possessed by a company's employees, working as a network of knowledge resources; i.e. it is the value inherent in an organisation's people. It includes employees' collective skills, experience, talent, knowledge, intellectual agility and behaviour.

#### **2.3.4 Human Assets**

Assets may be classified in many ways. Assets can be defined as the right kind and quality of "equipment" to carry out the production process as efficiently as possible (Lovemore and Brummer, 1993). In a company's balance sheet certain divisions are required by generally accepted accounting principles (GAAP), which vary from country to country.

In business and accounting, an asset is anything owned (or rented/leased i.e. under its control) which can produce future economic benefit, whether in possession or by right to take possession, by a person or a group acting together (e.g. a company), the measurement of which can be expressed in monetary terms. Assets are listed on the balance sheet. It has a normal balance of debit. Similarly, in economics an asset is any form in which wealth can be held.

The various types of assets defined in accounting and economics includes (Anon, 2006):

**Current Assets** - cash and other assets expected to be converted to cash, sold, or consumed either in a year or in the operating cycle. These assets are continually turned over in the course of a business during normal business activity.

There are 5 major items included into current assets:

- 1. Cash** - it is the most liquid asset, which includes currency, bank deposit, and negotiable instruments (e.g., money orders, checks, bank drafts).
- 2. Short-term investments** - include securities bought and held for sale in the near future to generate income on short-term price differences (trading securities).
- 3. Receivables** - usually reported as net of allowance for uncollectible accounts.
- 4. Inventory** - trading these assets is a normal business of a company. The inventory value reported on the balance sheet is usually the historical cost or fair market value, whichever is lower. This is known as the "lower of cost or market" rule.
- 5. Prepaid expenses** - these are expenses paid in cash and recorded as assets before they are used or consumed (e.g. insurance).

The phrase *net current assets* (also called working capital) is often used and refers to the total of current assets less the total of current liabilities.

**Fixed assets** - Also referred to as PPE (property, plant, and equipment). These are assets which are purchased for continued and long-term use in earning profit in a business. This group includes land, buildings, machinery, furniture, tools, wasting resources (timberland, minerals), etc. They are written off against profits over their anticipated life by charging depreciation expenses (with exception of land which increases in value). Accumulated depreciation is shown in the face of the balance sheet or in the notes. These are also called capital assets, especially when intangibles are taken into account.

**Intangible assets** – These lack physical substance and usually are very hard to evaluate. They include patents, copyrights, franchises, goodwill, trademarks, trade names, etc. These assets are (according to US GAAP) amortised to expenses over 5 to 40 years, with the exception of goodwill.

**Other assets** - a high variety of assets, most commonly:

- Long-term prepaid expenses.
- Long-term receivables.
- Intangible assets (if they represent just a very small fraction of total assets).
- Property held for sale.

In a lot of cases this section is too general and broad, because assets could be classified into any of the four above categories. In conclusion, an asset can be defined as having potential to earn revenue, its value is managed over life cycle, and its failure leads to irrecoverable commercial loss.

**Human Asset** is a new term for the knowledge economy where professionals are not in a problem-solving mode but in an opportunity-creation state. For the knowledge economy, achievement is not the term; and contribution is the key to success. Human Assets can assure that. The use of the term in the modern neoclassical economic literature dates back to Mincer (1958), an economist, who pioneered the way in an article “Investment in Human Capital and Personal Income Distribution”.

Becker’s (1994) view is that Human Capital is similar to the “physical” means of production, e.g., factories and machines, one can invest in Human Capital (via education, training, medical treatment) and the income depends partly on the rate of return on the Human Capital you own. Thus Human Capital is a stock of assets a company owns, which allows one to receive a flow of income, similar to interest earned.

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The concept of Human Capital can be infinitely elastic, including immeasurable variables such as the personal character or connections with insiders (via family or fraternity). This allows the theory to be true without explaining anything (Anon, 2006). Often it is not the education or training that one has which determines the value of one's education, but the prestige of the qualification or degree received. Someone who gets a qualification from a university will likely get a higher income than one from a technikon or technical college, even if they have exactly the same knowledge and the ability to apply the knowledge in the same or similar manner. Similarly, discrimination against certain cultures or female employees implies different rates of return.

According to Becker (1994), the Human Capital literature often distinguishes between "specific" and "general" Human Capital. Specific Human Capital refers to skills or knowledge that is useful only to a single employer (and who will likely be willing to pay for it), whereas general Human Capital (such as literacy) is useful to all employers. Likewise, the value placed on specific Human Capital due to their skills possessed may be worth more in one organisation than in another; e.g. an IT technician's value may be higher within an IT organisation than in an organisation where IT is purely a back office support function.

### **2.3.5 Value Based Management**

Value Based Management (VBM) is used by many companies as a strategy method for organisations wanting to create value for all stakeholders. This integrated approach aligns the objectives, strategy, management processes and people of an enterprise to continually enhance value. In organisations where Value Based Management has been adopted, mention is made of the employee value elements, but measurement is represented in intangible aspects. Integration of the performance measurements and alignment of compensation and systems are explored although very little specific literature on these topics is available.

Clear shareholder value approaches from an accounting as well as economical models have been explored and measurements evaluated and clearly defined. Likewise, methods for calculating customer value from retention, growth (with existing customers) and acquisition (new customers) has been explored, proven and implemented with success.

Black et al. (1998) explain why shareholder value is so important when the market looks at a firm's performance, and why mastering valuation has become an essential skill for managers whenever

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they make strategic decisions. They go on to explain how a framework of shareholder value can integrate the core business process of creating, preserving and realising value with techniques that can be customised across markets and sectors.

The term Value Based Management describes a management orientation explicitly toward value. It's about aligning the people, processes and systems of an organisation to continuously increase shareholder value. Because value, as represented by the share price, is set by the market, and because the market is more concerned with the future than the past, value-based management has to deal with perceptions as well as reality. It has two distinct tasks; to actually improve performance by being more effective and efficient, and to convince the market of the promise of this activity in terms the market will understand and believe.

*Market prices are tied to expectations rather than to past accomplishments. This is the difference between performance (historical) and valuation, which is about the market's expectation of future performance*

Many papers have been written relating to the topic of Value Based Management, mostly focusing on risk, financial performance, economic value add (EVA), metrics, scoreboard, financial incentives, creating and even destroying asset value. Value profiling assesses the value creation in business units or value centres against an economic profit measure such as Cash Flow Return on Investment (CFROI).

For the purposes of this study, the broad practices of Value Based Management (VBM) are considered as follows:

- Committing to value creation goals.
- Re-examining the role played by the corporate centre.
- Developing value maximising business strategies.
- Driving operational value.

- Broad-based rewards aligned with value creation.
- Building a value culture.
- The changed behaviour is more important than the metric.
- Changing the mindset will change operational and strategic thinking.
- Definite need to challenge entrenched thinking.
- Creates the burning platform for moving from incremental improvement / thinking.

To create value for their shareholders, companies must earn returns on invested capital that exceed the cost of capital. Each metric may have its own distinctive advantages and disadvantages, and each is expressed in its own distinctive way. Yet at their most basic level, they are all designed to measure management's success in achieving this aim.

The business imperative of VBM is to create value for all stakeholders in an organisation. Customers offer loyalty, patronage, and money for products and services that provide good value based on the combination of price and quality relative to competitive offerings. An organisation earns profit and market share if it keeps customers satisfied and loyal and generates customer value.

Equally important is the value that employees offer an organisation. As stakeholders, they give their time, commitment, and creativity. In return, they expect fair compensation, a challenging work environment, and the opportunity to learn, develop, and advance. As a result, the organisation enjoys loyal, productive, innovative employees who help build a competitive advantage.

### **2.3.6 Employee Relations Management Solutions**

The development of an Employee Relationship Management (ERM) concept by software and consulting houses was driven by the imperative to maximise employee performance and manage

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Human Capital more effectively. As companies faced many people management challenges, there was a need to develop an approach to address people management challenges and maximise returns on employee investment.

The value to shareholders is not the only measure of success for an organisation. Employee satisfaction has been measured and shown to have a direct influence on the growth of organisations. In a study by Doorley and Donovan (1999), it was found that when measuring a client's overall employee satisfaction index in a company which had slipped well below its growth potential (2%), the employee satisfaction index was very low. After committing to growth, their employee satisfaction index grew from 100 to 160 and their growth to 13%. By 1997, they were growing at 18% with employee satisfaction in the 170 range (Doorley and Donovan, 1999).

The e-Human Resources landscape includes a range of solutions, from e- enablement of critical HR functions to development of enterprise portals (Anon, 2003). All solutions can be carried out as a standalone initiative or in combination with other ERP solutions. As companies look to maximise return on their people management initiative investments and tackle more than one issue simultaneously, delivery of an integrated set of solutions is often the choice. One of the reasons provided for the fact that integrated solutions yield higher returns is because they affect more than one lever (i.e. Operating Margin, Revenue and Asset Management) of shareholder value.

Often it is the absence of a strategic approach to people initiatives that leads to process dispersion and misalignment, which prevent companies from maximising the effectiveness of their people management initiatives. One of the key advantages of an integrated solution vs. an isolated people management initiative is that an integrated solution can streamline and integrate uncoordinated efforts to improve efficiency and reduce costs across several processes simultaneously.

The limitation of this model is the quantification of the value back to bottom line tangible benefits. The focus is on logical activities or processes and methods of ensuring that these are done and the data of such activities recorded - the limitation being the fact that these systems are transactional and not interpretive.

For purposes of this study, an integrated solution is a system that enables the maximisation of return on Human Capital, using integration to improve efficiency and reduce costs across several processes simultaneously.

## 2.4 Company Reporting

Le Clerc et al. (1996) describe the objective of company corporate reports as “a method to communicate economic measurements and information about the performance of the organisation to the stakeholders of the organisation”

- Financial reporting includes the basic financial statements and accompanying notes.
- Business reporting encompasses the broader information provided by companies, including management’s discussion and analysis, information provided in the annual report, presentations to analysts, fact books, and business information provided on the company’s website.

The aim of all accounting information is to provide the particular user with relevant and timely data to make decisions (Mott, 2005).

- 1 **Shareholders** of limited companies will be influenced in their decision to remain investors or to increase/decrease their holding by receiving information about the financial performance and financial position of their company. This usually occurs twice a year in the form of a profit and loss account and a balance sheet relating to the first half-year and, later on, the full year.
- 2 **Owner-managers** of non-incorporated businesses will require the above information but they will also be privy to more detailed and more frequent information about the business’s financial affairs.
- 3 **Management** in companies range from director level down to supervisor level. Each person requires accounting information to help them in their roles.
- 4 **Suppliers** need to assess the creditworthiness of potential and existing customers when setting the amount and period of credit allowed.



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- 5 **Customers** also need to be reassured, in this case to minimise the risk of their supplies drying up and disrupting their own output. Firms entering into a joint venture will also need mutual reassurance. Similar checks to those outlined above for suppliers will need to be carried out.
  - 6 **Employees** and their **representatives** have a vested interest in the financial health and future prospects of their employer. They rely on an assessment of the published accounts by experts for this.
  - 7 **Government** levies tax on the profits earned by businesses and value added tax on the sales value of most industries. Tax authorities rely on the information provided by companies for these purposes.
  - 8 **Competitors** can make some comparisons; for example, sales per employee, from published accounting data in a process known as benchmarking.
  - 9 **Lenders/Investors** need to be assured that their capital is safe and that the borrowing company can service the loan or overdraft adequately, so again the financial statements of profit and loss account and balance sheet will be examined from this viewpoint.

It can be concluded from the above that most users of accounting information are drawing from what is provided in the published accounts. Only management has access to more detailed, non-published financial information within a company.

The content of the annual report and accounts for a listed company, i.e. one that is quoted on a stock exchange, is more comprehensive than the requirements of unlisted companies which reduce in line with their size. Disclosure requirements of listed companies derive from three sources:

1. Statutory law embodied in Companies Acts;
2. Accounting standards as laid down in FRSS and SSAPS (Statements of Standard Accounting Practice); and
3. Listing regulations specified by the Stock Exchange.

The following main items are disclosed in the annual report and accounts:

- **Chairman's statement** – a broad review of progress, changes in strategy and management and a guide to future prospects. This may be supplemented by a chief executive's review of each individual business's performance.
- **Operating and financial review** – a detailed commentary on the financial results and influential factors.
- **List of directors** – details of service, responsibilities and other directorships.
- **Directors' report** – a formal report on specific required items; e.g. dividend declaration, principal activities, share capital and substantial shareholdings, political and charitable contributions, directors' shareholdings, employment policy, creditor payment policy, close company status and appointment of auditors.
- **Report of the remuneration committee** – policy statement on how the total remuneration package of executive and non-executive directors is set.
- **Auditors' report** – a statement of auditors' responsibility and their report on whether or not the financial statements give a true and fair view of the state of affairs.
- **Financial statements** – comprising consolidated profit and loss account, balance sheet, cash flow statement, statement of total recognised gains and losses and parent company balance sheet only.
- **Notes to the financial statements** – additional breakdown and analysis of figures appearing in the main financial statements.
- **Historic record of financial performance** – a 10-year summary of the main financial figures and ratios reflecting profitability, dividends and shareholders' funds.

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- **Notice of meeting** – notice of the time and venue of the annual general meeting and the business to be conducted

According to Standard 38 (1998) of the International Accounting Standards Committee (IAS) for the measurement and amortisation of intangible assets and purchased goodwill, an intangible asset is defined as “an identifiable non-monetary asset without substance held for use in the production or supply of goods and services, for rental to others, or for administrative purposes.” The fair value of an asset is the amount for which that asset could be exchanged between knowledgeable willing parties in an arm’s-length transaction.

IAS 38 was published in 1998 to be applied from 1 July 1999. The areas covered are advertising, training, start-up, and R&D. The “asset” has to be identifiable and controlled; its cost has to be measured reliably, and it has to be one that is expected to generate future economic benefits to the organisation, otherwise it must be treated as an expense. This standard prohibits internally generated goodwill, brands, publishing titles, customer lists, and similar items. The standard insists that the asset should normally be amortised over the best estimate of the useful life, with a maximum of 20 years. This is not possible for human assets and as such, the latter cannot be considered as an intangible asset according to the definition by the IASC.

#### 2.4.1 Elements of Financial Statements

Financial statements (or financial reports) are a record of a business' financial flows and levels. Typically they will include:

- A *balance sheet* (statement of Financial Position) setting out the net asset position of a business.
- An *income statement*, income and expenditure statement or *profit and loss statement*.
- A *cash flow statement*.
- A *statement of other recognised gains and losses or other comprehensive income statement* setting out movements in equity that do not go through the income statement or profit and loss account (e.g. a revaluation of the value of head office of a manufacturing company).

- *Statement of retained earnings.*
- Supplementary notes and management discussion.

According to the World Bank (1995), the Financial Accounting Reporting and Auditing Handbook (FARAH) states that a good financial information system is vital for a strong management information system. It further states that an independent audit of financial statements provides faith and credibility to stockholders, members and third parties.

The elements of financial statements from IASC (International Accounting Standards Committee) that provide a framework for the preparation of financial statements include transactions and other events by grouping into broad categories the elements of the financial statement of companies. According to this body “elements may be classified by their nature or function in the business of the enterprise in order to display information in the manner most useful for the purposes of making economic decisions” (The World Bank, 1995).

Generally Accepted Accounting Practice Statements AC000 defines three elements which measure the wealth of an entity (Everingham and Kleynhans, 1995):

- Assets;
- Liabilities; and
- Equity.

**Assets definition:** A resource controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. Future economic benefits include cash from goods sold, or cost savings from using more efficient machinery. Legal ownership is not a requirement for recognition as an asset; i.e. permitting certain “leased” resources to be shown as assets by the lessees.

Some assets are not disclosed in a balance sheet. Internally generated goodwill, including the value of brands, never appears in a balance sheet. The value of the Human Capital (workforce), probably any firm's most valuable asset, does not appear at all in a balance sheet.

**Liability definition:** A present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

**Equity definition:** The residual interest in the assets of the enterprise after deducting all its liabilities.

When talking about a set of accounts, one refers to the profit and loss account statement and the balance sheet statement. A balance sheet is a snapshot picture at a moment in time. On the one hand it shows the value of assets (possessions) owned by the business and on the other, it shows who provided the funds with which to finance those assets and to whom the business is ultimately liable. An income statement is a profit and loss account, which compares income with expenses consumed in the same period.

The Financial Reporting Standard (FRS No 3) issued in 1992, and entitled Reporting Financial Performance, requires companies:

- To separate turnover and operating profit between continuing operations, acquisitions, and discontinued operations;
- To disclose profits and losses resulting from restructuring/reorganisation or from the disposal of fixed assets or parts of the business;
- To disclose extraordinary items (which should now be a rare event) as opposed to exceptional items (which could be quite commonplace);
- And to calculate earnings per share after taking them into account.

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Although the rules differ in different countries, usually larger companies and all publicly-quoted companies must have their financial statements independently audited. Note that the auditors do not certify financial statements, that is done by the company's directors. All an auditor does is examine the financial statements and records of a company and assess whether they do indeed show a "true and fair" view (or meet other particular requirements that the auditor is engaged to opine on).

#### **2.4.2 Reporting Non-Financial Measures**

Individual investors take reliability of information sources into account when using information. Investors adjust their reliance on information for the incentives and prior accuracy (Maines, 1996; Williams, 1996; and Hirst, Koonce & Miller, 1999) and as such, the investors' use of non-financial performance measures will depend on their own perception of the reliability of the source of that information.

The literature provides both support for and caution against mandating disclosure of non-financial performance measures. Non-financial performance measures considered relevant measures are predictive (leading indicators) of future financial performance and appear to be reflected in share prices and stock returns. Additionally, there is evidence that non-financial performance measures can enhance the value of financial measures due to interactive effects between the two.

Various researchers and students of Human Capital have called for more disclosure of non-financial information by corporations (Norton, 2000; Eccles, Herz, Keegan & Phillips, 2001; and Lev, 2001). These individuals argue that traditional financial measures have diminished in relevance due to changes in business models and are backward looking, rather than providing insights into a company's future performance. However, questions regarding the reliability, comparability and consistency of the information - factors which are of utmost importance when valuing an organisation.

While non-financial measures are industry-specific, the value of non-financial performance measures can depend on both environmental (e.g. regulatory) factors and firm-specific factors, such as firm strategy and product development and life cycles. These findings suggest that investors likely need firm- and time-specific models to make full use of non-financial measures. However, evidence indicates that managers tend to have difficulty specifying the relation between non-financial measures and future financial performance; thus, corporations may be unable (and

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perhaps unwilling for competitive reasons) to provide such models to investors or the general public which may include competitors.

If non-financial measures are subject to significant measurement error, regression analysis would probably fail to find a significant relation between non-financial measures and future financial performance. Survey evidence from Wm. Schiemann and Associates (as reported by Ittner and Larcker, 1998) suggests that corporate executives have concerns about the quality of non-financial information; particularly measures related to human assets, which are viewed as intangible. These executives also perceive the quality of financial information to be higher than that of non-financial information.

A related issue is the effect of an external audit of non-financial performance on investors' perceived reliability of this information. Investors and the general public generally consider audited information to be more credible than unaudited information (Libby, 1979; Pany and Smith, 1982; Johnson, Pany & White, 1983). The conclusion which can be drawn from this is if non-financial performance measure disclosures are audited, investors' perceived reliability of and reliance on this information likely would increase.

Research indicates that different formats for reporting financial performance measures can influence professional and non-professional investors' use of that information by affecting the transparency of information and particularly, of the links between performance measures influences analysts' use of this information.

## 2.5 Measuring Shareholder Value

For publicly traded companies, investors tend to look at *total shareholder return* as the ultimate measure of success. This is the change in share price from the date of purchase, plus any dividends received, divided by the original cost of the shares. For other types of companies, such as the public sector, the notion of value comes down to the overall governing objective of the organisation and how that organisation defines success.

In financial terms, shareholder value can be thought of as *market capitalisation* (current share price x the number of shares outstanding), an important measure for categorising companies at a single point in time.

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Buy-side investors (who actually drive share prices) typically value companies the same way one would value a bond—on the basis of expected future cash flows. Unlike bonds, the expected cash flows from a business are much more difficult to predict. Estimates have to start with the value of existing assets and current, actual financial results. Then one has to forecast the level of future investments and make assumptions about the company's ability to maintain or increase the return on those investments. Investors are interested in short-term results because they inform the forecast and, along with other criteria, they are quantified benchmarks for measuring a company's progress toward stated goals.

Investors continually hone their forecasts. To do this they want to hear details about what the company is actually doing to grow returns and the capabilities that they are building to allow them to sustain their business models. Positive guidance, based on the clear alignment of business strategy and specific actions, points the way forward. If one does not give investors a reason to believe, they won't. Transparency is about providing enough information so investors can decide *if* they want to invest and, if so, *at what price*. A lack of transparency — in historical results or in what the company is saying about the future — raises a red flag, and investors are likely to respond by lowering their forecasts (and, therefore, what they're willing to pay for the stock today).

This means, the better the available information, the lower the “transparency discount” i.e. transparency is less a burden imposed by regulators and more an opportunity to increase share price.

### 2.5.1 Enterprise Value Map (EVM)

The Enterprise Value Map (EVM) is a method developed by Deloitte as a graphical representation of the connections between key drivers of value (such as revenue growth, margins and asset turns) and the processes and tactics that affect those value drivers. This unified display allows the analysis of what the company *can* do, which initiatives may be most important, and how value is created allowing organisations to perform the following (Wortman, 2005):

- Structure and prioritise improvement initiatives, showing the relationship between tactics, strategies, objectives and value.



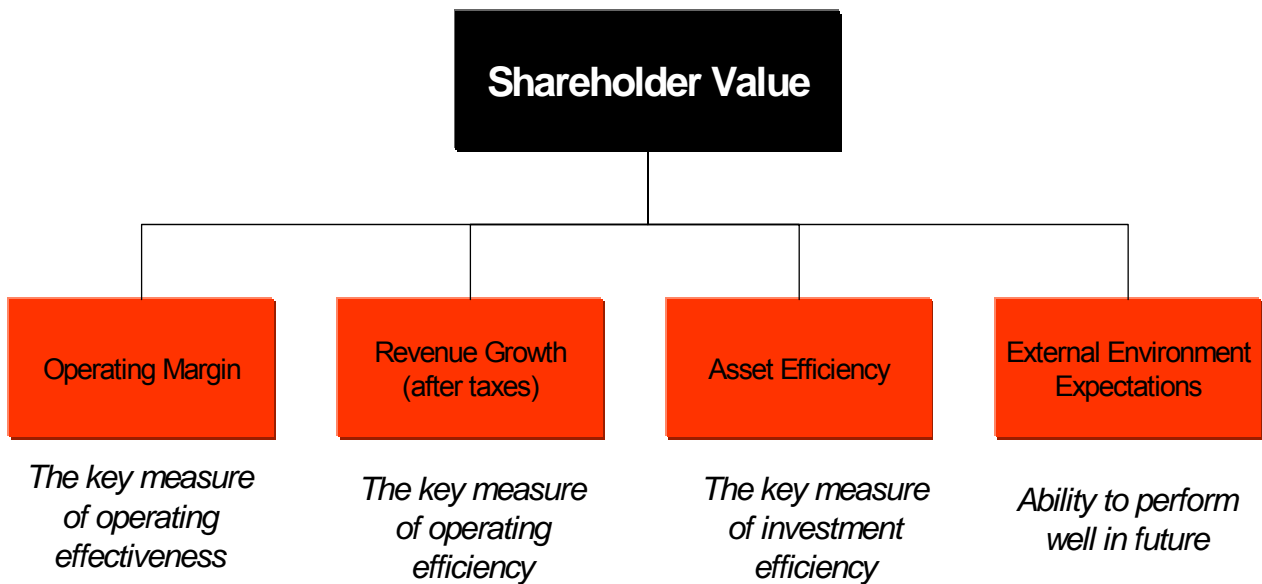
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- Communicate strategy and how it is to be implemented, as well as the interconnections between various initiatives.
  - Render insight for all stakeholders, internal and external, about what is being done, and why.

Business leaders today are continuously faced with increased scrutiny and pressure to enhance shareholder value. Investors are becoming more and more demanding, forcing companies to focus their attention on strategies and processes that add value to the shareholders.

From an executive perspective, the Enterprise Value Map is a framework depicting the relationship between the measures by which companies are evaluated and the means by which companies can improve those measures. Starting with the drivers of enterprise value, the methodology addresses those aspects companies can address to influence those drivers, depicting not only what companies can do categorically, but also how they can drive improvement at tactical levels. “Value Drivers” are the metrics by which shareholders, analysts and potential investors assess company performance - in absolute terms and relative to that of competitors (Wortman, 2005).

The EVM is at the top most level, made up of those components of the Income Statement and Balance Sheet. Revenue Growth and Operating Margin sections are the Income Statement portion of the map (these sections combine to describe a company’s current operational performance) and the Asset Efficiency section is a subset of the Balance Sheet, showing how efficiently a company uses its assets in delivering its operational performance.

The expectations section addresses factors that influence future Income Statement and Balance Sheet performance.



**Figure 4: Shareholder Value Map, adapted from Deloitte (2003)**

Revenue Growth and Operating Margin represent the Income Statement and combine to describe current operational performance. The Asset Efficiency section is a subset of the Balance Sheet, showing how efficiently assets are utilised in delivering operational performance. External Factors address factors that may influence future Income Statement and Balance Sheet performance, i.e. factors that influence shareholder confidence in the organisation and its leadership.

## 2.6 Reporting (Accounting) for Human Capital

The accounting standards setting authority has included in their standards those relating to the operating and financial review of a company. In other words, information that stakeholders can use to project the historical figures into the future, including the company's vision and strategy as well as information on the intangible assets such as Human Capital.

The chief issue within Human Capital accounting (HCA) is that human assets, unlike capital assets, have a largely uncertain future service life. Measuring the value of Human Resources has therefore been concerned with the nature of the uncertainty and providing estimates of this, with a number of measures used, including the discounted future compensation model (Lev and Schwartz, 1974) - where the value of an employee is the present worth of their remaining earnings from employment, and the replacement cost method, where "costs incurred by recruiting, selecting, compensating, and

training employees reflect the expected value of successful job performance” (Steffy and Maurer, 1998: 273).

Flamholtz (1985) stated that measuring an individual's value to the firm is founded on the notion that it is not the individual *per se* who is valuable, but the individual in relation to the roles he/she plays that is crucial.

### **2.6.1 Universal (Best Practices) Approach**

“Best practices” or “high performance work practices” emphasise the need for strong consistency among HR practices (internal fit) in order to achieve effective performance. This view has a high degree of empirical support (Huselid, 1995; Delaney and Huselid, 1996; Arthur, 1994; and MacDuffie, 1995) and has been championed by Pfeffer (1998) who listed 15 HR practices in 1994 which became seven in 1998:

1. Employment security;
2. Selective hiring;
3. Self-managed teams;
4. High compensation contingent on performance;
5. Training;
6. Reduction of status differentials; and
7. Sharing information.

Arthur (1992 and 1994) found that HR practices focused on enhancing employee commitment (e.g. decentralised decision-making, comprehensive training, salaried compensation, and employee participation) were related to higher performance. Conversely, he found that HR practices that

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focused on control, efficiency and the reduction of employee skills and discretion were associated with increased staff turnover and poorer manufacturing performance. Similarly, in a study of high performance work practices, Huselid (1995) found that investments in HR activities such as incentive compensation, selective staffing techniques and employee participation resulted in lower turnover, greater productivity, and increased organisational performance through their impact on employee skills development and motivation.

What the view shows is that where more of the high performance HRM practices is used, the better the performance as indicated by productivity, turnover or financial indicators. Although support for this view seems to exist, there are notable differences as to what constitutes a “best” practice. The requirement is to look past the talk and terminology being used to be able to see the value creation in Human Capital.

### **2.6.2 Reporting Human Capital Measures**

According to Huselid (1995), there are two major issues with Human Capital measures:

1. There is no common framework for reporting that goes beyond historical measures (e.g. cost of selection, or training) to “more detailed information on workforce quality”.
2. Many firms lack databases and audited information that can give strong and relevant information to investors.

Developing a consistent and coherent internal HR architecture on Human Capital measurement is a necessary condition for effective external reporting. The three factors that explain why companies do not report more on Human Capital (Stiles and Kulvisaechana, 2002) are:

- The fear of competitors - anxiety over whether Human Capital information is competitively sensitive;
- The fear of unions or employees; that is, concern that providing too much information may restrict the organisation’s flexibility (and worries over legal issues arising); and

- A concern for practical difficulties of collecting Human Capital information to present for reporting, and whether investors will understand it anyway.

## 2.7 Measuring Human Capital

Although measuring Human Capital has many different aspects to it, the demand for more information and transparency by stakeholders, the demand from shareholders for comparable information on the company's strategies and prospects, plus the competitive pressures where the clear advantage for growth companies is that of their Human Capital, makes it extremely important to report on Human Assets as part of the company's reporting framework.

The employee or Human Resources quadrant on a company's scorecard is often the most likely to include meaningless metrics, unrelated to the bottom line of a company. This could be largely due to the fact that HR or the "people part" of the business does little to tell them about the value and performance of this asset. Various researchers and consultants have developed models in an attempt to calculate the value of the employee, and this study explores some of these models below, as it may pertain to the results and recommendations for reporting.

Gratton (2000) developed a causal model linking people and the financial health of companies:



**Figure 5: Gratton's Causal Model - Gratton (2000)**

Guest, Michie, Conway & Sheehan (2003) shows a preference to adopt a stakeholder perspective, which “would give some emphasis to performance outcomes of concern to the range of stakeholders”. These outcomes, Guest et al. argues, should reflect employee attitudes and behaviour, internal performance (productivity and quality of goods and services); and external indicators, such as sales and financial performance. In other words, a number of potentially related outcomes that extend beyond a narrow definition of business performance based on just financial indicators should be assessed.

In the literature, research has tended to focus, in terms of outputs, on employee turnover, productivity, and financial performance. The difficulty in relying on just the company’s performance is that, apart from ignoring important other measures just outlined, it may be that within organisations, and business units there are different objectives (Delaney & Huselid, 1996). Some may be focused on market share, others on profit, and the HR practices may not be the same in both. If research is at an organisational level, rather than at a business unit level, such differences may reflect in a poor linkage between Human Capital and unit performance (Becker and Gerhart, 1996). Guest et al. (2003) also point to the problems in variations of accounting practices between countries, which may render comparisons in financial performance problematic.

The adoption of a stakeholder perspective reflects the concern of having multiple measures of performance outcome. This perspective is supported by the popularity of the “balanced scorecard” concept (Kaplan and Norton, 1993), which is intended to weigh the interests of various stakeholders. According to Kaplan and Norton, attention should be given, not just to traditional financial measures, but to people, processes and customers.

### **2.7.1 Human Capital ROI**

Fitz-Enz (2000), suggests a Human Capital Income Statement, which incorporates the costs of the processes for managing Human Capital and relates them to the financial value added for the organisation. He also takes account of the “hidden costs” of lost time and money through attrition, unwanted learning curves and other waste. This model looks at the Human Capital side and does not seem to make provision for the increase / decrease in the value of the Human Assets.

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REVENUE		
Human capital value added	\$2665	<i>Revenue less nonhuman expenses</i>
DIRECT EXPENSES		
Acquiring	15	<i>Cost of hiring</i>
Maintaining	1128	<i>Pay and benefit cost</i>
Developing	12	<i>Cost of training</i>
GROSS INCOME	1510	
INDIRECT EXPENSES		
Vacancy costs	126	<i>Revenue lost for, say, jobs unfilled</i>
Learning curve	438	<i>Revenue lost for partial productivity during first year of employment</i>
NET INCOME	946	

**Figure 6: A Human Capital Income Statement Fitz-End (2002)**

Another model for the calculation of ROI comes from the Corporate Leadership Council in the USA (2002). This model focuses on the actual intervention(s) offered by HR and works as follows:

Calculate all the costs of the intervention, including the time of specialists and participants, then multiply the number of employees participating by:

- The percentage of the job related to performance changes
- The performance change (in standard deviations)
- The value of one standard deviation in performance
- The duration of performance gain in x number of years

Then subtract the costs and divide the result by the costs to give return on investment.

The cost lines in this statement may not be 100% accurate; however, this approach has considerable merit because it defines the financial cost of maintaining Human Capital in relation to the financial value added it produces.

## **2.7.2 Human Capital Index (HCI)**

The contribution of Human Capital to aggregate productivity growth is important, but uncertainty remains about its magnitude and calculating the effect on the bottom line in real monetary terms. Brown (1999) developed two models he calls the Simple Human Capital Index and Complicated Human Capital Index.

### **2.7.2.1 Simple HC Index**

This index is made up of four sub-metrics:

- Number of years in the business / field.
- Level in the company (by job/grade or organisational chart level).
- Performance rating.
- Number and variety of positions / assignments held.

Each of these four factors is weighted, based on their relative importance. Each individual is then given a score based on these factors. This index may tell a company about the strength of a team and the entire workforce, and provide a method to calculate the true loss of a key person to turnover.

The limitation of this index is that it does not take into consideration the potential of the individual, whilst the advantage is that it is relatively simple and easy to understand and administer (Brown, 1999).

### **2.7.2.2 Complex HC Index**

This index takes into consideration the level of competency or skills mix and first weights the two dimensions of skills/competencies vs. experience/performance. This weighting could be different for



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companies wanting to acquire new skills vs. a company who is concerned with having seasoned employees.

Skills and competencies are categorised in technical and non-technical and these are then rated according to the person's level of proficiency in each area. The overall Human Capital score for each employee is then calculated by taking the competency score multiplied by the weight and the experience score multiplied by the weight (Brown, 1999).

### **2.7.3 Best Investment in Human Capital (BIHC)**

Best Investment in Human Capital (BIHC) provides a framework for Human Resources to move from a soft-skill business to one based on hard-skill measurement (Weiss, 1999). "Best" reflects comparative analyses of the company's current investment performance versus external standards. "Investment" refers to the change in treating the money and effort spent on developing HC as an investment rather than cost. "HC" refers to the money and effort it takes to cultivate people and their talent, reflecting the economic value of the knowledge, skill, experience and innovations of people in the company to be productive and competitive (Weiss, 1999).

### **2.7.4 Balanced Scorecard (BSC)**

The Balanced Scorecard (BSC) was not designed specifically to measure and publish intangible assets, only to take a more "balanced view" on internal performance measurement. The objectives and the measures of the scorecard are derived from an organisation's vision and strategy and thus complement the financial measures of past performance with measures of the drivers of future performance.

The Balanced Scorecard (Kaplan and Norton, 1996) seeks to align the evaluation of Human Capital to the company's strategic aims under four headings:

1. Financial success (to succeed financially, how should we appear to customers?)
2. Customer success (to achieve our vision, how should we appear to customers?)

- 
3. Operational success (to satisfy our shareholders and customers, at what business processes must we excel?); and
  4. Learning and growth (to achieve our vision, how shall we sustain our ability to change and improve?)

Kaplan and Norton distinguish between outcome measures (which they term “lag measures”) and performance drivers (termed “lead measures”), and emphasise that a good scorecard should have a mixture of both. Although organisations may have hundreds of performance measures scattered through the various functions, they are frequently unconnected with the financial outcomes that govern decisions at the top level.

The Balanced Scorecard does not specifically focus on people - it is implicit that each of the four sets of outcomes is generated by them. However, some company applications have changed the name of the learning and growth perspective to “employees” or “people”. Kaplan and Norton (1996) did include in these perspective two sets of people performance drivers, as follows.

- **Employee capabilities**

In this area, three outcome measurements are identified as:

1. Employee satisfaction.
2. Employee retention.
3. Employee productivity.

Driven by the following enablers:

- Staff competence.
- Technology infrastructure.

- The climate for action.
- Motivation, empowerment, and alignment.

The outcome measures described here are:

- Measures of suggestions made and implemented.
- Measures of improvement (in processes).
- Measures of organisational and individual alignment (this refers to individual and team goals being consistent with and supportive of the overall business goals).

Kaplan and Norton (1996) state that they can supply fewer examples of company-specific measures the human capital (people) perspective compared to the financial, customer and internal process perspectives in their balanced scorecard.

Becker et al. (2001) argue that Human Capital is the foundation of value creation based on the fact that up to 85% of a company's value is based on intangibles, and propose an adaptation of the Balanced Scorecard called HR Scorecard (discussed next). As the BSC achieves its purpose to balance the traditional (financial) perspective by adding the three other perspectives, there could, in principle, be many more perspectives.

### **2.7.5 HR Scorecard**

The HR scorecard (Becker et al., 2001) seeks to link HR policies and practices to the firm's strategic aims and values via analysis and measurement of essential workforce outcomes, employee behaviours, workforce competencies, workforce costs and investments and cultural attributes.

The model recognises the importance of both intangible and tangible assets, as well as of financial and non-financial measures. It also acknowledges the complex, value-generating connections among the firm's customers, operations, employees, and technology, and integrates HR's role in an unprecedented way. The model highlights the important distinction between lagging and leading indicators. Lagging indicators, such as financial metrics, typically reflect only what has happened in the past. Such metrics may accurately measure the impact of prior decisions, but they won't help one to make today's decisions, nor do they guarantee future outcomes.

<b>REVENUE</b>		
Human capital value added	\$2665	<i>Revenue less nonhuman expenses</i>
<b>DIRECT EXPENSES</b>		
Acquiring	15	<i>Cost of hiring</i>
Maintaining	1128	<i>Pay and benefit cost</i>
Developing	12	<i>Cost of training</i>
<b>GROSS INCOME</b>	1510	
<b>INDIRECT EXPENSES</b>		
Vacancy costs	126	<i>Revenue lost for, say, jobs unfilled</i>
Learning curve	438	<i>Revenue lost for partial production during first year of employment</i>
<b>NET INCOME</b>	946	

**Figure 7: Transforming the HR Architecture into a Strategic Asset - Becker et al. (2001)**

Becker et al. (2001) list a Seven-Step Model for Implementing HR's Strategic Role with a strong focus on designing a Strategic HR Measuring System.

- **Step 1: Clearly Define Business Strategy**

At the strategy-development "table," senior HR leaders provide an essential perspective. The key is to state the firm's goals in such a way that employees understand their role and the organisation knows how to measure its success in achieving them.

- **Step 2: Build a Business Case for HR as a Strategic Asset**

Once a firm clarifies its strategy, HR professionals should be able to build a clear business case for why and how HR can support that strategy, showing the high-performance work system that has a distinct, positive influence on a firm's financial performance.

The business case for a strategic HR role must also incorporate HR's key influence on strategy implementation and the role of strategically focused measurement systems.

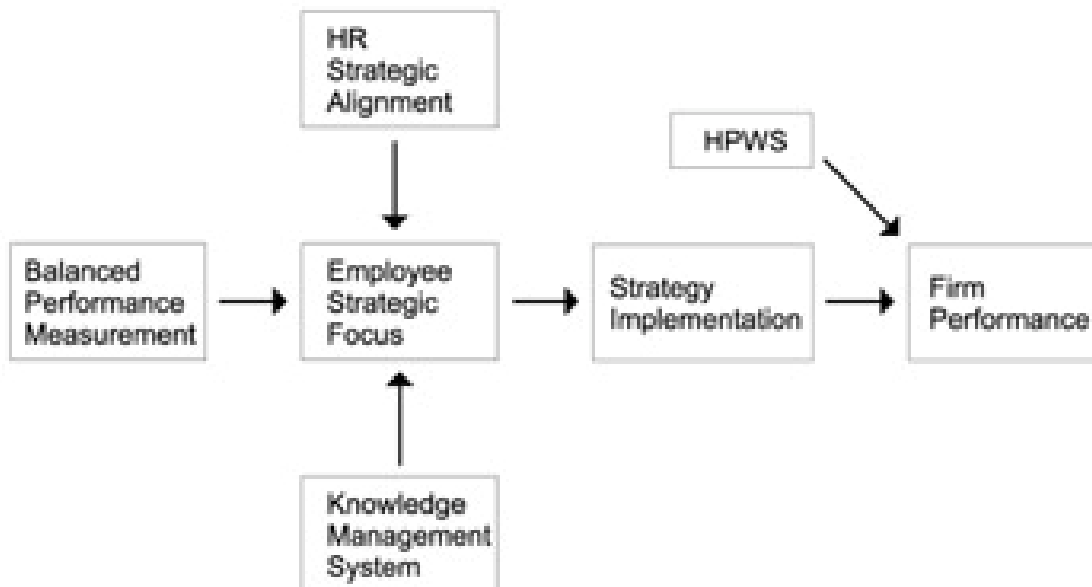


Figure 8: HR and Strategy Implementation - Becker et al. (2001)

- **Step 3: Create a Strategy Map**

Clarifying the firm's strategy sets the stage for implementing that strategy. To define the value-creation process, the top- and mid-level managers who will be implementing the firm's strategy should develop a strategy map to represent the firm's value chain, asking the following questions:

- Which strategic goals/objectives/outcomes are critical rather than "nice to have"?
- What are the performance drivers for each goal?

- How would progress toward these goals be measured?
- What are the barriers to the achievement of each goal?
- How would employees need to behave to ensure that the company achieves these goals?
- Is the HR function providing the company with the employee competencies and behaviours necessary to achieve these objectives?
- If not, what needs to change?

A strategy map of the value-creation process contains hypotheses, or predictions, about which organisational processes drive firm performance. Normally, a company validates these hypotheses only after achieving targets on performance drivers and observing the impact of these results on firm performance.

- **Step 4: Identify HR Deliverables within the Strategy Map**

HR creates much of its value at the points of intersection between the HR system (rewards, competencies, work organisation, etc.) and the strategy implementation system. Maximising that value requires an understanding of both sides of that intersection.

- **Step 5: Align the HR Architecture with HR Deliverables**

Evaluate how the HR system (rewards, competencies, work organisation, etc.) can be structured so as to provide those deliverables i.e. bottom up.

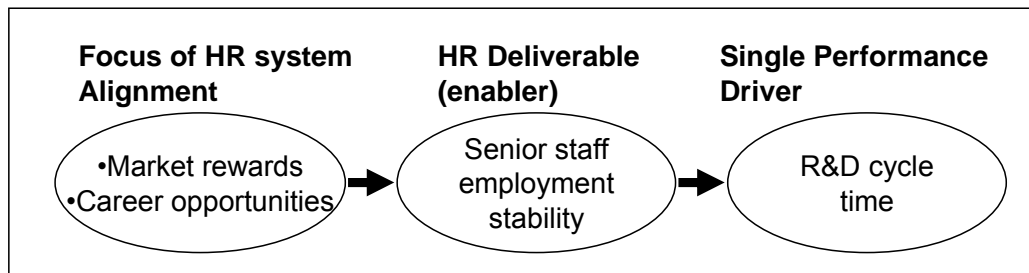


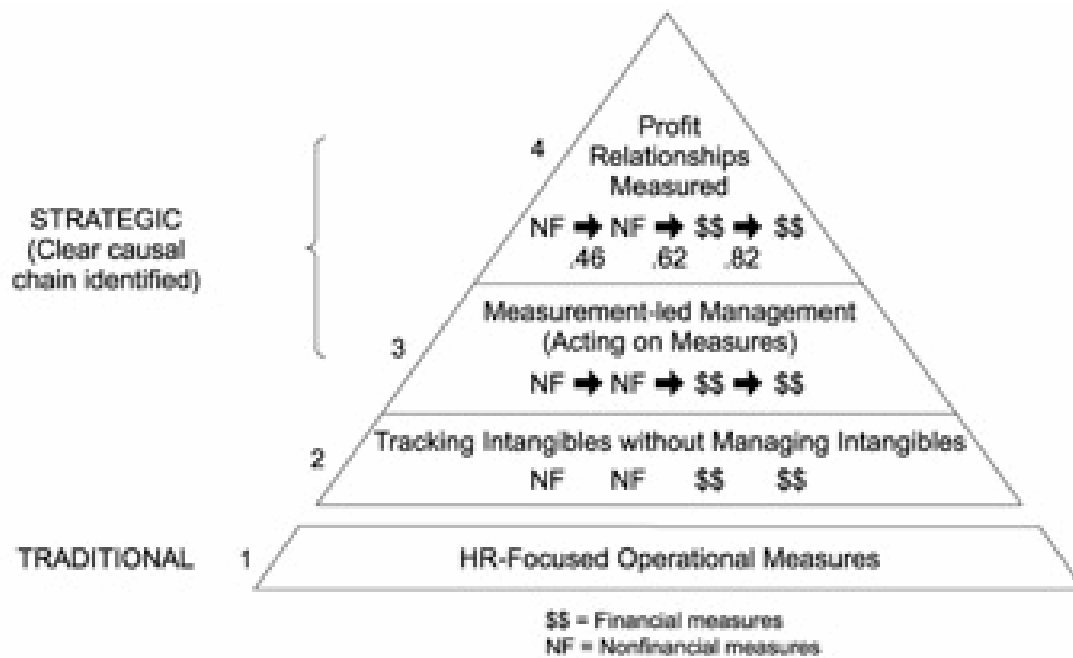
Figure 9: Intersection of HR with Strategy Map - Becker et al. (2001)

- **Step 6: Design the Strategic HR Measurement System**

Steps 1 through 5 guide the development of the HR architecture and lay the groundwork necessary to measure the HR-firm performance relationship. In Step 6, the actual design of the HR measurement system takes place. To measure the HR-firm performance relationship with precision, valid measures of HR deliverables need to be developed.

1. Choose the correct HR performance drivers and enablers. This requires comprehension of the causal chain for effective strategy implementation of the organisation.
2. Choose the correct measures for those deliverables and measure those variables accurately.

Becker et al. (2001) go on to illustrate the measurement choices facing HR professional (Figure 11 below).



**Figure 10: The Creation of Employee Strategic Focus through Increasing Measurement Sophistication - Becker et al. (2001)**

Most HR measurement systems fall in the traditional category, or Stage 1. These include operational metrics such as cost per hire and activity counts. The gap between Stages 1 and 2 in the diagram symbolises the substantial divide between strategically and operationally focused HR measurement systems.

In the second stage, HR measures have the aura of strategic import, but they do little to validate HR's role as a strategic contributor. If companies declare their "people" measures, such as employee satisfaction, as having strategic value, and these metrics are used in the reward system, there is a "balance" between financial and non-financial measures, but there is no consensus about how these variables serve to implement strategy. There is therefore no strategic logic linking these measures together.

Stage 3 is a key transition point. The firm includes non-financial measures (among them HR measures) in its strategic performance measurement system. In addition, it locates each measure within a strategy map - assisting HR to legitimately track HR's contribution to firm performance.



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In Stage 4, HR measurement systems let the firm estimate the impact of HR policies on firm performance. If the firm's value chain is short, the company can gauge the full impact of HR on overall performance. In organisations with more complex value chains, estimates of HR's influence may be limited to segments within the chain.

- **Step 7: Implement Management by Measurement**

Once the HR Scorecard is developed, and if the Scorecard is aligned with the imperatives of the firm's strategy, HR professionals will have new insight into what it takes to actually manage HR as a strategic asset.

According to Becker et al. (2001), implementing a new management process based on the work done in Steps 1 through 6 requires considerable change and flexibility, and the process is not just a one-time event. Human resource executives must regularly review the HR deliverables they've defined in order to be sure that these drivers and enablers remain strategically significant. This is particularly true for HR enablers that have direct links to specific business objectives. Some questions arise:

- How many HR professionals can build business cases to support a company strategy?
- What is the profile and competence of the HR professional to support such measures?

Research is required to identify the extent of this competency among HR professionals. Skilled HR managers understand when an enabler is no longer playing a strategic role and needs to be replaced (Becker et al., 2001).

## **2.8 Measuring Intellectual Capital**

Intellectual Capital (IC) is concerned with accounting for the firm's future prospects in an organisational mode. It is concerned with laying out the competencies which represent drivers of growth as potentialities (Brooking, 1997; Edvinsson & Malone, 1997; Johansson, 1998; Johansson et al., 1998; Roos et al., 1997a; Roslender, 1997; Stewart, 1997; and Sveiby, 1997). It is not concerned with the growth found in present markets, technologies and products, but it is rather focused on mobilising internal, foundational capabilities and competencies useful for growth in a

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long-term perspective (cf. Hamel and Prahalad, 1994; Roberts, 1998; and Wernerfeld, 1984). Here, organisational capabilities and competencies constitute the specific bases - organisational routines - for competitiveness built up over a long period of time and realised in a multitude of products and technologies over time. Growth and value creation are not a matter of particular products and markets but of the broad organisational knowledge, unique to a firm, which allows it constantly to adapt to changing conditions.

A few models have been developed to measure Intellectual Capital.

### **2.8.1 Intellectual Capital (IC) Index**

An IC statement is a set model; not a set calculation that arrives at a digit for the worth of a firm's intellectual capital. IC includes employees, organisation, and customers for a possible extended reporting on a firm's situation beyond the narrowly financial measures typically reported on.

Tangible assets, albeit important, are not decisive. More important is the "value of the talented people" that are valuable because they are part of an organisational system. Such a competence theory (Grant, 1996) suggests that organisational competence is gradually built and historically forged, and always placed in the uneasy position between discursive and tacit understanding of organisational rules of conduct. It directs attention to internal processes within the firm and not merely to external markets and competition.

The IC index is a second generation model that attempts to consolidate all the different individual indicators into a single index and correlate the changes in Intellectual Capital with changes in market value. This index was developed by Johan and Göran Roos who concluded that because it was so difficult to measure Intellectual Capital itself, the focus should be on measuring changes (Roos & Roos, 1997b). To this end they developed the IC-Index tool.

### **2.8.2 EFQM Excellence Model (EFQM)**

The EFQM Excellence Model is a non-prescriptive, self-assessment approach, developed as a framework for assessing applications for the European Quality Award (ECEDG, 2000). It uses nine criteria covering

1 Leadership;

- 2 Policy and strategy;
- 3 People;
- 4 Partnerships and resources;
- 5 Processes;
- 6 Customer results;
- 7 People results;
- 8 Society results; and
- 9 Key performance results.

Points are allocated based on assessment of results, approach, deployment and assessment and review.

### **2.8.3 People Value Add (PVA)**

Kunath (2003) said that “people value” drives all economic value added, and HR functions are high on his list of those organisational units that have not “sold” their true importance within most organisations. To meet the challenge of measuring the value added by people, a ratio, People Value Add (PVA), has been defined as the Economic Value Add (EVA) divided by the capitalised value of employee costs. It recognises that financial value is ultimately dependent on Human Capital.

#### **2.8.3.1 Economic Value Add (EVA)**

Economic Value Add (EVA) is a comprehensive performance measure that uses the variables of capital budgeting, financial planning, goal setting, performance measurement and incentive compensation to account for all the ways in which corporate value can be added or lost, and

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concentrates on changes in value as a result of new projects. It has been applied to Human Resource measurement by the Saratoga Institute, deriving metrics from the key drivers of value for the organisation.

EVA = Net operating profit after taxes (NOPAD) - Capital x Cost of Capital.

The capital charge is the most distinctive and important aspect of EVA. Under conventional accounting, most companies appear profitable but many in fact are not. As Drucker (1995:1-9) stated in a Harvard Business Review article, "Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources... Until then it does not create wealth; it destroys it". EVA corrects this error by explicitly recognising that when managers employ capital they must pay for it, just as if it were a wage.

EVA, relating profits or cash flow to tangible assets, capital employed or equity, defines that only by focusing on tangible flows are shareholders guaranteed that management will create "shareholder value". EVA is generally used and accepted in industry as a measure for Human Capital and has been used by Fitz-end (2000). This involves deriving metrics from the key drivers of value for the organisation. Examples of these metrics include: Revenue per Employee; Employee contribution to critical outputs (process), and the effectiveness of HR within the organisation.

This method is internally focused and does not report on Human Assets, rather on HR specific indices; i.e. best ways to manage the Human Asset. The EVA approach from finance relies heavily on discounted cash flow to evaluate the net present value of a capital project. If the return on capital is greater than the cost of capital, then value is created and the project should be implemented. This financial theory of capital will be used as a model from which to develop the measurement of Intellectual Capital. According to Robinson and Kleiner (1996), this financial project evaluation approach, which relies on value creation, should be applied to all of the internal processes of the value chain.

## 2.9 Measuring Intangibles

As Human Capital may be considered as an intangible asset, an understanding of the methods used to value intangibles is required. When researching the measurement of intangibles, it was found that

suggested measuring approaches for intangibles fall into at least four categories of measurement. The categories are an extension of the classifications suggested by Luthy (1998).

- 1 Human Capital
- 2 Customer Capital
- 3 Organisational Capital
- 4 Intellectual Capital

Intangible assets are a broader category than Human Capital and include aspects such as Intellectual Capital, copyright, brands, customer service and company image. Human Capital is thus seen initially as one element of a sub-set of intangibles as defined by Arthur Anderson (Group, 1998).

Measuring Intangible Capital has been approached in various manners - some of which are briefly described below:

#### **Direct Intellectual Capital Methods (DIC)**

This method estimates the Rand value of intangible assets by identifying its various components. Once these components are identified, they can be directly evaluated, either individually or as an aggregated coefficient.

#### **Market Capitalisation Methods (MCM)**

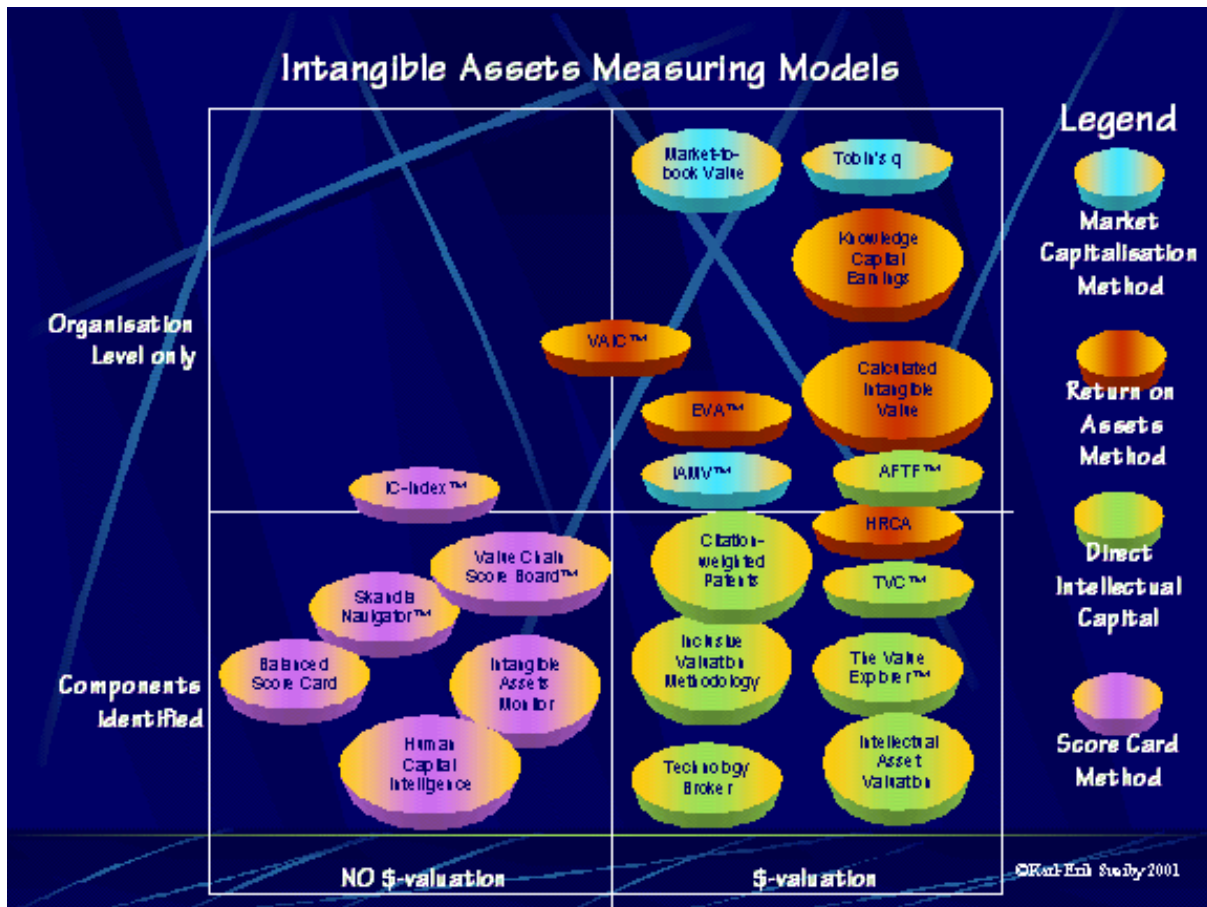
This method calculates the difference between a company's market capitalisation and its stockholders' equity as the value of its Intellectual Capital or intangible assets.

#### **Return on Assets (ROA)**

This method uses the average pre-tax earnings of a company for a period of time, divided by the average tangible assets of the company. The result is a company ROA that is then compared with its industry average. The difference is multiplied by the company's average tangible assets to calculate an average annual earning from the Intangibles. By dividing the above-average earnings by the company's average cost of capital or an interest rate, one can derive an estimate of the value of its Intangible Assets or Intellectual Capital.

The above categories are an extension of the classifications suggested by Luthy (1998) and Williams (2000), and have been applied for various situations; e.g. the methods offering \$-valuations, such as ROA and MCM methods. These are useful in merger and acquisition situations and for stock market valuations.

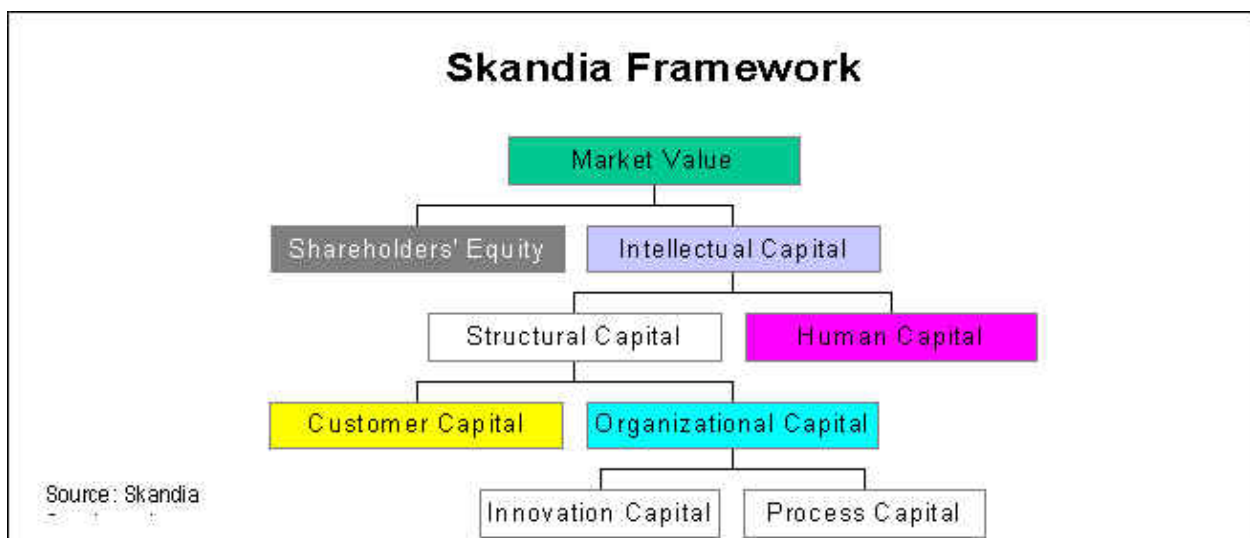
The following figure provides a graphical illustration of the various Intangible Assets measuring models. Details of those considered most important by the researcher are provided thereafter.



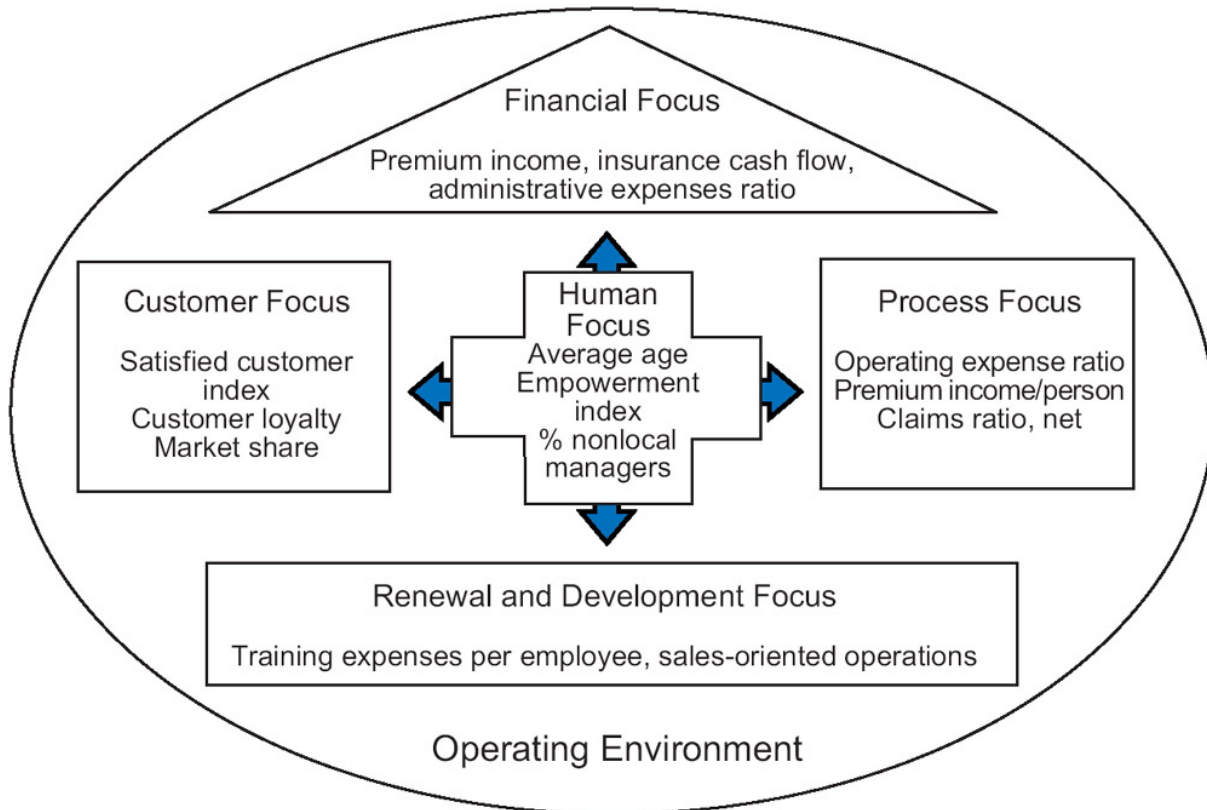
**Figure 11: Invisible Assets Measuring Models - adapted from Sveiby (1997)****2.9.1 Skandia Navigator / Intangible Assets Monitor**

The Skandia Navigator, pioneered by Leif Edvidsson (Anon 1992) is a collection of critical measurements that aim to provide a balanced view of performance and goal achievement. This monitor is considered by the researcher as the most comprehensive of all the Intangible measures. It is based on identification of critical indicators under five perspectives linked to the value creation process:

- 1 Financial focus
- 2 Customer focus
- 3 Process focus
- 4 Renewal and development focus and
- 5 Human focus

**Figure 12: Skandia Framework – Edvidsson (in Anon, 1992)**

The Intangible Assets Monitor is based on the notion of people as an organisation's only profit generators. The profits generated from people's actions are signs of that success, but not the originator of it. Human actions are converted into both tangible and intangible knowledge "structures" (Mayo, 2001). These structures are directed outwards (external structures) or inwards (internal structures). These structures are assets, because they affect the revenue streams.



**Figure 13: Intangible Assets Monitor - Mayo (2001)**

The Intangible Assets Monitor assumes a set of three Intangible Assets, and proposes that one should try and find metrics indicating the growth, renewal, efficiency and stability of these assets. The idea is to get a "peek" into how the Intangible Asset(s) are developing, by designing indicators that correlate with the growth of the asset in question, its renewal rate, how efficiently it is being utilised, and the risk of loosing it.

The following figure illustrates the HCM as proposed by Mayo (2001).



**THE HUMAN CAPITAL MONITOR**

PEOPLE AS ASSETS	PEOPLE MOTIVATION AND COMMITMENT	PEOPLE CONTRIBUTION TO ADDED VALUE		
<p>Human Asset Worth</p> <p>= employment costs x individual asset multiplier (IAM) / 1000</p> <p>IAM = a function of</p> <ul style="list-style-type: none"> <li>• capability</li> <li>• potential</li> <li>• contribution</li> <li>• values alignment</li> </ul> <hr/> <p><b>Maximizing Human Capital</b></p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• Acquisition</li> <li>• Retention</li> <li>• Growth</li> </ul> </td> <td style="vertical-align: top; padding-left: 10px;"> <ul style="list-style-type: none"> <li>– How successful are we?</li> <li>– What drives success?</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• Acquisition</li> <li>• Retention</li> <li>• Growth</li> </ul>	<ul style="list-style-type: none"> <li>– How successful are we?</li> <li>– What drives success?</li> </ul>	<p>Measures</p> <p>– How successful are we?</p> <hr/> <p><b>The work environment that drives success</b></p> <hr/> <ul style="list-style-type: none"> <li>• Leadership</li> <li>• Practical support</li> <li>• The workgroup</li> <li>• Learning and development</li> <li>• Rewards and recognition</li> </ul>	<p>The value added to each stakeholder</p> <ul style="list-style-type: none"> <li>• financial</li> <li>• nonfinancial</li> </ul> <ul style="list-style-type: none"> <li>• current</li> <li>• future</li> </ul>
<ul style="list-style-type: none"> <li>• Acquisition</li> <li>• Retention</li> <li>• Growth</li> </ul>	<ul style="list-style-type: none"> <li>– How successful are we?</li> <li>– What drives success?</li> </ul>			

**Figure 14: Human Capital Monitor – Mayo (2001)**

Sveiby (1997) recommended having only one or two measures in each box. He uses the term “employee competence” for Human Capital, and he confines this to “professionals”. This seems appropriate for totally knowledge-based companies such as consulting firms, but could overlook the very real added value provided by others.

Sveiby’s (1997) leverage effect is a formula that looks at the effect of the firm’s own professionals in generating revenue, in the context of all the Human Capital available.

The formula is as follows:

$$\text{Profit per Professional} = \frac{\text{Profit}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{\#employees \& freelancers}} \times \frac{\text{\#employees \& freelancers}}{\text{Number of professionals}}$$

General efficiency factor		Sales efficiency factor		Personnel efficiency factor		Leverage indicator
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**Equation 1: Sveiby’s leverage effect formula – Sveiby (1997)**

Under the “internal structure” category several measures relating to Human Capital are included:

- Proportion of support staff to total employees (efficiency).
- Sales per support person (efficiency) .
- Values and attitudes (efficiency).
- Age of the organisation (stability).
- Support staff turnover (stability).
- “Rookie ratio”- number of people with less than two years’ employment (stability).

Sveiby (1997) compares the Balanced Scorecard with the Intangible Assets Monitor. He notes that there are clear similarities between the non-financial areas of focus and their links to the strategy of

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the firm. The two were developed independently, but both recognise the importance of intangible assets.

## 2.10 Valuing Assets

Invisible assets are the key drivers of shareholder value in the knowledge economy, but accounting rules do not acknowledge this shift in the valuation of companies. Statements prepared under GAAP do not record these assets. GAAP covers such aspects as revenue recognition, balance sheet item classification and outstanding share measurements. Companies are expected to follow GAAP rules when reporting their financial data via financial statements.

There are a number of methods generally accepted and applied in valuing the assets of a company. These traditional methods include:

- **Cost based methods** - these method typically look at acquisition or replacement cost.
- **Market based methods** - this method uses the price to be paid in an open market.
- **Income based methods** - this method uses the cash streams to be expected into the organisation related to the contribution of the Human Asset, calculated as the present value of the expected net cash flows.

Flamholz (1999) states that the aim of Human Resource management is to optimise Human Resource value. He defines the measure of individual value as resulting from two interacting variables: a person's conditional value and the probability that they will stay with the organisation. An individual's conditional value is the present worth of the potential services that could be rendered if they stay with the organisation for x number of years. The conditional value is a combination of productivity (performance), transferability (flexible skills), and promotability. The latter two are heavily influenced by the first element. This is then multiplied by a probability factor that the individual will stay for the x number of years. This gives the expected realisable value, which is a measure of the person's worth. Flamholz (1999) extends the principle to evaluating the effectiveness of development programmes. If a programme produces a measured change in

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productivity, transferability, or promotability, this translates into an increase in the value of the individuals concerned.

There are a number of difficulties with this approach, not least of which is the estimation of potential future services. It also leads to lower values for older and more experienced people who have less time to render future services. There is a case for looking at them this way if one considers value over a future lifetime, but it fails to take account of the wealth of value in past experience.

### **2.10.1 Calculated Intangible Value Method (CIV)**

This method overcomes drawbacks of the market-to-book method of valuing intangibles, which simply subtracts a company's book value from its market value and labels the difference. Because it rises and falls with market sentiment, the market-to-book figure cannot give a fixed value of Intellectual Capital. CIV examines earnings performance and identifies the assets that produced those earnings. In many cases, CIV also points to the enormity of the unrecorded value. The formula is as follows:

- **Step 1:** Calculate average pre-tax earnings for a period e.g. three years.
- **Step 2:** Use the average year-end tangible assets for the same period.
- **Step 3:** Calculate the return on assets (ROA), by dividing earnings by assets.
- **Step 4:** Obtain the industry's average ROA for the same period.

**Step 5:** Calculate the excess ROA by multiplying the industry average ROA by the company's tangible assets. Subtract this from the pre-tax earnings in step one to identify the company earnings from its assets.

**Step 6:** Calculate the three-year average income tax rate and multiply this by the excess return. Subtract the result from the excess return for the after-tax number, the premium attributable to intangible assets.

**Step 7:** Calculate the net present value of the premium by dividing the premium by an appropriate discount rate e.g. weighted average cost of capital (WACC).

This apportions the calculated intangible value of the organisation, i.e. what doesn't appear on the balance sheet.

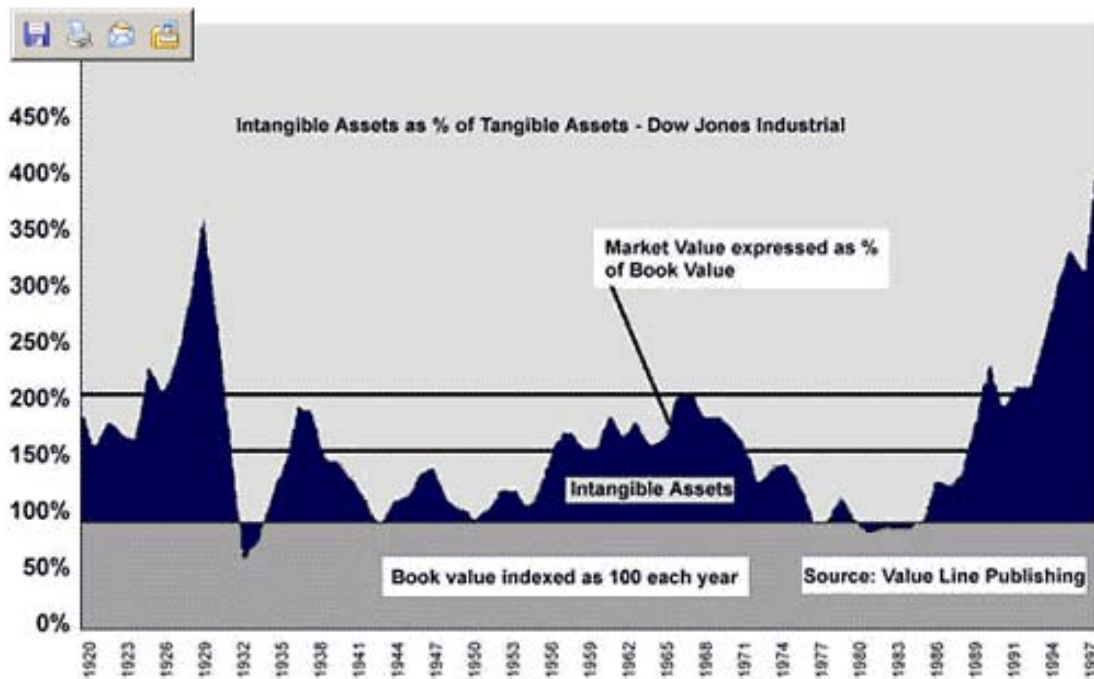


Figure 15: Intangible assets as a percentage of tangible assets – Value Line Publishing (1998)

## 2.11 Measuring Human Assets

### 2.11.1 Individual Human Asset Worth

A Human Capital Monitor considers what is it that makes one person more valuable than another and concludes that the answer is very organisation specific. For some, it is finding people who will fit in well and make good team members. For others, the ability to get certain kinds of results is all that matters. So any approach has to have some flexibility to meet different situations.

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The formula suggested in the Human Capital Monitor for calculating Human Asset Worth (Mayo 2001):

$$\text{HAW} = \text{EC} \times \text{IAM} / 1,000$$

(Human Asset Worth = Employment Cost × Individual Asset Multiplier / 1,000)

This is divided by 1,000 so that the end result will not look like a monetary amount that can be directly compared with cost. The purpose is to be able to understand *relativities* and provide a guide to taking appropriate actions.

$$\text{Employment Cost (EC)} = \text{Base salary} + \text{value of benefits} + \text{employer taxes}$$

This is the cost of employing a person, including taxes such as social security or national insurance, and the value of the benefits package. It excludes bonuses unless they are in whole or part guaranteed. It also does not include the overheads of providing space and equipment, as these are so variable and are likely to be averaged out on a per person basis.

The Individual Asset Multiplier (IAM) is designed to reflect the different level of present and potential value to the person's current role and to the organisation. It uses a Weighted Average assessment of:

- Capability- the cumulative skills, knowledge, experience, and useful networks.
- Potential- to grow and contribute at a higher level.
- Contribution- to stakeholder value.
- Alignment- to organisational values.

To calculate the IAM, each of the factors is assessed on a scale of 0.1 to 2.0. These four factors are assigned a percentage importance out of 100; i.e., if all were equal, 25% to each. In some companies, and for some groups of people, potential may be deemed less important etc.

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**Capability**

The value of an individual is in all their cumulative knowledge, skills, experience, and their relevant network of contacts. It is more than whether they have what is required by their current role. Their breadth is a measure of their flexibility for deployment in different roles - and this makes them more valuable. Whereas it is difficult to encapsulate this in numbers, it should be relatively easy to make judgments, as follows:

0.5	Has some noticeable deficiencies compared to expectations for this role.
1.0	Generally has the balance of capability expected for this role.
1.5	In several areas exceeds the level needed for the role; has unique knowledge and experience, and capability that can be applied in various other roles.
2.0	Has considerable breadth and depth beyond the basic needs of the role; known for unique expertise or has a range of capabilities that can be applied very flexibly.

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**Potential**

An individual invests their Human Capital with an organisation with the expectation that they will grow and progress. The organisation also wants to maintain continuity and provide ongoing succession, as well as build its expertise. The potential to grow beyond the present role is a source of value in itself. It could be for managerial positions, or for growth in any area that is strategically important.

The scale for this factor would be as follows:

0.5	Probably over promoted at current level.
1.0	Expected at the very least to grow within the role, or to stay up to date with a speciality, or to move laterally to different roles.
1.5	Able to grow to at least one higher level of responsibility, or to one or two further levels of specialist depth.
2.0	Considered high potential for management positions or technical/professional leadership.

**Contribution**

Reflecting the fact that individuals add different amounts of value to stakeholders is due partly to the opportunities presented by their role, and partly to their personal performance. This factor should be based on specific measures of value added, not on competence or performance measures (such as achieving milestones) that a stakeholder cannot see.



The evaluation scale for this factor is suggested as follows:

0.5	Makes some measurable contribution to non-financial measures.
1.0	Makes an average level of contribution to either a financial or a non-financial measure, or a combination.
1.5	Makes an above-average contribution to either a financial or a non-financial measure, or a combination, with a significant proportion being aimed at future value creation.
2.0	Contributes considerably more to both financial and non-financial value measures than the average employee, with the majority aimed at future value creation.

### Alignment

“Values”, in the sense of the philosophy or ethos of the organisation, may be expressed formally in written (or espoused) form, or in an accepted unwritten understanding. In some organisations, but not all, this would be a key factor. Managers make judgments about “chemistry” and “fit” when they hire people. Good-performing, capable people who comfortably align themselves to our values have particular worth. They become “part of us” and are likely to be loyal to the organisation.

0.5	Shows little alignment to corporate values.
1.0	Behaviour does not explicitly conflict with values.
1.5	Makes considerable effort to live as many of the values as possible.
2.0	Known throughout as a role model for the organisation’s values.

### 2.11.2 Collective Human Asset Worth

The purpose of an organisation is to organise the Human Capital of individuals in ways that produce more than they would as individual contributors. A team should be more than the sum of the individuals that make it up. *Workgroup effectiveness* is picked out as one of the contributing factors to the value-adding contribution. For the purposes of asset value comparisons, the combination of the Human Asset Worth of all the members of the team can be used.

Monti-Belkaoui & Riahi-Belkaoui (1995) suggested that Human Resource valuation should be based on value-addition, as it is a measure of wealth. Value addition is defined as the increase in wealth, generated by the productive use of the companies’ resources before it’ allocation among

stakeholders. A discussion paper by the Accounting Standards Committee in 1975 recommended that, amongst other things, a statement of value added showing how the benefits of the efforts of an enterprise are shared by employees, providers of capital, the government and reinvestment, be included in the external reporting.

### **The relative value of teams and departments**

Efforts on the retention of talent can be focused through seeing the relative value of different groups of people. This value may then be compared with the contribution that the group is making, and their costs. Mayo (2001) states that there should be a more or less linear relationship between “asset value” and “value added” for most groups.

### **The distribution of potential**

An understanding of how potential is distributed and where continuity problems exist is required.

### **The extent of values alignment**

The factors that have been judged need to be taken into account to get a feel of how values alignment is distributed in functions and in areas. This may lead to some action to shift the culture more toward the espoused values.

### **The flexibility of the workforce**

The higher the average factors for “capability,” the more flexible the group. In times of restructuring this may save unnecessary redundancies and it also provides more options in career management.

This statement of value-add provides a useful measure to help gauge performance by relating key figures such as capital employed and employee costs. The limitation of this reporting method is that it reports on the performance, but not on the efficiency, of the value-addition.

## 2.12 Selected International Case Studies

The following studies have been reviewed to assess the components of the framework against potential applicability globally. These cases were selected from a research paper done by University of Cambridge on Human Capital and Performance (Stiles and Kulvisasachana, 2003). The cases list the types of HR measures and business measures which form part of the companies' metrics and include the findings initiated due to the focus on these particular measures. These cases were evaluated to identify any link between the HRM practices, are related to perceptual measures of organisational performance. Links are found between employee productivity, cash flow, and market value, and the value of HR initiatives measured for increase in productivity. Most studies support the link between HRM and performance but do not imperially show that HRM causes high performance.

### Case study 1: Arthur (1994)

Single industry: 30 US steel mini-mills

HR measures: 10 variables - decentralisation, participation, general training, skilled workers, and level of supervision, social events, due process, wages, benefits, bonus, and percentage unionised. Clustered into two systems: control and commitment.

Outcome measures: manufacturing performance (labour efficiency, scrap rate) and employee turnover.

Controls: firm age, firm size, union status, business strategy.

Method: Regression

Findings: Commitment based HR systems associated with lower scrap rates and higher labour efficiency than control-based systems.

### Case study 2: MacDuffie (1995)

Single industry: 62 automotive assembly plants in 16 countries (volume plants)

HR measures: HR policies (index of four items - hiring criteria, incentive pay, presence of status barriers and level of training)

Production organisation measures: use of buffers - 3 items, (e.g. incoming and work in progress inventory), work systems 6 items - including employment involvement (production-related suggestions, job rotation and quality tasks), total automation, production scale, model mix complexity, parts complexity, production design

age.
Outcome measures: labour productivity (hours of actual effort to build a vehicle), quality (consumer perceived, defined as defects per 100 vehicles).
Controls: total automation, plant scale, model mix complexity.
Method: hierarchical regression.
Findings: innovative HR practices affect performance not individually but as interrelated elements in an internally consistent HR system and these systems contribute most to plant productivity and quality when they are integrated with manufacturing policies of a flexible production system.

### Case study 3: Huselid (1995)

Multi-industry: 968 US-owned firms with over 100 employees.
HR measures: High performance work system scale. 13 items elicited two factors (i) employee skills and organisational structures - items: formal job design, enhanced selectivity, formal training, quality of work program, quality circles, labour-management teams, information sharing programmes, formal grievance procedures, profit and gain-sharing plans, enhanced communications, (ii) Employee motivation - items: formal appraisal, linked to compensation, merit in promotion decision rules.
Outcome measures: turnover, productivity (log of sales per employee), corporate financial performance - market based measure Tobin's q, and accounting based measure - gross rate of return on capital employed (GRATE).
Controls: firm size, capital intensity, firm and industry levels of union coverage, industry concentration, growth in sales, R&D intensity, firm-specific risk, industry levels of profitability, net sales and total assets.
Method: regression analysis
Findings: high performance work systems have an economically and statistically significant impact on turnover, productivity and corporate performance. One standard deviation increase in HPWS is associated with a relative decrease of 7.05% in turnover, and on a per employee basis, \$27,044 more in sales and \$18,641 and \$3,814 more in market value and profits respectively.

**Case study 4: Delaney and Huselid (1996)**

Multi-industry: 727 organisations.

HR measures: staffing selectivity index (3 items), training index (3 items), incentive compensation (3 items), grievance procedure, decentralised decision-making, internal labour market index (5 items), vertical hierarchy

Outcome measures: perceptual measures of organisational performance assessing organisational performance over the last three years relative to similar organisations (on product quality, customer satisfaction, new product development) and on perceived product market performance (profitability, market share) over three years relative to product market competitors.

Controls: profit/not-for-profit, subsidiary, number of employees, firm age, market competition, union pressure, percentage of managers.

Method: regression analysis.

Findings: progressive HRM practices are positively related to perceptual measures of organisational performance, but do not support the assertion that complementarities among HR measures enhance performance.

**Case study 5: Youndt et al (1996)**

Single industry: 97 manufacturing plants

HR measures: administrative HR systems index (selection for manual and physical skills, training, results based appraisal, individual equity, individual incentives and hourly pay).

Human capital enhancing HR system index (selective staffing, selection for problem-solving and technical skills, development and behaviour based appraisal, external equity, group incentives, skill-based pay and salaried compensation), a range of manufacturing strategies (cost, quality, flexibility on delivery and scope).

Outcome measures: self-report measures of machine efficiency (e.g. equipment utilisation, scrap minimization); customer alignment (e.g. product quality, on-time delivery); and employee productivity (e.g. employee morale).

Controls: organisational size, industry environment.

Method: regression analysis

Findings: HR system focused on Human Capital enhancement directly related to multiple dimensions of operational performance. This was predominately so for links to a quality manufacturing strategy, giving broad support for contingency perspective.

**Case study 6: Delery and Doty (1996)**

Single industry: banking - 114 banks.

HR measures: 7 HR practices. Internal career opportunities (4 items), formal and informal training (4 items), appraisal (2 items), profit sharing (1 item), employment security (4 items), employee participation (4 items), job description (4 items).

Strategy: scale of six items measuring product/market innovation.

Outcome measures: two financial measures: return on average assets, return on equity.

Controls: bank size, bank age, part of a holding company, bank district.

Method: hierarchical regression analysis.

Findings: Three individual HR practices - profit sharing, results-oriented appraisals and employment security had relatively strong universalistic relationships with important accounting measures of performance. Contingency relationships between strategy and three HR practices - participation, results oriented appraisals, and internal career opportunities - explained a significant portion of the variation in the same performance measures. Similarly, the market-type employment systems was positively related to firm performance. The study demonstrates that universalistic, contingency and configurationally perspectives can explain significant levels of variation in financial performance.

**Case study 7: Huselid, Jackson & Schuler (1997)**

Multi-method: 293 publicly held US firms.

HR measures: strategic HRM scale (8 items including teamwork, communications, involvement, enhancing quality and developing talent to serve business in future)

Technical HRM scale (describes perceptions of how well the HR function performs activities - 8 items including recruitment, selection, training, performance appraisals and compensation administration).

Professional HRM capabilities scale (describes expertise and skill relevant to performing excellently within HR function) - 11 items

Business related capabilities scale (describes the amount of business experience HR staff have had outside of HR function) - 3 items

Outcome measures: employee productivity (net sales per employee, gross rate of return on assets, and profitability, Tobin's q).

Controls: union coverage, firm size, capital intensity, industry concentration, sales growth, R&D expenditures, stock price variability (beta) and firm industry.

Method: regression analysis.

Findings: Significant relationship between strategic HRM and employee productivity, cash flow, and market value. No meaningful relationship between technical HRM and firm performance. On a per employee present value basis, a one standard deviation increase in overall HRM effectiveness corresponds to an estimated increase in sales per employee of 5.2%, a cash flow of 16.3%, and a market value of 6%.

### Case study 8: Ichniowski, Shaw, and Prennushi (1997)

Single industry: 36 finishing lines in 17 US owned companies matched with 2190 monthly observations of productivity data.

HR measures: identified 8 HR variables (incentive pay, recruitment and selection, employment security, flexible job assignment, communications and labour relations) and identified 4 distinctive combinations of HR practices.

System 1 (incorporates innovative practices in all areas). Lines with this system have incentive pay plans, profit sharing, extensive screening of new employees, recruitment, high participation, multiple teams, formal team practice, employment security, job rotation, high training, low training, information sharing, managers meet workers regularly, meet with union, unionised, low grievance.

System 2 (similar to three but also includes extensive skills training and high involvement in teams).

System 3 (similar to system 4 except introduced innovative practices through worker involvement in teams and enhanced labour management communication).

System 4 - traditional HRM (firms identified as having no innovative practices with close supervision, strict work rules, narrow job responsibilities, incentive based pay on quantity not on quality of output, no work teams, no information sharing and no formal training).

Outcome measures: productivity (production line uptime - percentage of scheduled operating time that the line actually runs); quality (percentage of total production that met the industry standards).

Controls: capital vintage (when line was built), learning curve effects, technical line specifications, periods of unusually high downtime, quality of steel input, maintenance activity effects.

Method: OLS regression.

Findings: innovative HRM practices raise worker productivity and systems of innovative HRM practices had large effects on production workers' performance. While changes in individual employment practices have little or no effect.

**Case study 9: Patterson et al (1997)**

Single industry: 67 single site single product manufacturing firms with less than 1000 employees.

HR measures: acquisition and development of employee skills (selection, induction, training and use of appraisals); job design (skill flexibility, job responsibility, job variety and use of formal teams); quality improvement teams, communication, harmonisation, comparative pay, incentive compensation systems.

Outcome measures: labour productivity, real profits per employee (profits before tax, deflated by the producer price index of the industry and controlling for size of firm).

Method: qualitative and quantitative data collection, multi-level.

Findings: HRM practices account for 19% of variation between companies in change for profitability and 18% of variation between companies for change of productivity. The acquisition and development of skills and job design are significant determinants of change in both productivity and profitability.

**Case study 10: Guest et al. (2000)**

Multi-industry: 610 firms above 50 employees

HR measures: use and coverage of HR practice (48 items in the following sections): recruitment and selection, training and development, appraisal, financial flexibility, concern with quality, job design, communication and consultation, employment security and single-status and harmonisation.

Outcome measures: HR outcomes 8 items, including employee commitment, flexibility, and behaviour.

Human capital and performance 38, Human capital and performance 39.

Performance outcomes: labour turnover, absenteeism, perception of the firm's financial results, labour productivity, quality of products/services and effectiveness of HR practices compared with other organisations in the same industry.

Controls: composition (part-time, short-term employment), representation at the workplace (trade union recognition, single union/partnership deals, presence of a staff association) and redundancies.

Method: matched sample of HR managers and CEOs. Regression.

Findings: effective use of progressive HR practices is linked to superior performance, and also linked to perceptions of positive employee attitudes and behaviour.

**Case study 11: Guest et al. (2003)**



Multi-industry: 366 firms with over 50 employees
HR measures: 48 items on HRM covering nine main areas: recruitment and selection, training and development, appraisal, financial flexibility, job design, two-way communication, employment security and the internal labour market, single-status and harmonisation, and quality.
Outcome measures: labour turnover, absence and industrial conflict. Labour productivity (value of sales per employee) and financial performance (company's profit per employee).
Controls: sector, trade union membership, part of multinational, presence of consultative committee, staff committee, and single union deal, respondent holds HR position, perceived importance of overall HR policy in terms of controlling for labour costs.
Method: telephone interview using structured questionnaire, regression.
Findings: using objective measures of performance, greater use of HR practices was associated with lower labour turnover and higher profit per employee, but showed no association with HR and productivity. There was a strong association between subjective estimates of HR and productivity and financial performance. The study supports the association between HRM and performance but does not show that HRM causes high performance.

From these cases, it is clear that HR measures have a direct influence on the performance and productivity of companies. This is again linked to the bottom line of the organisations as it effects production, client interactions and team effectiveness. Measures such as the increase in sales per employee have a positive effect on cash flow, which in turn has a positive effect on profits and thus market value. Although a number of similarities exist, it is the opinion of the researcher that there are a number of South African specific issues to be taken into consideration and a global framework may have to include a country specific section (identified as a limit to the current study).

### 2.13 Arguments against Accounting for Human Capital

Although many authors have evaluated the theory of valuing Human Assets by putting it on the balance sheet, there are those who argue against such a concept.

Kearns (2003:94) states that “surely Human Capital is already on the balance sheet even though it is not explicitly listed and the problem of measuring Human Capital is not actually an accounting or actuarial problem”. Kearns (2003) supports his assessment by referencing the Enron scandal whereby the accounting conventions followed was subverted in order to create a false impression.

Philips (2005:95), states “Several disadvantages are inherent in macro level (Human Capital) analyses. First, a study is often very complex, difficult to conduct, and often requires skills that are

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beyond the capability of many Human Capital managers. Attempting to replicate a study at the organisational level may be impossible for most Human Capital functions.”

Another question HR practitioners battle to answer which affects the approach for accounting for HR is; Do effective HR practices drive (cause) positive financial results or do positive financial results lead to better HR practices (i.e., successful business can afford higher quality HR programs)?. Watson Watt (1999) showed in their study that the relationship moves both ways, creating a “virtuous cycle.”

Kearns (2003) is the biggest critique of both intangible and accounting principles applied to Human Capital. He has very compelling arguments against the book value view of Human Capital; based on the fact that share price determines market capitalisation or market value. His reasoning is based on the fact that share prices can swing in either direction which will in effect mean that should the share price be at its lowest, by implication the Human Capital of such an organisation would also be at its lowest. “Share prices, which can be subject to wide fluctuations on a daily basis, can hardly be said to truly reflect the value of human beings” (Kearns, 2003:92). In defence of his argument, one may ask what the value is of properties and buildings as assets on the balance sheet of such an organisation at that particular moment in time. The value certainly does not fluctuate with the share price, as the value of the Human Assets should not fluctuate. This concern is shared by Lester (2002) who concurs that the IC ratio is susceptible to market fluctuation.

Rutledge (1997:3) wrote, “Monkeying with financial statements, for almost any reason, is a terrible idea. Investors have 500 years of practice interpreting financial statements while learning to understand, project, get comfortable with, and value our more than \$60 trillion in total assets. In doing so, they have developed methods to adjust for many of the anomalies (for example, amortisation of goodwill, which can only be defined by describing what it is not) that emerge from our archaic double-entry bookkeeping practices from time to time. Scrambling the financial data we use to make such judgments would render these methods less useful. It also would throw up a cloud of uncertainty large enough to make owning assets more risky, and therefore less valuable. Giving people more information is fine. They can make their own judgments. Tinkering with the balance sheet is not a good idea. Although Intellectual Capital is important (who would doubt that people who know how to do things are more successful than people who don't?), it should be left off the balance sheet. Balance sheets are for stuff, the stuff that George Carlin talks about, not people or ideas. People aren't assets because you can't own them, at least not in this country (I'm neglecting alimony

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here); you can only rent them. Ideas are not assets because, partly due to the fact that the people who generate them can't be owned, you can't keep them bottled up for very long (except for the secret formula for Coke, that is). If you want to measure the value of people and their ideas, you need to look at cash flows, not assets."

In the case of this study, the researcher did not edit any of the above statements, but placed the proposition of this study in a broader framework. This study does not only look at accounting for Human Capital in terms which business will understand and relate to, but also considers the extraction of value, focused on increasing shareholder value, through Human Resources Management.

## **2.14 Conclusion**

The literature studied in this chapter provided a solid foundation for the study and objectives stated at the beginning of the chapter was met, providing substantial information to facilitate the development of a draft framework to facilitate the research process.

The literature shows that there are many dimensions to be taken into account for evaluating and calculating the value of Human Capital in an organisational context. Although the idea that Human Capital should be recognised as a line item in financial statements has been considered by a number of authors, researchers and even valuers, many of the proposed methods and calculations have lost acceptance. This may well be because most of these methods use different logic and calculation methods. For this study, the researcher endeavours to identify those components that are common or appear in multiple methods, testing this against the South African environment and the HR industry in general, and uses the generally accepted financial principles to measure this against the view to increase the knowledge base with an increased understanding of what influences (increases or detracts from) the value of Human Assets for an organisation.

The key consideration seemingly not taken into account is that valuing Human Assets will be required to overcome a number of hurdles to be accepted as an Asset in International Accounting Standards. An asset needs to meet the following criteria (Flamholtz, 1999):

- Possess a potential for future benefits.

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- Benefits must be measured in monetary terms.
  - Future benefits which might include a contribution to future net cash flows, or cost savings, must be owned or controlled by the firm.

From the literature review, it is clear that all these methodologies depend upon the use of metrics (quantitative measures). However, whilst some of these (such as EVA approaches) focus on factors that are capable of being valued in monetary terms, others (such as the Skandia Navigator, the Balanced Scorecard and the EFQM Excellence Model) concentrate more on non-monetary methods. Whereas some (such as EVA and the IC index) adopt a holistic approach, concentrating on one or a few high level metrics such as wealth generated per full time equivalent employee and human investment ratios, others (such as the Balanced Scorecard and the Skandia Navigator) adopt an atomistic approach, with numerous measures of different aspects of skills and learning, employee engagement and behaviours etc.

The contribution of Human Capital to technological progress, i.e. to the development and adoption of new technologies and to the continued improvement of existing production processes, innovation and ultimately company growth is mostly measured in intangible terms and even some of these may not be in line with the new economy for knowledge workers. That is measured is almost certain to improve. If there is uncertainty as to what to measure should all, or nothing, be measured? What is the impact on the organisation - the investment by stakeholders in the organisation?

Consideration will need to be given to the fact that the literature shows it is difficult to quantify most intangible assets in a monetary way, and whatever measures are reported on will compete with the financial measures' credibility and appearance of accuracy. People are mobile, subjective, changeable, and variable and as far from an accountant's concept of an asset as can be imagined. Reporting on Human Assets clearly will possess a challenge for the current accounting standards. The International Accounting Standard (IAS 38), which deals with the valuation of intangible assets, excludes the whole area of Human Capital (and others, such as brands) as not conforming to the definition of an asset (Mayo, 2001).

However, as stated by Zimmerman (2001:3), "Under growing pressures to innovate and to respond to turbulent competitive environments, there is a widespread recognition across all industrial sectors

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that the know-how, imagination and creativity of employees is becoming at least as critical to business success as ‘hard’ assets”.

Another consideration is that the increasing or measuring the value of Human Assets is the function of Human Resources. Using HR practices that facilitate achieve and enhance Human Capital effectiveness requires investing in HR activities. However, HRM practices need to be applied effectively in order to increase the performance as indicated by productivity, turnover and financial indicators. A study by the Fortune Magazine (1997) on the world’s most admired companies, clearly showed that highly admired and successful companies take their HR responsibilities more seriously than their competitors. The companies included Bayer, Bertelsmann, Citibank, Daimler-Benz, Dai Nippon, Disney, General Electric, Gillette, Federal Express, Intel, L’Oreal, Nestle, Nucor, Procter & Gamble, Roche Holdings, SBC Communications, Smith Kline Beecham, and Sony. It is thus safe to assume that HR programmes such as attraction and recruitment, retention, training and development, motivation, rewards and recognition, aligning business and HR strategies, etc. can be considered as the key to unleashing the value of Human Assets for the organisation. Showing the correlation between these programmes and the bottom line remains the challenge for HR practitioners.

Chapter 3 introduces the research methodology followed in the study based on the theoretical construct set out in this chapter to derive at the Framework for Human Capital Reporting.

## CHAPTER 3 - RESEARCH METHODOLOGY

*A journey of a thousand miles must start with a single step  
- Chinese proverb*

### 3.1 Introduction

The intent of this chapter on the research methodology followed in the research, serves to highlight the fact that, underlying all research, the scientific foundation must be above question. This chapter will describe the scientific methodology and approach utilised during this study.

Thorough research generates scientifically dependable data, which enables the researcher to practice professional conduct in the process of responsible decision-making (Cooper and Schindler, 2001). According to Kerlinger (1986), scientific research should include the following:

- A scientifically researched and proven integrating theory. Public and open resources (preferably primary resources).
- Precise definitions.
- A systematic and cumulative approach.
- Replicable findings.
- Objective and scientific replicable data collection and sampling.
- A clear statement of the research problem.
- A clear understanding and explanation of the phenomenon, contextualised in its broader domain.

This study adheres to the scientific approach through the application of both quantitative and qualitative methodologies, and utilises both inductive and deductive reasoning. The study includes a combination of theoretical and interpretive findings, and due to the complexity of the subject as well as the high quantity of qualitative data, the study was performed through the combination of methodologies and reasoning methods, a technique referred to as triangulation. Triangulation refers to the use of several research frameworks of reference analysing the same set of data to ensure scientific validation with the aim to overcome intrinsic bias arising from single methodology research (Leedy, 1993).

This research project was divided into the following phases:

1. Research design
2. Planning
3. Data collection and analyses
4. Evaluation and approval

as illustrated in Figure 17) which serves as a visualisation of the research process in the context of this research.

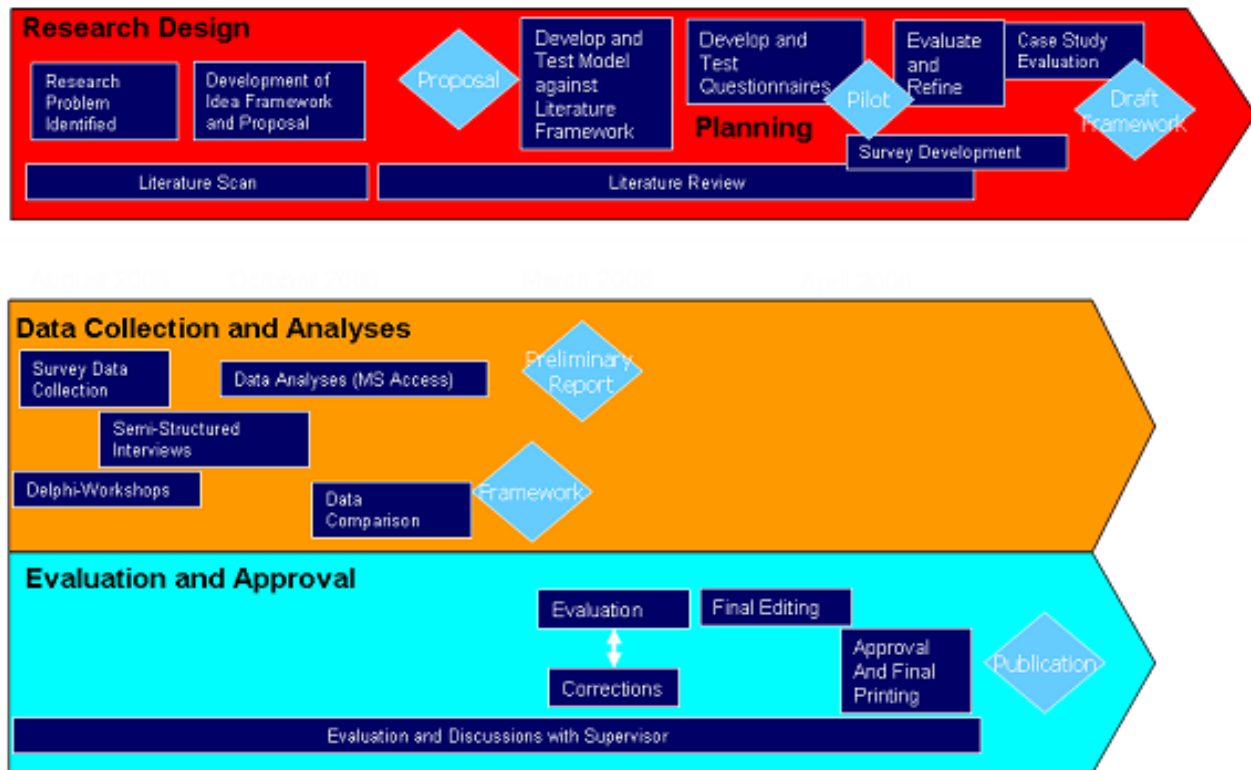


Figure 16: Research Process (author's own)

### 3.2 Theory

The study estimates (with the objective to optimise and improve) the value add of Human Capital to the bottom-line of organisations; i.e. value the Human Assets of an organisation; following a scientific approach by developing a framework for accounting Human Capital.

A company's ability to support its business strategies with Human Capital is an important indication of the company's future business performance. Traditional HR metrics fails to report on the level of performance, knowledgebase or value of their Human Capital, making it virtually impossible for stakeholders or valuers of companies to take this most important asset - Human Resources - into account in valuing the company against its competitors.

Consequently, resulting from the application of the value-add concept of Human Capital, an evolutionary HR Value-add Framework, open to validation and replication, is developed to enable companies to report on their Human Assets to shareholders and other stakeholders, to apply when

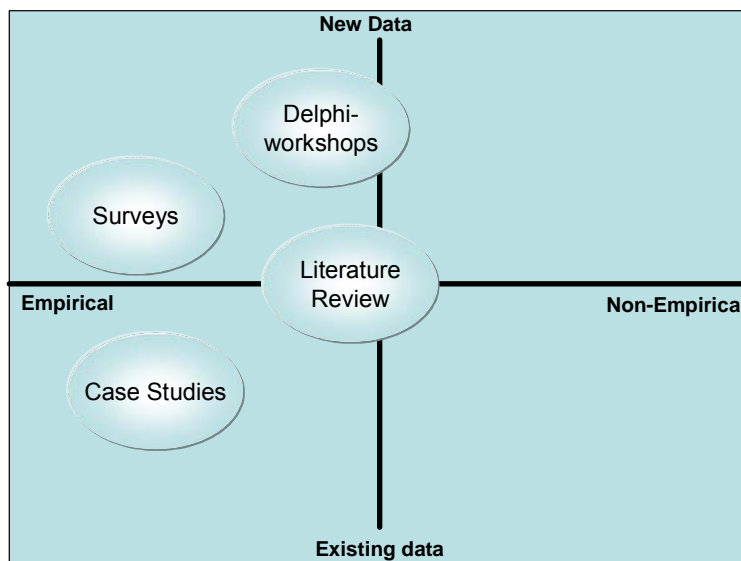


calculating the value of the company. This framework thus needs, amongst others (to be discussed later in this study) to include information that allows a holistic and informed assessment of the company's operations, finances, future strategies and prospects.

The study furthermore investigates the Human Resource Management (HRM) theories and defined activities which can have an effect on the company's Income and Expenditure Statement and/or Balance Sheet, to evaluate whether this has any correlation with the value of the Human Assets.

### 3.3 Detail of the chosen procedure

The research design is exploratory, aimed at developing a new model. As defined by Mouton (2001), good theories and models provide causal accounts of the world, allow one to make predictive claims under certain conditions, bring conceptual coherence to a domain of science, and simplify our understanding of the world. Please refer to Figure 18 which serves as a schematic of the research methods applied during this study.



**Figure 17: Research Methods (author's own)**

The following research instruments were utilised to obtain data for the research:

- Literature review that provides an overview of the field of study to assist the researcher to identify and build the link between finance and HR.

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- Case studies which provides the researcher with an in-depth description of current practices globally in HR accounting from various companies and studies in Industry as input into the planning and design of the semi-structured interview questions.
  - Development of questionnaires to be used as a survey of the target groups.
  - Survey methodology, used with the objective of obtaining a broad overview of the current status as well as (perceived) limitations to the proposed model from a large population.
  - Semi-structured interviews; used to allow executives and HR practitioners to respond spontaneously to open questions, allowing different dimensions and viewpoints as well as the considerations specific to the company.
  - Delphi-technique used after the initial failing of the surveys to obtain enough responses (data) to enable the researcher to make the required inductive reasoning. Evaluating current practices and leveraging the experience of HR experts (HR practitioners, students and consultants in Deloitte), allowed the researcher to evaluate and refine the framework.

Triangulation is defined as a process by which the researcher guards against the accusation that a study's findings are simply an artefact of a single method, a single source or a single investigator's biases (Patton, 1987), and thus was used to verify and validate the research in order to conquer intrinsic bias.

The research process consisted of the following activities:

1. Literature review of Human Capital and Corporate Reporting to ensure that a thorough knowledge and understanding is developed (descriptive and qualitative).
2. Evaluation of International Case studies as obtained through literature reviews.
3. Development of a draft framework.

4. Development of a survey based on the draft framework (to use for verification), piloted for input from students in Organisational Behaviour.
5. Survey developed in Step 4 reviewed and adjusted according to pilot feedback.
6. Development of a survey for HR Practitioners.
7. Verification of the current practice and required Human Capital reporting requirements by industry by means of the qualitative survey, followed by semi-structured interviews of Human Capital practitioners.
8. Development of a Survey for Auditors based on information gathered in Step 1, 4, 6 and 7.
9. Survey of auditors to evaluate the relevance of the proposed categories of reporting for internal and external reporting as well as their ability to audit such information.
10. Refinement of the framework based on responses and further, in-dept literature reviews, steps 7 and 9.
11. Evaluation of the application and validity of the metrics identified with HR Consultants and students using the Delphi-technique and a questionnaire based on Step 10.
12. Testing of and final adjustments and refinement of the framework with input from Human Capital specialists.
13. Development of the final HC Framework and Index.

The steps followed in the research are illustrated below:

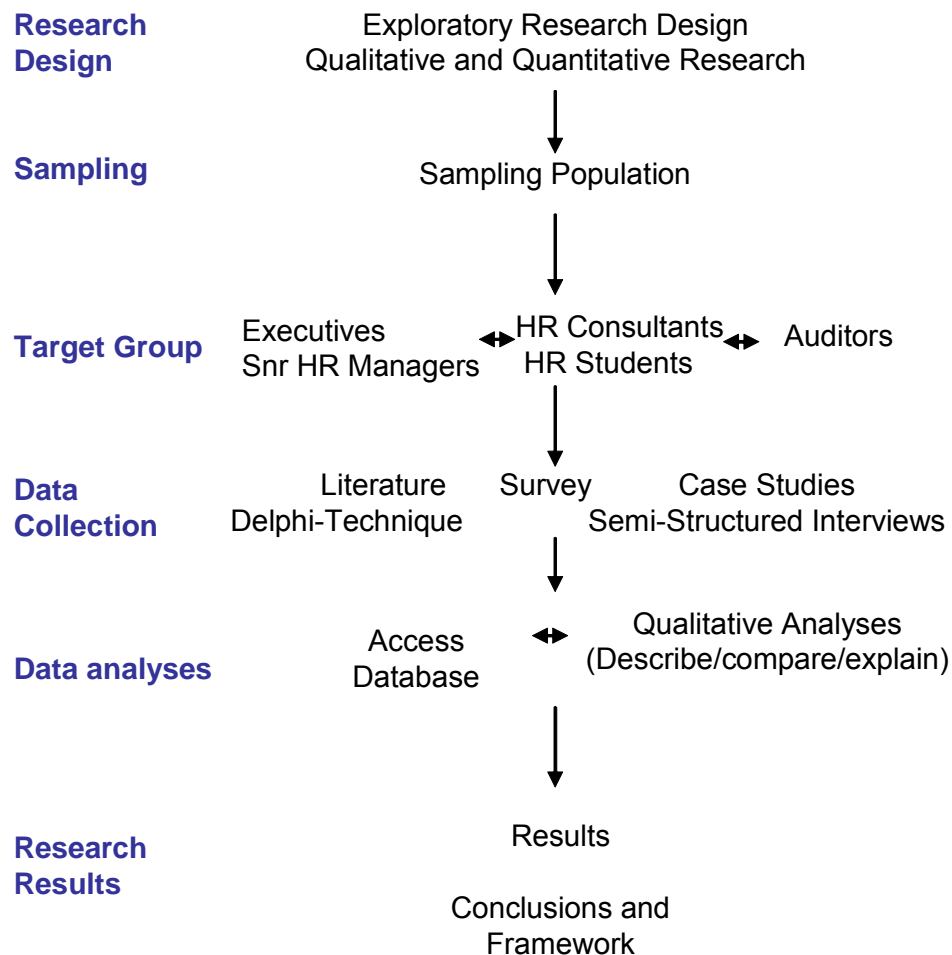


Figure 18: Steps followed in Research Methodology

### 3.4 Reasoning

There are three general approaches to reasoning (deductive, inductive and retroductive) used in research to facilitate the acquisition of new knowledge. For this study, both inductive and deductive reasoning were used.

**Deductive reasoning** - starts with generalisation and seeks to see if these generalisations apply to specific instances in order to test the theory (Guy and Diehl, 1992). Developing the model started with the generalisation that all activities within an organisation will lead to either an increase in the value (value seen here in the broader context) or a decrease in the value of the organisation. Following this, using the standards for financial reporting, and clarifying the concept as it relates to

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the Human Resources function and activities, a framework was developed to be tested against existing theories and insight from experts in this field.

**Inductive reasoning:** - commences with the observation of specific instances and seeks to establish generalisations or theories. This reasoning method is especially prevalent in this study in the analyses of the case studies as well as the population used during the Delphi-workshops.

### 3.5 Participants and Sampling

Participants and sampling for the study required an understanding of the primary objective; i.e. to determine the current status and application of HR metrics, reporting and insight into HR accounting methodologies in South Africa, where such techniques or tools/models have been deployed.

In qualitative research, non-probability sampling techniques are used as the researcher's intended purpose is to research individuals, groups or settings where the specific phenomenon being studied is most likely to occur. De Vos, Strydom, Fouche & Delport (2002) expressed an opinion that data are derived from one or two cases and therefore it is unlikely that these cases are randomly selected. Judgement sampling (sample elements have a relationship on common ground; i.e. the Human Resources function) and snowball sampling (researcher gathers information from respondents that enables the location of other respondents that has the same common ground) was used during this study. The snowball sampling produced four additional sample elements for the executive and senior HR managers' group that were not identified through the initial survey, and this additional information from participants has been included in the data analyses (Leedy, 1993).

The empirical section of this study has three parts, and three target groups were identified and used during this study. In the following paragraphs the different methods used for data collection as well as the participants from each of the groups is described.

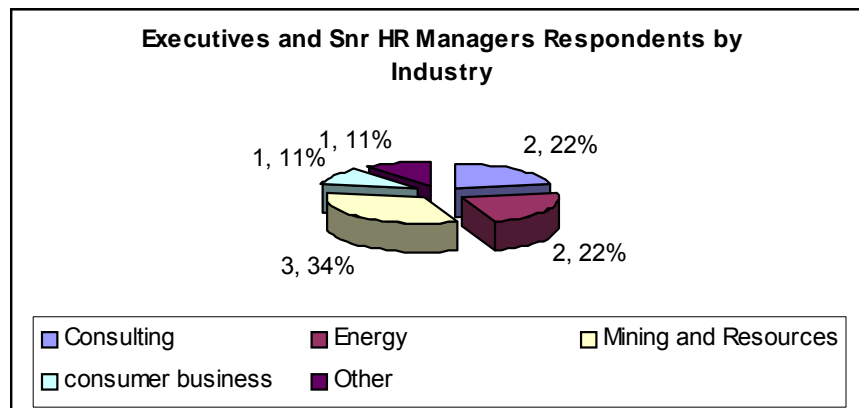
### 3.6 Target Groups

The target groups identified for this study consists of three separate groupings plus one specialist group:

### 3.6.1 Executives and Senior HR Managers

Senior HR managers and executives who have a reporting line function in HR were identified and their knowledge of the topic tested through the initial survey. These senior managers and executives have a direct responsibility for either HR or profitability from a line function perspective. As senior people within the organisation, their level of understanding of the organisation's key drivers and strategies, as well as their knowledge of the company's internal and external reporting, allowed them the insight into both the current status as well as the potential for the framework. The researcher selected this group specifically due to their involvement in the strategic focus of the organisation.

The nine sample elements that constitute the sample are presented in Figure 20 which graphically illustrates the element groupings for executives and senior HR managers.



**Figure 19: Executives and Senior Managers Respondents by Industry**

Figure 20 indicates that 34% of sample elements are from Mining and Resources organisations, 22% from Consulting and Energy, 1% from Consumer Business and 1% from Other (not specified). A benefit of the above sampling methodology is that the respondents have indicated their knowledge and insight on the topic from their organisational specific viewpoint.

### 3.6.2 HR Consultants and Students

Consultants and students of Human Resources were identified from a database of employees in Deloitte as well as partner or sub-contracting companies. The pool of 119 HR consultants and students who were non-randomly chosen includes students who attended post-graduate studies which included Human Resource Management and/or Finance and consultants who specialise in Human Capital advisory services.

### 3.6.3 Auditors

Auditors were identified from a list of Deloitte & Touche employees, by selecting two audit teams. The snowball technique was used to solicit more respondents and this increased the number of elements by three not originally identified by the researcher. These auditors are qualified CAs (Chartered Accountants) and have at least 2 years' auditing experience. Figure 21 indicates that 57% of sample elements are between 30 – 45 years of age, and 43% between 20 – 30 years. None of the respondents are older than 45.



**Figure 20: Auditors - Group Age Distribution**

Whilst most of the respondents have between two and four years' experience as auditors, 14% have between 9 -12 years and 29% have between 5 – 8 years (refer Figure 23).

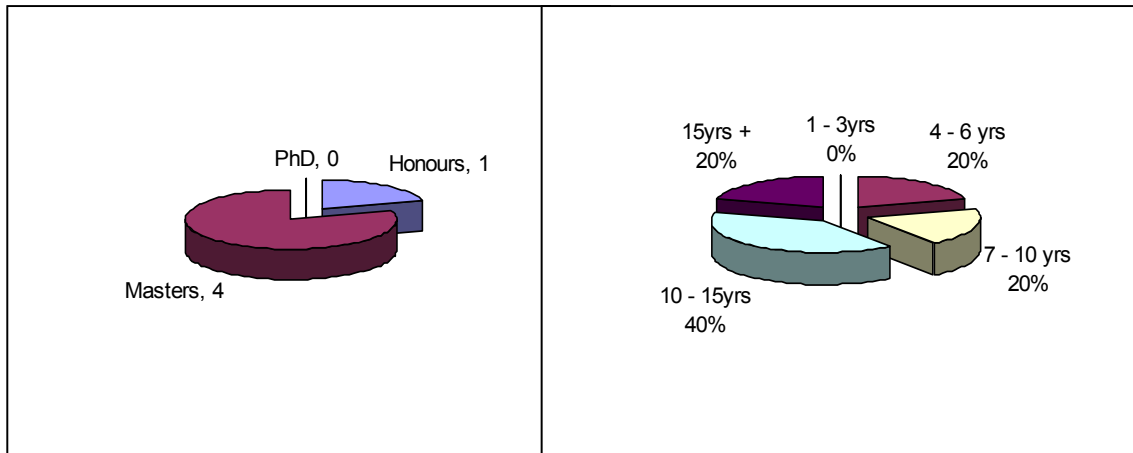


**Figure 21: Auditors – Number of years in position**

### 3.6.4 Human Capital Specialists

Human Capital specialists were identified using judgement sampling (purposely stratified / selected) from the group of respondents' HR specialists and students. This specialist group of five (40% male and 60% female) was asked to evaluate and comment on the final model. This group comprises specialist advisors in Deloitte Human Capital with six years or more experience in Human Resource Management and/or Human Capital and/or HR Strategy advisory services (refer to Figure 21 for a graphical illustration of their experience and educational qualifications).





**Figure 22: Specialists Education and Experience**

### 3.7 Data Collection

Primary data sources such as journal and magazine articles, newspaper and media reports, and information available on the Internet was collected and integrated with the data obtained via the case studies, surveys, focus groups and interviews to add further information, trends and industry knowledge. This data is integrated in the conclusion of the study and used to confirm or contradict the researcher's proposed model.

#### 3.7.1 Case Studies

The case studies obtained through the documentary sources are qualitative in nature, based on a number of different studies globally (refer Chapter 2). These cases were analysed to provide the researcher with insight into the current practices globally and provides for the ability to compare these with current practice in South Africa as well as providing the researcher with input to increase the relevance of the metric list and survey questionnaire.

#### 3.7.2 Semi-structured Interviews with Executives and Senior HR Managers

The Executives and senior HR manager target group were surveyed with the intention of gathering knowledge and an understanding of the current situation, as well as to ascertain and develop additional ideas not necessarily found in the literature research, which may relate to the topic under

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study in order to strengthen the implicit hypotheses generated by the research as it progressed. They were probed on their own perceptions of the value of the HR function, the value of Human Capital employed by the organisation, and most importantly, the methods they use to report on such matters.

A survey was first developed and distributed to this target group with the objective of:

1. Ascertaining the current status of HR reporting and level of understanding in the organisation.
2. Ascertaining the level of insight from the interviewee with regards to the topic.
3. Requesting names of organisations and/or other executives or senior HR management within the organisation that may be able to provide content to the research; i.e. using a “snowballing” technique.

Where applicable, the Likert-type rating scale, with a 1 - 5 agreement format was chosen for this survey. The scale was also described to ensure a higher level of consistency in evaluation. This survey was administered electronically to facilitate self-administration, whilst obtaining detailed information, which posed some challenges in it. Very few unspoiled returns were received (12 out of 19); however due to the exploratory nature of this questionnaire, this was acceptable to the researcher. Of the total returns received, 8 companies were selected to participate in this study, based on the answers and level of insight displayed in the returns.

### **3.7.3 Interviews**

The interviews with respondents were aimed at gathering an understanding of the current “as-is” situation in the application of HR metrics and reporting.

The target group for interviews included senior managers and executives at the strategic and tactical level of the organisation. These manager and executives currently perform HR duties or have an HR function reporting to them. The interviews were conducted according to the semi-structured interview guide and schedule. According to Thietart (2001), the benefit of non-structured interviews is the possibility that respondents can identify elements related to the research that structured

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interviews may miss. This point strengthens the methodology followed in this research. The objective of the interviews was to i) identify the current practices in South Africa, and ii), to understand the aspects which are considered as importance or of strategic nature to the organisation.

The interview guide used provided the researcher with prompts to probe to determine:

- Methods followed in HR reporting at the organisation of the respondent.
- Key indicators to measure Human Capital and the extent to which these measures are associated with other reporting or measuring within the organisation; specifically those relating to the company's profitability and/or competitiveness.
- The respondents' opinions regarding the importance of linking the HR and business strategy and how this should be demonstrated / reported.

The final section of the interview was to determine and prioritise the elements identified through the data collection and literature reviews that are required to ensure important HR information is included in reporting for companies as well as what the challenges or difficulties experienced in such reporting may be for their company.

#### **3.7.4 Surveys (Questionnaires)**

While qualitative data collection techniques aid in identifying relevant constructs and concepts to be examined, survey research provides a means of quantifying these concepts and examining relevant relationships in-depth. In this context an important consideration is the instrument design. Since the instrument used in this survey research is a self-administered questionnaire, the design and questionnaire formulation was designed to facilitate respondent comprehension and response accuracy.

The target group for the auditors' survey included qualified auditors employed by Deloitte and Touche. This group was surveyed to determine the relevance of the dimensions and descriptive elements of a model for Human Capital Reporting as well as to identify any additional elements that

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are perceived to be relevant from an external auditors' perspective. The objective of the questionnaire was to identify which elements of the Human Capital information (data) is essential and should be shared i) only internally, and ii) internally and externally. This group was also asked what other information (if any) they considered important to share with external stakeholders.

#### **3.7.4.1 Survey methodology**

The survey was administered electronically. This survey method of collecting data lends itself to a high level of standardisation and therefore high reliability (Singleton et al., 1988). It is relatively inexpensive, not too time consuming and matches the sampling proposed.

The electronic administration of the questionnaire has the added benefit that it can be completed and data stored in near real time and respondents can easily be reached through an electronic medium, irrespective of their geographic location. This however, had received limited response and the researcher had to use the semi-structured interview process to increase the number of respondents.

#### **3.7.5 Delphi Technique**

The Delphi technique has been found to be an appropriate mechanism for ensuring that emergent differences between and within key stakeholder groups (that can arise from differences in focus, situation and context) can be accounted for in a systematic way.

The Delphi method, as a research methodology, has been presented widely as a survey, procedure method and technique. The aim of employing the Delphi technique is to achieve consensus through a process of iteration (Hanafin, 2004). A key advantage of the Delphi technique is the potential it holds to recognise and acknowledge the contribution of each participant. The key advantage of this technique however, relates to the use of questionnaires that have the capacity to capture a wide range of inter-related variables and multi-dimensional features (Gupta and Clarke, 1996).

For purposes of this study, the definition set out by Linstone and Turoff (quoted by Hanafin, 2004) "a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem", is used.

The target group for the Delphi facilitated session using quantitative questionnaire and focus groups included HR Consultants from Management Consulting Groups and/or specialists HR consultants to

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include academic, strategic and operational thinking. The questionnaires were given to students of Organisational Behaviour as a pilot for electronic completion. Very few responses were received from the latter group - which can be construed as either due to a lack of understanding or ability to complete the questionnaires electronically. Due to this, a change in the methodology from the original intended electronic surveying was made and the Delphi facilitated sessions were used.

Three workshops were held using the Delphi technique, described as drawing on “group intelligence” and relying on the fact that although no one person may be able to provide reliable estimates confidently (Kendrick, 2004), the information gathered from these workshops were collated to enable the evaluation of the proposed framework. An observation from the researcher is that even though all participants agreed that there is a requirement for such a model, the lack of insight into the financial aspects of the business may have hindered the effectiveness of the detailed input. This was somewhat countered by the explanations and discussions during the sessions; however, the researcher balanced this with the literature research conducted.

Using focus groups, respondents were asked to complete a questionnaire at their leisure after a discussion of the topic and the context for the study. This reduces time pressures and allowed for more reflection and consideration of the responses. This method increased the number and quality of contributions and decreased the respondents’ burden by allowing participation during the time session. Participants evaluated the dimensions of the proposed framework as well as the metrics which was obtained from the literature review and semi-structured interviews. The latter was evaluated on nine dimensions (refer to Appendix D, Metric Questionnaire)

Snyder-Halpern (2002:185) summarises the primary advantages of the Delphi technique as “its adaptability to diverse data collection strategies, decreased peer pressure secondary to anonymity and the ease of condensing opinions of many and varied experts into a few precise statements”. Although many authors have questioned the reliability, validity and credibility of this research methodology, it needs to be noted that anonymity may lead to a lack of accountability. It is the opinion of the researcher that since the evaluation of the model has no personal gain or potential effect on the respondents, this is not a concern for this study.

The Delphi technique was also used to validate the final model with the judgement sample of specialists.

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### 3.8 Data Analyses

The data analyses commenced with the case studies and semi-structured interviews. In the words of Rubin and Rubin (1995: 226-227), “data analysis begins while the interviews are still underway. The preliminary analyses tell you how to redesign your questions to focus on the central themes as you continue interviewing”. During the formal analyses, themes and concepts were identified and categorised into the framework to build the one theme: Shareholder Value.

The first step in the data analysis involved the categorising of the data. This involved the breaking down of the non-structured interview contents into units of analysis and performing content analysis on this data to interpret the words and statements recorded into themes. These categories were correlated with the categories of the surveys and workshops. The accuracy, stability and replicability of the data was tested by evaluating the data multiple times, using the database capability of Microsoft Access.

The data gathered from the HR consultants and students during the Delphi workshops were based on the theoretical model of the dimensions of the framework. 119 respondents completed this questionnaire. The categories and themes discovered during analyses were compared for variations and nuances in meaning and cross-compared with the goal of developing an accurate, detailed and understandable theory for the model.

The semi-structured nature of the questionnaire and method of data collection does not facilitate an easy coding of the data, however, the aim of the analysis was to understand the various constructive elements of the data through an inspection of relationships between concepts, constructs and variables, and to identify any patterns or trends that can be isolated, or to establish themes in the data (Mouton, 2001).

Data analysis was assembled using Microsoft Access, since this tool allows for the capturing of largely descriptive survey questions, summaries, calculations and flexibility in reporting, which is a very important factor due to the matrix structure of the questions.

### **3.9 Conclusion**

The complexity of the model and the seemingly limited exposure and understanding by the groups in the target population is an accurate reflection of the current understanding and insight into the reporting of Human Capital in the industry. The research method was followed, and the stumbling blocks addressed by the researcher by changing the method applied to obtain useful information. Awareness of the pitfalls and limitations when conducting research of this nature always serve as caveats for future studies. The results and findings derived from implementing these methods are reported and discussed in the next chapter.

Chapter 4 will present the results and findings of the study.

## CHAPTER 4 - RESULTS AND DISCUSSIONS

***“There is no major decision that takes place in the company in which [the VP of HR] is not involved, and I fully expect him to have an opinion on business decisions. As CEO, I use [the VP of HR] as a personal consultant and sounding board for ideas and problem solving.” -  
Chairman and CEO, ARCO***

### 4.1 Introduction

This chapter describes the analysis of the empirical part of the study aimed at fulfilling the primary research objectives as described in Chapter 1. The main research objective was to develop a framework which can be used for reporting Human Capital as part of company reporting. Human Resource practitioners need to be able to identify and leverage activities, interventions and/or actions which will provide qualifiable results that demonstrate shareholder value for the organisation. This reporting framework with categories provides a holistic, future-orientated account of the human assets in a company, leading to a new model / theory.

In order to develop this framework, the study investigated the following:

1. Insight required by stakeholders into the Human Capital employed by organisations.
2. What Human Capital reporting and information are relevant, reliable and consistent for internal and external stakeholders.
3. Which Human Resource Management components can be used for comparative external reporting.

Consideration was also specifically given to consequences (please read as benefits) such as:

1. Strategic alignment of human resource development related initiatives.



2. Measurement of ROI for HR initiatives.
3. Related value propositions against which measurements can take place and against which HR development policies, procedures, guidelines and/or initiatives can ultimately be aligned.

It needs to be understood that the following research reflects largely the qualitative aspect of the research, and will be dealt with in literary format. This is an integration of the data obtained through the triangulation process.

#### **4.2 Current situation - Human Capital Value Add**

An understanding of the current situation relating to the functional area of Human Resources Management as well as the management of Human Capital (people) in South African organisations was one of the key starting points for the data collection phase of this study.

This is important at two levels:

1. Providing insight into the current practices and thinking within the industry and specifically the organisations in which the potential interviewee operates.
2. As an initiator to the thinking required to develop a model for the future which will be considered beneficial to the development of Human Assets in the organisation.

Using the survey developed for the Executive and Senior HR Managers group also worked as an initial “screening” that enabled the researcher to focus on those individuals or companies who had already shown some thinking or interest in the topic under consideration.

#### **4.2.1 Findings**

##### **4.2.1.1 Category 1: Human Resource Management Today**

An understanding of the management of the HR function and the level of maturity of this discipline is required to assist in evaluation of the input and discussions. At the start of the semi-structured

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interviews, ensuring alignment on the context of the study, the researcher had to explain some of the theoretical models and thinking as it pertains to measuring Human Assets. This also sparked discussions on what the current levels of understanding are and the importance of Human Resources as a function in the organisation.

Nine organisations were identified through the judgement sampling (post the initial survey). This portion of the interview was guided by Questions 2, 3, and 6 (Appendix A) to determine the current status of HR reporting within the organisation. The responses were very similar in that they all confirmed that Human Capital was considered as a key driver of the companies' performance and that "it is very obvious that People are our most important asset".

The senior HR managers interviewed confirmed that they believed that the HR strategies are aligned, thus enabling the business strategy, and this was confirmed by the executives interviewed. The methods to demonstrate or prove that this is so posed its own challenges as this group explained in great detail the diverse methods which they use to report on people issues within the organisation. In probing the link to the bottom line, many faltered and were not able to clearly articulate how their key indicators (such as demographics, turnover, exit interview data - reference Table 2) relate to their bottom line. An exception to this is organisations in the Mining industry – they were able to link their key indicator, absenteeism, to the loss of productivity and thus the direct impact on the bottom line. They also linked this indicator to the line management report - manpower plan. The latter report has evolved during the lifecycle of mining to include many factors, including that of the skills level of the workforce (it initially started as a report that lists the quantity of the workforce available for shifts) and potential impact of trends in sick leave or unplanned absences.

Of key interest were the comments regarding the shift in focus for organisations and the demand on HR practitioners, particularly post-ERP systems implementations (see Category 3 below). The role of the HR practitioner is clearly changing and one of the issues identified by this group is the lack of understanding and knowledge for the new role. This is also a finding throughout this study as one of the key barriers to an effective model for Human Capital reporting.

#### **4.2.1.2 Category 2: Reporting key indicators - Internally and Externally**

Executives and Senior HR Managers were asked in their initial survey to list the key indicators they currently use (internally and externally) within their organisation and then rate the importance of linking their key indicators to company profitability on a 5-point scale.

Industry	Reported	Indicators	Associated with your company's profitability or competitiveness	Complicatedness (1 - 5)	What prevents you reporting this externally?
Consulting	Externally	Commitment/ satisfaction	1 To a great extent	Very straightforward	
		Demographics	2 To some extent	Very straightforward	
		Informal feedback to management (spontaneous Q&A sessions, socials)	2 To some extent	Straightforward	
		Turnover	1 To a great extent	Complicated	Not something that can be shared externally
	Internally Only	Feedback from the Staff Mentorship Program	2 To some extent	Complicated	Not something that can be shared externally
		Individual Employee Competency and Development Plan	1 To a great extent		
Energy	Externally	Demographics	1 To a great extent	Very straightforward	
	Internally Only	Absenteeism	2 To some extent	Very straightforward	Other: (Please specify)
		Commitment/ satisfaction	2 To some extent	Straightforward	
		Exit Interviews	2 To some extent	Straightforward	Not something that can be shared externally
		Recruitment and selection	2 To some extent	Straightforward	Not enough time
		Staff Attitude Survey	2 To some extent	Complicated	Not something that can be shared externally
		Training ROI	2 To some extent	Complicated	

Industry	Reported	Indicators	Associated with your company's profitability or competitiveness	Complicatedness (1 - 5)	What prevents you reporting this externally?
		Turnover	2 To some extent	Very straightforward	Not something that can be shared externally
Mining	Externally	Absenteeism	2 To some extent	Straightforward	Little support from senior management
		Commitment/ satisfaction	1 To a great extent		
		Demographics	2 To some extent	Very straightforward	
		Productivity	2 To some extent	Straightforward	
	Internally Only	Absenteeism	1 To a great extent	Very straightforward	Not something that can be shared externally
		Demographics	1 To a great extent	Very straightforward	
		Exit Interviews	2 To some extent	Straightforward	Not something that can be shared externally
		Performance management	2 To some extent	Strategically not viable	Not something that can be shared externally
		Recruitment and selection	2 To some extent	Straightforward	Not enough time
		Skills Gap	1 To a great extent	Complicated	
		Turnover	1 To a great extent	Very straightforward	Not something that can be shared externally
		Turnover	2 To some extent	Very straightforward	
	Other (please specify)	Externally	Demographics	1 To a great extent	Straightforward
Employee brand			2 To some extent		
Recruitment and selection			2 To some extent	Complicated	Other: (Please specify)
Training ROI			2 To some extent	Complicated	

Industry	Reported	Indicators	Associated with your company's profitability or competitiveness	Complicatedness (1 - 5)	What prevents you reporting this externally?
		Turnover	2 To some extent	Very straightforward	Not something that can be shared externally
	Internally Only	Absenteeism	2 To some extent	Very straightforward	Other: (Please specify)
		Best company to work for	2 To some extent	Straightforward	Not something that can be shared externally
		Commitment/ satisfaction	2 To some extent	Straightforward	Not something that can be shared externally
		CSR	1 To a great extent		
		Performance management	2 To some extent	Straightforward	Other: (Please specify)

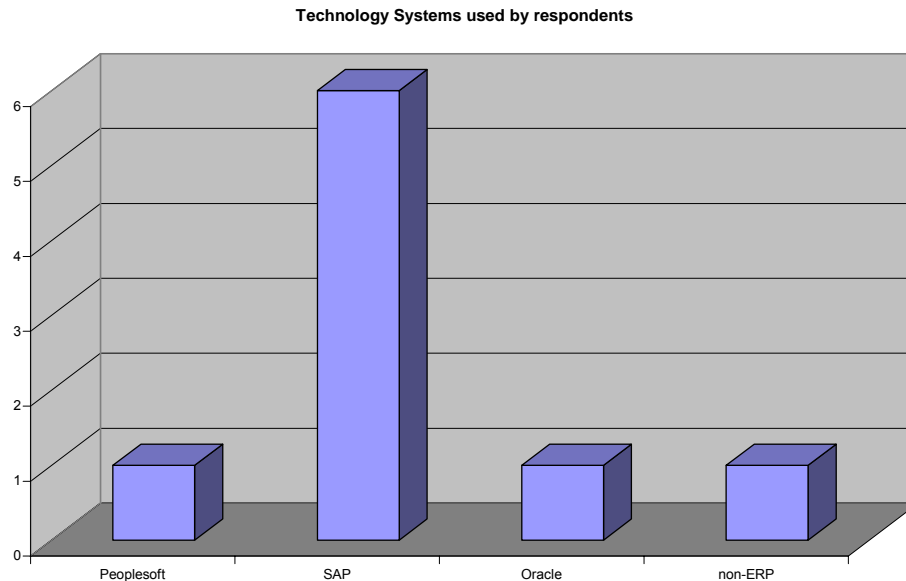
**Table 2: Key Indicators**

From the evidence presented in Table 2, it can be concluded that those indicators that are reported on externally are metrics which are considered “Very straightforward” or “Straightforward”. A single exception, Recruitment and Selection as identified as complicated by Industry Other, was discarded by the researcher as non-valid data due to the broadness of this function. In probing the reason for the more complicated indicators not being reported on externally, the group stated that the level of complicatedness is not considered as a limitation to reporting externally, but rather that time (linked to the complicatedness of the reporting) and strategic or competitive reasons i.e. “not something which can be shared externally” is the key driver in the reluctance to report externally on this information.

#### 4.2.1.3 Category 3: Technology Systems utilised for Human Capital Management (HCM)

Technology systems are important enablers for knowledge management and reporting of HRM. All organisations interviewed used some form of technology-enabled systems, 90% using an ERP system which is integrated with other functional areas within the company (refer Figure 25 below).

The company using a non-ERP system indicated that the size of the company does not warrant the use and expense of such as system.



**Figure 23: Usage of Technology Systems**

Questions 5 and 6 guided the researcher in determining the relative importance of using a system to enable reporting and analytics of Human Capital information. Without exception, the interviewees confirmed that the system(s) inform and guide them (through best practices built into the system) in the reporting and reporting requirements.

Of key interest is that the users of the systems (HR functional staff) were trained on the functionality of the system, but not necessarily on the application and usage of the reports or data analytics. As part of the ERP systems implementation, reports were identified (by the business) as required and where standard reports were not available, reports developed specifically. One organisation setup an HR team (HR business solutions) to specifically address the HR business requirements and employed an analyst who specialises in data warehousing and reporting. The other organisations all depend on an IT support function to provide them with relevant reporting and data analyses, and they specify the business requirements. As the HR specialists are not trained on data mining or analyses, this may be considered as a barrier to moving reporting in this environment to the next level.

#### **4.2.2 Lessons learned and considerations**

From the evidence presented above and the data analyses, the following lessons regarding the current status of HR in South Africa was learned:

- HR is still fighting the battle to be considered a strategic business partner. Although the value of people (Human Capital) is considered key for organisations today, the value of the HR contributions remains unproven and challenged.
- Organisations report on the latest trends rather than specific issues which can be considered a competitive advantage in their industry and the reporting are mostly lagging (re-active).
- ERP technology enables the HR function and the built-in best practices in these applications assists HR practitioners in providing reports. These reports are not necessarily analysed with a view of identifying trends, nor are they necessarily valued (and read) by the line function. A perception by senior HR managers is that the line manager asks for reports (during system implementation phase) that they do not use. (Please note: line managers were not interviewed).
- HR practitioners do not determine which reports should be included in company external reporting.

The above categories provided an insight into the culture prevailing in South African organisations regarding the utilisation and perceived value of the HR function's contributions. It also confirmed that Human Capital (people) is considered a key asset for organisations.

#### **4.3 Reporting on Human Capital**

Evaluating the current reporting on Human Capital provides insight into the type and levels of reporting in South African organisations, and more importantly, which reports provide organisations with insights into the effective usage of their Human Capital. Understanding the internal and external reporting, and what metrics are being applied by the HR function, as well as the link to the organisational strategies and impact on the bottom line, is the key focus of this dimension.

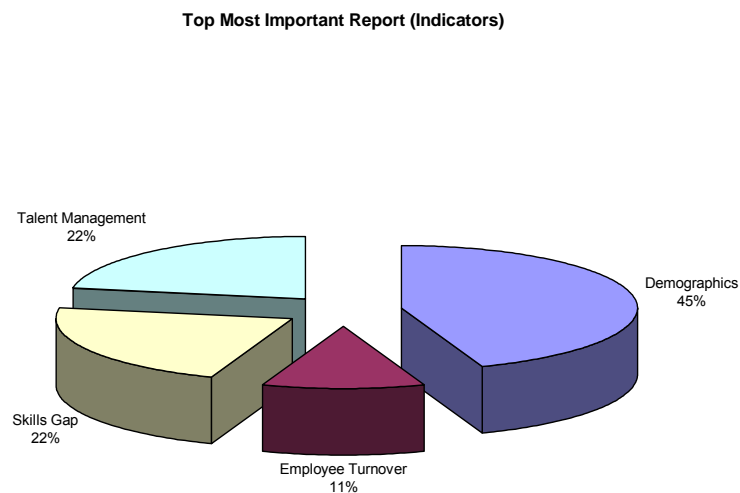
### 4.3.1 Findings

HR Managers surveyed and interviewed had varied opinions regarding reporting on the Human Capital within an organisation. Although interviewees were all in agreement that reporting from a Human Capital or Human Resource Management perspective is required, and that Human Capital is the most important asset within a company, not many were clear on exactly what should or should not be reported on.

#### 4.3.1.1 Category 1: Most important indicators

When asked what the top most important reports (indicators) are, i.e. those issues of most concern in the organisation, respondents gave varied answers, depending on the type of industry and maturity of the organisation, which was to be expected.

Issues top of the list are illustrated graphically below (Figure 23 ).



**Figure 24: Top Most Important Indicators (Reports)**



When asked “Were the indicators developed by the HR function alone or in conjunction with others (example: finance or strategy colleagues)?” the answers were fairly diverse:

- 42% of respondents stated that they had input from the business.
- 52% stated that although they developed it within HR, it was aligned to the business strategy.
- 6% stated that it was developed by HR alone.

The researcher found that no distinction is made between the terms “report” or “metric” and respondents felt that whichever is the most applicable answer to the question can be considered.

The researcher probed to find out if any of the metrics measured in their scorecards (HR or Balanced Scorecards) are considered in the top indicators or reports. One respondent (from the Consulting Industry) answered positively that the report for “Individual Employee Competency and Development Plan” is also included in their HR scorecard as the number of employees with a competency and development plan (CDP). All other respondents were unable to link the metrics on their scorecard to the top indicators.

It is clear that these companies have varied levels of reporting or metrics in place, however linking these reports and metrics to the bottom line was not considered by those who selected them. Scorecards for HR are focused on the operational effectiveness of the HR function, and scorecards for the line functions include the people components only in one quadrant of their scorecards - Learning and Innovation Perspective (also called the People Dimension).

Figure 24 is an extract example provided by one of the interviewees. None of the metrics listed on the scorecard were identified as a Top Indicator for this particular company.

LEARNING AND INNOVATION PERSPECTIVE

	Target	Actual	Trend
% of critical jobs with 3 succession levels	100.0	110.0	110.0 ↔

% of development plans and performance contracts	98.0	98.0	100.0		annually
Climate survey index	3.00	1.0	33.3	↓	bi-annually
Number of valid improvement suggestions received	5.00	4.5	90.0	↓	Monthly
Number of continuous improvements implemented	2.00	0.2	10.0	↔	Monthly
Number of incidents resulting in overtime work	-		0		Monthly
Hours spend on training and development as % of total working hours	5.0	5.5	110.0		annually
Number of man-hours working in other functional areas	120.00	130.0	108.3	↔	Monthly

**Figure 25: Balance Scorecard Example**

When asked “In your view, would there be value in the development of standardised HR measures for general use/use across your industry sector (locally and/or globally)?” 100% of respondents replied “Yes”. Respondents also agreed (100%) that there are core HR indicators which ALL companies should report. Suggestions for these varied with the exception of the following three indicators.

**1. BEE Charter or rating (demographics)** - this is predominantly related to the requirements from Government and/or stems from the strategic objective to ensure a more equitable workforce is deployed by the organisation. The topic in itself spawned a significant amount of time during the interviews, and it became clear that there are various schools of thought regarding the 1) effectiveness and accuracy of the information reported on and 2), the usefulness of such a report. This is outside the scope of this study, and it is suffice to say this is a dimension that is key in South Africa and considered as a very important indication of the commitment of South African companies to transformation for equitable employment.

As many sourcing contracts have a requirement for employment equity as a measure of evaluation, it may have a negative effect on a company’s ability to provide products and/or services into the marketplace (especially to Government and parastatal companies which are considerably South Africa’s largest spenders), and it has a direct impact on the bottom line. This metric is also included

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in all executive's KPIs (those interviewed and according to those senior HR managers interviewed for their executive team and/or board members).

Although this indicator is reported, mostly in industry charter format, the impact of this on the organisation (positive or negative) is not measured. This indicator is linked to an external factor that has a real impact on the bottom line. The fact that this indicator has been included in the KPIs of the top management team seems to have driven it down into the organisation and back down the value chain of HR (back to the attraction of staff). It can be concluded that if an indicator is included in the KPIs of the top management team, the relevant importance of this is elevated to a strategic level by default. This should be considered in the implementation of the proposed model as criteria for success.

**2. Leadership pipeline / succession planning** (assurance of the existence if not necessarily the details) - this topic, interlinked with talent management, was discussed considerably during interviews. Although there are different opinions as to the risk of making this information available internally (outside the HR function) or externally, the importance of having a plan in place and developing leaders for future is of equal high concern for executives and HR practitioners. Understanding the leadership pipeline and how to develop this, as well as the broader topic of talent management, is high on the agenda of all the HR practitioners interviewed. They are unclear as to how to reflect the success (or failure) of such a programme, however the programmes to address this have in all cases been put in place.

The discussion regarding the leadership development and succession planning programmes prompted the question regarding ROI being measured and tracked for HR programmes, to which 87% of those interviewed admitted not doing nor having the ability (tools, techniques or resources) to do this.

Concern regarding the shortage (supply) of key skills in the country makes the success of many HR programmes critical and as a result, the focus for ROI measures has been predominantly in Training and Development programmes. All respondents were familiar with the calculation of Training ROI.

**3. Employee turnover** - this lagging (historic) measure is reported on by all respondents and 46% of those interviewed admitted to not using this information, even if they do track or report it. One respondent mentioned that this may be used as input into the planning for recruitment; however this

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was not validated by the senior HR Manager within this company. As the staff turnover rate is very company and industry specific, the researcher also asked those who do use the metric if they compare their turnover rate with the industry average. This was confirmed, however internal benchmarking (i.e. comparing turnover in departments, divisions, teams) is not considered standard practice and only one respondent replied positively about (ever) having benchmarked this.

The turnover rate is very important on two dimensions: 1) to ensure that the company has a reasonable amount of “fresh, new blood” and avoid incestuous thinking and 2), to manage the cost and negative effect on employee efficiency due to a high turnover rate. As the staff turnover rate in an organisation may be considered a reflection of management, stability and workplace conditions within a company, this metric is considered important, however not necessarily of major strategic value.

#### **4.3.1.2 Category 2: HR reports that support and/or enable business decisions**

When probed as to what type of questions business managers need HR to provide answers to which can improve their decision making or add value to the business, a number of questions were identified:

*Please note: Questions have been reworded for clarity. Comments in brackets are related and added by the researcher.*

- Which segments of the workforce create the value for the core business (those components of the business where most of the revenue is initiated or generated)?
- Which areas of the business will be impacted by retirement (or unplanned leavers)?
- What impact will retirement have (on the skills and productivity necessary to meet future demand)?
- What is done to prepare successors (using coaching, training, cross-skilling or related HR programmes, and what is the success rate / ROI of such initiatives)?

- 
- In what areas is there a shortage of skills - demand greater than supply (what are the potential top-line and bottom-line implications)?
  - What skills will we need over the next medium term period (five years) that we don't currently possess? (Is there a supply of these skills in the market place?)
  - How will we create capacity for those skills required during the next five years which do not currently exist? (What happens to the business if not found?)
  - What is the staff turnover within critical areas (and how much does this cost in customers, productivity, innovation, and quality)?
  - What are we doing to resolve the root cause of unacceptable staff turnover? (Are there areas where staff turnover is actually required / needs to be encouraged?)

*Please note: Those interviewed were not certain that they were able to answer all or easily access this information if asked!*

When asked about their strategic objectives and plans and what tactics they have established to allow for this, HR practitioners identified a number of overall objectives that they hoped to achieve through measurement. The objectives ranged from the improvement of the efficiency of the HR function through to partnering with business to help support business decisions.

- Increase HR's effectiveness and efficiency.
- Introduce HR to best-practice thinking and benchmarking expertise.
- Demonstrate HR's credibility and value-add.
- Support critical decision-making through data analysis (pro-actively).

- 
- Align the “people” (Human Capital) with the business needs of the company through placement of the right person in the right position.
  - Establish HR as a strategic business partner.

#### 4.3.2 Lessons learned and considerations

The HR function is still operationally focused, but may be starting to take on a strategic role. HR strategies are set in alignment with the overall business strategy and this may invariably force HR practitioners to think more in terms of leading (forward thinking) indicators.

Executives’ understanding and insight into the value of the Human Capital within the business is clear, albeit only at a qualitative level. People are seen part of the competitive advantage of the organisation and it is a conscious decision to invest in and develop the Human Capital of the organisation. Line managers are taking on a more “people management” role; i.e. learning to manage the people as assets of the organisation to draw value from other assets (financial and physical). The value added by the HR function is not as clear and is still being questioned.

Implementing so called “Best Practices” because they worked elsewhere or come built-in standard with the system, will not significantly improve HR’s ability to achieve their objectives - the value in the systems are only effective if they are extracted. This requires the insight and know-how of HR practitioners. This knowledge and skill seems to be lacking in current HR practitioners and thus the ability to link the value of HR using reporting to the bottom-line impact is limited. This means that a lot of what may be termed “Value Add” HR activities are a waste of time and effort! Many reports run may not be worth the paper it is printed on and may end up in “File 13”. It is unlikely that HR will achieve the full value of initiatives unless they are *really* strategically aligned and understood in the context of the organisational objectives, linked to the bottom line and their effect measured and demonstrated. This view is shared by the executives, however they are at an impasse as to how to achieve or enable it.

#### 4.4 Using Metrics and Benchmarking

Using metrics to report on Human Capital and Human Resources Management is a very important component of the ability to link the value contribution of the HR function back to the organisations’

bottom line. Benchmarking this information either internally or against industry best practices will provide the organisation with insight as to how they compare to the rest of the market in their industry and provide imperative for improvement. Many qualitative measures and ratios (quantitative) have been developed for HR, most often used being the Balance Scorecard. The employee or Human Resources quadrant on a company's scorecard is, however, often most likely to include meaningless metrics, unrelated to the bottom line. HR scorecards (refer Section 2) are used within the HR functional area.

#### 4.4.1 Findings

Executives and senior HR managers surveyed indicated that they use HR scorecard reports to their Executive Committee or Board Meetings (71%) as well as within HR (86%) (Refer Table 3). The HR functions provide specific reporting to Line Management (100%), demonstrating that their reporting skills exist and (based on the assumption that the line reports are utilised) are considered of value to the operations.

HR Scorecard to Exco / Board	71%
HR Scorecard within HR	86%
Report to HR Directors	71%
Special reports for Line Management	100%
Special reports for Employees	29%
Report to External Stakeholders and Investors	29%
Separate Corporate Social Responsibility Report	43%

**Table 3 HR Reporting**

During the semi-structured interviews, it became clear that these reports have different impacts on the various businesses and that the reporting to a large degree has become "historical" i.e. there is uncertainty as to why particular metrics are being reported.

HR consultants and students were approached with a list of metrics for evaluation (see Addendum B) to obtain their input regarding the usability of these metrics, and if they can be considered to provide insight into the effectiveness and efficiency of the Human Resources function. They were

also asked to evaluate the components of the framework to measure the value of Human Capital against a model for shareholder value.

Questions asked for the evaluation of the metrics include:

- Is the indicator/ metric applicable?
- Is the indicator/ metric complete?
- Is the indicator applicable to all types of organisations?
- Is the data for the indicator easily obtained?
- Is the calculation required for the indicator simple?
- Is the indicator understandable?
- Is the data objective, qualifiable and reliable?
- Does the indicator point towards sustainable improvement?
- Can the indicator be measured on an ongoing basis?

*See Addendum B - Delphi Workshop Results*

Respondents' results to these questions are categorised and reported on below (Table 4). The researcher accessed the knowledge regarding the metrics first by asking if the metrics is understandable to the respondents. Metrics not understood were discussed and explained during the Delphi-workshop.

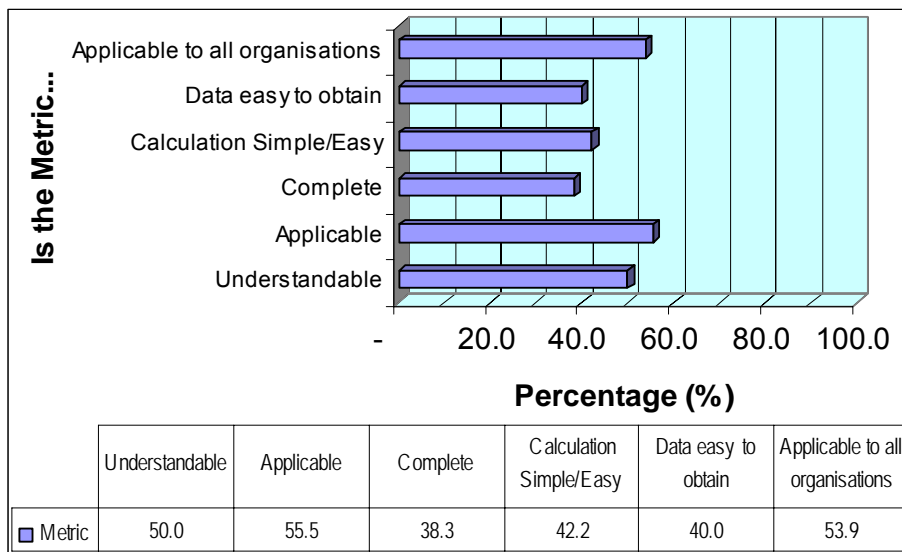


Metric	Understandable	Applicable	Complete
Total Compensation/Benefits as Ratio of Total Revenue	99%	100%	100%
Recruitment Resource Ratio	100%	100%	99%
Total Compensation as Ratio of Total Costs	100%	100%	99%
Incentive Cost Ratio	100%	100%	97%
Termination Rate	100%	100%	99%
EE Movements	100%	100%	97%
Acceptance Rate	100%	1%	99%
Employee Commitment	100%	100%	99%
Employee Motivation	100%	100%	97%
Employee Satisfaction	100%	100%	97%
Process Execution	100%	99%	97%
Retention of Key People	100%	100%	99%
Absenteeism rate by job category and job performance	100%	100%	99%
Accident costs	100%	100%	99%
Accident safety ratings	100%	100%	99%
Average employee tenure (by performance level)	86%	88%	94%
Average time for dispute resolution	84%	88%	93%
Benefits costs as a percentage of payroll or revenue	84%	86%	90%
Benefits costs/competitors' benefits costs ratio	82%	85%	87%
Compliance with fair employment practices / industry charter	83%	84%	88%
Compliance with technical requirement of affirmative action	79%	83%	87%
Comprehensiveness of safety monitoring	80%	83%	88%
Compensation of high performers compared to average performers	78%	83%	86%
Cost of HR-related litigation	78%	81%	86%

Metric	Understandable	Applicable	Complete
Cost of injuries	77%	82%	85%
Cost per grievance	78%	79%	55%
Cost per hire	74%	78%	83%
Cost per trainee hour	73%	78%	82%
Courses with highest number of attendees by competency	72%	78%	81%
HR department budget as a percentage of sales	72%	77%	80%
HR expense per employee	70%	76%	77%
HR expense / total expense	69%	74%	79%
Interviews per-offer ratio (selection ratio)	68%	72%	78%

**Table 4: Top Most Important Indicators (Metrics)**

The metric which scored the lowest was the total HR investment / earnings. Of the respondents 44% said this metric was understandable and 50% that it is applicable.



**Figure 26: Median responses for all metrics evaluated**

During the workshop discussion, it was clear that those skilled in finance understood the more financial metrics, whereas those respondents who had no financial background did not understand

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metrics with a strong financial grounding. This explains the phenomenon of the lower level of understanding of this metric. The median responses for the entire list of metrics presented during the Delphi workshop are illustrated in Figure 27 for all metrics evaluated. On average, 50% of the metrics listed were understandable to the participants of the Delphi-workshops with only 40% of data identified as easy / available to obtain. Those items identified as applicable had no significant difference to the percentage identified as applicable to all. One may conclude that any of the metrics considered applicable are applicable across all industries.

#### **4.4.2 Lessons learned and considerations**

A wealth of HR metrics exists and are being applied with varied degrees of understanding and insight. In the new role of HR, financial skills should be considered a prerequisite for HR practitioners.

Metrics is the starting point in evaluating the performance, efficiency and/or effectiveness of employees and the HR function. These metrics should not be contained in pure HR “softer” measures, but should include strong financial measures that demonstrate the value of HR initiatives at a financial, bottom line impact level.

The objectives of the organisation should define the key performance areas to be evaluated and inclusive of this should be areas of technology, processes, individual and team performance and impact on the customer. Using metrics provide the platform for benchmarking, both internally (amongst business units or divisions) as well as externally (against other industry players). Metrics and benchmarking are focused on the measurement of efficiency and effectiveness and relate to the function of Human Resource Management, rather than the efficiency and effectiveness of the Human Capital (person). It is important to understand the measurement of metrics, and using these for benchmarking has to be balanced and carefully assessed to ensure that it does not motivate or result in value detracting behaviour.

#### **4.5 Comparative External Reporting on Human Capital**

Comparative external reporting on Human Capital and the related value of Human Assets has been under discussion for a number of years. The Chartered Accountants of Canada (CICA) Board of Governors established a task force in May 1996 to review the CICA’s standard-setting activities and

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a chapter of their final reporting was dedicated to what they call Beyond Standard Setting — A Structure for Innovation. In this report, it is stated that in addition to internationally-accepted accounting and auditing standards, the business world is demanding the profession move beyond the historical annual financial statements. These statements on which standards are focused, and into a future where knowledge is rapidly changing and the need for reporting is continuous, require consideration for where wealth is generated more by Intellectual Capital than by plant and equipment; and where the needs of decision makers are focused on measuring and enhancing organisational performance (Lord, 1998).

The Canadian Performance Measures Initiative (CPMI) began in late 1995 under the joint sponsorship of the CICA and several other organisations. It was charged with developing an integrated performance measurement framework with indicators relating to Intellectual Capital, quality, environmental performance, customer satisfaction, innovation, and other issues. Their recommendation in this report was to establish a “Centre for Innovation” to sponsor and champion initiatives that will meet this market needs (Lord, 1998). Although this centre was established, it would seem that not much has come from the investigation into Intangible Assets to be included in reporting. No consideration has been given to this by the Chartered Accountants of South Africa (contacted by the researcher in November 2005), and as such, the survey for auditors to gather their views on reporting Human Capital externally is the only base for this category.

#### **4.5.1 Findings**

Auditors interviewed were all (100%) of the opinion that although it would be beneficial to include the information in company annual reports, it would be difficult if not impossible to audit such information year after year. By implication, this means that the result of this study may only be a guideline for reporting, but that the report will not be able to be validated through the normal governance and audit structures within organisations. One cannot help but wonder if it needs to be legislated before this very important aspect of the business is valued. Taking into consideration the defined role of auditors, the accountability for this information and the obligation to report on this remains with the directors of the company.

##### **4.5.1.1 Category 1: Is it essential to share strategic information with all stakeholders?**

Auditors were asked whether they consider it essential to share certain information with all stakeholders. In determining the importance of sharing information with stakeholders, from an auditors' perspective, the key business questions gathered from the research into reporting on Human Capital were categorised into themes and included in the auditors' questionnaire. They were asked to indicate whether this information should be readily available and shared with company stakeholders.

Auditors - Q: It is Essential to share the following information with all stakeholders?

<i>Information Question</i>	<i>Yes</i>
1. Which segments of the workforce create the value for which we are most rewarded in the market?	100%
2. Which areas of the business will be most impacted by impending waves of retirement?	100%
3. What is being done to prepare successors?	100%
4. What impact will anticipated retirement have on the skills and productivity necessary to meet future demand?	100%
5. Which segments of the workforce will be most impacted by the areas where the talent market is heating up (i.e., demand will outpace supply)?	100%
6. What is the potential top-line and bottom-line implications of demand outpacing supply in the talent market per segment of workforce?	100%
7. What skills will be required over the next five years that the company don't have currently?	100%
8. How will the company create capacity for skills which they currently do not have?	100%
9. What is staff turnover within critical areas?	100%
10. How much is staff turnover costing the company In customers / productivity/ innovation / quality?	100%
11. What is being done to resolve the root cause of high staff turnover?	100%
12. What is being done to retain our key / core workforce segments?	100%
13. Is the company actively developing talent portfolios or workforce plans that will help us to understand and communicate the financial consequences of talent decisions on business?	100%

**Table 5: Information readily available and shared with stakeholders**

Table 5 presents the findings from auditors to determine which information is required for reporting to stakeholders (including internal and external stakeholders). The entire list was considered to be essential by respondents. This confirms the requirements identified by the executives and senior HR

managers. Auditors were also asked what other information should be provided. Table 6 below lists the additional information they consider to be essential and the rationale provided for this.

Information	Reason / rationale for being essential to report externally
A statement by management as to whether they have adequate skills in the company to run the business efficiently	This is important bearing in mind the current shortage of qualified and trained staff in the country.
What effects transformation has had on the skills base of the company	In many instances staff is being replaced by previously disadvantaged individuals. As this portion of the population has a significant shortage of skills, previously trained persons may be replaced by inappropriately qualified personnel. This will effect the efficiency of the organisation.

**Table 6: Additional Information considered essential by auditors**

Table 6 also indicates that auditors consider the listed information important for both internal and external stakeholders. The issue of the level and quality of skills was also identified by a number of the senior HR managers interviewed and the consideration of the level of skills as well as the potential negative effect of transformation (Employment Equity) on the Human Capital of the organisation a consideration. The effects of transformation on the skills base of the organisation may also be linked to the question *“Is the company actively developing talent portfolios or workforce plans that will help us to understand and communicate the financial consequences of talent decisions on business?”*

The question regarding the reporting of this information identified as essential, as described above, was also evaluated for relevance to report externally by the auditors. The percentage of respondents who considered the category theme questions to be reported on externally is illustrated in Table 7. From this table, it is clear that leading indicators and financially linked indicators has been given preference for external reporting by the Auditor group.

Auditors - Q: This information should be shared with External?

Question	Yes
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Question	Yes
1. Which segments of the workforce create the value for which we are most rewarded in the marketplace?	0%
2. Which areas of the business will be most impacted by impending waves of retirement?	100%
3. What is being done to prepare successors?	86%
4. What impact will anticipated retirement have on the skills and productivity necessary to meet future demand?	43%
5. Which segments of the workforce will be most impacted by the areas where the talent market is heating up (i.e., demand will outpace supply)?	43%
6. What are the potential top-line and bottom-line implications of demand outpacing supply in the talent market per segment of workforce?	43%
7. What skills will be required over the next five years that the company don't currently possess?	43%
8. How will the company create capacity for skills which they currently do not have?	0%
9. What is staff turnover within critical areas?	100%
10. How much is staff turnover costing the company in customers/productivity/innovation/quality?	43%
11. What is being done to resolve the root cause of high staff turnover?	14%
12. What is being done to retain our key / core workforce segments?	29%
13. Is the company actively developing talent portfolios or workforce plans that will help us to understand and communicate the financial consequences of talent decisions on business?	100%

**Table 7: Information to be shared externally**

Even though the impact of retirement and what is done to prepare for successors as well as staff turnover in critical areas have all been identified as information to be shared with external stakeholders, the respondents did not consider that the impact (strategically or financially) should be reported on externally. Taking into consideration that a lack of transparency—in historical results or in what the company is saying about the future—raises a red flag with investors, a potential negative effect on forecasts (refer Chapter 1: Measuring Shareholder Value) may be eminent should these categories be reported on exclusively.

Demand and supply factors (information themes 5, 6 & 7) which have a direct correlation with staff turnover and risks linked to a lack of succession planning, with a mean score of 43%, is of particular interest. These factors have the potential to provide a valuator with insight relating to asset productivity as well as potential for revenue growth (negative or positive) and as drivers of future

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performance (leading indicators), may be compared (benchmarked) with other organisations. The lack of understanding the HR environment and the cause and effect in this environment is a major barrier of constraint for auditors of HR information.

#### **4.5.2 Lessons learned and considerations**

The lack of integration and alignment between Human Resources and Finance practitioners in their level of insight and focus on the financial aspects of Human Capital reporting may be considered as the biggest barrier to calculating and reporting the value of Human Assets in organisations.

- Understanding that the market value of an organisation is bigger than its book value and attributing this to “intangible assets” seems to be an easy way out. Understanding the value and impact of these intangible assets - in particular the application of Human Capital that has an effect on the assets - requires an understanding of this discipline by those who govern and audit to ensure that reliable, fair values are attributed to the organisation’s assets.
- A lack of insight into the discipline of HR and its impact on the bottom line can clearly be seen by the responses received from auditors. This seems to indicate simply that a “new breed” of auditors may be required for auditing information on Human Assets. Accountants should not be asked to value this asset, just as accountants are not asked to value physical assets, but rather taught about the aspects which may be considered for such a calculation.
- Depreciation of assets can be applied using the generally accepted principles and guidelines by government. A similar model should be considered for Human Assets - it simply requires a lot more innovative thinking and approach. “I cannot audit these factors” was a comment made by the Audit partner of the team surveyed - this does not take away the fact that this information is considered “essential” to stakeholders as confirmed by 100% of those surveyed.

The GAAP rules for company reporting do not make provision for the level and information required for Human Capital reporting. The question of whether or not it is the GAAP rules which need to be adopted or Human Capital reporting which needs to be conformed remains the key, critical question.



#### **4.6 Further results of semi-structured interviews**

Other topics of discussion during the semi-structured interviews have been categorised and are briefly discussed below:

##### **4.6.1 Preferred Employer / Employer of Choice Status**

Most of the respondents mentioned the strategic objective for their company of becoming a Preferred Employer / Employer of Choice, which, with the current shortage of certain skills in South Africa, seems to be indicative of the war for talent and again links into the HR programme for talent management.

The ubiquitous phrase, “An Equal Opportunity Employer” of the 1990s has been replaced in recruiting advertisements with “A Preferred Employer.” The un-stated implication is that the company truly values diversity and has a culture, policies and practices that make it a comfortable and productive working environment for people of different cultures (ethnic origin), people with disabilities, homosexuals, immigrants, senior citizens, and women. Today, the working environment benefits and opportunities offered to employees are considered in a more serious light as a key differentiator.

Most HR practitioners stated that they do not currently see their own organisation as a “preferred employer” and are not totally confident about the possibility of becoming one; however they state that this is the goal or focus of their HR strategy and tactics. The same question posed to executives had a different response - they are of the opinion that their organisation has plenty to offer and may be considered a “Preferred Employer”.

Many organisations have entered or considered entering the prestigious “Best Company to Work for” competition which allows the benchmarking of their offerings against other South African companies. This survey is administered by Deloitte and the employees’ and employers’ perceptions are assessed according to the following dimensions:

- Job Satisfaction

- Leadership
  
- Relationships and Trust
  
- Management Style
  
- Training and Development
  
- Communication
  
- Change and Transformation
  
- HR Policies and Procedures
  
- Rewards, Recognition and Performance
  
- Management Diversity
  
- Values and Culture

Where there are sufficient participants, an industry ranking and comparison is provided. In addition to being ranked among the total sample, participants are able to be ranked against companies within their particular industry. The prestige of this award, however, comes from being published as one of the Top 50 in the annual publication of “Best companies to work for in South Africa” by the Financial Mail, which is considered a key differentiator for attracting talent.

#### **4.7 Conclusion**

This chapter reports on the empirical research results obtained through the surveys, Delphi workshops and semi-structured interviews, the conclusions drawn from this information, and the lessons learned. The data was grouped into categories and assigned to support the primary and secondary objectives of the research.

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There is a gap between the competence, understanding, interpretation and views between executives, HR practitioners and auditors (finance practitioners). Linking these disciplines to set a common ground basis for HR reporting to be taken into consideration in the valuation of businesses is critical. Reaching this common ground may have very many different paths it can follow, however this study focuses on increasing the knowledge and skills of HR practitioners to bring their reporting methods closer to those in the finance discipline.

The researcher acknowledges that the requirement for auditors, especially those who will be required to audit this type of reporting, will need to include an improved understanding of the HR discipline, however she does not necessarily believe that those in the finance discipline are required to have the same level of depth in HR metrics and reporting - this function should rather be included in the new role for HR. The latter is considered a huge challenge which is demonstrated throughout the results of the data / information gathered from respondents in this discipline and the next Chapter provides a framework which will assist in bridging that gap.

Best practices and demands from industry (including Government) drives the focus areas for HR and could be considered the root cause of the reactive reporting style prevalent. This is also evident from the discussion focus such as Employment Equity or BEE Charter reporting, which is topical for a number of reasons. Including this measure as a KPI for executives elevated this metric to the relevant strategic level which prompted the reporting framework for this metric. A key learning from this includes the fact that the BEE Charters have been defined and set per industry with industry is leading the initiative. Does this prove that an industry standard is possible for Human Capital Reporting?

When probed about the seeming misalignment between HR and business, some comments from Executives were:

*“I value the hard work of HR but I worry that our company may not know which HR issues are the most strategic ones, versus operational.”*

*“I know in finance, but I am not sure about HR.”*

*“HR cannot articulate its perspective with as much precision as finance or even line managers.”*

*“I wish HR had more to offer here.”*

These comments clearly shows that HR practitioners need to realise and understand that something needs to be done - demonstrating the strategic value of HR in understandable business terminology is crucial.

Chapter 5 will provide a proposed framework for Human Capital reporting which addresses all the elements identified during this study, linking it to the company bottom line and top line with the primary objective of providing a framework for external reporting to be included in company reports.

## CHAPTER 5 PROPOSED FRAMEWORK

*“A discovery is said to be an accident meeting a prepared mind.”*

*- Albert von Szent-Gyorgyi, US biochemist (1893 - 1986)*

### 5.1 Introduction

From the previous chapter and the results of the surveys, it becomes clear that HR reporting is generally focused and reported on internally. This does not allow stakeholders (especially investors or shareholders) the ability to view or have insight into the Human Assets (value or risks) or even the Human Capital employed by the organisation.

This chapter consists of the framework developed by the researcher based on the empirical study. The chapter is divided into three categories:

1. Framework for the Human Resources function to enable a clear understanding of the components within Human Resources which affect the Human Capital Asset.
2. Human Capital reporting (internal measures).
3. Metrics to manage the value of Human Assets.

It concludes with proposed principles for reporting Human Capital as part of Company Annual Reports.

The proposed framework will provide companies and their stakeholders (employees, management, shareholders, government etc) insight as to the value of the Human Capital and the methods to manage the Human Resources employed by a specific organisation. Should the framework be adopted, the information can be trusted by investors and other stakeholders and available for auditing. The Human Resources function will understand which components of the discipline forms

a basis for comparative external reporting on Human Capital Assets. This will also provide HR with a framework of related value propositions against which measurements can take place and against which HR development policies, procedures, guidelines and/or initiatives can ultimately be aligned.

## **5.2 Methodology for the Framework**

The researcher used the Enterprise Value Map (EVM) methodology from Deloitte as a basis for the framework for Human Capital Reporting. This methodology is used to evaluate processes or identify opportunity improvement levers that positively effect shareholder value (refer Chapter 2).

The framework proposes to look at the following improvement levers for Human Capital Management:

- Reduction in Total Cost of Employee Interactions.
- Increase in Employee Efficiency.
- Improvement of the Employee's Impact on Customers.
- Improvement of Employee Performance.
- Improvement of Asset Profitability.
- External Factors that influence the view of stakeholders in their value / perception of the organisation.

## **5.3 Framework for HR**

Based on the findings and aims, the following components are included in a salient manner in the framework:

### **1. Human Resources strategy**

Reporting on Human Capital begins with an account of the firm's Human Resources strategy. This highlights the company's overall approach to the acquisition, development, management and performance of Human Capital. The strategy statement outlines the company's vision for the contribution of human assets in relation to future opportunities and challenges, and outlines the role of its HR policies in securing that contribution.

## **2. Sections on recruitment (acquisition) and retention, learning and development and Human Capital management**

This is supported by evidence on how organisations acquire, develop, manage and retain Human Capital. The evidence that organisations are able to provide and what is appropriate will depend on the organisations' individual circumstances. The evidence should be a balance of both quantitative and qualitative data. Quantitative data in particular can be misunderstood / interpreted, and therefore adequate explanation is required.

## **3. Information on performance**

The organisation should provide details of the effectiveness and performance of their Human Capital and Human Capital management policies and practices, using a mix of quantitative and qualitative data to indicate how well their strategic objectives are being achieved.

## **4. Information on asset productivity**

The organisation should provide details of the productivity and effectiveness of its Human Assets as well as the technology which enables the accurate accounting of such assets and the improvement of these assets, using a mix of quantitative and qualitative data to indicate how well the assets are enabled to increase their productivity.

This will highlight the company's ability to utilise their investment in technology to increase the capacity and effectiveness of the employees and highlight the level of automation a company may have invested in and leverage off. This dimension needs to be future-orientated to ensure that the value of the contribution of Human Assets to future performance is clear. The trade-off between

employing more Human Resources vs. the value (benefit) of deploying technologies is important; not only from an invested cash perspective, but also from a value generation perspective.

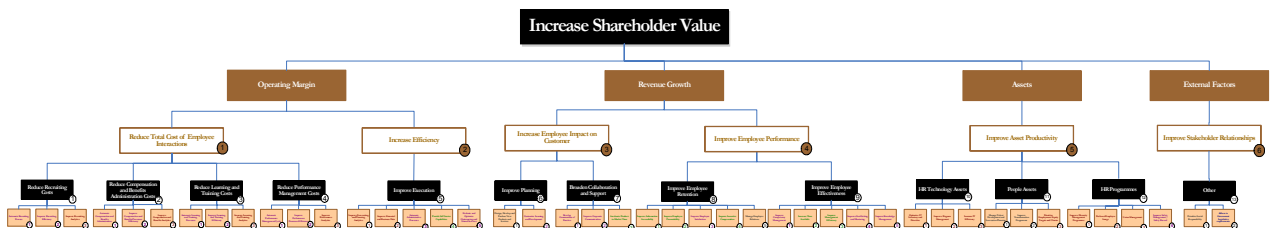
**5. Information which may relate to the considerations of the external environment**

The impact of the political and social environment on organisations is especially prevalent in South Africa. Reporting the status of the company’s employment equity policy and achievements as well as social investments provides an indicator of the organisation’s impact on the South African social and political policies and the economy of the country.

This is very important for non-profit or government organisations where questions such as “what is the value of a hospital that saves the lives of thousands of people?” or “what is the value of a university that educates the new leaders of tomorrow?” cannot be answered by looking purely at the revenue growth or operating margin, or even the assets of the organisation.

In order to facilitate this, a Human Capital Reporting Framework based on the EVM as described in Chapter 2 was developed as illustrated below.

**5.4 Proposed Framework**



**Figure 27: Proposed Framework**

The framework is based on the principles of accounting as specified in GAAP (refer to Chapter 2) and consists of the following components (please refer to the full framework print included in cover of report):

- **Reduce Operating Margins** – Lower transaction costs and increase knowledge dissemination.



- 
- **Increase Revenue** – Leveraging increased employee satisfaction and improved performance management.
  - **Improve Asset Productivity** – Optimal alignment and management of Human Capital resources including enabling technology.
  - **Improve Stakeholder Relationship** - Investment in social responsibility programmes and adherence to legislation.

Under each of these categories a distinct section on management and leadership is required. Information on Human Capital utilisation for this category of employees, with the greatest scope to affect the strategic performance of the organisation, will often be most readily available in organisations. It also has particular value to financial analysts and investors, as evidenced by the fact that the remuneration of company directors is already an important component of annual reports.

To read the model (large copy included in cover pocket of dissertation), the following approach should be taken:

### **Top-Down/Bottom-up**

The brown boxes (value drivers) marked A 1 - 4, are the metrics by which shareholders, analysts, and potential investors assess company performance - in absolute terms and relative to that of competitors. The four main value drivers of shareholder value are Revenue Growth (A1), Operating Margin (A2), Asset Efficiency (A3), and Expectations (A4). Starting at the top level and tracking downward, the successive layers of the model help answer the question, "How can we improve this?" The colour-coded items in the lower section of the model are specific actions you can take and have been linked to the HR strategic themes. Reading bottom to top, you can reverse the process and answer the question, "Why are we improving this?"

### **Left to Right**

The left side of the model, including the Revenue Growth and Operating Margin sections, represents the Income Statement portion of the model. These two sections combine to describe current operational performance. The Asset Efficiency section is a subset of the Balance Sheet, showing how efficiently assets are utilised in delivering operational performance. The External Factors section addresses factors that influence future Income Statement and Balance Sheet performance, and focuses on factors that influence shareholder confidence in the organisation and its leadership.

### **White Boxes - Improvement Levers**

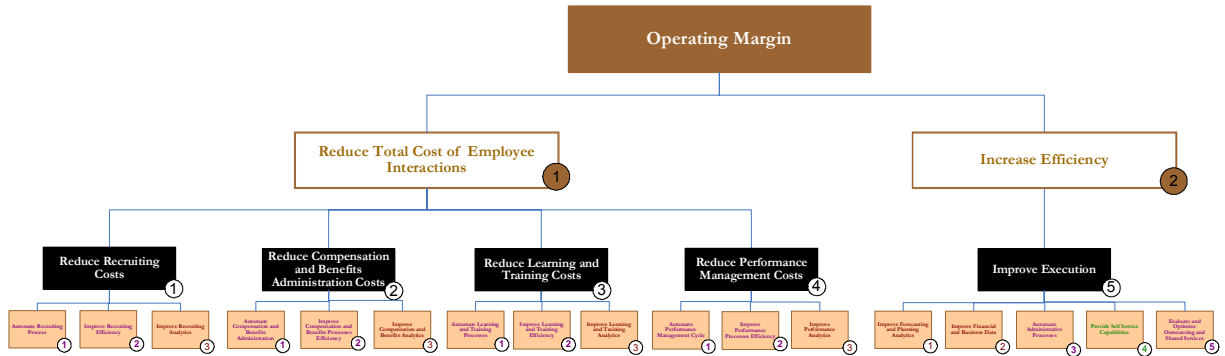
The first level of white boxes (B 1-6) defines actions organisations can take to improve revenue, operating margin, asset efficiency, and forward-looking performance. The next level (C 1-13) defines those areas on which the activities for improvement for maximum value may be focused on.

### **Colour coded text**

The text within the blocks described above is colour coded to highlight the link to the HR themes.

- Improve Employee Productivity.
- Develop a Continuous Performance Culture.
- Strengthen Knowledge Sharing and Learning.
- Elevate People Management to a Strategic Level.
- Increase Value to Customers through Employees.

### 5.4.1 Operating Margin (A1)



**Figure 28: Operating Margin**

There are two main factors that influence the operating margin:

- Reducing costs (B1) - Total cost of employee's interactions.
- Increasing efficiency (B2) - through improvement of execution capabilities.

#### 5.4.1.1 Reduce total cost of employee interactions (B1)

This area refers to ways in which Human Resource Management can reduce the costs of employee interactions to reduce the costs of the programmes for which they are responsible that directly impact the employee. Costs present a negative (-) effect on the Income Statement and thus the control of this is very important.

These include areas where HR is able to influence and control the costs directly:

- Reducing Recruitment costs (C1).
- Reducing HR administration costs (C2) - compensation and benefits administration.

- Reducing Learning / Training costs (C3).
- Reducing Performance Management costs (C4).

This management of costs is predominantly focused on the administration side and a balance between this focus and the value which may be extracted by applying HR initiatives needs to be maintained. An example of such a balance for consideration is in training and development. A study by Bassi Investments (Phillips, 2005) where the results shows that portfolio firms that made unusually large investments in employee education, training and development outperformed the S&P 500 by a factor of two (113% versus 55%). This may encourage an increase in the cost for Learning / Training and the reduction in cost focused purely on the administration of the function. Using metrics such as training ROI can help to ensure time, effort, focus and funds are spent on the right programmes that indeed deliver the increase in value for the organisation.

#### **5.4.1.2 Increase efficiency (B2)**

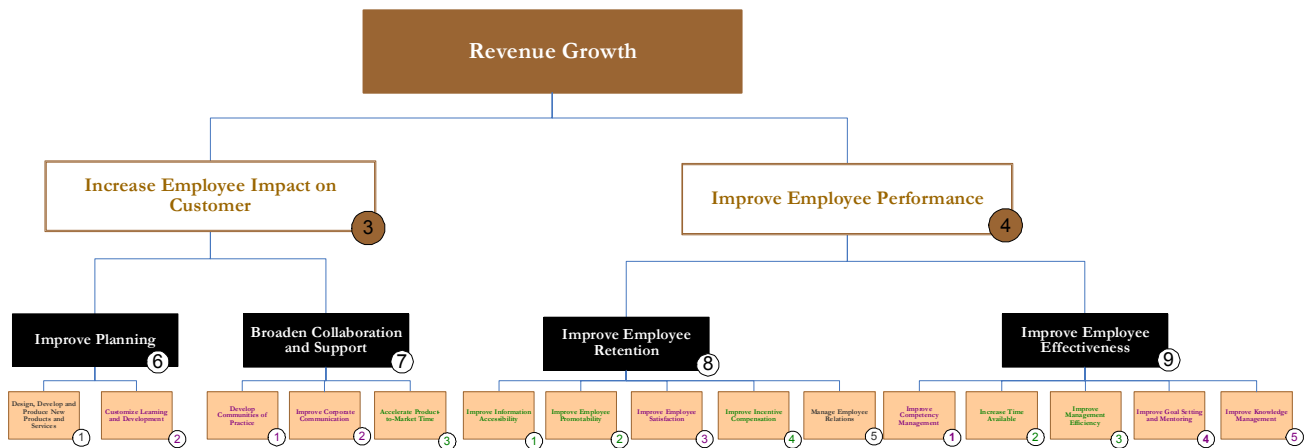
This area refers to increasing efficiency of the Human Resources function to provide the services and expertise to add value to the Human Capital of the organisation.

This includes:

- Improvement of Execution (C5) - of HR programmes.

These programmes need to be monitored and tested for Return on Investment (ROI) to ensure value is not destroyed, but added.

### 5.4.2 Revenue Growth (A2)



**Figure 29: Revenue Growth**

There are two main factors that influence revenue growth:

- Customers (B3) - increasing the positive impact that employees have on customers.
- Employee performance (B4) - improvement of the effectiveness and efficiency of the employee.

#### 5.4.2.1 Increase employee's impact on customer

In order to maintain a positive impact on customers and the interaction of the organisation's employees with customers, planning to increase the services and products that are offered and the "customisation" of such services and products as well as the training of employees in these products and services, needs to be addressed. The time to market of such products is crucial for revenue growth and ensuring that the relationship with customers is maintained, and customer loyalty build even more so.

The impact of employee satisfaction, loyalty, and productivity is linked to customer satisfaction and growth of customer loyalty (Heskett, Sasser & Schlesinger, 1994). The service-profit chain clarifies the links between the following:



**Figure 30: Service Profit Chain – adapted from Heskett et al., (1994)**

A study by Watson Wyatt (2004), Communication ROI Study™, demonstrated that there is a correlation between communication effectiveness, organisational turnover and financial performance. Some of the findings include evidence that:

- Companies that communicate effectively have a 19.4% higher market premium than companies that do not.
- Shareholder returns for organisations with the most effective communication were over 57% higher over the last five years (2000-2004) than returns for firms with less effective communication.

Based on the above, this dimension includes:

- Improve planning (C4).
- Broaden collaboration and support (C5).

#### 5.4.2.2 Improve employee performance (B4)

This area refers to the improvement of employee effectiveness. Retaining effective employees has a direct impact on both the operating margin and revenue growth. As the improvement and management of the efficiency of employees has been categorised to be influenced predominantly by the Human Resources function, the direct effectiveness of employees will have a larger impact on revenue growth than on the operating margin. This category is placed under the improvement of employee performance with the retention of employees which includes:

- Improve employee retention (C8).
- Improve employee effectiveness (C9).

#### Assets

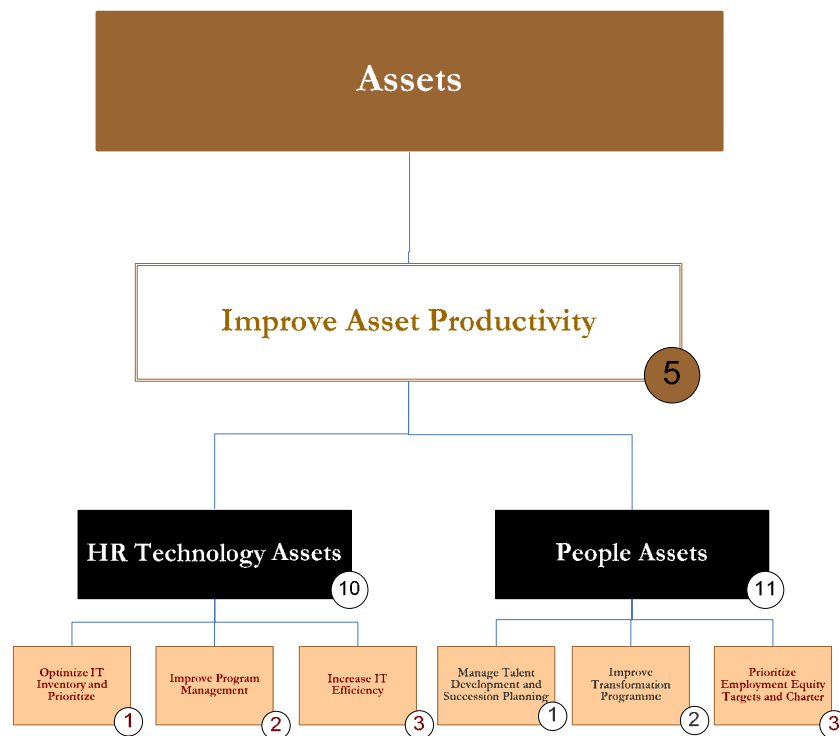


Figure 31: Assets

There is only one main factor that influences the assets value of an organisation:

- Improving asset productivity (B5).

Assets are depreciated over time, however Human Capital and intangibles are amortised due to their increase in value.

#### **5.4.2.3 Improve asset productivity (B5)**

In order to improve the productivity of your HR assets, an organisation may focus on two aspects:

- Technology Assets (C10).
- People Assets (C11).

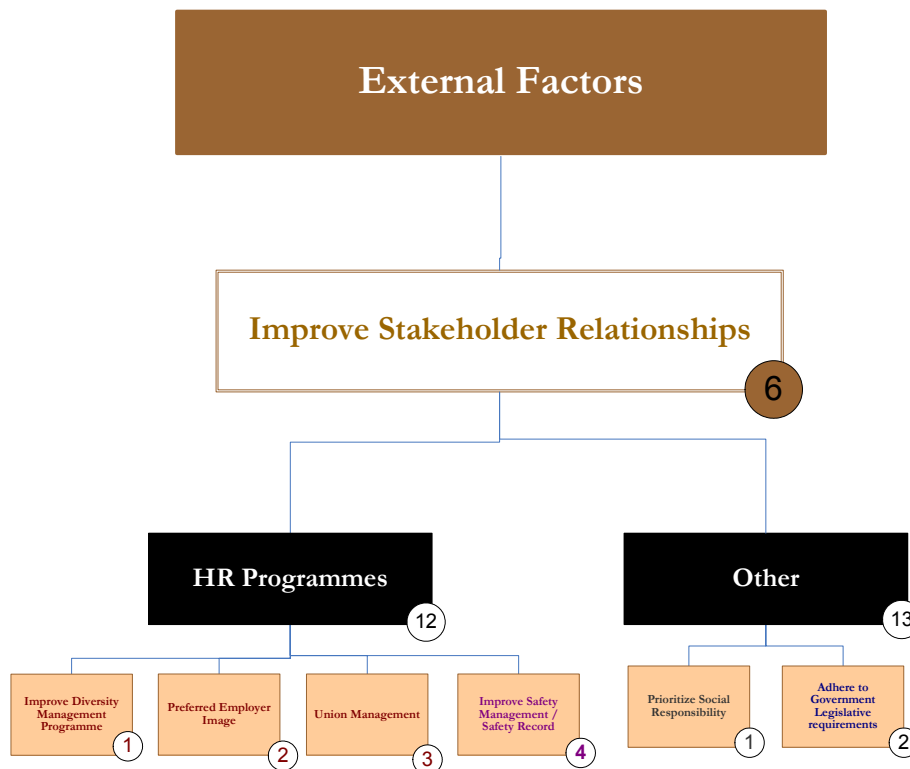
#### **5.4.2.4 Technology Assets (C10)**

HR technology, for example online benefits enrolment, retirement planning, compensation and pension administration, Employee / Manager self-service tools, e-recruiting tools, etc., can play a huge role in helping HR play a more value added strategic role. This technology must be implemented with the fundamentals in mind—improving accuracy, service, and cost-effectiveness to pay off in higher shareholder value. However, care must be taken to not implement the technology for the sake of it and to drive the value extraction from the technology - something which HR may not be skilled in yet.

As this technology is used to enable the HR efficiency and effectiveness, the cost of the technology is traded off against the reduction in Human Resources and the costs related to the latter. Taking this into consideration, the value generated from this method contributes to the value of the Human Resources function only.



### 5.4.3 External Factors



**Figure 32: External Factors**

This area refers to those factors that may influence the value of the company in the eyes of stakeholders (including government) and potential shareholders, external to the organisation. This varies by company and industry.

Certain HR programmes may well influence the external factors or react to the external factors, however, most of these are factors that need to be watched and proactively and reactively addressed.

- For this framework, HR Programmes (C12) is listed under this category. These programmes need to be considered as having an impact on the operating margin (costs) as well.

- 
- A category for Other (C13) is listed for consideration that needs to be given to market and external environment factors. These considerations are specific to the organisation and/or industry and cannot be listed in the model, but rather need to be identified by those using the model.

## 5.5 Using the Framework

To use the framework effectively, an understanding of the levers and what can be done is required.

### Actions You Can Take

To address the Improvement Levers, there are two basic categories of actions you can take:

*Change What You Do (Change your strategy / Refocus your resources)*

To maximise shareholder value, companies need to focus on activities that provide the best possible return on the resources they utilise. Focusing and refocusing can happen at many levels - from reducing costs spent on impact areas, to the discontinuation or outsourcing of services with little value add, to a diminished focus on lower-value employees. The first horizontal band of colour-coded actions addresses actions that can be taken from a strategy and focus viewpoint to improve the value of Human Assets in the organisation.

*Do What You Do Better (Improve your execution)*

There are two paths to better business process execution: improve the business processes themselves, and raise the efficiency and effectiveness of the people and technologies executing and managing the processes. Improving the performance of people and technologies means improving their respective capabilities, productivities and capacities.

The high interdependency of value drivers requires careful consideration of initiatives undertaken to improve a value driver. This will almost always have an impact on another value driver. The challenge is to recognise and account for these effects and balance the trade-offs in ways that align with the company's direction and priorities.

## **CHAPTER 6 - PROPOSED HUMAN CAPITAL REPORTING (business questions)**

*“With regard to excellence, it is not enough to know, but we must try to have and use it. “*

*- Aristotle (384 BC - 322 BC)*

### **6.1 Introduction**

The reporting offered by Human Resources management has evolved during the last few years as Human Capital has become more and more of a competitive advantage to organisations. In the Industrial Age, machinery was considered the key asset for an organisation; in the computer age, having further evolved, computing power was of utmost strategic value. In the new millennium, organisations started to realise that the value of knowledge management and Intellectual Capital far outweighs any machinery or equipment assets, and the many knowledge intensive companies such as Microsoft, Oracle, SAP and other consulting firms, as well as companies, are very focused and dependant on R&D and innovation. Human Assets may be seen as a company’s greatest asset. This requires HR, as the “custodian” of the information relating to the Human Capital in an organisation, to develop their skills in providing companies with intellectual, analytical analyses of its workforce and the strategic value of its Human Assets, enabled by the computer technology of the previous age.

There are three (3) levels of reporting for HR:

**1. Efficiency Reports** - reports addressed predominantly through metrics and benchmarking the efficiency or effectiveness of the HR function.

**2. Data Analytics** - reports which address those aspects of the line function concerned with the management of the workforce.

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**3. Company Reporting** (value adding, strategic) - reports which address specific business issues, or potential problems the business may need to address, from a Human Resources perspective; i.e. where Human Capital is applied to extract value for the business.

Using technology needs to enable HR to elevate their reporting to a strategic level; however, the journey will need to start by having an understanding of the value which can be added by the HR function to increase the Human Assets of an organisation.

To understand the elements of the tactics which are required to elevate the Human Resources Function to a strategic level, understanding of what HR strategy really means is required. Paul Kearnes stated that “HR strategy, like a military or any other strategy, is also not about individual battles, it is rather the thread that ensures all individual battles are making a contribution to the overall common cause; the winning of the war” (Kearnes, 2003:7). It is important for the strategy to provide clear guidance, and more important for the HR function to have the tactics ready to ensure that the strategy is executed and aligned with the business strategy. In order to do that, many different tactics may be deployed - the key question is which really adds value to the organisation and are there any that detract value. To be able to answer this in terms that businesses can understand, HR needs to be able to use quantifying measures, supported by the qualitative measures they are so good at.

In a study done by researchers at Cornell (Boudreau, 1998) the perceptions of line executives and HR executives regarding HR effectiveness was compared. In every category across the board, line executives rated HR effectiveness less highly than HR executives themselves did. The study also examined how HR’s effectiveness in different roles was perceived. Again, the line executives rated HR less highly in every category. Both groups agreed that HR fulfilled its HR services role best and its “change consulting” role least effectively.

The Cornell researchers looked at how the two groups valued HR’s overall contribution to the success of the firm. The HR executives gave themselves significantly higher ratings than the line executives (Boudreau, 1998).

Area	HR Mean	Line Mean
Performing the expected job	4.5	3.9
Responsive to customer needs	5.0	4.2
Enhancing competitiveness	5.0	3.8
Value-added contribution	5.0	4.1
Core competence	4.8	4.2

Source: Comparing Line and HR Executives' Perceptions of HR Effectiveness: Services, Roles and Contributions

**Table 8: Effectiveness of HR Contributions - Boudreau (1998)**

These findings seem to highlight the major hurdle. The HR practitioners surveyed during this study may in fact have an even lesser perceived view of the current contribution of HR. The HR mean from this study for value-added contribution (5.0) is considerably more positive than the Line mean (4.1) which is indicative of the current view on HR's contribution, confirmed in this study. Perception is almost reality, and any HR department perceived as less than top quality will not be able to guide a company into the kind of Human Capital management that raises shareholder value. HR practitioners will have to work on demonstrating the value they perceive themselves to add in terms that business will relate to, agree on, and which will change their perspective to a more positive view.

## 6.2 Human Capital / Human Resources Business Questions

The Human Resources function is able to provide insight into, and answer a number of very strategic business questions. The strategic focus of business questions evolves from the value that needs to be created by the Human Resources function as it supports the organisational mission. Once the HR function can demonstrate the value it creates at the strategic level, it will finally be able to link this value to the bottom line; i.e. in financial terms.

### 6.2.1 Internal reports linked to bottom line

Today, many HR systems have built into them any number of reports. These reports are focused mostly internally; however they play a huge role in the effectiveness of the Human Resources Function and in helping to elevate HR to a more strategic level.

The researcher has taken a list of these standard available reports and categorised them according to the proposed framework in an effort to assist HR in reporting more efficiently - internally. This list is not exclusive or exhaustive, and has been selected to focus on issues related to the performance of the business overall vs. the performance of individuals. It also includes measures for the improvement of performance for the HR function as this may have a direct or indirect impact on the overall performance. Understanding how these reports have an effect on the bottom-line will lead to improved external reporting (discussed next).

The following types of analyses, metrics and reports have been categorised into the various value levers of the framework (refer Section 5.3, Framework for HR), based on the typical business questions which may be asked for (or initiated by) HR. The HR categories are listed to ensure ease of reference for HR practitioners and the descriptions provided to ensure a common understanding.

Lever	Category	Description
Efficiency	Appraisal Summary	View the timeliness of your appraisal processes and the overall rating of the employee appraisals undertaking.
	Appraisal Summary	How do appraisal ratings compare for different employee groups, for example, key personnel?
	Appraisal Summary	How do performance, attitude effort and overall scores compare?
	Appraisal Summary	How many appraisals are late?
	Appraisal Summary	How many appraisals were completed on time?
Cost of Employee	Appraisal Summary	What percent of appraisals were completed on time?
	Employee	The purpose of this analytic is to reveal the organisation

Lever	Category	Description
Interactions		wide employment costs for the current and previous year.
	Employee Costs	How has my employment costs changed over time?
	Employee Costs	What are my employment costs for the organisation or part of the organisation?
	Employee Costs	What is the breakdown of my employment costs?
Cost Employee Interactions	of Employee Lifecycle	Evaluate the employment life cycle of a typical employee within the organisation and how this has changed period on period.
	Employee Lifecycle	On average, how long do employees remain in the organisation?
	Employee Lifecycle	On average how long does it take to hire an employee?
	Employee Lifecycle	On average, how many job roles do employees have during their employment with the organisation?
	Employee Lifecycle	On average, how much of the notice period do employees work prior to leaving?
	Employee Lifecycle	On average, what is the notice period of employees?
Cost Employee Interactions	of Headcount Summary	This analytic enables you to view the headcount status of the organisation in terms of number of employees and the associated full time equivalents (FTE)

Lever	Category	Description
	Headcount Summary	How many positions are vacant?
	Headcount Summary	What is the employee headcount in terms of full time equivalents (FTE)?
	Headcount Summary	What is the employee headcount within the organisation?
	Headcount Summary	What is the percent breakdown of headcount?
	Headcount Summary	What is the trend of my headcount, period on period?
Efficiency	HR Departmental Costs	This analytic lets you understand how much the Human Resources function costs in total and by function.
	HR Departmental Costs	How does the cost of running the HR function compare to last year / budget?
	HR Departmental Costs	What is my departmental HR spending against budget (by spend type)?
	HR Departmental Costs	What is the cost of running the HR function?
	HR Departmental Costs	What is the cost of the recruiting or compensation and benefits or training and education functions and how does this compare against last year / budget?
	HR Departmental	What is the global cost of running a particular HR function?



Lever	Category	Description
	Costs	
Employee Performance	Joiners and Leavers Summary	Highlights the employee hires and separations within the organisation and your employee turnover for a given time period.
	Joiners and Leavers Summary	How many employees have been hired?
	Joiners and Leavers Summary	How many employees have separated?
	Joiners and Leavers Summary	How many new hires have we had compared to those leaving?
	Joiners and Leavers Summary	What is my employee turnover rate?
	Joiners and Leavers Summary	What is the hire to separation ratio?
Employee Performance	KPI Tracker	Highlights the performance change, over time, of a choice of measures that are important to the function of people management.
	KPI Tracker	How many days are lost due to workplace accidents?
	KPI Tracker	How many days are lost through employee suspension?

Lever	Category	Description
	KPI Tracker	How many days are lost through sickness?
	KPI Tracker	What is the number of days with employees on maternity leave?
	KPI Tracker	What is the total number of training days?
Employee Performance	Satisfaction Survey	Monitor the level of job satisfaction experienced by your workforce and compare period on period - comparing improvements or issues that require improvement
	Satisfaction Survey	Has the satisfaction rating improved since last conducted?
	Satisfaction Survey	What is the response rate to the survey?
	Satisfaction Survey	What number/percent of my employees are satisfied?
People Assets	Separation Analysis	Analyze by period, the employee separation and turnover rate by location, organisation, function etc.
	Separation Analysis	How many employees have separated?
	Separation Analysis	What is my employee turnover rate?
	Separation Analysis	What is the percent of my key employees leaving?
	Separation Analysis	What is the ratio of voluntary to involuntary separation?

Lever	Category	Description
People Assets	Skill Gap	The purpose of this analytic is to provide a high level view of the skill gap or skill shortage within the workforce, matching the employees' skill against the skill requirement for the job role
	Skill Gap	How many employees within the organisation have skill gaps?
	Skill Gap	What percent of employees have skill gaps?
	Skill Gap	Which department within the organisation has the highest skill gap?
Efficiency	Skill Gap Trend	The purpose of this analytic is to give you a high level view of the skill gap or skill shortage within your workforce, and how this has changed over time
	Skill Gap Trend	How many employees within the organisation have skill gaps?
	Skill Gap Trend	How many employees have skill gaps compared to a previous period?
	Skill Gap Trend	What percent of employees have skill gaps?
	Skill Gap Trend	What is the percent change in the overall skill gap?
	Skill Gap Trend	Which department has improved the least in terms of

Lever	Category	Description
		reducing the skill gap?
	Skill Gap Trend	Which department has improved the most in terms of reducing the skill gap?
Cost of Training Employee Interactions	Summary	This analytic gives you a high level summary of the time and costs invested in training and developing your employees, comparing period on period.
	Training Summary	How many employees have received training?
	Training Summary	What are the total training costs?
	Training Summary	What is the average number of training days per employee?
	Training Summary	What is the average training cost per employee?
	Training Summary	What is the course attendance rate?
	Training Summary	What is the overall employee rating of the training courses?
Asset Productivity	Employee Distribution	This analytic allows you to view your workforce by demographics for improved planning
	Age Distribution	How is the age for the current employees distributed?
	Age Distribution	Is there a connection between age and gender within the organisation?

Lever	Category	Description
	Headcount by Ethnic Origin	How is each ethnic origin distributed in the organisation?
	Headcount by Ethnic Origin	What are the different employee nationalities in the organisation?
	Headcount by Ethnic Origin	What is the percentage of each nationality and ethnic group?
	Headcount Listing	What are these individual employees' job details?
	Headcount Listing	What are these individual employees' personal details?
	Headcount Listing	Who are the current employees in the organisation?
Asset Productivity	Hire Analysis	Details of all employees hired into the organisation over a specified time period.
	Hire Analysis	How many of the new hires are from each country?
	Hire Analysis	How many of the new hires are in each part of the organisation?
	Hire Analysis	How many of the new hires are male and female?
	Hire Analysis	How many of the new hires fall into each of the age bandings?

Lever	Category	Description
	Hire Analysis	How many of the new hires fall into each of the previous experience bandings?
	Hire Analysis	How many of the new hires have the same hiring source?
	Hire Analysis	What are the yearly figures for employees that have been hired?
	Hire Analysis	What are these individual employees' personal details?
	Hire Analysis	What is their previous experience?
	Hire Analysis	Who has been hired recently?
	Hire Analysis	Which part of the organisation have they been hired into?
Employee Performance	Length of Service Distribution	Analyse how length of service is distributed within the organisation by gender / ethnic origin etc. including the costs and impact of turnover
	Length of Service Distribution	How is the length of service for the current employees distributed?
	Length of Service Distribution	Is there a connection between gender and length of service within the organisation?
	Recent Hire Separation Analysis	View the number of employees that have been recently hired but are now separated.

Lever	Category	Description
	Recent Hire Separation Analysis	How many of recent hires are now leavers that fall into each of the previous experience bandings?
	Recent Hire Separation Analysis	How many of these leavers have the same departure decision? Are from the same department / function?
	Recent Hire Separation Analysis	What are the yearly figures for employees that have been recently hired and then left?
	Recent Hire Separation Listing	What are the job details of each individual leaver?
	Recent Hire Separation Listing	What is the listing of employees that have been recently hired and then left?
	Separation Analysis	How many of these leavers have the same departure decision? Are from the same department / function?
	Separation Analysis	What is the yearly turnover rate?
	Separation Listing	How many employees have left voluntarily? Non-voluntarily?
Employee Performance	Benefit Optimisation	The purpose of this analytic is to enable you to either reduce costs or increase the value to employees (or a combination of both) by altering your benefits provision
	Benefit Optimisation	How do my employee benefits compare across tax

Lever	Category	Description
		brackets?
	Benefit Optimisation	How effective are my employee benefits packages?
	Benefit Optimisation	How much money could I save if I discontinue a particular employee benefit?
	Benefit Optimisation	How much money could I save if I extend a particular employee benefit?
	Benefit Optimisation	What is the take up of my employee benefits?
	Benefit Optimisation	Which employee benefits should I discontinue?
	Benefit Optimisation	Which employee benefits should I extend?
Efficiency	Benefit Subscription	Analyse the take up of benefits by tax bracket to determine whether any are potentially discontinuable.
	Benefit Subscription	What is the take up of employee benefits? Which should be continued, discontinued?
People Assets	Headcount Trend	View the current workforce and trends relating to the employment status of the organisation including joiners and leavers
	Headcount Trend	What is the employee headcount in terms of full time equivalents (FTE)?



Lever	Category	Description
	Headcount Trend	What is the employee headcount within the organisation?
	Headcount Trend	What is the trend of my headcount, period on period?
	Joiners and Leavers Analysis	How many employees have been hired?
	Joiners and Leavers Analysis	How many employees have separated?
	Joiners and Leavers Analysis	What is the headcount at the start and end of each time period?
	Joiners and Leavers Analysis	What is the net employee headcount change?
	Joiners and Leavers Analysis	What is the number of 'job changers' period on period?
People Assets	Quality Of Hires	Provides visibility of the progress made by new hires within the organisation in comparison to new hires in a previous period, comparing them with previous new hires
	Quality Of Hires	Has the percent of employees completing their probationary period improved over time?
	Quality Of Hires	How do appraisal grades of new hires compare to a previous time period?

Lever	Category	Description
	Quality Of Hires	How does my retention rate of new hires compare to a previous time period?
	Quality Of Hires	How many employees have been hired?
	Quality Of Hires	How many employees have successfully completed their probationary period?
	Quality Of Hires	How many employees remain employed a year from their hire date?
	Quality Of Hires	What is the uptake of training by new hires compared to a previous period?
Employee Retention	Remuneration Index	This analytic enables you to compare your total remuneration as well as the compensation and benefits components, against the industry.
	Remuneration Index	How does the job role remuneration compare to the industry?
	Remuneration Index	How well do we remunerate key employees / positions?
	Remuneration Index	What are the components of remuneration and how do they compare to each other and the industry by job role?
	Remuneration Index	What is the spread of remuneration by job role?

Lever	Category	Description
Employee Effectiveness	Employee Scoring	Rank employees within the organisation based on different scoring methodologies (Job performance, Aptitude, Appraisal, Experience, Attendance, Discipline), combined to produce an overall score per employee
	Employee Scoring	1) Job Performance - the latest employee job score within their current position multiplied by 100.
	Employee Scoring	2) Aptitude - the latest employee aptitude score is the composite score based on the following 4 skills multiplied by 100: flexibility, initiative, self-motivation and teamwork.
	Employee Scoring	3) Appraisal - the latest employee appraisal rating multiplied by 100. For those employees who have not yet had an appraisal an imputed figure is used based on the average of the selected organisation node.
	Employee Scoring	4) Experience - is calculated on the current job position: 75 for less than 2 years service, 100 for 2-4 years, 125 for 4-6 years and 125 for more than 6 years experience.
	Employee Scoring	5) Attendance - is calculated by multiplying the number of sickness occurrences over the last 24 months by -5.
	Employee Scoring	6) Discipline - is calculated by multiplying the discipline score over the last 24 months by -20. The discipline score for each grievance is 1 for verbal warning, 2 for written warning, 3 for final warning 4 for dismissal and 0 following a successful appeal.

Lever	Category	Description
	Employee Scoring	What is the score per employee?
	Employee Scoring	Which employees are above the average score?
	Employee Scoring	Which employees are below the average score?
Employee Retention	Joiners and Leavers by Employee	Use this to view the employees who join or leave the organisation during a specified time period.
	Joiners and Leavers by Employee	What are the expiry dates of the probationary periods for all new hires?
	Joiners and Leavers by Employee	What was their length of service on leaving the organisation?
	Reasons For Leaving	What reasons (trends and %) do employees leaving the organisation give?
Recruitment Costs	Tenure Distribution	Evaluate the length of tenure of your workforce.
	Tenure Distribution by Agency	What is the distribution of employees, by recruiting agency, throughout the organisation in terms of length of tenure/service?
	Tenure Distribution by Employee	What is the distribution of employees throughout the organisation in terms of length of tenure/service?
Employee	Tenure Distribution by	Analyse the distribution of employees length of

Lever	Category	Description
Retention	Job Role	tenure/service by job role
	Job Role	Tenure Distribution by What is the distribution of employees, by job role, throughout the organisation in terms of length of tenure/service?
Employee Retention	Tenure Distribution by Leavers	Use this to view the distribution of leavers length of tenure/service.
	Leavers	Tenure Distribution by What is the distribution of leavers throughout the organisation in terms of length of tenure/service?
People Assets	Workforce DNA	Use this to understand the typical characteristics of employees within the organisation.
	Workforce DNA	What are the demographics of my workforce?
	Workforce DNA	What is the average age of employees within the organisation?
	Workforce DNA	What is the average salary of employees within the organisation?
Recruitment Costs	Recruitment Efficiency	Understand the average time taken to complete the advertising stage of the hire cycle. This stage is made up of three specific phases within the advertising stage, Identification of Need Date to Approve Need Date, Approve Need Date to Job Specification Date and Job Specification Date to Communicate Date.

Lever	Category	Description
	Recruitment Efficiency	What is the average length of time it takes to advertise for a new job position via Agencies?
	Recruitment Efficiency	What is the average length of time it takes to advertise for a new job position via the HR department?
	Recruitment Efficiency	What is the average time taken from Approve Need Date to Job Specification Date via Agencies?
	Recruitment Efficiency	What is the average time taken from Approve Need Date to Job Specification Date via the HR department?
	Recruitment Efficiency	What is the average time taken from Identification of Need Date to Approve Need Date via Agencies?
	Recruitment Efficiency	What is the average time taken from Identification of Need Date to Approve Need Date via the HR department?
	Recruitment Efficiency	What is the average time taken from Job Specification Date to Communicate Date via Agencies?
	Recruitment Efficiency	What is the average time taken from Job Specification Date to Communicate Date via the HR department?
Recruitment Costs	Hire Cycle Time	It will enable you to identify which stage of the hiring cycle takes the most time, by understanding this you may be able to change your hiring processes and thus reduce your overall cycle time.

Lever	Category	Description
	Hire Cycle Time	On average how long does it take to hire an employee?
	Hire Cycle Time	What is the average length of time it takes for successful candidates to accept an offer?
	Hire Cycle Time	What is the average length of time it takes short-list candidates for an interview?
	Hire Cycle Time	What is the average length of time it takes to advertise for a new job position?
	Hire Cycle Time	What is the average length of time it takes to interview candidates?
	Hire Cycle Time	What stage within the hire cycle process takes the longest time?
Recruitment Costs	Hiring Status	This analytic enables you to understand the number and the progress of candidates that are in your hiring processes.
	Hiring Status	How many candidates have we interviewed? Short-listed?
	Hiring Status	How many days from hire process initiated to placement (time to place)?
	Hiring Status	How many job positions are within the hire process? How many résumés per position?

Lever	Category	Description
	Hiring Status	What is the current status for each job position?
	Hiring Status	What stage in the hire cycle is the job position?
	Hiring Status	Which job positions are in the process of being filled?
Recruitment Costs	Interview Cycle Time	View the average time taken to complete the interview stage of the hire cycle. This stage is made up of the following phases, Shortlist to Interview Round 1, Interview Round 1 to Interview Round, Interview Round 2 to Interview Round 3 and Interview Round 3 to Job Offer.
	Interview Cycle Time	What is the average length of time from Final Interview to Job Offer via the HR department versus Agencies?
	Interview Cycle Time	What is the average length of time it takes from Shortlist to Interview Round 1 via the HR department versus Agencies?
	Interview Cycle Time	What is the average length of time it takes to interview candidates through the HR department versus Agencies?
Recruitment Costs	Offer Cycle Time	Use this analytic to view the average time taken to complete the offer stage of the hire cycle. This stage is made up of the following phases, Job Offer Date to Offer Reply Date and Offer Reply Date to Job Start Date.
	Offer Cycle Time	What is the average length of time it takes for successful candidates to accept an offer via the HR department versus Agencies?



Lever	Category	Description
	Offer Cycle Time	What is the average length of time it takes from Job Offer Date to Offer Reply Date via the HR department versus Agencies?
	Offer Cycle Time	What is the average length of time it takes from Offer Reply Date to Job Start Date via the HR department versus Agencies?
Recruitment Costs	Shortlist Cycle Time	Use this analytic to view the average time taken to complete the shortlist stage of the hire cycle. This stage is made up of two specific phases within the shortlist stage, Communication Date to Close Date and Close Date to Shortlist Date.
	Shortlist Cycle Time	What is the average length of time it takes from Close Date to Shortlist Date via the HR department versus Agencies?
	Shortlist Cycle Time	What is the average length of time it takes from Communication Date to Close Date via the HR department versus Agencies?
	Shortlist Cycle Time	What is the average length of time it takes short-list candidates for an interview via the HR department versus Agencies?
People Assets	Vacancy Exceptions	This analytic highlights the vacancies that are still outstanding for all the job roles where the hire process has been initiated.

Lever	Category	Description
	Vacancy Exceptions	How many days has the position been vacant?
	Vacancy Exceptions	What is the current status for each job position?
Training Costs / Development Efficiency		This analytic enables you to view the courses available for a particular employee so that a skill gap may be reduced through further training.
	Development	What is the current skill level of the employee for the particular skill?
	Development	Which training courses are available to improve skills?
	Course Quality	This analytic summarises the quality, in terms of employee feedback, of the organisation's education program.
	Course Quality	How many employees have attended the course?
	Course Quality	How many employees have attended the course over this time period?
	Course Quality	What is the rating for each course?
	Course Quality	What is the rating of the course overall?
Training Costs / Course Quality Detail Efficiency		This analytic enables you to review the quality of a particular course and instructor in light of feedback from delegates. It gives details of the quality rating, average cost

Lever	Category	Description
		per delegate and course duration.
	Course Quality Detail	How many courses have been delivered for this skill?
	Course Quality Detail	How many employees have attended the course?
	Course Quality Detail	What is the average delegate cost?
	Course Quality Detail	What is the rating of the course instructor?
	Course Quality Detail	What is the rating of the course overall?
Training Costs / Employee Efficiency	Course History	These analytic details the courses that an individual employee has attended over a chosen time frame.
	Employee Course History	How many courses has an employee attended?
	Employee Course History	What dates did the employee attend courses?
	Employee Course History	What was the cost per course?
	Employee Course History	What was the description of the course attended?
	Employee Course	What was the duration of the course?

Lever	Category	Description
	History	
	Employee Course History	What was the qualification gained by attending this course?
Training Costs / Future Efficiency	Summary	Training This analytic enables you to view a list of planned employee courses by location.
	Future Training Summary	How many employees are booked on the course?
	Future Training Summary	What courses are available in the future?
	Future Training Summary	Which employees are booked on the course?
Training Costs / Post Efficiency	Course Enhancement	Skill Understand the impact that training courses have on the overall skill improvement of your workforce.
	Post Course Skill Enhancement	How many employees have attended the course over this time period?
	Post Course Skill Enhancement	How many employees have improved their skill?
	Post Course Skill Enhancement	How many employees have not improved their skill?

Lever	Category	Description
	Post Course Skill Enhancement	What dates did the employee attend courses?
	Post Course Skill Enhancement	What is the average length of time that an employee takes to improve their skill?
	Post Course Skill Enhancement	What is their skill level after improvement?
	Post Course Skill Enhancement	What is the percent of employees that improve their skills as a result of the course?
	Post Course Skill Enhancement	What skills does the course offer?
	Post Course Skill Enhancement	What was their skill level prior to the course?
Training Costs / Proposed Efficiency	Course Skills	This analytic enables you to understand which training courses are available to enhance which skill within your workforce.
	Proposed Course Skills	How many employees do not have the skill at all?
	Proposed Course Skills	What is the duration of the course?

Lever	Category	Description
	Proposed Course Skills	What is the number of employees within the organisation at each grade of the skill?
	Proposed Course Skills	What is the percent of employees within the organisation at each grade of the skill?
	Proposed Course Skills	Which courses are available to improve particular skills?
Employee Effectiveness	Skill Absence by Employee	by This analytic enables you to understand what skills are absent in your workforce. This information may be used to identify under skilled employees and plan future training needs.
	Skill Absence by Employee	How long have these employees been in the job?
	Skill Absence by Employee	How many employees do not have a particular skill?
	Skill Absence by Employee	Which employees do not have a particular skill?
	Skill Absence by Employee	Which job roles do these employees undertake?
Employee Effectiveness	Skill Gap Analysis	Skill Gap Analysis gives you a listing of all employees within the Organisation that have an identified skill gap. It enables you to understand which employees are below the

Lever	Category	Description
		minimum skill score for their job role.
	Skill Gap Analysis	What is the skill score of the employee versus the required skill score for the job role?
	Skill Gap Analysis	Which employee has a skill gap?
	Skill Gap Analysis	Which employee has the highest skill gap?
Employee Effectiveness	Skill Gap Trend Analysis	Skill Gap Analysis Trend gives you a listing of all employees within the Organisation that have reduced their skill gap.
	Skill Gap Trend Analysis	Which employee has improved the most over the time period?
	Skill Gap Trend Analysis	Which employees have improved their skill score over the time period?
	Skill Improvers by Employee	This details the change in skill score of an employee over given time period for their various skills.
	Skill Improvers by Employee	How long has the employee been in their current role?
	Skill Improvers by Employee	What is the change in skill score for this employee over the time period?
	Skill Improvers by Employee	Which skill has the employee improved the least over the

Lever	Category	Description
	Employee	time period?
	Skill Improvers by Employee	Which skill has the employee improved the most over the time period?
People Assets	Skill Level by Employee	by Gives you the ability to view your employees, grouped by skill and skill level. This will help you understand the numbers and the job role of the employees who may be in need of further training.
	Skill Level by Employee	How long have these employees been in the job?
	Skill Level by Employee	How many employees have the skill at a particular grade?
	Skill Level by Employee	Which employees have the skill at a particular grade?
	Skill Level by Employee	Which job roles do these employees undertake?
People Assets	Succession Planning	Use this to map employees skills with the skills required for a job role and highlight employees suitable for career progression.
	Succession Planning	How many employees possess the skills required to perform a particular job role?



Lever	Category	Description
	Succession Planning	Which employees are excelling in their current job role?
	Succession Planning	Which employees are most closely matched to the job role?
	Succession Planning	Which employees are under-achieving in their current job role?
	Anticipated Leavers List	Which employees are likely to leave?
People Assets	Leavers DNA by Organisation	Use this to understand the typical characteristics of employees who leave the organisation.
	Leavers DNA by Location	What employee characteristics is a good indicator of employee separation?
	Leavers DNA by Organisation	What are the average age, job role, and skill level and employment type of your leavers?
	Leavers DNA by Organisation	What employee characteristics is a good indicator of employee separation?
	Leavers DNA by Organisation	What is the typical 'make-up' of employees leaving voluntarily?
	Leavers DNA by Organisation	What is the typical 'make-up' of key employees leaving voluntarily?

Lever	Category	Description
Employee Retention	Leavers Forecast	This analytic uses statistical technique to estimate the number of employees that are likely to leave your company over the coming periods.
	Leavers Forecast	How many leavers should I anticipate over the coming months?
Employee Retention	Leavers Profile	This analytic uses statistical techniques to discover which employee characteristics are good indicators of employee churn.
	Leavers Profile	What are the average age, job role, and skill level and employment type of your leavers?
	Leavers Profile	What employee characteristics are good indicators of employee separation?
Employee Retention	Salary Analysis	View the distribution of basic salaries within the organisation by employee grade, demographics and age.
	Salary Analysis	How do salaries compare in different organisational units within the business?
	Salary Analysis	What are basic, bonus and total salaries?
	Salary Analysis	What is the spread of salaries in the organisation by age range?

Lever	Category	Description
	Salary Analysis	What is the spread of salaries in the organisation by job grade?
Employee Effectiveness	Skill Depletion Impact	Use this analytic to measure the effect on department skill levels when an employee leaves the organisation. It details the average skill score with and without the 'leaver' and also highlights the number of employees remaining with the skill.
	Skill Depletion Impact	How many employees remain who are competent in the skill?
	Skill Depletion Impact	What impact is there on the overall skill score of an employee leaving a department?
	Skill Depletion Impact Detail	View in detail the effect on department skill levels when an employee leaves the organisation
	Skill Depletion Impact Detail	What is their job position?
	Skill Depletion Impact Detail	What is their skill level?
	Skill Depletion Impact Detail	When did they acquire the skill?
	Skill Depletion Impact Detail	Which employees remain in the department who have the skill?

Table 9: Business Questions - adapted from SAP (2003)

### 6.3 External Reports

When asked which components should be reported externally, a few topics were identified by Executives and Managers. These include:

Indicator	% Reports Externally
Absenteeism	17%
Best company to work for	17%
Commitment/satisfaction	33%
Demographics	100%
Employee brand	17%
Informal feedback to management	17%
Productivity	17%
Recruitment and selection	17%
Training ROI	17%
Turnover	33%

**Table 10: Key Indicators Reported Externally**

However, as this study is exploratory and the topic under consideration does not have the benefit of experience and expertise, it is the opinion of the researcher that this list is very limited and the interpretation of what is of competitive value (i.e. cannot be shared) and what is of such strategic value that it is the duty of the organisation to ensure that shareholders have insight into, is the biggest influencer in this limitation.

The proposed framework (see Chapter 5), allows for flexibility in reporting as each organisation and industry may be entirely different; however, the calculation of the value of the Human Assets allows for these differences in the same manner as physical assets may differ in composition, but the Rc value is calculated and depreciated using the same method across industries.

According to Schulman, Cox & Schulman (1999:256) metrics are “quantifiable calibrations of performance along a single dimension, such as time, cost, or accuracy”. Grouping together a

number of metrics provides you with performance measures into an area of focus. These performance measures provide you with the ability to compare various companies with each other in a meaningful way. These measures will not only allow the organisation to look forward and improve their planning, but will also give stakeholders in the organisation or market place the ability to evaluate the organisations' current and future potential performance.

#### **6.4 Performance Metrics**

The metrics evaluated during the Delphi workshops are linked below with the elements within the proposed Framework to allow HR practitioners to draw the link between their metrics and the value it adds to the shareholders. Metrics have also been added based on input from specialist HR input post-evaluation of the model. These metrics can be included in external reporting as well as internal reporting.

Metrics are categorised into typical HR functional topics and linked to the levers on the framework via the numbering system of the framework; e.g. C11 (D1) refers to People Assets, Manage Talent Development and Succession Planning.

**Career and Succession Planning C11(D1); C5(D1); C8(D2)**

Frequency of review of career paths	Frequency per 3 year period
Number of employees moving outside career paths per annum	% of population
Number of employees considered as "high-potential" / on mngr development track	% of population
Number of job families for which there are established career paths	% of job families
Number of key positions for which succession plan exists	% of key positions
Number of promotions per annum	% per head of population
Percentage of employees progressing ahead of planned time at identified level	% of all employees at level
Percentage of employees progressing behind planned time at identified level	% of all employees at level
Rate of satisfaction with career progression	% satisfactory rating
Turnover rate for resources considered "high-potential" resignations	% of all voluntary

**Compensation and Benefits C8(D4); C2(D1)(D2)(D3)**

% of personnel remunerated "above market"	% of population
Average range of remuneration within salary grades	Rc range
Average variable remuneration to fixed remuneration	%
Payroll cost per employee	Rc per employee
Percentage of personnel with target/objective-related pay structure	% of population
Personnel costs to operating costs	%
Top management / Executive remuneration costs as % of total remuneration costs	% of total remuneration costs
Total compensation / benefit as Ratio of Total Revenue	Ratio
Total costs of benefits provision	Rc per head of population
Total personnel costs per annum	Rc per annum

**Development and Planning C6(D2)**

Accuracy of forecasting (estimated vs. actual utilization rate)	%
Average cost of functional/department moves	Rc per transferee
Average cost of in-country transfers	Rc per transferee
Average costs of expatriate package per annum	Rc per expatriate
Average costs of re-skilling training due to department/function transfers	Rc
Average down-time related to transfer	Average Rc per transferee
Average personnel age	Years
Number of resources involved in re-skilling programs due to dept/function transfers	% of population
Percentage of workforce under expatriate/international assignment programs	% of population
Percentage of workforce under international secondment	% of population

<b>Employee Communication C7(D1)(D2); C9(D5); C8(D3)</b>	
Effectiveness of communication channels	% of population satisfied
Frequency of official communications	Number per annum
Frequency of updating personnel policies manual	Number per annum
Improvement of operational effectiveness	% of population satisfied
Level of feedback / suggestions for improvement	Number per annum
Number of department-wide communication events per annum department	Number per annum / department
Penetration of communication formats population	Readership as % of population
Satisfaction with quality of communications	% of population satisfied
Speed of resolution to enquiries relating to employee benefits	Average elapsed time
Timeliness of communicating employee benefits information	Average elapsed days
Communities of Practice	% of Staff members of CoPs
Knowledge Management	No of registered IP

<b>Preferred Employer C12(D2)</b>
Survey Composite
Survey results on becoming "the" employer of choice in selected, critical positions

<b>Social Responsibility C13(D1)</b>	
Rc spent on Social Investment as % of total Revenue	Rc Social Investment / Total Revenue

<b>Employee Relations C12(D3); C8(D5)</b>	
Average time for dispute resolution	No of days to resolution
Coverage of union membership	% of population
Lost time occurrences	No per annum / per 1000 FTEs
Number of incidences of industrial action	No per annum
Number of lawsuits brought against employer per annum	Number p.a. / per 1000 FTEs
Number of lawsuits won by employer per annum as % of all industrial lawsuits	% of lawsuits
Number of recorded cases of disciplinary action against employees	No per annum / per 1000 FTEs
Number of recorded grievances brought by individual employees	No per annum / per 1000 FTEs
Number of recorded grievances brought by unions	No per annum / per 1000 FTEs
Productivity lost per annum resulting from industrial action	Rc p.a. / head of population
Cost of HR-related litigation	Rc per head of population

<b>Exit / Separation</b>	
Average cost of up-skilling outgoing employees	Rc per person
Average length of time for successful outplacement placement	Avg elapsed days per successful placement
Average time on administration related to retirement	Hours per retirement case
Average time spent related to exit interviews per annum	Hours per interviewer
Costs of redundancy pay-outs per annum personnel costs	Rc per person or % of overall
Effectiveness of exit interview information reports	% satisfaction with qualitative turnover reports
Rate of early retirements per annum	% of population
Rate of outgoing personnel successfully out-placed	% of outgoing personnel
Rate of personnel made redundant	% of population
Rate of voluntary terminations per annum	% of population

<b>Performance Management C4(D1)(D2)(D3); C9(D1); C9(D3)(D4)</b>	
Accuracy/Helpfulness of performance appraisal	% level of appraisee satisfaction
Attainment of performance objectives per level	% of population (per level) evaluated
Average component of performance-related compensation	% of overall compensation
Average time in performance appraisals training	Hours per annum / appraiser
Coverage of personnel involved in objective-based performance management system	% of population
Frequency of review of competency model	Number of times per 3 yr period
Frequency of review of performance measures	Number of times per 3 yr period
Number of employees with quantitative performance targets	% of population
Percentage of employees with below target performance	% of population (per level) evaluated
Time spent conducting/performing annual review activities	Hours per annum / manager
% KPIs linked to company competency	% of KPIs

<b>HR Administration and Automation C5(D3); C5(D4); C8(D1); C9(D2)</b>	
Return on investment for funds a company spends on their employees	$\frac{\text{Revenue} - (\text{Operating Expense} - (\text{Comp Costs} + \text{Benefits Costs}))}{(\text{Comp Costs} + \text{Benefits Costs})}$
Percent of co's operating expenses attributed to the cost of operating an entire HR department	$\frac{\text{HR expense}}{\text{Operating expense}}$
Percent of a company's operating expenses attributed to an entire HR department	$\frac{\text{HR Functional Expense}}{\text{HR Expense}}$
HR FTE Ratio: Total number of FTE employees for each HR FTE	$\frac{\text{Total FTE}}{\text{Total HR FTE}}$
HR FTE Investment Factor: Rc per FTE employee allocated to running the HR department	$\frac{\text{HR Expense}}{\text{Total FTE Strategic}}$
HR FTE as a percentage of total HR FTE	$\frac{\text{HR Strategic FTE}}{\text{Total HR FTE}}$
Total number of FTE employees for each HR department FTE	$\frac{\text{Total FTE}}{\text{Total HR department FTE}}$



<b>Workforce DNA C11(D2)(D3); C12(D1); C13(D2)</b>	
Diversity Profile	
Workforce Employees Revenue Factor	
Executive Revenue Factor	
Professional Revenue Factor	
Executive Headcount Percent	
Manager Headcount Percent	
Professional Headcount Percent	
Office & Clerical Headcount Percent	
Adjusted Rc profit added per FTE leverage employees have on profitability	Revenue - (Operating Expense - (Compensation Costs + Benefits Costs)) / Total FTE
Percentage of workforce that is promotable	

<b>Recruitment, Selection and Induction C1(D1)(D2)(D3)</b>	
% of new hires undergoing orientation training within first month of employment	% of all new hires
Acceptance rate	% of all offers
Average costs of "sign-on" incentives	Rc per hire
Average elapsed recruitment time	Elapsed days
Average job-person fit effectiveness	% manager satisfaction
Costs per hire	Rc per hire
Effectiveness of external recruiters	% of all successful placements
Number of unsolicited resumes/cv's	Number per annum
Rate of successful vacancy fulfilment per annum	% of all open positions
Ratio of internal to external hires	%

<b>Retention</b>	
Absenteeism rate by job category and job performance	Days per head of population
Attrition rate of expatriates per annum	% of all returned expatriates
Coverage of employees under long-term incentive program	% of population
Level of employee satisfaction	% of population
Number of employees on flexi-time arrangements	% of population
Number of new hires under affirmative action / diversity programs	% of new hires
Number of resignations by employees identified as "high-potential" all "high-performers"	% of total resignations or % of
Response rates for annual employee feedback surveys	% of population
Staff suggestion rate	Number per annum
Staff suggestion success	Number per annum

**Training and Development C3(D1)(D2)(D3)**

Attainment of performance goals	% of successful achievement
Average evaluation of training programs	% satisfaction per course
Average training hours per level per annum	Hours
Average training investment per FTE	Rc per person
Average training provided by line managers per annum	Hours per manager
Cost of internal training to cost of external training	%
Cost of training trainers	Rc per internal trainer
Learning penetration	% of total population
Number of full-time dedicated internal trainers per head of population	%
Training investment per annum	Rc per annum

**Innovation, Development of Products and Services C6(D1); C7(D3)**

Time-to-market	
Development costs	Rc
Customer value due to new products, processes or innovations	Rc
Number of new products / new processes	#
Number of improved products and processes	#
Number of registered copyrights, patents, inventions	#
Number of employee suggestions received and implemented	#

**IT Business Solutions Measures C10 (D1)(D2)(D3)**

No of Projects successfully implemented	#
No of management employees with access to business information to facilitate decision making	#
Cost of IT Solution	Rc
Cost of development per FTE	Rc per FTE
Cost of solution development as % of turnover	% of turnover

**Safety, Health and Environment C12(D4)**

Accident costs	Rc per Quarter
Accident safety ratings	Rating
Cost of injuries	Rc per annum
Number of safety training and awareness activities	No per annum
Number of stress-related illnesses	
Average medical and healthcare costs per employee	Medical Benefit costs or Medically related costs / covered employees
Total occupational health and safety costs	Rc per head of population

## **6.5 Conclusion**

The value of functional areas such as HR can be assessed only through their effect on the bottom line and the value they add to line functions by enabling line to improve their own effectiveness and efficiency. Understanding the impact of people and how best to apply it in a line function can be advised by HR. Analysing the result of such application of Human Resources in the business, from both a cost and a productivity perspective, can be calculated using HR analytics such as described in Chapter 6. The efficiency of HR as a function in itself, however, also requires measurement and using metrics such as those described in Chapter 7 allows the business to determine the return on investment for such HR programmes.

An understanding of both the cost as well as the benefits of Human Capital, those who employ the human resource, as well as the function of Human Resource management within an organisation, is what drives the value from Human Assets. In the preceding chapters, those elements that make up such costs and determine the benefits has been explored and listed. HR practitioners and People Managers may select those metrics and reports that will add most value to their business by balancing them against the Human Capital Reporting Framework. The following Chapter provides the recommended reporting elements to be included for Human Capital in company annual reports.

## CHAPTER 7 – REPORTING HUMAN CAPITAL IN COMPANY ANNUAL REPORTS

***“Everything that can be counted, does not necessarily count; everything that counts cannot necessarily be counted”***

***- Albert Einstein 1879 - 1955***

### 7.1 Introduction

Assets have an intrinsic value to the organisation, and at the same time they generate value for others. In other words, we add value to stakeholders through the deployment of our assets. So, when we talk about people in an organisation, there are two separate ways in which we can use the concept of value:

- What they are worth to us, and
- The value they add to others and the organisation.

We remunerate the individual based on their perceived worth as influenced by the market salaries for the position in which the individual is employed.

The person contributes with his Human Capital individually as well as within a team where the value is even greater than that of one single individual. It is the intrinsic worth of people that comprises the Human Capital available to us, and at the same time that worth is creating an asset by its contribution to the organisation.

Money is used to fund purchases of or rent/lease physical (tangible) assets and in their day- to-day use. It is also employed by people, both in managing the tangible assets and in building intangible assets, such as brand value, customer loyalty, efficient processes, and new knowledge. An

intangible asset, like any other asset, generates value or even subtract value i.e. assets can turn into liabilities (negative asset value).

The value and use of an asset attracts certain expenses (administration costs). Increasing the value generated from an asset requires investment in that asset (training and development, initiatives for increasing efficiency etc), and certain factors determine or influences the manner in which the asset is applied and used.

This chapter looks at the framework for the reporting of, measuring and improving of Human Assets and the organisational function that is linked to the management of this resource.

## **7.2 Principles for Reporting**

A reporting model is required as a standard for reporting Human Capital. This model needs to take into consideration the general accepted accounting principles and be innovative and future orientated to enable the reporting of Human Assets. The model needs to be sensitive to those factors that provide the company a competitive edge.

### **7.2.1 Principles**

Reporting on Human Capital requires certain expected and accepted principles based on good practice of reporting:

Principle	Method of address
Provide both the effect on revenue growth and operating margin to balance the contribution, demonstrating potential income (revenue) and the conditions required to realise this	Show value to the stakeholders in respect of Human Capital value contributions, including the impact of the costs of such contributions on the operating margin
	Information on possible barriers to the effective development and utilisation of Human Capital and the impact on customers and employee performance that may impact on revenue generation
Provide the value of the asset productivity and the information that may influence the application of the asset within the organisation which can be measured (benchmarked) against competitors	Information on the human assets deployed and the value being contributed - be future-oriented
Report on external factors which influences stakeholders	Information on the factors that influence the contribution of Human Assets i.e. productivity, meeting legislative requirements, potential risks and influence of market conditions.

**Table 11: HR Reporting Principles****7.2.2 Features of the report**

Information is relevant to the identification of Human Capital and should be available in both quantitative and qualitative indicators. A distinction between primary and secondary indicators is required.

The framework incorporates information on both the short-term and the long-term, highlighting both investments in and depreciation of human assets. It provides information not only on Human Capital “staff” but also on the management and utilisation of the flow of Human Capital. Categorizing the workforce is an essential component to this reporting framework.

There are multiple themes of indicators to reflect the value add from Human Resource Management - these are important to guide the tactics deployed by HR to enable the value creation.

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- Indicators to highlight possible barriers to the under-utilisation of Human Capital based on gender, age or ethnic origin are not depicted in the framework, however, the level of adoption of employment equity in the organisation is an important distinction and required to be shown.
  - Indicators to highlight the contribution to social or community projects i.e. a companies social responsibility is an important distinction.

### **7.3 Company Annual Report**

When reporting from a financial perspective in company annual reports, the Human Resources asset value needs to be taken into account. The Rand value of the Capital invested is not difficult to obtain, and is currently available as part of the normal Chart of Accounts within an organisation. The total cost of Human Resources does however need to reflect (as a line item) all categories of the workforce, including consultants employed to execute activities on behalf of the organisation, part-time labour employed from time to time as well as fixed term contractors. People are employed by the organisation with the objective of trading their skills and knowledge for monetary reward. The capabilities applied have the same or similar effect on the organisation whether a full-time employee or that of a part-time employee or contractor.

The effect of revenue should be accounted for to balance this investment in HR capital. Balanced, these two amounts equate to the Human Capital Value Addition. An example of what such a Human Capital Statement may look is illustrated below, providing an account of potential risk and risk mitigation factors for this category of assets. This is required to ensure that shareholders have a full view of the deployment of the Human Assets in the organisation.

Human Resources Annual Statement					
	Yr01	Yr02	Yr03	Yr04	Yr05
Human Capital Value Addition					R 3 997 246
Corporate Social Investment					R 34 800
BEE Charter Score					0.0
% of Critical Workforce with successors identified					80%
% Increase in Critical Workforce					2%
Hire to Separation Ratio					12
Median age (All Employees)					42
Management to Staff Ratio					1:18
Employee Satisfaction Index					4.2
Employee Turnover Rate					2%
Days lost due to workplace accidents					145
Human Resources Strategy Statement:					
Approach to the acquisition, development, management and performance of Human Capital					
Social Corporate Investment Statement:					
Application of Social Investment Funds and impact thereof on the country (social and economic)					
Best Practices:					
Description of Best Practices (maximum 3) employed by the organisation which may influence the bottom line					

Figure 33: Example HC Corporate Report



#### **7.4 Conclusion**

Delivering “value” is why organisations exist. This is clearly about providing “sustainable returns to shareholders” for those companies that have owners and investors. Even non-profit organisations that create value for their stakeholders, though it may not be measured financially, have the same goal. It is safe to assume that stakeholders will only want to continue their association with an organisation if their expectations of value are being met. In the new era of knowledge workers, organisations and markets need to look for value beyond the traditional net book worth, which reflects only the physical and financial assets. Intangible assets such as Human Resources, which due to the nature of the knowledge worker in the 21<sup>st</sup> century contributes most, if not all of currently unaccounted value.

For stakeholders to assess the real value of an organisation, they need to be fully informed of physical, financial and human assets. In order to do this, organisations will need to provide enough information, of reliable source and in a format understandable (if not standard) to it's shareholders. This framework sets out to provide just such a method.

Chapter 8 will conclude this study with a summary, recommendations, limitations and proposed further studies.

**CHAPTER 8 - CONCLUSIONS AND RECOMMENDATIONS**

*“Everyone is looking for a quick fix, but what they really need is fitness.”*

*- Kevin Myers (2005)*

**8.1 Introduction**

A company's management of its Human Resources and its ability to align them with its strategic objectives play a key role in the company's level of success. Increasingly, HR practitioners face the challenge of quantifying the value of HR management processes and their worth to the company. There is a need to focus beyond mere acceptance that HR management is good practice and common sense, and instead measure the actual value it brings.

Executives regard the HR function as facilitators of administrative needs rather than as strategic business partners and seems interested in having HR fulfil only the basics (i.e., getting the HRIS data accurate) instead of gathering insight into the strategic realm of the business. This thinking is outdated as the HR landscape has changed, and the acknowledged critical role of people management demands that HR performs a strategic role in the key decision-making team. This also means that HR has to raise its own profile and prove that it can add value.

This requires managing more than just the simple operations. It means defining the organisation's HR strategies to attract, retain, and support the right people and linking Human Capital strategies to

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the right technology solutions to maximise efficiencies. It means linking technologies and HR processes to business strategies and objectives, assisting in the tactics business leaders want to deploy to leverage their investment in the Human Resources of the organisation. It means showing in financial terms, the value creation of the Human Resources of an organisation.

The objectives defined at the start of this study was to explore the fields of Human Resources and finance to formulate a reporting framework that will integrate these fields in the area of value extraction from human assets. This framework will assist Human Resources practitioners to link their contribution and the contribution of the Human Resources within the organisation to the bottom line of the organisation. Taking into consideration that it may be argued that there is no difference between money measures and other measures. Both are uncertain and all are dependent on the observer. The main reasons why the money measures seem more “objective” and “real” are that they are founded on implicit concepts of what a company is and that the measures have been around for so long that they are guided by definitions and standards.

With this context in mind, the framework developed during this study provides an approach to support organisations in improving their ability to:

1. Analyse, design, manage and strategically align their HR processes
2. Identify Human Resources' contribution to the business
3. Identify a method of evaluating, especially in quantitative terms, the value added by the company's human assets

Simply stated, the Human Capital invested in the organisation is a key factor in the performance of the organisation. The talent of the organisation stems from their Human Resources, flowing from the people within the organisation. This means that the most effective practices for the attraction, deployment, retention and even separation of people and the organisation has a direct impact on the bottom line and thus shareholder value. How these resources are applied may add to the value of the organisation or even detract from it.

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Based on the above, how aligned HR practices are with the stakeholders' values needs to be measured, improved and reported on as part of good governance to enable stakeholders and potential stakeholders in an organisation to have a holistic view of the real value of the organisation. These practices are not limited to what the HR function does / does not do, but include all aspects of people management within the organisation.

Conventional wisdom dictates that a company's management of its Human Resources and its ability to align them towards strategic objectives play a key part in a company's level of business success. This is a generally accepted fact of corporate life, but increasingly, HR practitioners face the challenge of quantifying just what this contribution is and the worth of HR to a company.

During the semi-structured interviews, the researcher explored the topic of HR management reporting in-depth and it became clear that the "pressure" for HR analytics and/or reporting has been brought about by various factors, key amongst which are the requirements for cost-cutting efforts and justification of spending, as well as the increasing requirement for corporations to be more accountable and provide more transparency for their activities. HR functions are at risk of being overlooked if they are unable to accurately justify HR investments and show returns.

Complacency by the HR function would mean reduced ability to demand the required amount of financial attention for continued investment in people-related aspects of business. When asked how difficult or easy it was for HR to obtain funding, HR managers felt that as long as they stick to the budgetary guidelines, it is reasonably easy as "everyone realises the value of the people and developing them and of course we have to pay them or this business will come to a complete standstill". Although HR are pressured for lower increases or even decreases in budget (by %), they are not required to compete from the same base or to the same degree as other functions such as Finance.

Reporting on Human Capital may indeed require a different, innovative perspective; however funding the Human Resources and the initiatives developed to increase the value added by these resources, remains of monetary importance. The organisation is faced with the challenge of applying its cash or investment from shareholders to those initiatives that will generate most value. As it is the people or Human Resources of the organisation who makes these decisions as well as executes the activities that generate this value, investment needs to be made to ensure that the bar is continually raised for the Human Resources.

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Including Human Assets in the chart of accounts will require an adjustment of the current accepted methods of reporting financial results. The basic principle that net profit equals revenue less expense remains to drive those initiatives that organisations focus on, but extracting value from the assets of the organisation, will need to include the value encapsulated in the human assets of the organisation. The categories of expense should include the total cost of Human Resources; i.e. all categories of the workforce, including consultants employed to execute activities on behalf of the organisation, part-time labour employed from time to time as well as fixed term contractors, but so should the value generated by these groups.

Delivering “value” is why organisations exist. This is clearly about providing “sustainable returns to shareholders” for those companies that have owners and investors. The knowledge worker era requires the market to look for value beyond the traditional net book worth which reflects only the physical and financial assets. In order to address this requirement for the Human Assets of the organisation and HR will need to provide reporting that satisfies the principles that:

- Provide both the effect on revenue growth and operating margin to balance the contribution, demonstrating potential income (revenue) and the conditions required to realise this
- Provide the value of the asset productivity and the information that may influence the application of the asset within the organisation which can be measured (benchmarked) against competitors
- Report on external factors which influences stakeholders

The research demonstrated the different viewpoints from the various stakeholders (HR, Finance, Auditors and Executives) and their insight (or lack thereof) into the value contribution of the HR function as well as Human Capital. The lack of insight into the cross-functional disciplines of HR and Finance has become more emphasised and the change in the role of HR practitioners prevalent. This will require a re-look at the profile of HR practitioners to include skills that include financial and analytical competence. Likewise, the biased views towards financial measures limit the ability of auditors to audit the information in this discipline and will also require a look into the skills and knowledge of this.

## 8.2 Expected impact of results

In implementing the proposed Human Capital Measurement Framework, it is expected that companies will be able to achieve the following benefits:

Primary benefits:

- A framework to evaluate the company's Human Capital Value Addition.
- Be able to counter the one-sidedness of "people are costs" with "they also have worth as assets and they add value."
- Understand the relative value of individuals and teams, and make choices regarding which we must retain if required.
- Make informed and intelligent investment decisions, and understand the relative benefits of investing in people compared to other assets
- "Keep stock" of talent and expertise in a much more meaningful way than counting heads, and know whether the human assets available to us is increasing or decreasing.

Secondary benefits:

- Introduction of common language between HR, Finance and other business functions.
- Articulation of expected results between business strategic objectives and HR processes, investments, etc. (prerequisites not only for measuring HR efficiency and ROI, but also HR's impact on business results).
- Establishment of strategic and operational guidelines of HR performance management model.

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- Operational tools and overall approach to design and implement HR strategy consistent with business strategy, including those measures that calculates the effectiveness and efficiency of such as strategy.
  - Better conditions for a more balanced budget allocation based on business return analysis.

A further benefit is the proposed standard report for information supplied by organisations that is balanced and objective (refer example HC Report). This proposed report provides for Human Capital information without divulging details that is considered of competitive advantage, but meets the requirement for transparency to shareholders.

In order to understand key people issues in the organisation, shareholders have to understand:

- Why the workforce is shrinking or expanding.
- Whether the workforce profile fit the core business and strategy of the organisation.
- How reliant is the organisation on it's key positions and what are the risks associated with this.
- How to maximise the value which can be obtained from the available workforce which requires an understanding of:

The size and composition of the workforce.

Strategies for motivation, development and retention.

Value of the skills, competencies and knowledge of employees in key / strategic positions.

Succession planning.

Remuneration and reward linked to performance.

Employment practice (employment equity, diversity, compliance to charter).

### **8.3 Contributions of the present study**

This study has contributed to the fields of Human Resources as well as finance; however, the overall value is in the holistic view of the contribution of Human Resources to increase the value of the organisation.

For Human Resources practitioners, this study provides a framework that links the activities and initiatives within this function to shareholder value.

- It assists HR practitioners to focus on those activities that really add value to the bottom line whilst controlling those that has the potential to detract value; i.e. aligning HR initiatives with the business strategy and tactics the operation wishes to employ.
- It provides HR with a method of reporting their own as well as the value contributed by the Human Resources of the organisation both internally as well as externally.
- It assists organisations to identify methods of extracting or increasing the Human Capital within the organisation.
- It assists HR practitioners in identifying information which can be compared to competitors and industry for assessment of their own position in the market.

For Finance practitioners, this study provides insight into the value that HR and invested Human Capital adds to the organisation and the method(s) with which to assess the value of this contribution. It also provides insight into those areas which can be benchmarked, using this technique to evaluate the efficiency of the applied capital.



For the organisation and stakeholders of the organisation, the framework enables organisations to assess their present organisational effectiveness and efficiency in applying the Human Resources of the organisation. It also provides insight into information regarding the application of human assets within an organisation, comparative by industry.

For researchers the benefits of the study are:

- A framework for Human Capital Reporting developed through literature review and empirical research.
- A framework that assists in linking metrics and business reporting requirements to allow organisations to extract value from their Human Capital.

The study identified areas for further study (e.g. developing a calculator for Human Assets as a line item on the balance sheet).

The body of knowledge on reporting for Human Capital and human resource management has expanded due to the findings of this research and serves as a contribution to the theory and research base of the field of organisational behaviour.

#### **8.4 Recommendations for future work**

This study was explorative and identified the need for further studies pertaining to reporting Human Assets and related areas. A brief statement of possible areas for future work includes formulating hypotheses for:

- The variables included in the HC framework are not significantly different in different industries.
- The HC framework does not include country specific issues and thus cannot be applied globally.
- A Human Capital Balance Chart of Accounts based on the principles of the report as identified in this study allows for a line item calculation in company Chart of Accounts.

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- Lastly, an evaluation of the new role required of HR practitioners i.e. development of an adjusted job profile for Human Resource Practitioners should be investigated and tested.

### **8.5 Limitations of the present study**

Due to the limited experience and knowledge on this subject, a full model for the calculation of Human Assets as a line item could not be completed and tested. The suggested framework developed during this study allows for reporting and proposes a model that may be considered as an exploratory step in such a calculation. The limitation is due to information of a qualifiable nature that is 1) lacking and 2) not linked to the specific impact on an organisation.

A further limitation is that not all industries in South Africa are represented. Organisations who have implemented some form of HR accounting are limited, and the number of HR consultants and students with a detailed understanding of this topic even more so. This has narrowed the sample size considerably.

Companies who have implemented more than just internal HR reporting could not be found and thus, this study, by default, was influenced predominantly by the literature reviews and global case studies. Even in global studies, there are several obvious weaknesses in applying HR metrics into an acceptable accounting framework.

The discussions with respondents lack an explicit understanding that takes into account the complexity of the interdisciplinary nature of Human Resource accounting. This is further complicated due to the sensitivity of the nature of the topic which is considered by most as either confidential or highly sensitive and of a competitive advantage.

To counter these limitations in the current study, the researcher took into account the very simple question “who benefits” throughout the analyses. Although the researcher was not able to test the model in a “real” environment although there is no question that the model can be tested and will yield satisfactory results, and recommendations for future studies are to use evaluation research to focus on the implementation of this model in companies.

## ADDENDUM A - TERMS AND DEFINITIONS

**GAAP** - Generally Accepted Accounting Principles - These are accounting guidelines, formulated by the CICA's (Canadian Institute of Chartered Accountants) Accounting Standards Committee, that govern how businesses report their financial statements to the public. These rules, conventions, and procedures define accepted accounting practices.

GAAP are a combination of authoritative standards (set by policy boards) and simply the commonly accepted ways of recording and reporting accounting information. (<http://www.finance.gov.ab.ca/business/ahstf/glossary.html#g>)

**BALANCED SCORECARD** - A technique for measuring organisational success and identifying areas for improvement and action. The idea of the balanced scorecard came from management theorists Robert Kaplan and David Norton, who recognised that organisations often focused too much on financial criteria for performance management, thereby neglecting other features that help to deliver competitive advantage. Their solution was to devise a method by which managers can translate their vision into clear measures of success through balancing the financial perspective with three other, equally important perspectives: the customer, the internal processes, and innovation and learning. Each perspective requires the managers to identify different factors that are critical to success, and to devise key performance measures for these factors. The resultant 'balanced scorecard' will be a template for the organisation to evaluate its overall performance and identify areas of strength and weakness (Heery and Noon, 2001).

**AFFIRMATIVE ACTION** - is the term used to describe initiatives designed to promote equal opportunity and redress the existing disadvantage experienced by some groups. It is a combination of both positive action and positive discrimination.

**ACOP** - Approved Code of Practice - Issued by the Health and Safety Executive under the health and safety regulations, ACOPs are designed to provide detailed guidance to employers on how to comply with health and safety law. Like other statutory codes of practice they are not legally binding, but a failure to comply with the code may be used as evidence against an employer by a court of law.

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**BALANCE SHEET** - in formal bookkeeping and accounting, a statement of the book value of a business or other organisation or person at a particular date, often at the end of its "fiscal year," as distinct from an income statement, also known as a profit and loss account (P&L), which records revenue and expenses over a specified period of time.

A balance sheet is often described as a "snapshot" of the company's financial condition on a given date. Of the four basic financial statements, the balance sheet is the only statement which applies to a single point in time, instead of a period of time. A modern balance sheet usually has three parts: assets, liabilities and shareholders' equity. The main categories of assets are usually listed first and are followed by the liabilities. The difference between the assets and the liabilities is known as the 'net assets' or the 'net worth' of the company.

**CIPD** (Chartered Institute of Personnel and Development) - A professional association for personnel/human resource practitioners in the UK. It offers advice and support to its members as well as promoting good practice and providing the accreditation for professional training courses and qualifications in personnel management. However, unlike other professions, such as accountancy, personnel/HR specialists are not obliged to become members of the CIPD, or to take professional qualifications; however firms may insist on CIPD membership and qualifications for their personnel staff. This was formerly titled the Institute of Personnel Management (IPM) but merged with the Institute of Training and Development in 1994 and became the Institute of Personnel and Development (IPD).

**COMPENSATION** - is payment for work which 'compensates' the employee for the 'disutility' of labour. The rather negative connotation associated with the term has led some personnel specialists to replace it with reward or reward management. 'Compensation' and 'compensation and benefits'— 'comp-and-ben' - are also used to refer to the specialist activity involved in administering and managing remuneration systems and to the specialist group of managers who have responsibility for this area.

**COMPETENCY BASED APPROACH** - to managing people focuses on the skills and talents needed to be able to perform a particular task to a certain standard. The assessment of competencies is useful for various aspects of the management of Human Resources: setting standards of performance that can be expected from employees and appraising them against such standards; assessing the training and development needs of individual employees; and identifying the skills,

abilities, and characteristics needed when recruiting and selecting new employees. Competency may be broken down into two categories: behaviour-based or work-based. Behaviour-based competencies are personal characteristics/attributes that contribute to effective job performance (for example, interpersonal skills, attitudes, motivation). Work-based competencies are specific skills and abilities required to perform the job to a specific standard (for example, the use of spreadsheet software, and fluency in spoken Zulu, management of a budget). A focus on competency not only allows for the development of employees, it also provides a new means of rewarding people; thus there has been a growing interest in systems of competence-based pay.

**CORPORATE GOVERNANCE** - the control and organisation of private corporations. It is an issue of relevance to human resource management for two reasons. First, it is argued with increasing frequency that national systems of corporate governance shape the pattern of employment relations within the economy. In the UK, the system of corporate governance emphasises accountability to shareholders and there is an active market for corporate control that encourages firms to seek a high return on investment. These features of corporate governance, in turn, are said to encourage short-term and an opportunist or adversarial approach to workforce management. Continental Europe systems exist that allow for worker participation in company management through works councils and worker directors as a measure of good corporate governance. This is also largely legislated in the USA through the Sarbanes-Oxley Act whilst guidance is offered in South Africa through the King Report and King II Report.

**CFROI** (cash flow return on investment) - is a one-year spot performance measure that uses only current year financial information. In its simplest form, CFROI is an estimate of a company's achieved real rate of return. The calculation can be performed using a financial calculator where the inputs are: **N - Asset Life:** An estimate of how long a business' productive assets will generate cash. **PMT - Operating Cash Flow:** Operating cash flow measures the cash produced by a business before financing and unusual items. **PV - Inflation-Adjusted Gross Assets:** measures the original or cumulative investment in the business. **FV - Non-Depreciating Assets:** represents the "terminal value" of a business e.g. land, investments, and current assets less current liabilities.

**ETHNICITY** - is the concept of categorising a person according to his or her ethnic group or origin. An ethnic group has a shared history and a cultural tradition of its own. These features are usually identified through characteristics such as a common geographical origin, a common language, a common literature, and a common religion or belief system. Normally an ethnic group will be a

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minority within a larger community. Because an ethnic group is a cultural construct, it is constantly changing and developing, thereby creating its own identity and redefining itself. This term encompasses the dynamic nature of a social group, and is used to replace the fixed and somewhat discredited concept of race.

**HUMAN CAPITAL THEORY** - is based on the assumption that individuals can affect their value in the labour market by choosing whether or not to take advantage of educational opportunities and training. If they do so, they increase their Human Capital and consequently will increase their value to employers. Human Capital theory suggests employees should be treated as individuals with specific sets of skills and abilities, so it emphasises competence-based pay as an effective remuneration system. Proponents argue this leads to a very meritocratic system and helps to achieve equal opportunities based on talent and ability, and regulated by a market economy.

**HUMAN RESOURCE ACCOUNTING** - is the technique of treating expenditure on the development of employees as capital investment. Accountants are frequently dismissive of this, arguing that it is impossible to put a monetary value on human assets that would be generally acceptable. Another ethical consideration is whether free human beings should be regarded as assets in the same way as legally owned property.

**liP** (Investors in People) - a national standard of action and excellence in the UK. It specifies good practice for improving an organisation's performance through its people, thus making such organisations attractive for employees to work in. Organisations applying for the liP award must (1) demonstrate commitment to invest in people to achieve business goals; (2) undertake planning about how skills, individuals, and teams are to be developed to achieve these goals; (3) take action to develop and use necessary skills in a well-defined and continuing programme directly tied to business objectives; and (4) constantly evaluate outcomes of training and development in terms of employee progress towards goals, the value achieved, and future needs.

In theory, it is designed to raise the standard of training and development in UK organisations, but in practice research reveals a mixed picture of success. Some organisations are fully committed to training and developing their employees, and are convinced that it will lead to improvements in performance. Others do the minimum possible to achieve the liP recognition because they believe it is good for the company image, but will have little impact on performance.

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**JOB FAMILY** - set of jobs based around common activities but conducted at different levels of the organisation. For example, a finance and accounting job family could embrace junior finance officers, senior accountants, and the finance director of the enterprise. A job family may form the basis of an integrated pay structure, such that all jobs within the family are managed using a common set of pay rules and procedures. The reason for basing pay on job families is that it allows rates of pay for each family identified to be set with regard to the external labour market. For example, the rates of pay for those within the finance job family can reflect the going rate for accountants and finance directors, with different rates of pay being established for those in other job families, such as operations or personnel management.

**KNOWLEDGE-BASED COMPANIES** - organisations whose success derives from their ability to create new knowledge, and use this as the basis for new products and services. Within the organisation, the emphasis is on 'knowledge management' whereby the processes and operations of the organisation are directed towards the creation of knowledge and its dissemination throughout the organisation. Essential to these processes are employees at all levels whose ideas and insights form the basis of knowledge creation, and provide the potential competitive advantage for the organisation. The idea of the knowledge-creating company has been developed by management theorists Ikojiro Nonaka and Hirotaka Takenchi, who drew upon Japanese companies such as Matsushita, NEC, and Kao to substantiate their arguments.

**SUCCESSION PLANNING** - is the process of ensuring that managerial posts are filled with effective managers through either identifying and developing talent with the organisation (through career management), or recruiting suitable people from outside the organisation. The process should be proactive, in the sense that it should include planning for both certainties—such as retirement—and eventualities such as resignation and vacancies as a result of internal promotions or transfers.

**NETT CURRENT ASSETS** - (also called working capital) refers to the total of current assets less the total of current liabilities.

**NUMERICAL FLEXIBILITY** - the policy of ensuring that the appropriate amount of labour is employed for the needs of the organisation. This may involve putting people on a variety of contracts to ensure that fluctuations in the demand for employees across the working day, week, or year are matched with the appropriate supply of labour. The most common forms of numerical flexibility are: (1) part-time working, (2) temporary/fixed-term contracts, (3) subcontracting.

**PEST** analysis - an audit of an organisation's environmental influences with the purpose of using this information to guide strategic decision-making. The PEST technique involves assessing four sets of factors: Political/legal, Economic, Socio-cultural, and Technological. The assumption is that if the organisation is able to audit its current environment and assess potential changes, it will be better placed than its competitors to respond to changes.

**SHARED SERVICES** - typically HR administrative services that are consolidated in a service centre and accessed by managers from different business divisions and strategic business units via different channels such as telephone or intranet (self-service). In large multinational companies shared services may be provided from a single centre to staff across the globe, with service centre staff fielding inquiries and offering advice on a broad range of company policy, procedures or general HR activities.

**TACIT SKILLS** - or tacit knowledge are acquired through experience in an organisation and arise from detailed familiarity with equipment, procedures, co-workers, and customers. One of the justifications for employee participation is that it allows managers to draw upon these tacit skills and feed them into the decision-making process.

**TOTAL REMUNERATION** - consists of three elements. The first is base pay, expressed as an hourly rate or annual salary. The second is variable pay, which consists of additional supplements, bonuses, and other payments that typically are linked to performance. The third component is benefits or indirect pay, including cash payments like occupational sick pay and maternity pay and non-cash awards like paid holidays and health insurance. Increasingly it is recommended that companies calculate and manage total remuneration for each employee as a means of securing tighter control of labour costs.

**ZERO BASED BUDGETING** - a technique that requires departmental managers to propose and justify their entire budget for the year. It is a planning system that assumes the starting point for each year is no budget, rather than the traditional method of using the previous year's budget as the baseline.



## ADDENDUM B - DELPHI WORKSHOP RESULTS

Data results of Delphi Workshops - % of participants who answered Yes

	Is the indicator / metric applicable?	Is the indicator / metric complete?	Is the indicator / metric applicable to all types of organisations?	Is the data for the indicator / metric easily obtained?	Is the calculation required for the indicator / metric simple?	Is the indicator / metric understandable?	Is the data objective, quantifiable and reliable?	Does the indicator / metric point towards sustainable improvement?	Can the indicator / metric be measured on an ongoing basis?
Costs per Full-Time Employee	100	26.6	100	100	100	100	100	100	100
Total HR investment / earnings	50	97.87	52.13	36.17	40.43	43.62	39.36	26.6	56.38
Revenue per Employee	100	100	-0	100	100	100	100	100	100
Total HR investment / revenues	48.94	25.53	51.06	35.11	39.36	42.55	38.3	25.53	55.32
Total Compensation/Benefits as Ratio of Total Revenue	100	100	100	100	100	98.94	100	100	100
Turnover by recruiting source	47.87	22.34	50	35.11	39.36	41.49	38.3	22.34	54.26
Training Investment per Employee	100	96.81	-0	100	100	100	100	96.81	100
Turnover costs	46.81	21.28	48.94	34.04	37.23	40.43	36.17	21.28	53.19
Training Remuneration Factor	98.94	96.81	-0	-0	-0	100	-0	96.81	100
Turnover rate by job category and job performance	45.74	23.4	47.87	32.98	37.23	40.43	36.17	23.4	52.13
Recruitment Resource Ratio	100	98.94	100	100	100	100	100	98.94	100
Variable labour costs as percentages of variable revenue	44.68	21.28	46.81	31.91	36.17	38.3	34.04	21.28	51.06
Total Compensation as Ratio of Total Costs	100	98.94	100	100	100	100	100	98.94	100
Worker's compensation costs	44.68	22.34	45.74	31.91	35.11	37.23	34.04	22.34	50
Incentive Cost Ratio	100	96.81	100	100	100	100	100	96.81	100
Workers compensation experience rating	42.55	21.28	44.68	29.79	34.04	36.17	31.91	21.28	48.94
Termination Rate	100	98.94	100	100	100	100	100	98.94	100

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Access to business information to facilitate decision making	43.62	18.09	45.74	29.79	34.04	36.17	31.91	18.09	47.87
EE Movements	100	96.81	100	100	100	100	100	96.81	100
Adherence by the workforce to core values	41.49	17.02	43.62	28.72	34.04	35.11	30.85	17.02	46.81
Acceptance Rate	1.06	98.94	100	100	100	100	100	98.94	100
Average change in performance appraisal rating over time	40.43	15.96	42.55	28.72	31.91	34.04	30.85	15.96	45.74
Employee Commitment	100	98.94	100	-0	-0	100	-0	98.94	100
Change in employee mind-set	39.36	14.89	41.49	27.66	30.85	32.98	28.72	14.89	44.68
Employee Motivation	100	96.81	100	-0	-0	100	-0	96.81	100
Climate Surveys	38.3	13.83	40.43	26.6	30.85	31.91	28.72	13.83	43.62
Employee Satisfaction	100	96.81	100	-0	-0	100	-0	96.81	100
Consistency and clarity of messages from top management	37.23	11.7	39.36	26.6	29.79	30.85	27.66	11.7	42.55
Management Leadership	100	2.13	100	-0	-0	-0	-0	2.13	100
Customer Complaints / Praise	36.17	11.7	38.3	26.6	29.79	30.85	27.66	11.7	41.49
Knowledge Generation	100	-0	-0	-0	-0	100	-0	-0	100
Customer satisfaction with hiring process	35.11	9.57	37.23	26.6	29.79	30.85	27.66	9.57	40.43
Knowledge Integration	100	-0	100	-0	-0	100	-0	-0	100
Degree of financial literacy among employees	35.11	9.57	36.17	26.6	28.72	29.79	27.66	9.57	39.36
Knowledge Sharing	100	-0	-0	-0	-0	-0	-0	-0	100
Degree of race and gender by job category	34.04	10.64	35.11	24.47	26.6	27.66	25.53	10.64	38.3
Process Execution	98.94	96.81	100	100	100	100	100	96.81	100
Dealing with poor performers	34.04	7.45	35.11	23.4	25.53	26.6	24.47	7.45	37.23
Retention of Key People	100	98.94	100	100	100	100	100	98.94	100

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Employee Commitment Survey Scores	31.91	6.38	34.04	23.4	26.6	26.6	24.47	6.38	36.17
Relational Capital	100	2.13	100	-0	-0	-0	-0	2.13	100
Employee competency growth	31.91	5.32	32.98	22.34	24.47	24.47	23.4	5.32	35.11
Structural Capital	100	-0	100	-0	-0	-0	100	-0	100
Employee development opportunities	30.85	6.38	31.91	23.4	24.47	24.47	23.4	6.38	34.04
Value Alignment	100	-0	100	-0	-0	100	-0	-0	100
Employee turnover by performance level and controllability	28.72	3.19	30.85	21.28	22.34	22.34	21.28	3.19	32.98
Absenteeism rate by job category and job performance	100	98.94	100	100	100	100	100	98.94	100
Extent of cross-functional teamwork	28.72	2.13	30.85	21.28	22.34	22.34	21.28	2.13	31.91
Accident Costs	100	98.94	100	100	100	100	100	98.94	100
Extent of Organisational Learning	27.66	1.06	29.79	19.15	20.21	20.21	19.15	1.06	30.85
Accident safety ratings	100	98.94	100	100	100	100	100	98.94	100
Extent of understanding of the firm's competitive strategy	26.6	1.06	27.66	20.21	21.28	21.28	20.21	1.06	29.79
Average employee tenure (by performance level)	88.3	93.62	90.43	73.4	77.66	86.17	80.85	93.62	97.87
Ready access to the information and knowledge	25.53	1.06	26.6	19.15	20.21	20.21	19.15	1.06	28.72
Average time for dispute resolution	88.3	92.55	89.36	72.34	76.6	84.04	78.72	92.55	96.81
Required employee competencies are reflected in recruiting	23.4	1.06	25.53	19.15	20.21	20.21	19.15	1.06	27.66
Benefits costs as a percentage of payroll or revenue	86.17	90.43	88.3	71.28	75.53	84.04	78.72	90.43	95.74
Employees are clear about the firm's goals and objectives	23.4	3.19	24.47	18.09	19.15	19.15	18.09	3.19	26.6
Benefits costs/competitors' benefits	85.11	87.23	87.23	69.15	73.4	81.91	76.6	87.23	94.68

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costs ratio									
Extent to which employees are clear about their own goals	23.4	3.19	23.4	17.02	17.02	18.09	17.02	3.19	25.53
Compliance with fair employment practices / industry charter	84.04	88.3	86.17	71.28	75.53	82.98	77.66	88.3	93.62
Reward knowledge creation and sharing	21.28	1.06	22.34	15.96	17.02	17.02	15.96	1.06	24.47
Compliance with technical requirement of affirmative action	82.98	87.23	85.11	68.09	71.28	78.72	73.4	87.23	92.55
HR is helping to develop necessary leadership competencies	20.21	1.06	21.28	17.02	18.09	18.09	17.02	1.06	23.4
Comprehensiveness of safety monitoring	82.98	88.3	87.23	68.09	73.4	79.79	74.47	88.3	91.49
HR does a thorough job of pre-requisition soft-asset	18.09	1.06	20.21	15.96	15.96	15.96	14.89	1.06	22.34
Compensation of high performers compared to average performers	82.98	86.17	85.11	65.96	70.21	77.66	73.4	86.17	90.43
HR leadership is involved early in selection	18.09	1.06	20.21	14.89	15.96	15.96	14.89	1.06	21.28
Cost of HR-related litigation	80.85	86.17	82.98	65.96	70.21	77.66	71.28	86.17	89.36
Extent to which HR measurement systems are seen as credible	18.09	2.13	20.21	13.83	13.83	14.89	14.89	2.13	20.21
Cost of injuries	81.91	85.11	82.98	64.89	69.15	76.6	71.28	85.11	89.36
Information is communicated effectively to employees	15.96	2.13	19.15	13.83	14.89	14.89	13.83	2.13	19.15
Cost per grievance	78.72	55.32	81.91	65.96	70.21	77.66	72.34	55.32	88.3
Average employee can describe the firm's HR strategy	15.96	2.13	18.09	12.77	13.83	13.83	12.77	2.13	18.09
Cost per hire	77.66	82.98	80.85	63.83	68.09	74.47	69.15	82.98	87.23

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Average employee can describe the firm's strategic intent	13.83	2.13	17.02	13.83	14.89	14.89	13.83	2.13	17.02
Cost per trainee hour	77.66	81.91	79.79	62.77	67.02	73.4	68.09	81.91	86.17
Sharing of large amounts of knowledge with employees	12.77	2.13	15.96	12.77	13.83	13.83	12.77	2.13	15.96
Courses with highest number of attendees by competency	77.66	80.85	78.72	61.7	65.96	72.34	67.02	80.85	85.11
Firm has turned its strategy into specific goals	11.7	2.13	14.89	11.7	12.77	12.77	11.7	2.13	14.89
HR department budget as a percentage of sales	76.6	79.79	77.66	61.7	65.96	72.34	67.02	79.79	84.04
Top management shows commitment and leadership	10.64	2.13	13.83	10.64	11.7	11.7	10.64	2.13	13.83
HR expense per employee	75.53	76.6	76.6	60.64	63.83	70.21	64.89	76.6	82.98
Percentage of employees making suggestions	10.64	2.13	12.77	10.64	11.7	11.7	10.64	2.13	12.77
HR expense / total expense	74.47	78.72	76.6	59.57	63.83	69.15	63.83	78.72	81.91
Percentage of PDI promotions	10.64	2.13	11.7	10.64	10.64	10.64	9.57	2.13	11.7
Interviews per-offer ratio (selection ratio)	72.34	77.66	75.53	59.57	63.83	68.09	64.89	77.66	80.85
Percentage of workforce that is promotable	7.45	2.13	10.64	9.57	9.57	9.57	8.51	2.13	10.64
Lost time due to accidents	72.34	47.87	75.53	58.51	62.77	68.09	62.77	47.87	80.85
Employees with experience outside their current job	7.45	2.13	9.57	8.51	8.51	8.51	8.51	2.13	9.57
Measures of cycle time for key HR processes	72.34	47.87	74.47	57.45	61.7	67.02	61.7	47.87	79.79
Percentage of retention of high-performing key employees	6.38	2.13	9.57	8.51	8.51	8.51	8.51	2.13	9.57

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Number of applicants per recruiting source (by quality)	70.21	47.87	73.4	57.45	61.7	67.02	61.7	47.87	78.72
Consistent and equitable treatment of all employees	6.38	-0	8.51	7.45	7.45	7.45	7.45	-0	8.51
Number of hires per recruiting source (by quality)	69.15	46.81	72.34	55.32	59.57	64.89	59.57	46.81	77.66
Performance of newly hired applicants	5.32	-0	7.45	7.45	7.45	7.45	7.45	-0	7.45
Number of courses taught by subject	68.09	43.62	71.28	55.32	59.57	63.83	58.51	43.62	76.6
Planned development opportunities accomplished	4.26	-0	6.38	6.38	6.38	6.38	6.38	-0	6.38
Number of recruiting advertising programs in place	67.02	42.55	70.21	53.19	57.45	62.77	57.45	42.55	75.53
Ratio of HR employees to total employment workforce	3.19	2.13	5.32	5.32	5.32	5.32	5.32	2.13	5.32
Number of safety training and awareness activities	67.02	43.62	69.15	52.13	56.38	61.7	56.38	43.62	74.47
Requests for transfer per supervisor	1.06	-0	4.26	4.26	4.26	4.26	4.26	-0	4.26
Number of poor performers who left per level	67.02	42.55	69.15	52.13	56.38	61.7	56.38	42.55	74.47
Retention rates of critical human capital	2.13	-0	3.19	3.19	3.19	3.19	3.19	-0	3.19
Number of stress-related illnesses	64.89	40.43	67.02	50	54.26	59.57	54.26	40.43	72.34
Success rate of external hires	2.13	-0	2.13	2.13	2.13	2.13	2.13	-0	2.13
Number of training days and programs per year	65.96	42.55	65.96	50	54.26	58.51	54.26	42.55	71.28
Survey results on becoming “the” employer	1.06	2.13	1.06	1.06	1.06	1.06	1.06	2.13	1.06
Offer-to-acceptance ratio	63.83	39.36	65.96	50	54.26	58.51	54.26	39.36	71.28

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	Is the indicator / metric applicable?	Is the indicator / metric complete?	Is the indicator / metric applicable to all types of organisations?	Is the data for the indicator / metric easily obtained?	Is the calculation required for the indicator / metric simple?	Is the indicator / metric understandable?	Is the data objective, quantifiable and reliable?	Does the indicator / metric point towards sustainable improvement?	Can the indicator / metric be measured on an ongoing basis?
Proportion of high performers to average performers	62.77	38.3	64.89	48.94	53.19	57.45	53.19	38.3	70.21
Percentage of and number of employees involved in training	63.83	39.36	64.89	47.87	52.13	56.38	52.13	39.36	69.15
Percentage of correct data in HR information system	59.57	37.23	62.77	46.81	51.06	55.32	51.06	37.23	68.09
Percentage of employee development plans completed	60.64	37.23	61.7	46.81	51.06	54.26	50	37.23	67.02
Access to appropriate training and development opportunities	59.57	36.17	60.64	45.74	50	53.19	48.94	36.17	65.96
Percentage of new material in training programs each year	57.45	35.11	59.57	44.68	48.94	52.13	47.87	35.11	64.89
Percentage of payroll spent on training	57.45	32.98	59.57	44.68	48.94	52.13	47.87	32.98	64.89
Percentage of performance appraisals completed on time	56.38	32.98	58.51	43.62	47.87	51.06	46.81	32.98	63.83
Response time per information request	55.32	29.79	57.45	42.55	46.81	50	45.74	29.79	62.77
Sick days per full-time equivalent per year	54.26	30.85	56.38	42.55	46.81	48.94	44.68	30.85	61.7
Speed of salary action processing	53.19	30.85	55.32	40.43	44.68	47.87	43.62	30.85	60.64
Time needed to orient new employees	53.19	29.79	55.32	39.36	43.62	46.81	42.55	29.79	59.57
Time to fill an open position	53.19	28.72	55.32	39.36	43.62	46.81	42.55	28.72	58.51
Total compensation expense per employee	51.06	27.66	53.19	37.23	41.49	44.68	40.43	27.66	57.45

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## **APPENDICES**

**Appendix A - Executives and Senior HR Managers' Survey**

**Appendix B - Semi-structured interview guide**

**Appendix C - Auditors Survey**

**Appendix D – Metric Questionnaire**

## Appendix A - Executives and Senior HR Managers' Survey

### Instructions

Please select each worksheet (Section 1 - 3) and complete questions by selecting or entering into the WHITE boxes.

Once you completed all 3 sections, please save and email back to:

**reuphk@webmail.co.za**

***you may begin immediately or read the background introduction below first***



# HUMAN CAPITAL FOR INCLUSION IN COMPANY ANNUAL REPORTS

**Questionnaire Target Population :**  
**Company Executives and HR Professionals**

### Objective

This questionnaire has been developed by a student in the course PhD: Organizational Behaviour at the University of Pretoria (2005) to gain insight into the reporting (internal and external) done by companies in South Africa in respect of their Human Capital / Human Resource Assets.

### Introduction

In today's knowledge economy, a company's ability to support its business strategy with human capital is an. Most executives would agree with the statement that Human Resource Management has an impact on the

This research is focussed on gaining an understanding on:

- the value of organisations' reporting on what they identify to be their most important HCM issues
- whether, in addition to organisation-specific reporting, all organisations should be encouraged to report on the
- how far there should be central guidance on the most appropriate numerical measures (metrics) to be included company reports
- how best to ensure that HCM is both widely reported and the information is trusted by investors and other

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### Target Population:

This questionnaire has been designed specifically for Executives in an attempt to understand the current HCM issues being reported on internally as well as externally, and what obstacles may exist to reporting on Human Capital as part of Company Shareholder Reports.

### Further input into research:

auditors to ascertain what they believe to be a reflection of the Human Capital and evaluation of Human Assets for an organization to ensure a holistic view is obtained. Interviews may also be requested for certain organizations in order to extrapolate information further or develop further, more qualitative understanding as input to the research. This will be collated into a model with input from HR Specialists to develop a framework which companies may use to report on Human Capital which should provide shareholders and stakeholders of organizations a more holistic view of ALL the assets of the organization.

***Your time and input is valued and appreciated.***

**Thank you. If you would like to receive the aggregated results of this survey from the other Companies, please provide an email address where we can send it to:**

[Email Address](#)



6.) Of those indicators that are **not** currently external, which ones would be complicated to report them externally and what prevents you from externally reporting these.

Indicator	Complicatedness: Please select from dropdown list	What prevents you reporting this externally? Please select from dropdown list
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		
Leave blank		

Key Indicators Used for Human Capital Management Reporting

7.) In your view, why are the indicators your organisation use to report on Human Capital / Human Resources important? (Please select from dropdown list)

8.) What (if any) indicators do you not currently use but think you could/should?

Why?

	Why?

9.) Please could you select and indicate 5 areas of most concern / importance for your organization from the indicators.

Top Most Important	
2nd Most Important	
3rd	
4th	
5th	

10.) Were the indicators you identified developed within a conceptual frame of reference related to key businesses/management processes? (Select Yes/No from dropdown box)

11.) Were the indicators developed by the HR function alone or in conjunction with others (example: finance or strategy colleagues)?

HR Alone / In Conjunction with \_\_\_\_\_

12.) How did you / your company / your financial institution include in external reporting, (if any)?

13.) How have stakeholders (customers, suppliers, shareholders, employees) responded to external reporting of Human Capital measures?

14.) In your view, would there be value in the development of standardised HR measures for general use/use across your industry sector (locally and/or globally)? (Select Yes/No from dropdown box)

15.) In your view, are there common, core HR indicators which ALL companies should report? (Select Yes/No from dropdown box)

**SECTION 2**

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**Internal Human Resource  
Measures ---- 2 Questions**

**1.) Which of the following measures / measuring instruments are utilized in your organization for formal measurement?**

**(Internally Only).**

*Please could you also select 5 areas of most concern / importance for your organization and indicate these with 1 (Top Most) to 5.*

<b>Measurement / Instrument</b>	<b>Areas of most concern or challenge 1 (Top Most) to 5</b>	<b>Is this formally measured (Yes / No)</b>
Business Performance		
Employee Commitment		
Employee Motivation		
Employee Satisfaction		
Employment Equity Charter		
Human Capital		
Knowledge Generation		
Knowledge Integration		
Knowledge Sharing		
Management Leadership		
Process Execution		
Relational Capital		
Retention of Key People		
Structural Capital		
Training		
Value Alignment		

**2.) How do you currently segment your employees / workforce?  
(select from dropdown list)**



**SECTION 3****University of Pretoria etd – Kasselmann, R (2006)****Company and Personal Information****Please provide the following information on your Company:**

Name of Company		
Year Company was founded		
Industry sector		
Location (Location of Head Office)		
Number of employees	Headcount:	
	Full Time Equivalents	
Part-time employees	Regular:	
	Contingency:	
Headcount – Executives		
Headcount – Professional Staff		
Headcount - Human Resources staff		
Frequency of Company Reporting		

**Please complete the following information about you**  
**(Those indicated with an \* are optional):**

Name and Surname		
Title		
*Gender		
*Age Group		
*Contact Details		
Tel No: (please include dialing code)		
Email address:		
*How long have you performed your current job function?		Years

**Click here to save and email back once completed**  
 (reuphk@webmail.co.za)

**Thank you. If you would like to receive the aggregated results of this survey from the other Companies, please provide an email address where we can send it to:**

Email Address

*Your time and input is valued and appreciated.*

**Appendix B - Semi-structured interview guide**



# **HUMAN CAPITAL FOR INCLUSION IN COMPANY ANNUAL REPORTS**

## **- A South African Perspective**

### **SEMI-STRUCTURED INTERVIEW GUIDE WITH COMPANY EXECUTIVES / SNR HR MANAGEMENT**

**DATE:** \_\_\_\_\_

**ORGANISATION:** \_\_\_\_\_

**INTERVIEWEE:** \_\_\_\_\_

**POSITION:** \_\_\_\_\_

**Semi-structured interviews:**

<b>Question</b>	<b>Answer</b>
1. What is your current role in the organisation?	
2. Do you believe that your people and HCM practices have an impact on the performance of your organisation?	
3. Do you believe that your Board (or equivalent) should try to understand the links between these practices and performance, and ensure that your HCM strategy complements and supports your business strategy?	
4. How can /do you demonstrate, to your own satisfaction and that of your stakeholders, that this is so?	
5. Do you use any systems to enable your HCM reporting?	
6. What reports do you believe have provided you / your line management with the most valuable insights into HCM or HR Practices?	
7. Was there a specific reason for implementing the system(s) mentioned?	

Are you able to answer any of the following questions via a report or similar for your organisation?  
 How important are these factors for your organisation, and if you do not currently receive such information, would you consider it relevant / important to provide insight with regard to Human Capital within the company?

Question	Can be answered	Importance for your organisation
Which segments of the workforce create the value for which we are most rewarded in the marketplace?		
Which areas of the business will be most impacted by impending waves of retirement?		
What is being done to prepare successors?		
What impact will anticipated retirement have on the skills and productivity necessary to meet future demands?		
Which segments of the workforce will be most impacted? Is the talent market heating up (i.e. demand will outpace supply)?		
What skills will be required over the next five years that the company doesn't currently possess?		
How will the company create capacity for skills which they currently do not have?		
What is the staff turnover within critical areas?		
How much is staff turnover costing the company In customers / productivity/ innovation / quality?		
What is being done to resolve the root cause of high staff turnover?		
What is being done to retain our key / core workforce segments?		
What are the workforce demographics?		

Is there any other information / reports which you believe are critical (internal or external) from a Human Capital reporting perspective for company stakeholders?


**Use survey response to initiative detailed further discussion.**

**Appendix C - Auditors Survey**



# **HUMAN CAPITAL FOR INCLUSION IN COMPANY ANNUAL REPORTS - A South African Perspective**

**Questionnaire Target Population:**

**Auditors (Internal and External)**

**Objective**

This questionnaire has been developed by a student in the course PhD: Organisational Behaviour at the University of Pretoria (2005) with the objective of developing a model for reporting on Human Capital / Human Resource Assets for South African companies.

**RESEARCHER**

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## INTRODUCTION

In today's knowledge economy, a company's ability to support its business strategy with Human Capital is an important indication of the company's future business performance. The King II Report on Corporate Governance in South Africa (2002) recommended that management accounting should, as a matter of best management practice, reflect requirements of human capital development. This implies that companies should lay out, in publicly reported accounts, the principles, standards and goals adopted for the development of their Human Capital, making appropriate reference to the accounting policies adopted to support adherence to them. Furthermore, King II recognises that the development of Human Capital does not only to serve the economic interest of the company, but also serves the requirements of the society within which the company operates. However, no standard or framework to enable the inclusion of this information in company reporting to demonstrate the effect on performance currently exists. This means that a company's most significant asset (Human Capital) is not included in the valuation of the business.

This research is focussed on gaining an understanding on:

- The value of organisations' reporting on what they identify to be their most important Human Capital Management (HCM) issues
- Whether, in addition to organisation-specific reporting, all organisations should be encouraged to report on the Human Resource issues as part of the company shareholder report
- The extent of central guidance on the most appropriate numerical measures (metrics) which should be included in company reports
- How best way to ensure that HCM is both widely reported and the information is trusted by investors and other stakeholders as relevant, reliable and consistent, and what obstacles there might be to such reporting.

### Target Population:

This questionnaire has been designed specifically for Auditors to determine the relevance of the dimensions and descriptive elements of model for Human Capital Reporting as well as to identify any additional elements that are perceived to be relevant.

***Your time and input is valued and appreciated.***

Reuphillan Kasselmann

**Researcher**

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**SURVEY ON HUMAN CAPITAL MANAGEMENT REPORTING**

**SECTION 1**

Please complete the following information about you  
(Those areas indicated with an \* are optional):

*If completing this form electronically, please simply delete the options not applicable.*

Name and surname	
Title	Mr, Mrs, Ms, Dr, Prof, etc
Highest qualifications	
*Gender	Male / Female
*Age group	Below 30; 30 – 45; 45 – 55; Over 55
*Contact details	Tel No: Email address:
Your position / job title	Auditor (Internal) Auditor Manager Senior Manager Audit Partner Other (Text Box)
*How long have you performed your current job function?	_____ years

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Please provide the following information on your company / the company which you audit:

*Please copy this box if more than one*

Name of your company		
Company(ies) which you audit		
Industry sector		
Number of employees	Headcount:	Full time equivalents:
Part-time employees	Regular:	Contingency:
Headcount – executives		
Headcount – professional staff		
Headcount – Human Resources staff		
Frequency of company Reporting	List: Quarterly Half-yearly Annually	

Please complete the following questionnaire. There are no right or wrong answers. Simply evaluate each item based on your own experience.

**Human Resource Reporting**

I am familiar with and /or have used the following Human Capital calculations:

*(Please mark with an X)*

	Unknown	Familiar	Used
HC ROI (Return on Investment on employees) = (Revenue – (Expenses – Compensation))/Compensation			
Compensation Revenue Factor = Compensation as % of Sales			

Please indicate if you believe the following information should be readily available and shared with company stakeholders by marking with a (X) in the Essential / Not essential columns. If you indicate that the information is essential, please also indicate if you consider this to be so for Internal Only or Internal and External Stakeholders.

	Essential	Not Essential	Internal Stakeholders Only	Internal and External Stakeholders
1. Which segments of the workforce create the value for which we are most rewarded in the marketplace?				
2. Which areas of the business will be most impacted by impending waves of retirement?				
3. What are being done to prepare successors?				
4. What impact will anticipated retirement have on the skills and productivity necessary to meet future demand?				
5. Which segments of the workforce will be most impacted by the areas? Is the talent market heating up? (I.e. demand will outpace supply)				
6. What are the potential top-line and bottom-line implications of demand outpacing supply in the talent market per segment of workforce?				
7. What skills will be required over the next five years that the company does not currently possess?				
8. How will the company create capacity for skills which they currently do not have?				
9. What is staff turnover within critical areas?				



	Essential	Not Essential	Internal Stakeholders Only	Internal and External Stakeholders
10. How much is staff turnover costing the company In customers / productivity/ innovation / quality?				
11. What is being done to resolve the root cause of high staff turnover?				
12. What is being done to retain your key / core workforce segments?				
13. Is the company actively developing talent portfolios or workforce plans that will help you to understand and communicate the financial consequences of talent decisions on the business?				

Please list any other essential information you believe should be shared with stakeholders of an organisation.

Information	Reason / rationale for being essential	Internal Stakeholders Only	Internal and External Stakeholders	Notes (if required)

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Thank you. If you would like to receive the aggregated results of this survey, please provide an e-mail address where we can send it: E-mail: \_\_\_\_\_

This information will only be processed in accordance with the provisions of the Data Protection Act 1998 and any other relevant legislation. No further information will be sent to you unless required.

Please return this form to the researcher:

[reuphk@webmail.co.za](mailto:reuphk@webmail.co.za)

OR

Reuphillan Kasselmann

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**Appendix D – Metric Questionnaire**



# **HUMAN CAPITAL FOR INCLUSION IN COMPANY ANNUAL REPORTS**

## **- A South African Perspective**

### **Questionnaire Target Population:**

#### **HR Consultants / Experts**

- Students in Human Resources Management
- HR Consultants

#### **Objective**

This questionnaire has been developed by a student in the course PhD: Organizational Behaviour at the University of Pretoria (2005) with the objective of developing a model for reporting on Human Capital / Human Resource Assets for South African companies.

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This research is focussed on gaining an understanding on:

- The value of organisations' reporting on what they identify to be their most important Human Capital Management (HCM) issues.
- Whether, in addition to organisation-specific reporting, all organisations should be encouraged to report on the Human Resource issues as part of the company shareholder report.
- The extent to which central guidance on the most appropriate numerical measures (metrics) should be included in company reports.
- How best to ensure that HCM is both widely reported, and that the information is trusted by investors and other stakeholders as relevant, reliable and consistent, and what obstacles there might be in such reporting.

### **Target population:**

This questionnaire has been designed specifically for HR students and consultants to determine the relevance of the dimensions and descriptive elements of Human Capital Reporting, as well as to identify any additional elements that are perceived to be relevant.

### **Further input into research:**

Further research will be done using a similar questionnaire to assess the opinion of company valuers and auditors to ascertain what they believe to be a reflection of the Human Capital and evaluation of Human Assets for an organisation to ensure a holistic view is obtained. This will be collated into a model with input from this questionnaire to develop a framework which companies may use to report on Human Capital which should provide shareholders and stakeholders of organisations a more holistic view of ALL the assets of the organisation.

***Your time and input is valued and appreciated.***

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## SURVEY ON HUMAN CAPITAL MANAGEMENT REPORTING

Please complete the following questionnaire. There are no right or wrong answers. Simply evaluate each item based on your own experience.

### PERSONAL INFORMATION

Please complete the following information about you.  
(Those areas indicated with an \* are optional):

Name and surname	
Title	List titles: Mr, Mrs, Ms, Dr, Prof, etc
Highest qualification	
*Gender	Male / Female
*Age group	Below 30; 30 – 45; 45 – 55; Over 55
*Contact details	Tel No: Email address:
Your position	Student HR Consultant Other (Text Box)

### SECTION 1

#### Model for Employee Value

The following statements measure the value of Human Capital against a model for Shareholder value. Please read the question on the left, then evaluate the dimension in the next column to be either Essential or Not Essential by placing an (X) in the relevant column.

		Essential	Not Essential
What is the relevance of the following dimensions to lead to a reduction in the Total Cost of Employee Interactions for HR? (Please consider the impact on the service offered by HR in assessing these dimensions)	Reduce compensation administration costs		
	Reduce benefits administration costs		
	Reduce performance management costs		
	Reduce talent management costs		
	Reduce recruiting and selection costs		
	Reduce learning / training costs		
Will the following dimensions increase employee efficiency?	Reduce employee time spent on administrative functions		
	Increase technical skills of employee		
	Improve execution capability of employee		
Will the following dimensions help to improve the employee's impact on customers?	Improve employee's understanding of his/her impact on shareholder value		
	Improve planning		
Will the following dimensions assist in the improvement of employee performance?	Broaden collaboration and support with customers		
	Improve employee retention		
	Improve employee's skills and competence		
	Improve employee effectiveness		

Will the following dimensions assist to help with the improvement of asset profitability for the organisation?	Physical assets		
	Technology assets		
	People assets		
Will the following external factors influence the view of stakeholders in their value / perception of the organisation?	Diversity management		
	Preferred employer image		
	Social responsibility		
	Union management		
	Safety management / safety record		

## SECTION 2

### Human Resource Measures

Indicate with an X in the relevant box (Yes / No) if you believe the following measurement / instrument can be used to evaluate the status of the Human Capital Value in organisations.

*(Please see Appendix A for definitions if required):*

Measurement / Instrument	Yes	No
Business performance		
Employee commitment		
Employee motivation		
Employee satisfaction		
Employment equity charter		
Human Capital		
Knowledge generation		
Knowledge integration		
Knowledge sharing		
Management leadership		
Process execution		
Relational capital		
Retention of key people		
Structural capital		
Training		
Value alignment		

**SECTION 3**

The following metrics are considered required to provide insight into the effectiveness and efficiency of Human Resources in an organization and should be included in External Reporting on Human Capital.

**Please use the sheet (Form 1) provided and complete per indicator (reference the indicator number) the following:**

*For electronic submissions, this form is also provided in Excel for easier completion. (Please use Metrics List.xls)*

- 1 Is the indicator/ metric applicable?
- 2 Is the indicator/ metric complete?
- 3 Is the indicator applicable to all types of organisations?
- 4 Is the data for the indicator easily obtained?
- 5 Is the calculation required for the indicator simple?
- 6 Is the indicator understandable?
- 7 Is the data objective, quantifiable and reliable?
- 8 Does the indicator point towards sustainable improvement?
- 9 Can the indicator be measured on an ongoing basis?

No	Indicator/ Metric
1	Costs per Full-Time Employee
2	Revenue per Employee
3	Total Compensation/Benefits as Ratio of Total Revenue
4	Training Investment per Employee
5	Training Remuneration Factor
6	Recruitment Resource Ratio
7	Total Compensation as Ratio of Total Costs
8	Incentive Cost Ratio
9	Termination Rate
10	EE Movements
11	Acceptance Rate
12	Employee Commitment
13	Employee Motivation
14	Employee Satisfaction
15	Management Leadership
16	Knowledge Generation
17	Knowledge Integration
18	Knowledge Sharing
19	Process Execution
20	Retention of Key People
21	Relational Capital
22	Structural Capital
23	Value Alignment

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No	Indicator/ Metric
24	Absenteeism rate by job category and job performance
25	Accident costs
26	Accident safety ratings
27	Average employee tenure (by performance level)
28	Average time for dispute resolution
29	Benefits costs as a percentage of payroll or revenue
30	Benefits costs/competitors' benefits costs ratio
31	Compliance with fair employment practices / industry charter
32	Compliance with technical requirement of affirmative action
33	Comprehensiveness of safety monitoring
34	Compensation of high performers compared to average performers in peer group
35	Cost of HR-related litigation
36	Cost of injuries
37	Cost per grievance
38	Cost per hire
39	Cost per trainee hour
40	Courses with highest number of attendees by competency
41	HR department budget as a percentage of sales
42	HR expense per employee
43	HR expense / total expense
44	Interviews per-offer ratio (selection ratio)
45	Lost time due to accidents
46	Measures of cycle time for key HR processes
47	Number of applicants per recruiting source (by quality)
48	Number of hires per recruiting source (by quality)
49	Number of courses taught by subject
50	Number of recruiting advertising programs in place
51	Number of safety training and awareness activities
52	Number of poor performers who left per level
53	Number of stress-related illnesses
54	Number of training days and programs per year
55	Offer-to-acceptance ratio
56	Proportion of high performers to average performers, per job level
57	Percentage of and number of employees involved in training
58	Percentage of correct data in HR information system
59	Percentage of employee development plans completed

University of Pretoria etd – Kasselmann, R (2006)

No	Indicator/ Metric
60	Percentage of employees with access to appropriate training and development opportunities
61	Percentage of new material in training programs each year
62	Percentage of payroll spent on training
63	Percentage of performance appraisals completed on time
64	Response time per information request
65	Sick days per full-time equivalent per year
66	Speed of salary action processing
67	Time needed to orient new employees
68	Time to fill an open position
69	Total compensation expense per employee
70	Total HR investment / earnings
71	Total HR investment / revenues
72	Turnover by recruiting source
73	Turnover costs
74	Turnover rate by job category and job performance
75	Variable labour costs as percentages of variable revenue
76	Worker's compensation costs
77	Workers compensation experience rating
78	Access to business information to facilitate decision making
79	Adherence by the workforce to core values, e.g. cost consciousness
80	Average change in performance appraisal rating over time
81	Change in employee mind-set
82	Climate surveys
83	Consistency and clarity of messages from top management and from HR
84	Customer complaints / praise
85	Customer satisfaction with hiring process
86	Degree of financial literacy among employees
87	Degree of race and gender by job category
88	Effectiveness of performance appraisal processes for dealing with poor performers
89	Employee commitment survey scores
90	Employee competency growth
91	Employee development / advancement opportunities, compensation, etc.
92	Employee turnover by performance level and controllability
93	Extent of cross-functional teamwork
94	Extent of organisational learning
95	Extent of understanding of the firm's competitive strategy and operational goals



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No	Indicator/ Metric
96	Extent to which employees have ready access to the information and knowledge that they need
97	Extent to which required employee competencies are reflected in recruiting, staffing, and performance management
98	Extent to which employees are clear about the firm's goals and objectives
99	Extent to which employees are clear about their own goals
100	Extent to which hiring, evaluation, and compensation practices seek out and reward knowledge creation and sharing
101	Extent to which HR is helping to develop necessary leadership competencies
102	Extent to which HR does a thorough job of pre-requisition soft-asset due diligence
103	Extent to HR leadership is involved early in selection of potential acquisition candidates
104	Extent to which HR measurement systems are seen as credible
105	Extent to which information is communicated effectively to employees
106	Extent to which the average employee can describe the firm's HR strategy
107	Extent to which the average employee can describe the firm's strategic intent
108	Extent to which the firm shares large amounts of relevant business information widely and freely with employees
109	Extent to which the firm has turned its strategy into specific goals / objectives that employees can act in the short and long run
110	Extent to which top management shows commitment and leadership around knowledge-sharing issues throughout the firm
111	Percentage of employees making suggestions
112	Percentage of PDI promotions
113	Percentage of workforce that is promotable
114	Percentage of employees with experience outside their current job responsibility or function
115	Percentage of retention of high-performing key employees
116	Perception of consistent and equitable treatment of all employees
117	Performance of newly hired applicants
118	Planned development opportunities accomplished
119	Ratio of HR employees to total employment workforce
120	Requests for transfer per supervisor
121	Retention rates of critical Human Capital
122	Success rate of external hires
123	Survey results on becoming "the" employer of choice in selected, critical positions

**SECTION 4**  
**Human Resource Reporting**

I am familiar with and /or have used the following Human Capital Calculations:

	Familiar	Used
HC ROI (Return on Investment on employees) = (Revenue – (Expenses – Compensation))/Compensation		
Compensation Revenue Factor = Compensation as % of Sales		

I believe the following information should be readily available and shared with all company stakeholders:

	Essential	Not Essential	Internal Stakeholders Only	Internal and External Stakeholders
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