

Realising the Anticipated Strategic Value of Human Capital Measurement

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Abstract

The increased importance of human capital has created a strategic imperative in many organizations for improved workforce measurement. However, while Human Resource (HR) executives understand the business decisions human capital metrics should support, they are less confident in their organization's ability to effectively do so. While, advances in information technology have greatly increased organizations' capacity to accurately and efficiently record and report human capital data, this improved access has not translated into greater insight and strategic impact. The predominant application of human resource information systems remains administrative in nature with limited analytic applications insights.

This paper presents the findings of 2 studies on how organizations can realise the full strategic value of human capital measurement. The first study was in-depth interviews with 32 North American and Australian organizations regarding their Human Capital Measurement efforts. The second study was a follow-up survey with 47 Australian organizations. Overall, we found that regardless of size, location, or industry, organizations share the same goals and face similar challenges in their human capital measurement efforts.

Realising the Anticipated Strategic Value of Human Capital Measurement

Human capital measurement systems have been widely proposed as an important source of competitive advantage (Kovach & Cathcart, 1999; Mayfield, Mayfield & Lunce, 2003). While, advances in information technology have greatly increased organizations capacity to accurately and efficiently record and report human resource data (Martinsons, 1997), this improved access to Human Resource (HR) data has been expected to provide HR managers with the necessary business insight to play a greater strategic role and drive organizational effectiveness (Ball, 2001; Kossek, Young, Gash, & Nichol, 1994; Robinson, 1997; Tansley, Newell & Williams, 2001). However, many organizations are finding it difficult to derive the anticipated benefits from improved access to HR data.

A recent survey of 241 HR executives by the Corporate Leadership Council (2001) found that while HR executives generally understand the business decisions human capital metrics should support, they are less confident in their organization's ability to effectively do so. Most respondents considered their HR measurement system to be ineffective and few believed their HR measurement system to be as effective as those of other corporate functions, such as finance. The pressure to improve the effectiveness of HR measurement was expected to grow with 80% of HR executives surveyed predicting that their organizations investment and focus on HR measurement would significantly increase across the next 5 years. Therefore, a major challenge facing HR functions is not only improving the effectiveness and quality of human capital measurement but also their ability to analyze and utilize human capital data to inform business decisions.

We present the findings of 2 studies on how organizations can realise the full strategic value of human capital measurement. We begin by outlining previous research on human resource information systems (HRIS) and note the continued need for research on how to facilitate the utilization of human capital metrics. Next, we present the results of our studies in two main sections. First, we outline those factors that participating organizations saw as constituting successful utilization of human capital metrics. Second, we discuss what the major challenges organizations face in maximizing the business impact of human capital metrics are.

Human Resource Information Systems Research

Human resource information systems are “the composite of data bases, computer applications, and hardware and software that are used to collect/record, store, manage, deliver, present, and manipulate data for Human Resources” (Broderick & Boudreau, 1992: 17). HRIS are envisaged to improve organizational effectiveness in two ways via improving administrative and analytical applications (Ball, 2001). For example, Kovach and Cathcart (1999) noted that HRIS firstly increase administrative efficiency through the automation of data extraction improving the accessibility, richness and consistency of HR data. Second, HRIS provide increased strategic support through improved analytic capability. Therefore, “the key is to focus on making better decisions, not just producing data faster” (Kovach & Cathcart, 1999: 277). A similar dichotomy was made by Martinsons (1994, 1997) in distinguishing between unsophisticated and sophisticated applications of HRIS.

This dichotomy of administrative and analytic applications is reflective of Zuboff's (1988) distinction between the ‘automating’ and ‘informating’ capacity of information technology. ‘Automate’ refers to how information technology reduces mental and physical labor in the management of data, while ‘informate’ refers to information technologies processing data to generate new information (Tansley et al., 2001). ‘Informating’ requires HR consultants to analyze and interpret the information to derive insights. Zuboff proposes that the automate and informate capacities of IT are incremental with automating a necessary but not sufficient condition for informating. Likewise, in the HRIS literature (e.g., Ball, 2001; Martinsons, 1994; 1997), the automation of administrative applications is positioned as a necessary but not sufficient condition for analytic applications.

The predominant application of HRIS remains administrative with organization failing to derive the anticipated analytic insights (Ball, 2001; Boudreau & Ramstad, 2004; Corporate Leadership Council, 2001; Kinnie & Arthurs, 1996; Kovach & Cathcart, 1999, Tansley et al., 2001). For example, Ball posed the question “Does HRIS use simply replicate the filing cabinet or is the information analyzed in any way?” (2001: 681). She found, in a survey of 127 organizations, that the majority of organizations were using there HRIS for data management and administration rather than analysis and decision support. While, organizations inability to move beyond administrative application of HRIS has bee repeatedly noted, limited empirical research exists on why organizations find it so hard to utilize HRIS analytic applications to improve decision making.

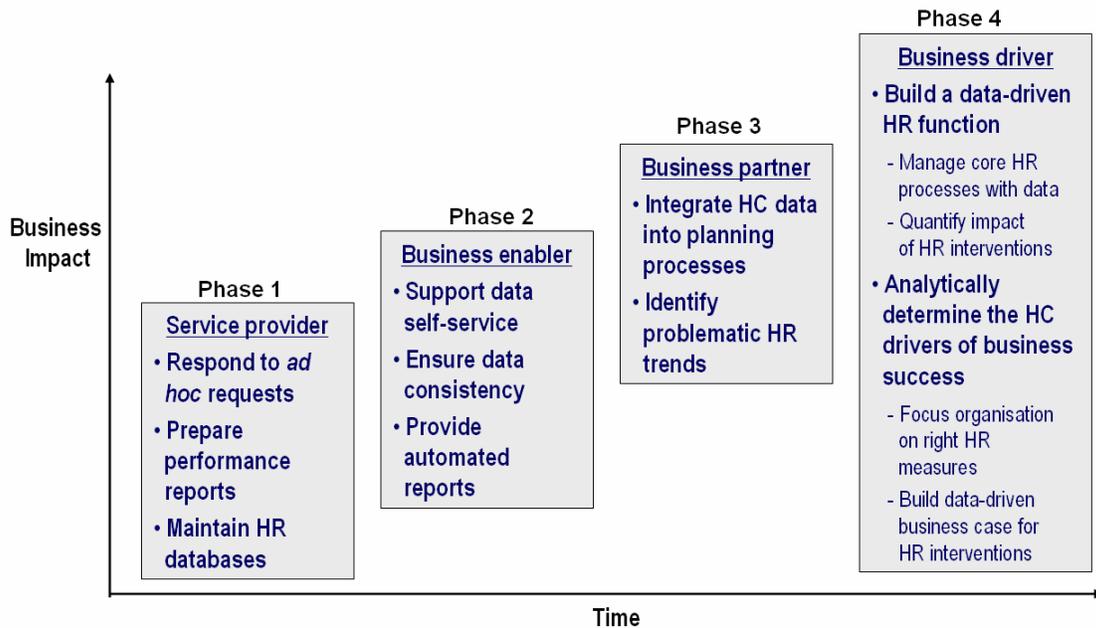
In this paper, our primary aim was to gain insight into the major challenges organizations face in effectively utilizing human capital data to inform business decisions. In pursuing this objective, we conducted 2 studies on how organizations can realise the full strategic value of human capital measurement. The first study was in-depth interviews with 32 North American and Australian organizations regarding their Human Capital Measurement efforts. The second study was a follow-up survey with 47 Australian organizations. Overall, we found that regardless of size, location, or industry, organizations share the same goals and face similar challenges in their human capital measurement efforts.

The 4 Phases of Human Capital Measurement Value Creation

Value creation from human capital measurement occurs in four progressive phases (see Figure 1). The four phases of value creation incrementally increase the business impact of human capital measurement, but also incrementally require greater resources and time to attain. The first two phases are primarily focused on the *implementation* of technology to improve the availability, quality and accessibility of human capital data. The next two phases of value creation are focused on the *utilisation* of human capital data to enhance decision making.

Phase 1 - Service Provider. The first phase of value creation stems from improved human capital data holdings. This phase is characterised by three activities. First, technology driven improvements in human capital reporting through centralising disparate data sources and automating data extraction from transactional data bases. Second, the standardisation of metrics definition with the development of an agreed organization wide data dictionary of how metrics are defined. The data dictionary provides the formula for all metrics, lists inclusion and exclusion criteria for the calculation of metrics, and provides information of where the data for each metric is sourced from. Third, quality assurance processes for establishing and maintaining data integrity are developed and implemented.

Figure 1: The 4 phases of human capital measurement value creation



Phase 2 – Business Enabler. The second phase of value creation is enabling the business through improving access to human capital metrics. This phase is still pre-dominantly technology driven. Improved reporting and analysis tools enable users to disaggregate data quickly, provide the ability to drill-down through the data, view longitudinal trends (by month, quarter, calendar year, financial year), examine inter-relationships between measures, and provide both external and internal benchmarks. Further, information technology automates regular reporting and supports ad hoc queries. This phase is also characterised by an increase in the number of users accessing the data.

Phase 3 – Business Partner. The third phase of value creation is the utilisation of human capital data by the HR function to partner more effectively with the business. Specifically, human capital metrics enable HR to better speak the language of the business, to become more analytical, and to develop into a strategic partner with line management. An important feature of this phase is that the HR function develops the necessary analytic skills to inform critical decisions throughout the organization. Human capital reporting extends beyond reporting and monitoring to forecasting and drawing out implications of current workforce trends. For example, turnover reports do not merely state what the turnover rate has been but provide an analysis of turnover drivers/causes, commentary on the cost/consequences of turnover, and recommendations for actions

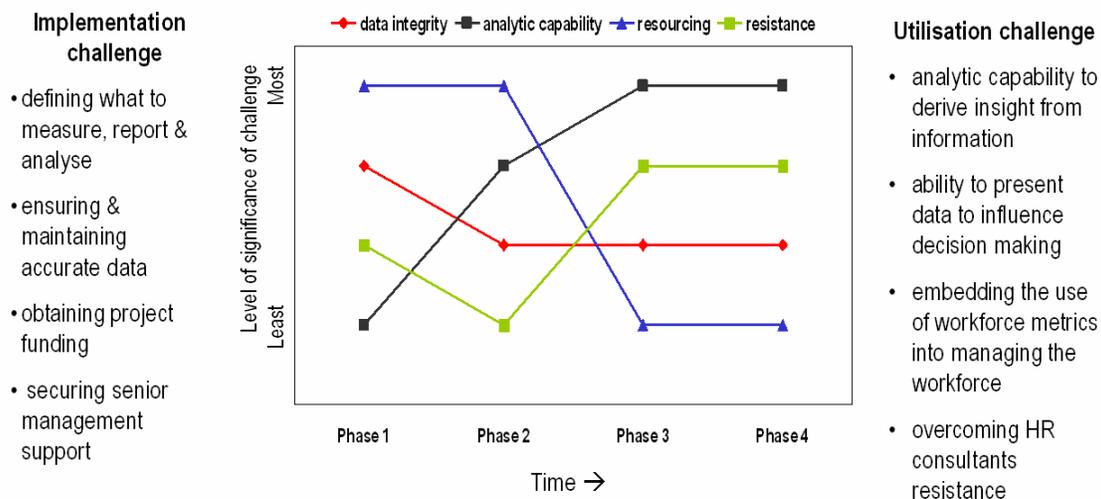
Phase 4 – Business Driver. The final phase of value creation is human capital measurement being a major consideration in decision making throughout the organization, not just confined to the HR function. The human capital measurement system provides a framework that guides and enhances the quality of decisions through out the organization. The measurement framework clearly shows the connection between the workforce and business outcomes,. Thus providing employees with a clear line of sight of how their jobs contribute to organizational effectiveness.

A prime indicator of the maturity of the human capital measurement system is the application of human capital metrics and workforce projections for workforce planning purposes. More advanced organizations, project their future workforce supply (i.e. how many and what type of employees are we going to have) and demand (i.e., how many and what kind of employees are we going to need) from both a capacity (i.e. numbers) and capability (i.e. skills) perspective. This enables an analysis of potential future workforce gaps through the matching of demand and supply forecasts. Potential gaps are then considered in the context of external labour supply in order to develop and prioritise workforce strategies.

Challenges to Effective Human Capital Measurement

The four major challenges that consistently manifested themselves are: 1) establishing and maintaining HR data creditability, 2) securing adequate project resourcing, 3) analytical capability, and 4) managing cultural resistance. Our latest findings (see figure 2) show that during phase 1 and 2 the primary challenge is technology *implementation*, while progressing into phase 3 and 4 is about the *utilisation* of data. The implementation challenge revolves around establishing data integrity and obtaining project resourcing. Issues with data creditability are often compounded by limited project resources (e.g., FTE, budget, timeline). Project teams generally felt that they were under resourced and needed to develop a case study from the data to demonstrate the utility of human capital metrics in order to acquire more resources and gain senior management support by demonstrating return on investment of human capital metrics.

Figure 2: Major challenges during the 4 human capital measurement phases.



In our survey study with 47 Australian organizations, 29% classified themselves as being in phase 1, 45% in phase 2, 9% in phase 3, and 17% in phase 4. This reflects that organizations are beginning to realise technology driven improvements in human capital data capture and reporting. Information technology by itself is not a panacea that will provide increased business insight and strategic value. The major challenge facing most organizations is not an implementation one but the effective utilisation of human capital data. It is not for a lack of human capital data, if anything, most organizations are encountering information overload.

At the forefront of most HR executives human capital metrics utilisation challenge is building the necessary analytic capacity within HR and ensuring that HR professionals understand how to use human capital metrics to inform decisions. The more abundant human capital metrics become the more important analytics become. One project manager noted “our capacity to collect, store and report data far exceeds our ability to analyse, interpret and make sense of the data, yet alone act upon it.”

The other major utilisation change is initiating and managing the required cultural and behavioural change. The long-term success of human capital measurement depends upon HR business partners/consultants, who need to see value in and be willing users of human capital metrics. The change required in employees’ perceptions of human capital measurement was succinctly captured by one HR executive, who noted that employees’ perceptions need to be shifted from “This is being done to me” to “This is being done for me” to “I am doing this for myself”. The need to win minds and hearts does not only need to occur in HR but also in the wider organization. Senior management and line managers also need to be convinced of the utility of human capital metrics. Currently, most HR functions are not able to effectively answer line managers’ questions as they do not have access to timely and accurate HR data. Let alone provide a human capital measurement framework that clearly depicts the causal links between human capital processes and business outcomes. Indeed, in most organizations it appeared that workforce related decision making is not data driven but remains largely based on managers’ gut feel and rules of thumb.

Conclusion

The increased importance of human capital as an organizational asset has created a strategic imperative in many organizations for improved measurement. However, the predominant application of HR information technology remains administrative with limited analytic application. The challenges to effectively leveraging human capital measurement to provide business insight and more importantly business impact appear daunting. Indeed, our research suggests that projects which do not explicitly manage the required behavioural and cultural change and focus exclusively on the technical aspects of human capital measurement greatly diminish their chances of success.

There is a potential risk that investing in information technology to enhance human capital reporting and analysis may never fully succeed unless users’ perceptions are carefully managed during the implementation process. Quality human capital technology and data are necessary but not sufficient to drive value creation from human capital measurement. As with all organizational changes, it is people’s perceptions about what is happening and the value of the project to them and their work that drives attitudes, levels of support and subsequent utilisation. At the forefront of this transformation will be increasing HRs’ ability to analyse, interpret and communicate human capital metrics. Organizations need to ensure that HR professionals have both the *skill* and *will* to utilise human capital metrics. Only then will organizations begin to realise the full strategic value of human capital measurement.

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