World Review of Business Research
Vol. 6. No. 2. September 2016 Issue. Pp. 1 – 12

The Balanced Scorecard in a New Zealand Organisation: Empirical Evidence of Change in their Performance Culture

Andries du Plessis* and Garikai Tachiwona **

The balanced scorecard, if used correctly by managers could be used to transform low performing information technology service teams into highly productive and profitable units that meet customer service expectations. Two research questions are answered: Was it the balanced scorecard approach, that made a difference to employee productivity and business performance of the unit, and if so how? What management changes enhanced service delivery improvements which resulted in a change in customer satisfaction? An exploratory research was executed covering three years of the balanced scorecard implementation in a New Zealand Information Technology Service Organisation interviewing managers, employees and a customer director. Some findings are: a lack of process and management leadership; communication was poor; relationships between engineers, managers, Medicare and NZIS were also tensed and distrustful. Recommendations and conclusions form the last two sections.

1. Introduction

The provision of information technology services through outsourcing models provides significant challenges to many organizations. Both suppliers and recipients of information technology services always face the vexed question of how to deliver, or obtain, services that exceed expectations, or, at the very least, adequately meet their requirements. Customers usually see companies that over-promise in order to acquire an outsourcing contract, but under-deliver thereafter, leaving both parties with a bad taste. As the economic climate has become increasingly turbulent, businesses seek to keep ahead of the competition by working faster and smarter; by raising productivity levels per employee while, at the same time, increasing innovation and minimising costs (Du Plessis, Douangphichit, & Dodd, 2016; Du Plessis, 2015a; Chavan, 2009).

At the heart of the business are managers who must deliver required services to increasingly demanding customers, through employees having differing levels of understanding, personalities, backgrounds and abilities. Employment security is no longer guaranteed, and loyalty from employees is no longer a given. Companies have always faced many challenges, but at no other time have the business challenges become more pronounced, with rapid and volatile change, as in the 21st century (Du Plessis, 2009; Jørgensen, Owen, & Neus, 2009). For knowledge-based industries, of which information technology companies are part, it has

* Dr Andries J du Plessis, Department of Management and Marketing, Unitec Institute of Technology, Auckland, New Zealand, Email: aduplessis@unitec.ac.nz
**Mr Garikai Tachiwona, Department Manager, Datacom, Auckland, New Zealand, Email: tachiona@yahoo.com

become increasingly clear that the best way to maintain a sustained competitive advantage is to develop and effectively deploy the knowledge-based resources they have to the advantage and benefit of their customers (Grundy, 2006; Lee & Lee, 2007; Perez & Pablos,2003).

Managers face complex business environments in which there are many competing interests. Working out how to make the best use of the intellectual capital they have at their disposal in the form of existing productivity tools and employee knowledge to drive productivity can be a major challenge for many of them. This research considers how the balanced scorecard can be used to drive high workplace productivity in such an environment. The real name of the organisation will not be revealed, due to confidentiality requirements and for the purposes of this study the organisation will be referred to as NZIS.

The main problem is how to efficiently meet the ever-changing needs of customers while keeping abreast with developments in technology, legislation and the economy. The main question is: how can managers use the balanced scorecard to transform low performing information technology service teams into highly productive and profitable units that meet customer service expectations? Two more research questions are addressed in this paper: Was it the balanced scorecard approach, that made a difference to employee productivity and business performance of the unit, and if so how? What management changes enhanced service delivery improvements which resulted in a change in customer satisfaction?

To understand the reasons why customer expectations could not be met as a result of stymied team dynamics and to identify and address the key drivers of employee disengagement to improve organisational performance. High performance organisations have highly motivated employees; it can be inferred that the balanced scorecard cannot effectively work in an organisation which has an unhappy and disengaged workforce. Therefore, the objective is to investigate and identify the drivers of disengagement in this particular team, and how management won the hearts and minds of the employees, thereby enabling the successful implementation of the balanced scorecard.

This article explains the problem and objectives of the study in the next two sections with the methodology and research methods following it. A comprehensive literature review includes the four perspectives of Kaplan and Norton and section six discusses in detail the results and findings with recommendations and conclusions forming the last two sections.

2. Literature Review

2.1 Background

A number of researchers refer to the original use of the balanced scorecard as a monitor of a range of performance measures in an organisation, as opposed to just financial measures which offer a historical, but limited, view of an organisation's performance (Chavan, 2009; Dribin, 2009; Kaplan, 2009). The range of measures results in a balanced view of organisational performance. This view of organisational performance assists managers to know where to focus their attention, without doing so at the expense of something else important. This research identifies the initiatives and management approaches that were cumulatively critical for the successful transformation of the business unit into one having a culture of high employee productivity and engagement. It is a fact that most organisations which adopt the balanced scorecard approach experience a high failure rate (Du Plessis, Douangphichit, & Dodd, 2016; Du Plessis, 2015b; Ittner & Larcker, 2003; Jørgensen, et al., 2009; Smith, 2005).

2.2 What is the Balanced Scorecard?

The concept of the balanced scorecard was introduced by Robert Kaplan and David Norton in a Harvard Review publication in 1992 entitled "*The Balanced Scorecard: Measures That Drive Performance".* It advocates a departure from the traditional emphasis on financial performance measures, and proposes adding operational measures which strongly affect the behaviour of managers and employees (Kaplan & Norton, 1992). The balanced scorecard is a management tool that enables managers to manage organisational operations more effectively through the use of a balanced set of measures. The balanced scorecard concept claims that no single measure can provide a clear performance target for a business, or focus attention on the critical areas the business needs to address. It is based on the understanding that you get what you measure, and that you cannot improve what you cannot measure (Elg & Kollberg, 2009; Kaplan, 2009; Kaplan & Norton, 2005).

The scorecard approach proposes that we seek to understand and measure the key factors which drive value-creation in an organisation. It aims to present management with a summary of key performance indicators of a business and provide a rich set of measures with which they can effectively evaluate business performance (De Geuser, Mooraj, & Oyon, 2009). The summary of key success factors then acts as an operational dashboard which business managers can use to make tactical decisions that successfully drive the business forward. Through the use of the balanced scorecard, managers should not be overwhelmed with complexity, as they should have a handful set of balanced key performance indicators. This allows them to have an overview picture of organisational performance with minimal risk of overlooking something important.

The balanced scorecard concept encourages managers to look at a business from four perspectives as explained in Figure 1, below. These are: the financial perspective; the customer perspective; the internal business process perspective; and the learning and growth perspective (Ahmed, et al., 2011; Kaplan & Norton, 1992; Pang-Lo & Chih-Hung, 2007). The balanced scorecard approach retains traditional financial measures.

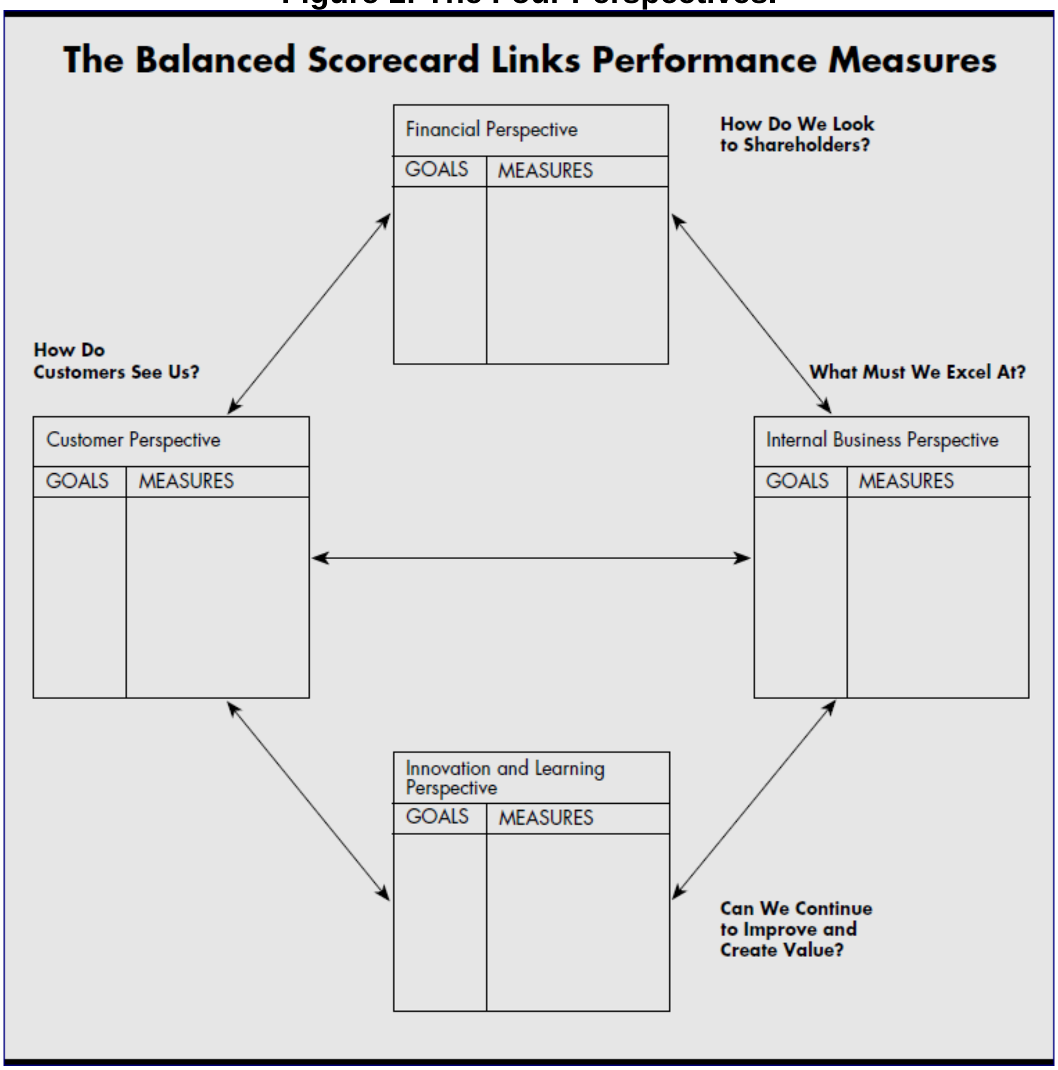
2.2.1 Financial Perspective

The financial perspective considers business profitability, the return on investment, cash flow, growth, shareholder value and so on (Ahmed et al., 2011; Kaplan & Norton, 1992; Kaplan & Norton, 2005). These financial indicators are lagging indicators, which are not a good predictor of the future. Lagging indicators only alert us when things have gone wrong and the effect is already being felt by the business and the balance sheet. Such indicators do not provide proactive feedback for NZIS.

2.2.2 Customer Perspective

The customer perspective considers measures for retaining and meeting customer satisfaction, as well as product expectations (Ahmed et al., 2011). Strategies for creating and maintaining customer relationships necessary for keeping current customers and acquiring new ones are the main focus. This perspective includes measures and factors that matter to customers, such as how the customers view NZIS in terms of efficiencies, cost, quality of products and services (Chavan, 2009; Kaplan, 2009). Market share considerations, customer performance, brand reputation and the company image are taken into account here.

Figure 1: The Four Perspectives.



Source: Kaplan & Norton, 1992, p. 72

2.2.3 Internal Business Process Perspective

The internal business perspective focuses on the processes, decisions and actions that are necessary for NZIS to meet customer and shareholder expectations (Ahmed et al., 2011; Kaplan & Norton, 1992). For shareholder and customer-based measures to be met there must be other measures and processes that must be executed internally (Kaplan & Norton, 2005). Without effective internal processes, NZIS will struggle to meet shareholder and customer expectations in the medium to long-term.

2.2.4 The Learning and Growth Perspective

The learning and growth perspective measures to what extent NZIS's employees, technology, and culture is capable of meeting future requirements. Measures such as employee satisfaction, retention and engagement form part of the learning and growth perspective. NZIS's ability to innovate and achieve operational excellence depends on the competencies of its employees, the capabilities of technology assets at its disposal, and on its culture and leadership (Du Plessis, Frederick, & Maritz, 2013; Ahmed et al., 2011; Kaplan, 2009; Kaplan & Norton, 2004). The value of the various perspectives is ultimately seen in the form of positive financial outcomes, as their purpose is to create a strategic value chain which ensures efficient internal processes underpinned by high internal capabilities.

3. Methodology

3.1 Background

Over a period of three years this research project covered an exploratory research project of the balanced scorecard implementation in the business unit of the New Zealand Information Technology Service Organisation. The researchers are not aware of any similar research ever having been done in an information technology service organisation within New Zealand, hence the exploratory nature of this particular research. In 2004 NZIS was successful in securing a large outsourcing contract to provide information technology support services for Medicare Insurance, a major provider of private healthcare services and insurance. It was the first time that the customer had outsourced the management of its information technology infrastructure on such a scale.

The outsourcing agreement required NZIS to manage the entire infrastructure for the customer, and the outsourcing contract prescribed response expectations, in a service level agreement (SLA), for finding solutions to problems and issues that could arise from time to time. SLAs are standard practice in information technology outsourcing contracts. NZIS inherited an infrastructure system that was unstable, and a system environment that they were not familiar with. The company embarked on a number of projects which were meant to bring stability to the system and reduce the number of system faults resulting in priority one (P1) incidents. Priority one incidents are software, hardware or system faults that result in service disruptions to a number of business users or their customers.

On the NZIS side, the morale and commitment was initially high as these projects were embarked on, but as some issues persisted, and the number of P1 incidents continued - which the customer had expected to be quickly eliminated, the customer's satisfaction levels went down, bringing about the possibility that the outsourcing contract could be lost. The persistent issues affected the morale, and productivity of NZIS engineers. NZIS account managers were under increasing pressure to meet ever-changing customer expectations. NZIS has grown in business turnover and staff numbers; an interest has developed in how to more effectively manage its human and information technology resources. The need for more effective managers and a highly engaged workforce has never been greater.

The increasing trend of encouraging and sending managers to management courses provides a strong indication that NZIS sees its workforce as a major source of competitive advantage that it can capitalise on through effective management. For this research project, managers and employees were interviewed with the intention of understanding the management actions in their view made the balanced scorecard approach work in the business unit. The various views and experiences of management and employees within the business unit since the adoption of the balanced scorecard in 2008 were gathered. These views were analysed and summarised with the intention of making recommendations for a balanced scorecard approach that could be implemented company-wide.

3.2 Research Methods: Quantitative and Qualitative

According to Bryman (2012), quantitative approach is a research study that usually focuses on quantification in collecting and analysing the data. Bryman (2012) and Saunders, Lewis, and Thornhill (2012) say that a quantitative research study is always related to a deductive approach that has the relationship between theory and research study. Theories are from the existing data and then set out to test or prove which are based on hypothesis and experimentation. The direction of research study is from general to specific. The quantitative approach also has some negative points. This is because it is more structured than most qualitative approaches. In addition, it relies on self-response questionnaires that contain structured response formats (Zikmund et al., 2013).

Bryman (2012) and Saunders et al. (2012) says that the qualitative approach is a research study that usually focuses on words rather than quantification in collecting and analysing the data. Qualitative approach uses methods for collecting and analysing data that are not quantitative. It aims to explore social relations and describes reality as experienced by participants (Adams et al., 2007). Qualitative study often focuses on the inductive approach that gathers data by taking extensive observation then draws conclusions. This approach helps researchers to understand better the nature of an issue and the result of findings analysis could formulate a theory (Saunders et al., 2012). The qualitative approach is associated with interpretive and naturalistic approach to its subject matter. It means that researchers study matter in their natural setting, intending to interpret or make sense of phenomena in terms of the meanings people bring to them.

3.3 Sample Selection

There were only three managers in the business unit on which this case study was based; therefore, the sample population of managers was limited to three. Employees interviewed were chosen on the basis of their length of service within the business unit. The longest serving employees were interviewed. The reason for this purposeful sampling was that employees that had been around for less than thirty-six months would not be able to provide an insight into the changes that took place. Bryman (2008) explains that this type of sampling is suitable in research projects similar to NZIS.

3.4 Data Collection

Recorded verbal interviews of the research participants were the primary source of data collection. Seven research participants were interviewed. The research participants were selected on the basis of their involvement during the time of the business transformation being researched. Qualitative data was collected through recorded verbal interviews of managers and employees in the business unit on which the case study is based. Three managers and two employees in the business unit were interviewed.

One senior manager (a director) in NZIS was interviewed to capture his views on the transformation of the business unit. One manager in the customer organisation was interviewed to obtain her views on how she experienced the quality of service by NZIS before and after the implementation of the balanced scorecard. No quantitative data was collected. The target population work in a highly stressful environment; the interviews were limited to 60 minutes each. All the data was collected by the researchers between December 2010 and July 2011. The researcher's own e-mail archives from 2007 to 2010 were also used.

4. Discussion of the Results

According to Du Plessis, Frederick, & Maritz (2013) and Eker & Eker (2009), organisational culture determines the extent to which performance measurement systems will be effective in propelling organisations forward, while Dribin (2009) maintains that those organisations that have rigid cultures inevitably have poor communications, and are generally never ready for the implementation of a performance system, resulting in an attempt to implement one failing. Lau & Moser (2008) consider organisations, or cultures, in which performance measures are perceived as fair by employees as standing a high chance of successfully implementing them.

For the balanced scorecard approach to succeed in an organisation substantial changes in culture within the business are required (Du Plessis, 2015a; Chavan, 2009). Managers championing the balanced scorecard need to be committed to creating a culture in which employees are supported and empowered to perform, and make decisions. A people-centred culture in which people feel that their jobs are meaningful, that managers care about their welfare and what they think, will most likely have highly engaged employees whose performance is higher than if such a culture did not exist (Du Plessis, 2015b; Dent & Holton, 2009; Devi, 2009a; Wildermuth & Pauken, 2008). According to Devi (2009b) "Committed employees perform better".

Information technology service organisations are faced with constant change driven by changing customer requirements and needs, security enhancements, infrastructure and business application updates and upgrades. These continual changes result in change projects coming up all the time. A culture that is dynamic, receptive to change and has high employee engagement is required for successful change implementations (De Vries, et al., 2009; Jørgensen, et al., 2009). Managers who are not committed to creating or maintaining a positive culture are not likely to succeed in implementing the balanced scorecard framework.

No annual performance targets in NZIS Medicare business unit was done before the introduction of the balanced scorecard. The team was always in reactive mode; performance evaluation was either non-existent or informal. Engineers did not feel supported, and were therefore de-motivated, and not engaged in their jobs. There was a lack of process and management leadership. Relationships between the engineers and managers were tolerable at best. Relationships between Medicare and NZIS were also tensed and distrustful. Communication was poor and managers did not appear to have a solution on how to motivate the team to get ahead. According to the engineers change began in 2007 with the appointment of a new Service Delivery Manager, on contract, by the name of Nicola Hughes, and another Outsourcing Manager by the name of Stevens Simmonds. He did not stay for long as he was replaced by Jack, and Nicola by Carly Fiorina (not her real name). The engagement of new managers in 2007 in the NZIS Medicare business unit resulted in a turnaround, as management were able to re-establish trustful relationships with the customer; able to motivate engineers; and put in place processes that ensured that the number of errors that caused business disruptions to Medicare was reduced.

The processes also ensured the provision of more reliable data upon which sound decisions could be based. The engineers felt that the appointment of the new managers brought an increased level of management openness, and feedback regarding customer perception of service quality provided by NZIS. This resulted in the team becoming much more settled and certain of what was happening. More positive guidance from management increased team confidence. For the balanced scorecard to be successful, managers need to provide clear guidelines and direction. A number of team members resigned and left the team. Most of those that resigned were team members that had a negative attitude. One of them used to be a team leader, who was so abusive as to drive some other team members to tears. When those team members left, the level of friction within the team diminished. The new engineers that joined the team were hard-working and friendly, resulting in a less tensed atmosphere.

Jack was appointed as the Outsourcing Manager who formally introduced the balanced scorecard approach, put an end to the blame game, and made engineers feel safer and more comfortable. Employee confidence, engagement and management support are important for the successful implementation of the balanced scorecard. Performance targets were put in place, and a greater emphasis on the wellbeing of engineers was made. Salary reviews were made; the professional development and training of engineers was looked into. Where necessary, engineers were sent for training courses in order to properly equip them with the knowledge necessary to become effective in their roles. Engineers became more engaged, and more productive, much to the customer's delight. In the interviews, one of the engineers described the team relationship as “pretty good” and dynamic, with people happily doing their work. If somebody is a little weak in some area of knowledge they have no problems asking anyone else for help, and this never used to be the case previously. The relationship with Medicare improved, and became more trustful as issues were addressed in a constructive way. All the research participants agree that the turnaround was as a result of the adoption of the balanced scorecard, effective management and good leadership.

Was it the balanced scorecard approach, that made a difference to employee productivity and business performance of the unit, and if so how?

The range of measures results in a balanced view of organisational performance. This view of organisational performance assists managers to know where to focus their attention (Du

Plessis, 2015a; Du Plessis, 2006). The balanced scorecard evolved to become a tool for translating strategy into action, and its core value was in enabling an organisation to realise its vision and strategy. Based on the interviews, apart from two managers that were specifically mentioned as not having people management skills, most of the managers appear not to have had an issue in handling staff well. They certainly remained challenged on how to resolve issues and improve business performance, especially in the light of system challenges that threatened the renewal of the facilities management contract with Medicare.

What most of them lacked, was the leadership ability to bring about a culture change necessary for removing the logjam. Jack was able to paint a picture of what he believed success looked like, and provide guidelines to the business as usual (BAU) team on how to get there (Lockwood, 2007; Townsend & Gebhardt, 2008). While the balanced scorecard has been acknowledged as a crucial tool in the transformation process, the provision of good and strong leadership by Jack in which he provided a vision and the means to see its accomplishment is also seen as an important driver to progress.

What management changes enhanced service delivery improvements which resulted in a change in customer satisfaction?

Aligning the operational aspects of a business with strategy is crucial if NZIS is to experience sustained growth and success (Du Plessis, Douangphichit, & Dodd, 2016; Kaplan & Norton, 2008; Schulte, 2005). Increasing the productivity of the knowledge worker is of paramount importance (Lee & Lee, 2007). The balanced scorecard is seen as the most effective way to implement business strategy in an area where there is constant turbulence and change in technological, social, political and economic arenas. The emergence of knowledge and its effective management can provide significantly sustainable competitive advantages to businesses. The management of NZIS had to make a few changes such as to focus on the things that matter to employees. The effect is then that the employees care about their work; they need recognition; they need interesting and challenging jobs; they need to feel empowered and trusted to do the right things (Du Plessis, Frederick, & Maritz, 2013; Du Plessis, Sun, Marriott, 2012; Lockwood, 2007; Townsend & Gebhardt, 2008).

The newly adopted open-door policy also proved to be genuine, as opposed to lip-service. This proves that employee engagement is a direct reflection of how employees experience their relationship with their managers; how important their work is in contributing to success. Sending employees for training courses paid for by NZIS, and providing proper equipment for engineers to perform their duties without having to struggle with inadequate, and under-powered equipment resulted in a dramatic improvement in productivity and performance. Ending the blame game in NZIS improved employee confidence. The ability by management to face any customer onslaught, made engineers feel safer, and trust management more. For the NZIS Medicare BAU team, high employee engagement has become a key competitive advantage. While the balanced scorecard has been acknowledged as a crucial tool in the transformation process, the provision of good and strong leadership by the manager in which he provided a vision and the means to see its accomplishment is also seen as an important driver to progress.

5. Conclusions

A complex approach to the implementation of the balanced scorecard will almost result in failure. A manager who is unable to motivate and engage employees is unlikely to succeed in bringing about a long-term culture of high performance. This also applies to a manager who is unable to manage process.

Good managers are critical for the successful implementation of the balanced scorecard. Good managers successfully implement the balanced scorecard framework without formally knowing about it. This research has clearly identified that the balanced scorecard is successful in the context of an environment in which there is good leadership and management; employees having the right attitude whom are engaged in their work; in addition to having processes which measure progress and propel team members towards the desired objectives which are relevant for business success. The only limitation to this study is perhaps the small sample size and the fact it was done in one organisation only, but it supports previous studies success where the balanced score card was implemented Identifying and addressing issues affecting employee morale resulted in increased engagement, which made the implementation of the balanced scorecard easier. In conclusion, if the implementation of the balanced scorecard is failing, or if business productivity is low, one should look no further than the management chain responsible for the running of the business. Happy and satisfied employees are indeed productive and loyal.

References

Adams, J, Khan, HTA & Raeside, R 2007 . 'Research methods for graduate business and social science students'. Retrieved from *EbLib* database

Ahmed, Z, Ahmed, Z, Nawaz, MM, Dost, KB & Khan, MA 2011. 'Comparative Significance of the Four Perspectives of Balanced Scorecard'. *Interdisciplinary Journal of Contemporary Research in Business*, vol. 3, no. 1, pp. 981-993.

Bryman, A, Becker, S & Sempik, J 2008. 'Quality Criteria for Quantitative, Qualitative and Mixed Methods Research: A View from Social Policy'. *International Journal of Social Research Methodology,* vol. 11, no. 4, pp. 261-276.

Bryman, A 2012. 'Social research methods' (4th ed.). New York, NY: Oxford University Press

Chavan, M. 2009. 'The balanced scorecard: a new challenge'. *Journal of Management Development,* vol. 28, no. 5, pp. 393-406.

De Geuser, F, Mooraj, S & Oyon, D 2009. 'Does the Balanced Scorecard Add Value? Empirical Evidence on its Effect on Performance'. *European Accounting Review,* vol. 18, no. 1, pp. 93-122.

Du Plessis, AJ, Douangphichit, N and Dodd, P 2016. HRM in relation to employee motivation and job performance in the hospitality industry. *Journal of International Business Research and Marketing*, Vol 1 no. 4, May 2016: pp 1-13

Du Plessis, AJ 2015a. *HRM and ER in South Africa: contemporary theory and practice*. In Du Plessis, AJ (Ed) Munyeka, W, Chipunza, C, Samuel, MO, Naidoo, K, Keyser, E & Gura, M. Juta Publishers, Cape Town, South Africa.

Du Plessis, AJ 2015b. Evidence of the changing activities, goals and roles of HR practitioners. *Journal of Community Positive Practices* Vol 15 no. 1, pp 3-16

Du Plessis, AJ, Frederick, H & Maritz, A 2013. Education and training deficits in industrial clusters: Empirical evidence that managers can use to rectify the skills gap in Auckland precinct. *National Academy of Management. Actual Problems of Economics,* Vol 2 no. 3, pp 12-20.

Du Plessis, AJ, Sun, J, Marriott, RJ 2012. Comparison of cultural diversity in a traditional Asian and a Western joint venture in China: some empirical evidence. Paper presented at the *World Business and Economics Research Conference*, 10-11 December, Auckland, New Zealand.

Du Plessis, AJ 2009. 'An overview of the influence of globalisation and internationalisation on domestic Human Resource Management in New Zealand'. *International Review of Business Research Papers* vol. 5, no. 2, March: pp. 1-18.

Du Plessis, AJ 2006. Human resource's role in future priorities and current capabilities in New Zealand organisations. *International Journal of Knowledge, Culture and Change Management,* vol. 6, no. 1, pp. 69-78.

Dribin, L 2009. 'Are You Ready for Performance and Measurement Improvement?' *Journal of the Quality Assurance Institute,* vol. 23, no. 3, pp. 20-23.

Elg, M & Kollberg, B 2009. 'Alternative arguments and directions for studying performance measurement.' *Total Quality Management & Business Excellence,* vol. 20 no. 4, pp 409-421.

Grundy, T 2006. 'Rethinking and reinventing Michael Porter's five forces model.' *Strategic Change,* vol. 15 no. 5, pp. 213-229.

Iselin, ER, Mia, L & Sands, J 2008. 'The effects of the balanced scorecard on performance: The impact of the alignment of the strategic goals and performance reporting.' *Journal of General Management,* vol. 33, no. 4, pp. 71-85.

Ittner, CD & Larcker, FF 2003. 'Coming Up Short on Nonfinancial Performance Measurement.' *Harvard Business Review* (November), pp1-9.

Jørgensen, HH, Owen, L & Neus, A 2009. 'Stop improvising change management!' *Strategy & Leadership,* vol. 37, no. 2, pp. 38-44.

Kaplan, RS & Norton, DP 1992. 'The Balanced Scorecard--Measures That Drive Performance.' *Harvard Business Review,* vol. 70, no. 1, pp. 71-79.

Kaplan, RS & Norton, DP 2008. 'Mastering the Management System.' *Harvard Business Review,* vol. 86, no. 1, pp. 62-77.

Kaplan, RS & Norton, DR 2005. 'The Balanced Scorecard: Measures That Drive Performance. (cover story).' *Harvard Business Review,* vol. 83, no. 7/8, pp. 172-180.

Kaplan, RS, Norton, DP & Rugelsjoen, B 2010. 'Managing Alliances with the Balanced Scorecard.' *Harvard Business Review,* vol. 88, no. 1/2, pp. 114-120.

Lee, YC & Lee, SK 2007. 'Capabilities, Processes, and Performance of Knowledge Management: A Structural Approach.' *Human Factors and Ergonomics in Manufacturing,* vol. 17, no. 1, pp 21–41.

Lockwood, NR 2007. 'Leveraging Employee Engagement for Competitive Advantage: HR's strategic role:' *Society for Human Resource Management Research*.

Lonnqvist, A, Kianto, A & Sillanpaa, V 2000. 'Using intellectual capital management for facilitating organizational change.' *Journal of Intellectual Capital*, vol. 10, no. 4

Pang-Lo L & Chih-Hung, T 2007.' Effect of Knowledge Management Systems on Operating Performance: An Empirical Study of Hi-Tech Companies using the Balanced Scorecard Approach.' *International Journal of Management,* vol. 24, no. 4, pp. 734-743.

Perez, JR & Pablos, PO 2003. ‘Knowledge management and organizational competitiveness: a framework for capital human analysis.’ *Journal of Knowledge Management,* vol. 7, no. 3, pp. 82-91.

Phillips, PA 2007. ‘The Balanced Scorecard and Strategic Control: A Hotel Case Study Analysis.’ *Service Industries Journal,* vol. 27, no. 6, pp. 731-746.

Rampersad, HK 2008. ‘The way to a high-performance culture with the Total Performance Scorecard.’ *Strategic Change,* vol. 17, pp. 43–55.

Saunders, M, Lewis, P & Thornhill, A 2007. ‘Research methods for business students’ (4th ed.). Harlow, England: Prentice Hall.

Schulte, WD 2005. ‘The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment.’ *Academy of Management Learning & Education,* vol. 4, no. 4, pp.519-522.

Smith, M 2005. ‘The balanced scorecard’. *Financial Management (14719185)*, pp. 27-28.

Townsend, P & Gebhardt, J 2008. ‘Employee engagement – completely.’ *Human Resource Management International Digest,* vol. 16, no. 3, pp. 22-24.

Zikmund, WG, Babin, BJ, Carr, JC & Griffin, M 2013.’ Business research methods’ (9th ed.). Mason, OH: South-Western, Cengage Learning.