

actKM Online Journal of Knowledge Management

Volume 2, Issue 1
2005

ISSN: 1834-3554

Balanced Scorecard typology and organisational impact

Aurel Brudan



www.actkm.org

Proceedings from the actKM Sixth Annual Conference 2005

This journal and individual papers published at www.actkm.org

First published in Australia in 2005 by actKM Forum

Selection and editorial matter copyright © actKM Forum 2004/2005

Individual papers copyright © individual contributors 2004/2005

All rights reserved. Apart from fair dealing for the purposes of study, research, criticism or review as permitted under the Copyright Act, no part of this journal may be reproduced by any process without written permission from the publisher.

ISSN: 1834-3554 (Online)

Cover design by actKM Forum.

Copyediting by Maxine James.

The actKM Online Journal of Knowledge Management is a peer-refereed journal. Full papers submitted for publication are refereed by the Consulting and Associate Editors through an anonymous referee process.

Editorial Board

Editor

Dr Paul James, actKM Forum

Consulting Editors

Associate Professor Trish Milne, University of Canberra

Associate Professor Shankar Sankaran, Southern Cross University

Balanced Scorecard typology and organisational impact

Aurel Brudan, PhD candidate, National Graduate School of Management, Australian National University, Canberra

aurel.brudan@anu.edu.au

Abstract

The Balanced Scorecard (BSC) emerged as a highly regarded management tool, witnessing rapid global adoption. However, initial promises were only partially fulfilled and the value added by implementations is under expectations. The unique characteristics of the concept - continuous evolution, confusing literature and ambiguity - make the BSC misunderstood and misused. Future research needs to clarify the nature of the BSC, its role and the impact of BSC implementations on organisations. This paper presents a new research project designed to answer these questions. It presents an overview of the BSC adoption, the emergence and evolution of the tool as well as the key components, roles and an estimated typology map. The key research questions, methodology and contribution to theory as well as practice are also outlined.

Keywords

Balanced Scorecard, Polyvalent management tool, Crystallising function, Strategic management, Management systems, Organisational impact

Introduction – promising concept, wide adoption, limited results

The Balanced Scorecard (BSC) emerged in the early 90s as a new management concept and was immediately embraced by both the academic and corporate worlds. Over the last ten years, the potential of this concept has been recognised in various forums. In 1997 Harvard Business Review considered that the BSC was one of the most influential ideas of the twentieth century (Calabro, 2001:5). The American Accounting Association gave it an award as the best theoretical contribution in 1997 (Norreklit, 2003:609), while other renowned academics recognised it as one of the major innovations in performance management (Ittner and Larcker 1998:205, Otley 1999:377, 2003, Andon, Baxter and Mahama 2005:29).

The uptake of the BSC in a relatively short period of time is quite impressive. The Balanced Scorecard Collaborative (the initiators of the concept in 1992), claim that according to Bain & Company by 2002 the BSC was already used by half of the Global 1000 companies (Calabro, 2001:1). Also, according to Dave Norton (quoting Bain & Co. figures) between 40% - 45% of the Fortune 1000 companies in Europe are using this new concept, while in Australia, local research show the estimated the rate of adoption at 35% (Calabro, 2001:1). Perhaps the most comprehensive evaluation of the global BSC adoption is given by the 'tools and techniques' survey administered annually by Bain & Company to senior executives on five continents. The BSC was introduced in the survey in 1996, when 39% of the respondents claimed to be users. For about five years this figure remained fairly constant, and then it peaked at 62% in 2002 (Figure 1). Overall, the BSC is considered one of the tools with the sharpest increase since being introduced in the survey, with an 18% change, although its usage dropped slightly in 2004 at 57% (still above the average of 54%). The same survey ranked the BSC 13th in the top 25 most used management tools, slightly higher in Asia (10th) and Latin America (8th) (Rigby, 2001a:143, 2003:6, 2005:7).

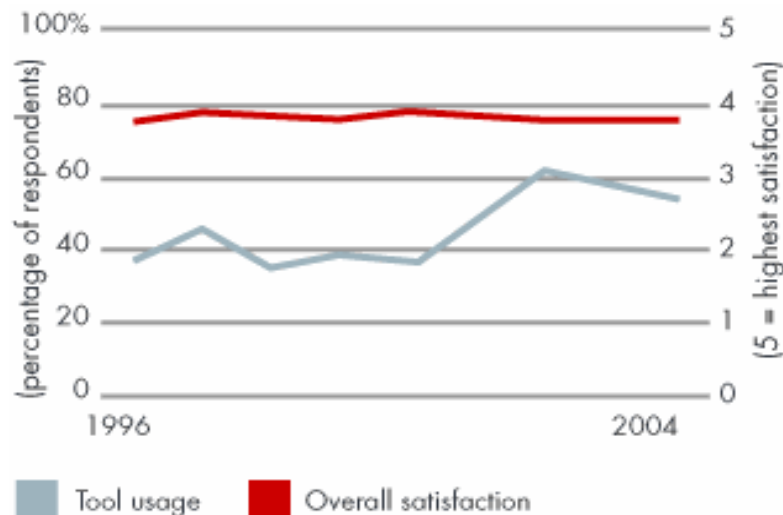


Figure 1: The global use of the Balanced Scorecard and user satisfaction

Source: Bain and Company website, 2005

Despite the accolades and idealistic scenarios that abound in the BSC literature, the promises of the concept have yet to convert into widespread success in practice. According to Paul McCunn, a KPMG management consultant, the failure rate of BSC implementation is 70%, a figure based on research conducted by Claude Levy, a professor at the Free University of Amsterdam (McCunn, 1998:34). The annual Bain & Co. ‘tools and techniques’ survey administered worldwide by the company estimated that in 2004, only 15% of the users were extremely satisfied with the tool and 6% were dissatisfied. While the percentage of dissatisfied users can be considered modest, the proportion of extremely satisfied users is below average and less than half compared to the most popular tool. The defection rate of 7% is the fourth highest (behind Business Process Reengineering, Economic Value-Added Analysis, Core Competencies and at the same level with four other tools) in the list of 25 tools analysed in the Bain & Co research (Rigby and Bilodeau, 2005:25). Also, research conducted by The Hackett Group in 2004, estimated that less than 20% of the typical implementers have in place mature balanced scorecards that are generating business value. According to Hackett’s 2004 Finance Book of Numbers, the primary reasons for this were overweighting the scorecards with historical financial information and the use of too many metrics (The Hackett Group, 22 Oct 2004 News Release).

Current problem – the need for a BSC typology map

Overall, these surveys paint a picture of a promising concept, widely adopted, but that so far has failed to deliver consistent user satisfaction as a large proportion of implementers fail to maximise the value added by the use of the BSC. Empirical observations of both existing theory and implementation case studies support the assumption that one of the main barriers in the successful implementation and use of the BSC is the issue of the concept being misunderstood and misused.

The Balanced Scorecard concept is well known for its malleability, being a very fluid concept, subject to considerable adaptation and interpretation. However, the numerous applications and adaptations of the BSC are not clearly documented in the existing literature on this topic. As a result, there is a considerable degree of confusion surrounding this subject in both practice and theory. Almost every article about the BSC has a different version of its use and almost every BSC implementation has a different approach to BSC and its utility.

Thus, researching blindly the topic ‘Balanced Scorecard’, evaluating and generalising the BSC impact on organisations that implemented it can be a very difficult, and possibly irrelevant exercise as each organisation actually has a different interpretation of the concept presented under this term.

For this reason, one of the issues yet to be resolved in existing BSC literature is the lack of an overarching analysis of the BSC concept, including origins, evolution, types, characteristics, roles and impact on management theory and practice.

This research aims to develop theory that clarifies the interpretation and use of the BSC and links it to organisational impact.

One of the objectives of the research is the development of a BSC typology map, which involves identifying the main types of BSC implementations. Additionally, the research will analyse the various ways in which the BSC can be used in organisations, defining the roles of the BSC and linking them to the BSC typology map. A third objective of the research is exploring the linkage between BSC types, roles and user satisfaction, analysing if and how organisations get value out of certain approaches of the BSC concept.

The main research question investigates the relationship between BSC typology and the perceived impact of the BSC on organisations.

Balanced Scorecard – definition, emergence, evolution

The evolutionary nature of the BSC, the confusing literature and the general ambiguity in its use are serious challenges for the future of the concept and possible obstacles in achieving value added, successful implementations. Further exploration of the concept and its impact is needed to address these challenges by offering research grounded answers and possible solutions

Definition

Clarifying the nature of the BSC is essential in establishing a more standardised approach to the presentation and use of the tool. The assumption made is that the best term to define the nature of the BSC is as a ‘management tool’. The basis of this assumption is that the BSC as a tool can be integrated in various frameworks to enhance the usage of management systems in organisations. The term ‘management tool’ can mean many things, but often involves a set of concepts, processes, exercises and analytical frameworks. (Rigby, 2001b:139). One of the best definitions of the BSC is offered by Norton and Kaplan: ‘*A tool that translates an organisation's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system.*’ (Balanced Scorecard Collaborative, 2005, Online). However, at the moment there is limited research analysing the nature of the BSC and there is no standardised way of defining the concept.

Precursors of the BSC concept

The origins of the concept can be traced back to various sources. One of its precursors is the 'tableau de bord', a management tool introduced in France in the 1930s and described as a 'dashboard' used by managers to monitor the operational performance of their organisations (Bessire and Backer, 2005:646). The 'tableau de bord' has been quite popular in France ever since its introduction and the majority of the large companies are using it, however, due to the limited availability of translated literature it had a minimal overseas diffusion (Bontis, Dragonetti, Jacobsen and Roos, 1999a:396). Also, General Electric used a BSC-type system, designed to be used as a performance management system in the early 50's (Hendricks, 2004:1).

Emergence of the BSC concept

The Balanced Scorecard is the result of a year long research project led by Robert Kaplan, Professor of Leadership Development at the Harvard Business School and David Norton, Founder and President of Balanced Scorecard Collaborative, Inc. The project was conducted with 12 companies on the leading edge of performance measurement in 1990-1991 to determine what successful companies were measuring. This research began with the hypothesis that financial measures, taken in isolation, were insufficient to drive performance and that a more balanced view was required. This 'balanced view' evolved into the Balanced Scorecard which includes financial measures and those measures which drive financial performance, namely customer, business process (internal), and learning and growth (skills and knowledge). Over time, the concept evolved into its present manifestation as a management tool used for various purposes such as performance measurement, management, strategy implementation and strategic management.

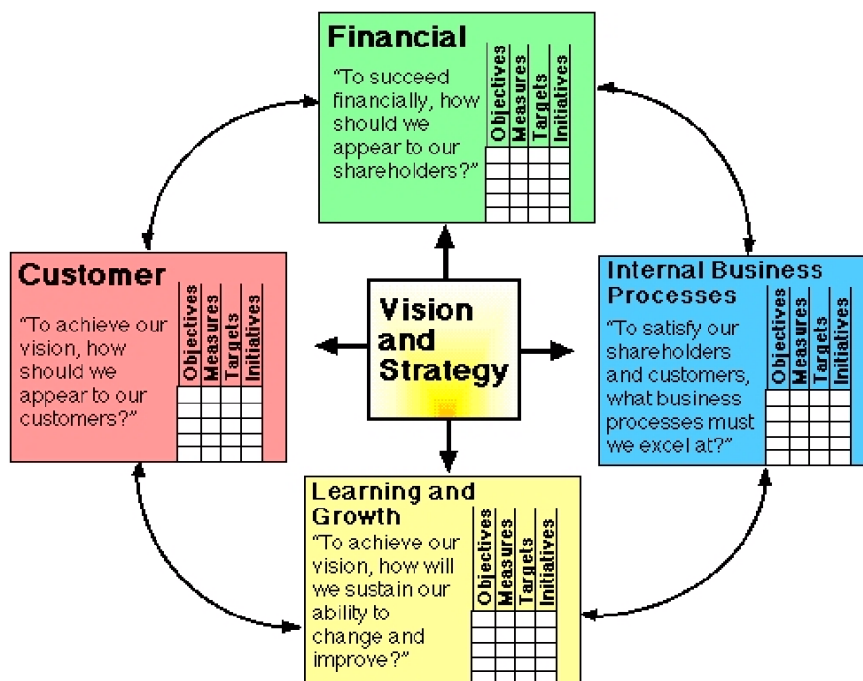


Figure 2: The global use of the Balanced Scorecard and user satisfaction.

Source: Balanced Scorecard Institute Website, 2005

Evolution of the BSC concept

One unique characteristic of the BSC concept is its evolving nature, as it witnessed a continual transformation process ever since its launch. The evolution of the BSC is clearly outlined by following the path of publications by its authors, who along the way also formed Balanced Scorecard Collaborative as a company dedicated to the promotion of the concept.

1992 - Performance measurement tool

Kaplan and Norton introduced the BSC to the wider public in 1992. The concept was presented at that time as a performance measurement tool, used to capture besides the financial measures, the value-creating activities from an organisation's intangible assets (Kaplan and Norton, 1992: 71). A year later, in a new article, they made the first references about the connection between performance metrics and strategy (Kaplan and Norton, 1993: 135).

1996 - Performance management system

By 1996, the BSC was labelled as a strategic performance management system, which formed the basis of a rallying framework for strategic processes, resource allocation, budgeting and planning, goal setting and employee learning (Kaplan et al., 1996a: 85). In the same year they published the first book on the topic, which included instructions on how the concept should be implemented (Kaplan et al., 1996b: 273).

2000 - Strategic management and control system

The shift towards a more strategic use of the BSC was confirmed in a new article published in 2000 (Kaplan et al., 2000: 176). The following year, their second book (Kaplan et al., 2001:100) brought more clarity on the move to use the Balanced Scorecard as an all encompassing strategic management and control system.

Table 1: BSC evolution in the Norton and Kaplan literature

Year	Publication	Title	Approach to BSC
2004	Article	How the Balanced Scorecard complements the McKinsey 7-S model	Tool for aligning all organisational variables and processes for successful strategy execution
2004	Book	Strategy Maps: Converting Intangible Assets into Tangible Outcomes	Strategic alignment tool in an intellectual capital context
2004	Article	Measuring the strategic readiness of intangible assets	Strategic readiness of intangible assets
2001	Book	The Strategy-Focused Organisation: How Balanced Scorecard Companies Thrive in the New Business Environment	Encompassing strategic management and control system
2000	Article	Having trouble with your strategy? Then map it	Focus on strategy mapping
1996	Book	The Balanced Scorecard: Translating Strategy into Action	Implementation guidelines
1996	Article	Using the balanced scorecard as a strategic management system	Strategic performance management system
1993	Article	Putting the Balanced Scorecard to Work	First references about performance metrics/strategy connections
1992	Article	The Balanced Scorecard - Measures That Drive Performance	Performance measurement tool
1990-1991	N/A Research project	What successful companies are measuring	Emergent concept

Source: Author, 2005.

Thus, by 2002, within a span of ten years, the Balanced Scorecard evolved according to Kaplan and Norton from a measurement tool to a tool used by executives to implement and direct strategies throughout their organisations. In their 2004 article, they take the concept even further, focusing on the use of the Balanced Scorecard as a strategic alignment tool in an intellectual capital context (Kaplan et al., 2004a: 83).

Balanced Scorecard – components, roles, impact

While theoretical frameworks and implementation models abound in the BSC literature, the area that deals with the impact of the BSC on organisations implementing it is extremely dry. However, due to the fluidity of the BSC concept, establishing a typology map, outlining BSC components and roles needs to be the first step in undertaking BSC evaluation research.

Components of the BSC

The components of the BSC concept can be grouped into four categories, three of them linked to the elements of the BSC and the fourth one that describes the scale of implementation. The first group is the upstream category, containing components that define the context of the BSC. The corporate philosophy describes the vision, mission, values, and key competencies of the organisation. The organisational strategy and business plan formulate the strategic choices made and the actions to be taken. The destination statement is a description, with quantitative detail of what the organisation is likely to look like at an agreed future date.

The second group is the core category, containing the key elements of the BSC: 20 to 25 strategic objectives, each associated with one or more measures, with corresponding targets and assigned to one of four perspectives. The major causal relationships between strategic objectives are documented in a graphical representation of the organisational strategy and the processes and systems necessary to implement that strategy.

The third group is the downstream category, formed by activities that integrate the core of the BSC in the organisation. A key activity is data gathering, which contributes to periodically populating the BSC with data. Performance reporting deals with the production and presentation of performance reports based on the BSC data. Initiative management represents the next step of action that is taken based on the performance report findings.

Table 2: Grouping of the BSC Concept Components

		Upstream - Context	Depth
		Corporate philosophy	Enterprise Level BSC
		Strategy & Business Plan	
		Destination Statement	
		Core	Group Level BSC
		Measures & targets	
		Strategic Objectives	
Downstream - Integration	Strategy Map		Individual Level BSC
Data gathering			
Performance reporting			
Initiative/integration management			

Source: Author, 2005.

Changing the lens of analysis, the fourth category of BSC components relates to the depth of the implementation and use. The top level of implementation is the enterprise level, covering the entire organisation. At the opposite pole, BSC implementations can drill down to the individual level, aligning personal scorecards to the enterprise one. In between, there are

several possible levels, such as divisional, group and team level scorecards, all linked to the enterprise and personal scorecards.

The roles of the BSC

Strategic management

As a strategic management tool, the BSC is used in both strategy formulation and organisational alignment. In the strategy formulation context, the BSC contributes by structuring information and visualising the dynamics of strategy through one of its secondary tools, the Strategy Map.

Operations management

At operational level, the BSC is used as a performance measurement tool, providing not only information on whether or not business targets were achieved but also clarifying the impact on corporate strategy. This way, the BSC is a source of business intelligence, used in various organisational decision making processes, such as its initiative generation and prioritisation.

Human resource management

A complete BSC implementation cascades the corporate scorecard at divisional level, team level and finally at individual level. Personal scorecards have a double function. On one hand they define the personal contribution to strategy implementation. On the other hand, by assigning and monitoring personal targets, they could be used in the performance assessment process. Thus, the BSC is also used as a performance management tool and consequently integrated in the human resources and compensation strategy.

Marketing communications

Perhaps one of the most value added roles that the BSC could have is as an internal communication tool. In this role, the BSC communicates both strategic and operational information in a structured, standardised format, filling one of the most important gaps in today's organisational environment – communication and alignment. The BSC tells the story of the strategy and how everyone in the organisation contributes to it (Kaplan and Norton, 1996a:62). The BSC is also used in external communication, in supplier management and other general communication with customers and shareholders.

Knowledge management

Another important role that the BSC fills in a knowledge management context is of measuring intangible assets. There is a considerable amount of literature analysing the BSC in parallel with intellectual capital (Bontis et al. 1999c: 391, Sveiby, 2004: 2). Thus, a BSC is one of the tools that is used to bring forth intellectual capital and manage intangible resources (Mouritsen, Larsen and Bukh, 2005:9).

Financial management

In a financial management context the BSC is used to inform budgeting and for evaluating potential expenditures for their impact (Andon et al., 2005:32). Traditional budgeting emphasises financial performance over the pursuit of strategy, however by using the BSC, organisations are able to align budgeting to strategy.

Although the BSC is used in various ways, academic articles and case studies focus mainly on the measurement and control roles of the BSC. The literature is virtually polluted with idealistic scenarios and implementation case studies that present the BSC in this light. The assumption is that, influenced by this current of opinion, implementations focused on the strategy and measurement side of the BSC, giving too little consideration to the other roles the BSC could fulfill in organisations. More attention needs to be given to the polyvalent role of

the BSC and how approaching the BSC as a polyvalent management tool might influence implementation success.

BSC Typology Map

Existing BSC classification focuses on the evolution of the concept, outlining three BSC generations: focusing on performance measurement, then performance management and in the end strategic management (Cobbold and Lawrie, 2002). As this classification is mostly derived from the evolution of literature and is not based by academic research, there is a need for an independent classification of BSC types of implementations. Based on the BSC components and the use of the BSC in organisations, the following BSC typology map is proposed.

Type 1 - Reporting Balanced Scorecard

The Reporting Balanced Scorecard is the most basic type of BSC and is represented by a list of financial and non-financial indicators grouped under several perspectives. Only a selective set of components (three) are used by this BSC type: measures and targets as core components, data gathering, and performance reporting as integration components. This type of BSC does not include upstream/context components, as it is not linked to strategy.

The main use of the Reporting Balanced Scorecard is as an internal/external communication tool, used for reporting. A relatively popular use of this type of BSC is as a knowledge management tool, used to track both tangible and intangible assets under different organisational perspectives. Overall the focus of this type of BSC is on balanced reporting of both financial and non-financial indicators. It represents a very basic form of BSC, as described in the first Kaplan and Norton article on the topic in 1992. Similar tools to this type of BSC are the Scandia Navigator (Edvinsson and Malone, 1997) and the Intangible Assets Monitor (Sveiby, 1997), both referred to as intellectual capital measuring tools.

Table 3: BSC typology /Concept Components matrix

No.	BSC Type	Upstream Components	Core Components	Downstream Components
1	Reporting BSC	- - -	Measures & targets - -	Data gathering Performance reporting -
2	Functional BSC	Strategy & Business Plan - -	Measures & targets - -	Data gathering Performance reporting Initiative management
3	Control BSC	Corporate philosophy Strategy & Business Plan -	Measures & targets Strategy Map -	Data gathering Performance reporting -
4	Alignment BSC	Corporate philosophy Strategy & Business Plan Destination Statement	Measures & targets Strategy Map Strategic Objectives	Data gathering Performance reporting -
5	Complete BSC	Corporate philosophy Strategy & Business Plan Destination Statement	Measures & targets Strategy Map Strategic Objectives	Data gathering Performance reporting Initiative/integration management

Source: Author, 2005.

Type 2 - Functional Balanced Scorecard

The Functional Balanced Scorecard is a variation of the Reporting BSC, consisting of both financial and non-financial indicators grouped under different perspectives, the difference being its focus on functional areas. Examples of this type of BSC are: the IT Balanced Scorecard, the HR Balanced Scorecard, the Marketing Balanced Scorecard, or the

Distribution Balanced Scorecard. The components of the Functional BSC are similar to the reporting one, however, in addition to the core component – measures and targets - it also includes a complete set of downstream/integration components as well as one element from the upstream-context set of components – Strategy and Business Planning.

The main use of this type of tool is performance measurement for different functional areas within the organisation, the secondary roles being internal/external communication and Human Resources Performance Management. Overall, this type of BSC has a strong focus on a functional area within an organisation, not capturing all the corporate strategic objectives, but just the ones that relate to the specific contribution of the functional area.

Type 3 – Control Balanced Scorecard

The Control BSC is a corporate BSC implementation that has most of the components of the concept as described by Kaplan and Norton. However it lacks the Destination Statement, the use Strategic Objectives and the Initiative Management System. The main role of the Control BSC is Corporate Performance Management, secondary roles being: Human Resources Performance Management, Internal/External Communication and Intellectual Capital Management.

Type 4 – Alignment Balanced Scorecard

The Alignment BSC is a corporate BSC implementation that takes a step further towards a complete BSC implementation, by using in addition to the components of the Control BSC a Destination Statement and Strategic Objectives.

Strategic Management, with a focus on Alignment is the main role of this type of BSC, secondary roles being: Corporate Performance Management, Human Resources Performance Management, Internal/External Communication, Intellectual Capital Management, Financial Management and Project Management.

Table 4: BSC typology /roles and usage rank matrix

No.	BSC Type	Primary Role	Other roles	Estimated usage rank
1	Reporting BSC	Internal/External Communication	Intellectual Capital Management	Third most common
2	Functional BSC	Performance Measurement	Performance Management (HR) Internal/External Communication	Second most common
3	Control BSC	Corporate Performance Management	Performance Management (HR) Internal/External Communication Intellectual Capital Management	Most common
4	Alignment BSC	Strategic Management - Alignment	Corporate Performance Management Performance Management (HR) Internal/External Communication Intellectual Capital Management Financial Management Project Management	Fourth most common
5	Complete BSC	Strategic Management – Alignment and Control	All roles Managed towards polyvalent BSC use	Fifth most common

Source: Author, 2005.

Type 5 – Complete Balanced Scorecard

The complete BSC is the most comprehensive type of BSC implementation as described by Kaplan and Norton (1996a, b, 2001, 2004a, 2004b, 2005). It has a full set of components and

its main role is Strategic Management, focusing on both Alignment and Control. This type of BSC is also proactively managed towards a wide integration in organisational systems.

The impact of the BSC on organisations

There is limited research analysing the impact a specific approach to BSC has on implementation success. However, considering the focus on measurement and control of most implementations and their relative limited success, the assumption made is that methodology and approach, not internal/external environment were the causes of most failed implementations. The BSC can bring structure and alignment in an otherwise fluid and vague organisational environment. The BSC can also be replicated in a similar format within the organisation at various levels, thus creating new organisational links and facilitating communication. Perhaps the best way to describe this process is crystallisation, with the BSC acting as a polyvalent management tool with a crystallising function. According to Kaplan and Norton, the BSC should be used as a communication, informing and learning system, not a controlling system. Thus, promoting the crystallising function of the BSC organisations might be more successful in shifting the focus from measurement and performance management to a more strategic, polyvalent approach to BSC. More research is needed to analyse how the BSC is perceived in organisations already using the BSC and if practice confirms the assumptions made.

Methodology and analysis methods

Investigating this topic would involve hypothesis building based on the study of secondary data (existing literature and case studies) and then testing the hypothesis by surveying organisations that implemented the BSC in some sort of format. Following the survey, five case studies corresponding to each BSC type will be developed for a more in-depth characterisation of the BSC typology.

Stage 1 is represented by secondary research for hypothesis building with the objective of enabling documented construction of BSC typology. A second component is the developing of the Australian BSC users database, structured in five categories: private sector – manufacturing; private sector – services; public sector – funded agencies; public sector – commercial agencies; and education sector.

Stage 2 is represented by quantitative research by surveying all organisations in the database developed in Stage 1. The survey will assist in testing the validity of the BSC typology map – how organisations fit the assumptions made regarding BSC type and usage in Australia and the correlation between BSC typology and organisational impact on several organisational variables: overall performance, strategic alignment, operational management, human resource management, internal communication, external communication, knowledge management, financial management, and project management. The survey will be done over the web or telephone. The survey subjects will be the Balanced Scorecard Administrators/Managers in the surveyed organisations.

Qualitative research will be conducted in Stage 3, by developing five Case Studies, one for each BSC type, building on the findings of the quantitative research. The organisations will be selected on the criterion as being the most representative for their type, and preferably, from different sectors, according to the survey data obtained in Stage 2 of data gathering.

Contribution to theory and practice

In recent years there has been an increased focus on strategic management and the development of tools to assist senior management in the formulation and implementation of strategy. The BSC proved to be a prime candidate, however it came with a legacy of measurement and performance management that contaminated a great deal of implementation efforts. As a result, refining the concept and adopting a more comprehensive approach to BSC as a polyvalent management tool would greatly benefit managers by offering a more structured overview of the concept. Having a clear map of the main types of approaches to the BSC and linking them to key roles and the impact on organisations that use them is of particular interest to managers as they can make more informed decisions about current and future BSC implementations, based on academically validated research, and not just on the existing consultants' rhetoric. Further research would also help to find out if the crystallising function of the BSC is the answer to the integration and alignment challenges that organisations are facing today. Both managers using the BSC or planning to implement it would benefit from such research, as they will be in a position to fine-tune the use of the concept based on a BSC typology map as well as on the correlation between the BSC use and impact outlined in this research project.

From an academic perspective, clarifying the way the BSC is defined and used would fill a gap in the existing body of literature on this subject. By giving more context to the generic 'Balanced Scorecard', the research will assist in channelling future academic research projects to specific approaches to the BSC, thus improving the relevance of research findings. Researching and validating a BSC typology map is an essential step for further progress of research in this one area of the BSC not sufficiently explored, which is the evaluation of its impact. Several findings about the impact of various BSC types on organisations will also be available as a result of this research project, thus providing a reference point for future research.

Limitations

This research does not attempt to provide an objective description of the processes associated with BSC usage in organisations. This research limits itself to identifying the main categories of BSC implementations and analysing the correlation between the BSC typology and perceived impact on organisations.

References

- Andon, P., Baxter J., Mahama H. (2005, Mar). 'The Balanced Scorecard: Slogans, Seduction, And State Of Play'. Australian Accounting Review, Vol.15, No.1, pp.29-38.
- Balanced Scorecard Collaborative website, Learning Centre Section, FAQs and Glossary, [Available Online] Retrieved June 16 2005 from https://www.bscol.com/bsc_online/learning/faqs/index.cfm?id=D84E0D4C-BDC5-11D4-A8C400508BDC96C1
- Bain and Company [Online resource] Retrieved June 16 2005 from http://www.bain.com/management_tools/tools_balanced.asp?groupcode=2
- Bessire D. and Baker R (2005, Aug), 'The French Tableau de bord and the American Balanced Scorecard: a critical analysis', Critical Perspectives on Accounting, Vol. 16, No. 6, pp. 645-664.
- Bontis N, Dragonetti N., Jacobsen K. and Roos G. (1999, Aug) 'The knowledge toolbox: A review of the tools available to measure and manage intangible resources', European Management Journal, Vol. 17, No. 4, pp 391-402.
- Butler, A., Letza S. R. and Neale B. (1997, Apr) 'Linking the balanced scorecard to strategy'. Long Range Planning, Vol.30, No.2, pp.242-253

- Calabro, L. (2001, February) 'On Balance' [Electronic Version] CFO Magazine, Retrieved June 17, 2005 from <http://www.cfo.com/printable/article.cfm/2991608>
- Lawrie G. and Cobbold I. (2002, May), 'The Development of the Balanced Scorecard as a strategic management tool', Conference Paper presented at PMA Conference, Boston, USA, May 2002
- Hendricks K (2004 Nov/Dec), 'The Balanced Scorecard: To Adopt or not to adopt?' Ivey Business Journal [Electronic Version] Retrieved June 16 2005 from http://www.iveybusinessjournal.com/view_article.asp?intArticle_ID=527
- Ittner, C. D. and Larcker D. F. (1998) 'Innovations in performance measurement: Trends and research implications'. *Journal of Management Accounting Research*, Vol.10, pp. 205-238.
- Kaplan, R. S. and Norton D. P. (1992, Jan-Feb) 'The Balanced Scorecard - Measures That Drive Performance', *Harvard Business Review*, Vol.70, No.1, pp.71-79
- Kaplan, R. S. and Norton D. P. (1993, Sep-Oct) 'Putting the Balanced Scorecard to Work' *Harvard Business Review*, Vol.71, No.5, pp.134-142
- Kaplan, R. S. and Norton D. P. (1996a, Jan-Feb) 'Using the balanced scorecard as a strategic management system'. *Harvard Business Review*, Vol.74, No.1, pp.75-85
- Kaplan, R. S. and Norton D. P. (1996b) 'The Balanced Scorecard: Translating Strategy into Action', Boston, Harvard Business School Press.
- Kaplan, R. S. and Norton D. P. (2000, Sep-Oct) 'Having trouble with your strategy? Then map it' *Harvard Business Review*, Vol.78, No.5, pp.167-176.
- Kaplan, R. S. and Norton D. P. (2001) 'The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment', Boston, Harvard Business School Press.
- Kaplan, R. S. and Norton D. P. (2004a, Feb) 'Measuring the strategic readiness of intangible assets' *Harvard Business Review*, Vol.82, No.2, pp.52-63
- Kaplan, R. S. and Norton D. P. (2004b) 'Strategy Maps: Converting Intangible Assets into Tangible Outcomes' Boston, Harvard Business School Press.
- Kaplan, R. S. (2005) 'How the balanced scorecard complements the McKinsey 7-s model' *Strategy and Leadership*, Vol. 33, No. 3, pp.41-46
- McCunn, P (1998, Dec.) 'The Balanced Scorecard...the eleventh commandment', *Management Accounting* Vol. 76, Nr. 11, pp. 34-36.
- Mouritsen, J., Larsen H. T., Bukh, P.N. (2005) 'Dealing with the knowledge economy: intellectual capital versus balanced scorecard' *Journal of Intellectual Capital*, Vol.6, No.1, pp.8-27
- Rigby, D. (2001, winter) 'Management tools and techniques: A survey'. *California Management Review*, Vol.43, No.2, pp.139-160.
- Rigby, D (2003) 'Management tools survey 2003: Usage up as companies strive to make headway in tough times', *Strategy & Leadership*. Chicago, Vol. 31, No. 5; pp. 4-11
- Rigby, D. (2005) 'Management tools 2005'. Bain and Company [Electronic Version] Retrieved June 16 2005 from http://www.bain.com/management_tools/2005_tools_strategy_brief.pdf pp.1-9
- Rigby, D. and Bilodeau B. (2005) 'Management tools and trends 2005'. Bain and Company [Electronic Version] pp. 1-72 Retrieved June 16 2005 from http://www.bain.com/management_tools/Management_Tools_and_Trends_2005.pdf
- Sveiby, K. E. (2004), 'Methods for Measuring Intangible Assets', [Online Resource] Retrieved June 16 2005 from <http://www.sveiby.com/articles/IntangibleMethods.htm>
- The Hackett Group, 22 October 2004 News Release [Online Resource] Retrieved June 16 2005 from <https://portal.thehackettgroup.com/portal/site/hackettcontent/index.jsp?epi-content=GENERIC&beanID=808899842&viewID=pressrelease>