# Introduction
# Business performance measurement: unifying theories and integrating practice

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In July 2000 I wrote the preface to the first edition of this book, which read:

Performance measurement is on the agenda. New reports and articles on the topic have been appearing at a rate of one every five hours of every working day since 1994. A search of the World Wide Web reveals over 170,000 sites dedicated to it. In 1996, one new book on the subject appeared every two weeks in the US alone. Since 1994 Business Intelligence, a professional conference organising company based in the UK, has organised some 90 separate events on business performance measurement (BPM). Some 2,700 delegates from over 1,400 different firms attended these conferences. In terms of delegate fees alone, Business Intelligence has accrued over $5 million. Add to this, the revenues received by other conference organisers, publishers, market research firms, software vendors and consultants and it is clear that business performance measurement is a multi-million dollar industry.

Like many multi-million dollar industries developments are rapid. Recent years have seen the introduction of new methods of measurement, such as activity-based costing, throughput accounting and shareholder value analysis. New measurement frameworks, most notably the balanced scorecard and the business excellence model, have taken the business community by storm. Data collected by the US research firm, Gartner, suggest that 70% of firms will be using balanced scorecards to measure business performance by the end of 2000. Other data, such as that collected by the US consulting firm Towers Perrin, indicate that the majority of firms have introduced their balanced scorecards during the last five years. Similar trends can be observed in the field of quality management. Self-assessment frameworks, such as those underpinning the Baldridge Award and European Foundation for Quality Management Award, have generated significant industrial interest and activity. Increasingly authors and commentators are discussing the multiple roles of measurement. It is now recognised that measures allow managers to do far more than simply check progress. The behavioural consequences of measures are frequently discussed. The value of benchmarking and external comparisons is widely understood. The question of what data should be disclosed to external parties – especially shareholders – is actively debated. Organisations such as Skandia, the Swedish Insurance company, and Shell have begun producing supplements to their annual reports. Skandia's supplement discusses the value of the firm's intangible assets, while Shell's 1998 supplement, entitled *Profits and Principles – Does There Have to Be a Choice*?, describes the company's environmental performance. Other organisations, such as the UK's Cooperative Bank, have moved even further and structured their annual report around the "inclusive" framework, proposed by the Royal Society of Arts, Manufacturers and Commerce following their Tomorrow's Company Inquiry. The Cooperative Bank's "Partnership Report", for the 1997 financial year, reviews the bank's performance through the eyes of its seven partners: (i) shareholders, (ii) customers, (iii) staff and their families, (iv) suppliers, (v) local communities, (vi) national and international society and (vii) past and future generations of "Co-operators".

In the academic community people from a wide variety of different functional backgrounds are researching the topic of performance measurement. Experts in accounting, economics, human resource management, marketing, operations management, psychology and sociology are all exploring the subject. One of the major problems with the field is that they are all doing so independently. The accountants discuss their ideas with other accountants. The operations managers talk to other operations managers. Rarely is knowledge generated in one academic functional academic silo assimilated by another. Of course, the end result is a massive duplication of effort. In 1998 the first multi-disciplinary conference on performance measurement was held at Churchill College in Cambridge. Between them the 94 papers presented at the conference cited some 1,246 different books and articles. Of these, less than 10% were cited more than once and only 0.3% were cited more than five times. These figures are symptomatic of a field with vast richness, but unmanageable diversity.

A significant problem this gives is that there appears to be no agreement as to which are the important themes and theories in the field. Everyone writing about the topic has his/her own preferred references and freely cites them. While this diversity is appealing, it also hinders development, because it makes it almost impossible for generations of researchers to build upon the work of others. If the field of performance measurement is to develop as an academic discipline then it is essential that some boundaries are identified and some theoretical foundations agreed. It is hoped that this book will make some small contribution to facilitating this process.

The last six years have seen some significant changes. An updated version of the first paragraph today, writing as I am in Septemper 2006, would read:

Performance measurement is on the agenda. The ISI Web of Knowledge lists 6,365 scientific publications on performance measurement for the time period 2001–5. This is equivalent to one new scientific paper appearing on the subject every seven hours of every working day. Add to this the practitioner and popular literature, and it is easy to see why a Google search now reveals over 50,000,000 websites dedicated to performance measurement. In December 2005 Amazon listed over 3,700 books on performance measurement, while the latest estimates suggest that there are close to 100 software vendors selling performance-reporting packages. Add to the software vendors' revenues the fees collected by conference organizers, publishers, market research firms and consultants, and it is clear that organizational performance measurement is a multimillion dollar industry.

These updated facts and figures tell only part of the story. In the last five years international interest in performance measurement has grown significantly. It is clear that other regions of the world, most notably the Middle East and Asia, are now just as interested in performance measurement as Western economies. Across the world, governments are requiring public services to develop and deploy more sophisticated performance measurement and management systems. And, in light of corporate governance scandals, requirements to disclose information are increasingly being imposed on organizations, by legislators and by the investment community alike.

Of course, topical subjects always attract members of the academic research community – either as critics or advocates. One of the joys of academia is the diversity of views that are held and expressed. In the preface to the first edition of this book I used data from the Performance Measurement Association (PMA) conference to illustrate this point, highlighting that at the PMA's first conference (held in 1998) the "94 papers presented… contained references to some 1,246 different books and articles. Of these, less than 10% were cited more than once and only 0.3% were cited more than five times." Updating these figures provides an equally interesting picture. Recently I completed a citation analysis of scholarly publications in performance measurement (Neely, 2005). The headline finding of this study was that the 1,352 performance measurement papers analysed included 31,646 citations, covering 25,040 works and drawing on 16,697 different lead authors. In the entire data set twelve lead authors were cited between fifty and 100 times, 266 were cited between ten and forty-nine times and 11,929 (71.4 per cent) were cited only once.

The data illustrate that the field of performance measurement still exhibits massive diversity: that 1,352 journal articles can cite 25,040 different works suggests a rich and diverse intellectual heritage. My aim in this volume is to draw together some of this rich diversity. Deliberately, the book draws on authors from a variety of functional disciplines, all of whom are working in the field of performance measurement. Deliberately, it presents a variety of perspectives on performance measurement.

The book opens with a section on functional perspectives and theoretical foundations, in which eminent authors from the accounting and finance, marketing, operations management, supply chain and psychology fields offer their views on measurement.

The second section of the book is devoted to a review of frameworks and methodologies. There are numerous such frameworks and methodologies, each with different strengths and weaknesses. The second section explores these, and raises questions about the theoretical validity of some of these frameworks and methodologies from both philosophical and mathematical perspectives.

The third section of book investigates the practical applications and challenges of performance measurement. Once again, this section draws upon multiple themes and disciplines, and the applications of measurement systems in a wide variety of contexts – especially those that are difficult to deal with – are discussed.

The fourth section moves to the arena of public services specifically, exploring approaches to performance measurement in education, the police and health. It also contains a provocatively entitled chapter – "Perversity in public service performance measurement" – that looks into the challenges of developing and deploying measurement systems.

The fifth, and final, section offers some views on emerging issues and trends in performance measurement, including explorations of the link between pay and performance, the reasons why measurement sometimes works when it should not and some of my own thoughts on the emerging phenomenon of corporate performance measurement systems.

The breadth of the book means that it should appeal to a wide audience, encompassing measurement scholars and practitioners. The book deliberately draws on work being undertaken by a diverse group of researchers – diverse in the sense of both geographical location and functional persuasion. The resultant richness illustrates well the diversity inherent in the topic of performance measurement, but it is hoped that the text also offers a reasonable foundation on which future generations of researchers can draw.

By bringing together these widely varied contributions in a single volume it is hoped that at least a start has been made on the process of unifying theories and integrating practice in performance measurement.

## Reference

Neely, A.D. (2005). The evolution of performance measurement research: developments in the last decade and a research agenda for the next. *International Journal of Operations and Production Management*, 25(12), 1264–77.

# PART I

## Performance measurement – functional analyses and theoretical foundations

By its nature performance measurement is a diverse subject. Researchers with functional backgrounds as varied as accounting, operations management, marketing, finance, economics, psychology and sociology are all actively working in the field. As discussed in the introduction, this incredible diversity brings with it both challenges and opportunities. It results in a fascinating richness, but also makes it extremely difficult for each generations of researchers to build upon one another's work. A significant barrier stems from the fact that, traditionally, the way academic careers develop is through functional specialization. Accountants talk to accountants. Operations managers meet with operations managers. Marketing specializts network with other marketing specialists. The result is deep and rich streams of functionally specialized research, often with limited cross-fertilization. The aim of this first section is to begin the process of redressing this shortcoming by drawing together several functionally based reviews of performance measurement.

The section contains six chapters. The first, by David Otley, reviews measurement from an accounting and finance perspective and explores the different roles of measurement. Otley argues that the accounting community implicitly recognizes that measurement systems have three fundamentally different roles in organizations. First, they provide a tool for financial management. Second, they provide an objective for overall business performance. Third, they provide a means of motivation and control. A key theme in Otley's contribution is that far too often academics and practitioners do not recognize these three different roles, and the result can be significant confusion, especially when a measurement system designed to fulfil one role is used for another.

The second contribution comes from Bruce Clark, who provides an extensive review of marketing performance measurement. In his chapter Clark explores the theoretical and practical challenges of measuring marketing performance. He argues that this has become a particularly important issue in the past several years, and is complicated by inconsistent definition, varying organizational roles and the lagged effects of many marketing tools on customer behaviour. The chapter reviews these challenges, and then presents the means by which various scholars and practitioners have addressed them, with a special emphasis on research and practice since 2000. The chapter concludes with several issues and challenges to move marketing performance measurement forward.

The third contribution is based on the operations management perspective and is provided by Andy Neely. He explores the evolution of performance measurement research in operations, examining three different time periods. The first, prior to the 1980s, was a difficult period for the operations management community, as it was largely marginalized from the mainstream academy. The second, 1980–2005, saw significant developments in the field of operations management, stimulated partly by the emergence of Japan as a major economic power, which in turn resulted in a surge of interest in how better to manage operations. The third phase, since 2005, explores the question of "What next?" for performance measurement research in operations.

In the fourth chapter Douglas Lambert and Michael Knemeyer explore the issue of supply chain performance measurement. This contribution builds on some of the themes raised in Andy Neely's chapter, extending the analysis to encompass the entire supply chain. Lambert and Knemeyer argue that many of the so-called supply chain metrics currently in use are no more than logistics measures, and call for a more holistic approach to supply chain measurement.

The fifth contribution is provided by Marshall Meyer, who argues that performance has the potential to become a new management discipline. Starting with the question "What is performance?", Meyer argues that performance measurement, if used correctly, offers the potential for managers to understand which of the activities undertaken generate revenues that exceed costs. Developing this theme, he introduces the notion of activity-based revenue as a measurement methodology and illustrates how this approach has the potential to overcome some of the shortcomings encountered in the measurement systems used by organizations today.

The sixth and final chapter in this first part comes from Michel Lebas and Ken Euske, who ask explicitly: "What is performance?" Lebas and Euske describe performance as one of those “suitcase words in which everyone places the concepts that suit them, letting the context take care of the definition”. They argue that this is one of the reasons why it is so difficult to develop theories in the field, and suggest that performance should be equated with purposeful action taken today designed to produce meaningful results tomorrow. Building upon this theme, Lebas and Euske then develop nine propositions designed to illustrate how performance can best be defined and understood through causal models shared by organizational decision makers.

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Excerpt
More information

# 1 Accounting performance measurement: a review of its purposes and practices

David Otley

## Introduction

Accounting measures of performance have been the traditional mainstay of quantitative approaches to organizational performance measurement. However, over the past two decades a great deal of attention has been paid to the development and use of non-financial measures of performance that can be used both to motivate and report on the performance of business (and other) organizations. The impetus for such developments has come from the bottom and the top of the organization alike. Much performance management at the operational level is carried out using specific indicators of performance that are usually not measured in financial terms. At the most senior levels, although financial performance is inevitably a major consideration, there has been an increasing recognition that other important factors in the effective running of the organization cannot be well captured by such measures. Thus, non-financial performance measures have undergone significant development, to the relative neglect of the development of improved financial measures. However, the recent publicity surrounding the marketing of economic value added (EVA®) as an overall measure of company performance by management consultants Stern Stewart can be seen as a sign of a new emphasis on the financial aspects of performance.

The purpose of this chapter is to review the roles and functions of financial measures of organizational performance, and to outline the major features of their development, particularly in the last thirty years. It will be argued that there are three different major functions for the use of financial performance measures, and that, although these uses overlap to some extent, major confusion can be caused by applying measures developed for one purpose to a different use. The three main functions involved are as follows.

(1) The use of financial measures of performance as a tool of financial management. Here the focus is on the functional specialism of finance and financial management. This is concerned with the efficient

 

provision and use of financial resources to support the wider aims of the organization, and to manage the effective and efficient operation of the finance function.

(2) The role of financial performance as a major objective of a business organization. Here some overarching financial performance measure, such as profit, return on investment (ROI) or EVA®, is used to signify the achievement of an important (perhaps the *most* important) organizational objective.

(3) The function of financial performance measures as a mechanism for motivation and control within the organization. Here the financial information provides a "window" into the organization by which specific operations are managed through the codification of their inputs and outputs in financial terms.

Clearly, there is some overlap between these different functions. Efficient financial management is a component of efficient overall management, but it does not subsume the latter. Performance may be managed, in part, by the transmission of corporate objectives (in financial form) downwards as part of the process of strategy implementation, but other mechanisms and measures are generally required to supplement such financial measures. Financial measures may provide substantial insight into the overall impact of operational activities, but other, more specific, measures are generally needed to understand fully and manage the "drivers" of performance. This chapter will therefore first consider each of these major functions independently, and then examine the linkages between them.

What follows is by no means a comprehensive review of the uses to which financial performance measures have been put over the past thirty years. Rather, it is a brief report of the highlights of this area that attempts to draw out the lessons that have been learned, and that attempts to limit the confusion that can be caused by not recognizing the different functions involved.

## A tool of financial management

Any organization, whether public or private, has to live within financial constraints and to deliver perceived value for money to its stakeholders. The role of the finance function is to manage the financial resources of the organization, and to ensure that the financial constraints it faces are not breached. Failure to do this will lead to financial distress, and ultimately, for many organizations, financial failure or bankruptcy.