
Editorial: Performance measurement: theory and practice

Guest Editor: Professor Andy Neely

Centre for Business Performance, Cranfield School of Management

In July 1998 some 200 academics from 30 different countries gathered in Churchill College, Cambridge for the first international, multi-disciplinary academic conference on business performance measurement. Over the course of the next three days some 100 different papers were presented to the assembled audience. Functional disciplines as diverse as marketing, operations management, accounting, sociology, economics, human resource management, quality management and innovation management were all well represented. Topics discussed included the balanced scorecard, self-assessment frameworks, benchmarking, activity based costing, the measurement of customer satisfaction, employee satisfaction, innovation performance and marketing performance. By the end of the conference the question on everybody's lips was 'what next?'. The answer – a special issue of the *International Journal of Business Performance Management* and a second conference – this time scheduled for July 2000.

The papers that follow represent a selection of the best papers presented at the 1998 conference. They illustrate the functional, geographic and topic diversity encountered at the conference. They also contain some very important messages and lessons for academics and practitioners working in the field of business performance measurement. Prior to the conference one of the researchers in the Centre for Business Performance conducted a citation analysis of the papers to be presented. The 94 papers included in the analysis cited between them 1246 different books and papers, written by 1575 different authors and published in 292 different journals. Of these, over 90% were cited in one paper alone and less than 1% were cited in four papers or more. The message – the enormous diversity in the field of business performance measurement. Among the multi-cultural, multi-disciplinary group that attended the conference there was little agreement about which were the important works in the field of business performance measurement. The value of this diversity is that it encourages immense richness in terms of research and discussion. The problem, however, is that it makes it extremely difficult to delineate the boundaries to the field and for future generations of researchers to build upon a solid and respected research base. If business performance measurement is to develop its own identity as an academic field of study then it is essential that researchers in the field reach some consensus about the theory that underpins it. While this special issue will not address this question explicitly, it is hoped that the papers will provide some building blocks from which we can work.

The papers contained in this special issue fall into three broad categories. The first set is concerned with the theory and philosophy of measurement. The second set focuses on measurement in practice, while the third set explores specific types of measurement.

The special issue begins with a paper by Murray and Richardson that explores the broad context for performance measurement by examining the strategic planning process. Murray and Richardson's thesis is that the strategic planning process should not be a

one-off annual event, but instead a continuous learning process. They argue that focus is crucial to effective strategic planning and suggest that executives in many organizations are frustrated by strategic planning processes precisely because they fail to deliver focus. Measures, in Murray and Richardson's eyes, help rectify this shortcoming, because they force managers to be precise about their organizations' priorities and strategies.

The paper by Tonchia builds on these themes and reports the results of an investigation into the extent to which the design of performance measurement systems for manufacturing operations is contingent upon an organization's manufacturing strategy. Through a large scale survey of Italian firms Tonchia collects data which allow him to explore the links between the structure of an organization's measurement system and the strategic choices that have been made in the business. Although only a preliminary study, Tonchia's paper raises some fundamental questions about the nature of performance measurement and opens some potentially fascinating avenues for future research.

In their work Murray and Richardson and Tonchia both assume that measures should be derived from strategy. In certain situations, however, measures are imposed upon organizations by external bodies. Van Peurse and Pratt's paper highlights this as it explores the issue of public accountability in the New Zealand health sector. Van Peurse and Pratt begin by pointing out that most commentators suggest that measures should be derived from strategy and then argue that this is inappropriate in the context of the health sector, as what matters there is the stakeholder's requirements. In fact this argument could be taken more broadly. Strategies are put in place to ensure stakeholder requirements are satisfied. Hence rather than deriving measures from strategies, perhaps in both the public and private sector, measures should be derived from an analysis of the wants and needs of stakeholders. Building upon this foundation Van Peurse and Pratt then present the results of a Delphi study during which they asked stakeholders in the New Zealand health service what factors they would like to see covered in the health service's annual report.

One of the important messages in Van Peurse and Pratt's paper is that measures are used in a variety of different contexts. The final two papers in this first set explore this theme more fully as they discuss the impact of context on measurement. The first, by Clark concentrates on theoretical developments in the field of measuring marketing performance. He provides a wide ranging and thought provoking review of marketing measurement through the ages, with particular emphasis on measures of:

- 1 market orientation,
- 2 customer satisfaction,
- 3 customer loyalty, and
- 4 brand equity.

His paper ends with some personal views on research challenges for the future.

The second, by Austin and Larkey explores performance measurement and management in the context of knowledge workers. As the information age gathers pace, ever increasing numbers of knowledge workers are being employed. Knowledge workers, by definition, have specialist skills and capabilities, which often their managers do not understand. Frequently their motivation is intrinsic, rather than extrinsic, usually because they are driven by curiosity. The question that Austin and Larkey address is how then can such workers be measured and managed.

Having dealt with some of the philosophical issues associated with measurement the special issue then turns to the vexed question of current industrial practice. This set begins with a paper from Ambler and Kokkinaki that reports the results of a significant study of measuring marketing effectiveness. Interviews and surveys carried out in a wide variety of UK firms have allowed Ambler and Kokkinaki to build an up-to-date picture of the different methods used by marketing and financial managers to measure marketing effectiveness. Further research on this and related topics is crucial as there is a severe shortage of data on what managers measure and why.

Stone's paper reviews recent developments in the field of employee satisfaction. She reports the results of a survey of the FTSE 100 and five follow up case studies that explored the use of employee satisfaction as a measure of business performance. Despite the theoretical rhetoric, Stone's research suggests that relatively few organizations use the data gathered through their employee satisfaction surveys in a systematic manner.

Minchington and Francis provide yet another view on current industrial practice. They surveyed members of the Chartered Institute of Management Accounting and asked them about their organization's measurement practices. Particular areas of focus in this study included the extent to which divisions had adopted new measurement methodologies and frameworks, such as EVA® and the Balanced Scorecard, and the reasons why these methodologies and frameworks had been adopted.

The paper by Bennett and James focuses on current industrial practice in the field of environmental performance measurement. In their paper Bennett and James review the environmental reporting practices of a variety of companies in the FTSE 100 and also explore with users of these environmental reports (shareholders, ethical investors, community representatives, pressure groups, etc) what else they would like to see companies disclose. Again this paper is valuable, not least because it provides a comprehensive review of the current state of the art in environmental performance reporting.

Ingle's paper is another that looks at current practice in performance measurement and management, although this time the focus is on a particular industry sector – the automotive industry. Ingle describes an application of the performance measurement questionnaire of Dixon *et al* to the Irish Automotive Components Industry. Once again one of the major contributions of this paper lies in the fact that it seeks explicitly to identify what managers are measuring and why they are measuring it.

The final paper in this set addresses one of the key questions that the upsurge in interest in performance measurement has raised – namely what is the role of management accountants in modern organizations. Kouhy and Vedd address this question in the context of human resource management, by exploring the extent to which management accountants provide data and information to support the development of strategic human resource management. As well as describing current practice in this area Kouhy and Vedd call for greater collaboration between management accountants and human resource professionals in the future.

There are certain specific areas of performance that managers constantly seek to measure. The papers in the final set deal with three of these – customer satisfaction, productivity and innovation. The theme of the paper by Kristensen *et al* is customer satisfaction. They begin by reviewing the evidence that increased customer satisfaction leads to improved business performance. They then explain the background to the Swedish and American Customer Satisfaction Barometers and how these have influenced

the new European Customer Satisfaction Index. Kristensen *et al.* have been involved in one of the early pilot case study applications of this new European index in the Danish Postal Services. They end their paper by describing their experiences with the index and outlining their hopes for the future.

Hannula and Rantanen focus inside the firm and address the question of how to measure and improve productivity. They conducted two separate surveys that together covered some 1000 firms in Finland as part of a study which sought to identify what were the greatest barriers to productivity improvement in Finnish SMEs. They sought to classify these barriers into internal, external and general and present data that suggest that the most significant barriers to productivity improvement are internal and therefore under management's control.

The vexed question of how to measure innovation performance is the one explored by Katila. She discusses the value of patent counts as a measure of radical innovation performance and highlights both the strengths and weaknesses of this measure. Empirical data drawn from 100 biopharmaceutical firms are used to support Katila's arguments and highlight the fact that patent lags of ten years or more are required if patent counts are to provide accurate information about innovation performance.

Increasingly authors are recognizing that measurement has multiple roles. The process of deciding what to measure can help managers clarify strategy and priorities. Clear measures can be used to communicate strategies. Measurement data, once available, can be used both to assess the implementation of strategy and to challenge whether the right strategy is being pursued. Of course a key role for measurement is that the data allow organizational performance to be assessed. The final paper in the special issue – by Brown – explores this subject explicitly and asks – who is best placed to assess an organization's performance. Brown uses data from the *Britain's Most Admired Companies* study to compare executives' perceptions of their organization's performance with expert external observers (analysts and executives from competitors). In general he finds that executives believe their organizations are performing better than the external experts do. The questions that this observation raises is who is right and why do these different parties have such radically different views?