

Journal of Business Research 55 (2002) 363-375

JOURNAL OF BUSINESS RESEARCH

Marketing productivity, marketing audits, and systems for marketing performance assessment Integrating multiple perspectives

Neil A. Morgan^{a,*}, Bruce H. Clark^b, Rich Gooner^a

^aKenan-Flagler Business School, University of North Carolina at Chapel Hill, CB# 3490, McColl Building, Chapel Hill, NC 27599-3490, USA ^bNortheastern University, USA

Abstract

Responding to competitive pressures and financial realities long familiar to other functional managers and academics, corporate shareholders, senior managers, and the Marketing Science Institute have identified marketing metrics and marketing performance measures as top research priorities. However, marketing academics have only recently begun to re-focus on this important research domain. Historically, marketing productivity analysis and the marketing audit concept have dominated approaches to assessing marketing performance. We suggest that both approaches have been fundamentally limited in terms of conceptualization and implementation, but that within each approach are the seeds of a more useful, holistic approach to marketing performance assessment (MPA). Two distinct MPA system approaches are necessary to integrate past efforts, extend our existing knowledge base, and aid management practice — normative and contextual MPA systems. We review past approaches and integrate these with more recent theoretical advances to develop conceptual models of both types of MPA systems and consider their implications for management practice and academic research. © 2001 Elsevier Science Inc. All rights reserved.

Keywords: Marketing performance assessment; Effectiveness; Efficiency

You simply can't manage anything you can't measure. Richard Quinn, VP Quality, Sears Merchandising Group, Management Review, March 1996

1. Introduction

Measuring marketing performance has long been a central concern in marketing (e.g. Parker, 1962; Feder, 1965) and remains a vital issue for many corporations (e.g. Herremans and Ryans, 1995; Fellman, 1998), particularly those in industries where marketing expenditures are significant (e.g. Foster and Gupta, 1994; Sheth and Sisodia, 1995). However, following initial interest and central conceptual development in the 1960s and 1970s (e.g. Sevin, 1965; Kotler et al., 1977), productivity and effectiveness analyses in marketing have advanced only sporadically in both academic and managerial domains (Bonoma and Clark, 1988; Sheth

and Sisodia, 1995). Our contention is that marketing productivity analyses and marketing audit approaches are subsets of the broader issue of marketing performance assessment (MPA), and that neither approach can be isolated from the context of an integrated marketing performance framework.

Both academics and managers currently lack a comprehensive understanding of the marketing performance process and the factors that affect the design and use of MPA systems within corporations. Work in this area has been dominated by two major approaches to marketing performance: marketing productivity analysis and marketing audits. This article critically assesses these two approaches to performance assessment and develops a framework to integrate the two into a normative system for performance assessment. It further outlines important contextual factors affecting the design and use of MPA systems. Both normative and contextual MPA systems have implications not only for management practice but also for knowledge generation and assessment in the academic field of marketing.

This paper makes four contributions to the marketing literature. First, we provide a critical review of the two most significant historical approaches to MPA, highlighting

^{*} Corresponding author. Tel.: +1-919-962-9835; fax: +1-919-962-7186.

E-mail address: morgann@icarus.bschool.unc.edu (N.A. Morgan).

the contributions, implementation problems, and conceptual deficiencies of each. Second, we develop a theoretically anchored, holistic conceptual model of a normative MPA system that explicates our understanding of the marketing performance process. Third, we develop an initial conceptual model of contextual MPA systems highlighting likely contingency, response, and performance variables associated with the design and use of MPA systems in individual corporate contexts. Finally, we discuss the implications of our conceptual model development and highlight important research questions to be addressed as we seek to expand our knowledge of this important but underdeveloped domain.

1.1. Functions of MPA systems

Performance assessment systems are an important type of organizational control system (Anthony, 1988). Control systems are formalized routines and procedures that use information to maintain or alter patterns in organizational activity (Jaworski, 1988; Simons, 1991) to ensure desired outcomes (Tannenbaum, 1968; Lawler and Rhodes, 1976; Anthony, 1988; Jaworski, 1988). The control process may be viewed as consisting of four basic steps: setting a desired performance standard, collecting and communicating information relating to actual performance, comparing this information with the performance standard, and taking corrective action where necessary (Anthony, 1965, 1988; Green and Welsh, 1988; Goold and Quinn, 1990). Critics suggest that management and marketing control systems are often ineffective for several reasons including: illdefined objectives, performance measurement standards that are not well linked with strategy objectives and content, and poor performance appraisal and review (Hrebiniak and Joyce, 1984; Bonoma, 1985; Bonoma and Crittenden, 1988).

As an important organizational control system, five distinct roles of MPA systems are:

- to confirm compliance with non-negotiable standards such as regulations, and industry association standards (e.g. Petty, 1997);
- to monitor overall organizational "vital signs" and provide early warnings of problems that may affect future performance such as increased customer complaints (e.g. Schibrowsky and Lapidus, 1994);
- to provide data inputs for planning and decision making, as well as to aid "generative" learning (e.g. Slater and Narver, 1995);
- to aid strategy implementation by tracking the extent to which strategic marketing objectives and milestones are being achieved (e.g. Bonoma and Crittenden, 1988); and
- to signal marketing priorities and desired outcomes to managers and employees (e.g. Ouchi, 1979; Govindarajan and Fisher, 1990).

From this control system perspective, current knowledge regarding MPA system design and use is fundamentally limited. Given MPA's central importance in the study and effective practice of marketing within organizations, we must better understand past contributions and integrate this base with more recent theoretical work to provide a stronger foundation on which to build.

1.2. MPA: a historical review

Two different but related approaches to MPA are evident in the marketing literature: marketing productivity analysis (an "efficiency" approach) and the marketing audit concept (an "effectiveness" approach). The literature relating to each of these bases is assessed, and contributions to the research domain, possible implementation problems, and conceptual deficiencies are identified below.

1.3. The efficiency perspective — marketing productivity analysis

Productivity concerns the relationship between inputs and outputs (Misterek et al., 1992), and productivity analyses assess the efficiency of the transformation process by which inputs and outputs are linked (Sink, 1985). Marketing productivity analysis is an inherently partial productivity measure in that it is based on a subset of the universe of possible organizational inputs, outputs, and transformation processes (Misterek et al., 1992). Since inputs and outputs concerning marketing performance are often in different units of measurement (Selnes, 1992), marketing productivity analysis usually involves transforming input and output units into some standard measurement unit (usually dollars) (e.g. Bonoma and Clark, 1988).

While many marketing productivity measures have been proposed (see Bonoma and Clark, 1988), the majority either endorse or incrementally extend Sevin's (1965) profit-tomarketing-expense-ratio measures of efficiency (Foster and Gupta, 1994). Input measures suggested as appropriate in assessing marketing productivity have included efforts to operationalize and quantify marketing expenses and levels of investment, head count, quality (employee and decision), effort, and allocation of overhead (Bonoma and Clark, 1988). The output measures most frequently suggested in assessing marketing productivity have included profits, sales (unit and value) market share, and cash flow (Bonoma and Clark, 1988).

Two trends may be observed in the development of marketing productivity analysis since Sevin's (1965) seminal conceptualization. First, there has been a movement towards inclusion of more "non-pecuniary" (non-financial) measures of marketing output such as quality of service (e.g. Bucklin, 1978) in productivity assessments. Second, there have been suggestions that productivity assessments also focus on the adaptability and innovativeness of a firm's marketing efforts (e.g. Walker and Ruekert, 1987) and that MPA systems incorporate more sophisticated multidimensional assessments of marketing productivity (Bhargava et al., 1994; Sheth and Sisodia, 1995).

The marketing productivity research stream may be viewed as making two major contributions to the assessment of marketing performance. First, it has provided a managerially relevant conceptual model of the efficiency dimension of marketing performance similar to those that have been developed in other areas such as manufacturing. Second, marketing productivity analysis has focused attention upon, and greatly increased understanding concerning the identification and measurement of marketing costs (e.g. Sevin, 1965) and revenue (e.g. Feder, 1965).

Despite these contributions, there remain several significant problems with marketing productivity analyses that have severely limited the operational use of the approach. First, marketing productivity analysis assumes that marketing inputs and outputs can be economically and accurately assessed and that such measures will be stable over time. These assumptions have proven difficult to validate, for while "hard" inputs and outputs (particularly costs and revenue) may be relatively easy to accurately measure, less tangible inputs and outputs are more difficult to assess (e.g. Selnes, 1992; Herremans and Ryans, 1995). The stability of assessments may also be problematic as accounting decisions concerning overhead allocation can significantly affect input and output measurement (e.g. Johnson and Kaplan, 1987; Selnes, 1992). Measurement accuracy and stability problems may also be compounded by difficulties in transforming marketing inputs and outputs into common currency. For example, while brand equity has been a much researched topic in the marketing literature (e.g. Keller, 1993; Simon and Sullivan, 1993), there remains no universally accepted way of translating brand equity into a dollar value (e.g. Keller, 1998).

In addition to such implementation problems, marketing productivity analyses also present a number of significant conceptual limitations. First, efficiency measures rely upon knowledge of cause and effect relationships linking inputs managerial actions and outputs (e.g. Govindarajan, 1988). In fact, we have little knowledge concerning such relationships in marketing, and marketing transformation processes remain largely a "black box" (Piercy, 1997; Vorhies and Yarbrough, 1998). In addition, productivity analyses largely ignore time lags between marketing inputs and their effect upon outputs, and the impact of cumulative effects is also impossible to discern using such approaches (Foster and Gupta, 1994). Second, productivity analyses focus upon the amount and not the quality of marketing inputs and outputs. While adjustments may be made such as using price-of-output changes as a reflection of quality, this approach does not consider changes in technology that may simultaneously improve quality and lower price (e.g. Misterek et al., 1992). Finally, while marketing productivity analyses capture the efficiency dimension of marketing performance, they largely ignore other important dimensions such as effectiveness and adaptiveness (e.g. Richardson and Gordon, 1980; Skinner, 1986).

1.4. The effectiveness perspective — marketing audits

A different approach to assessing marketing performance — the marketing audit — was developed in parallel with the emergence of marketing productivity analysis. Emulating accounting's financial audit, the marketing audit originated in an American Management Association report, "Analyzing and Improving Marketing Performances. 'Marketing Audits' In Theory and Practice'' (AMA, 1959) that included seminal works by Crisp (1959), Sessions (1959), Shuchman (1959), and Oxenfeldt (1966). The marketing audit was described as a systematic, critical, and impartial review of the total marketing operation; of the basic objectives and policies of the operation and assumptions that underlie them; and the methods, procedures, personnel, and organization employed to implement the policies and achieve the objectives (Shuchman, 1959).

Kotler et al. (1977) refined the marketing audit concept into a comprehensive, systematic, independent, and periodic examination of a company's or SBU's strategies, objectives, activities, and environment, designed to reveal problems and opportunities, and to recommend actions that would improve the company's marketing performance. The refined audit model identified six proposed components of the marketing audit, and advocated the use of a standard set of procedures. Kotler et al.'s six proposed marketing audit components included:

- 1. the marketing environment audit, consisting of analyses of both the macro environment and the task environment;
- 2. the marketing strategy audit, to assess the consistency of marketing strategy with environmental opportunities and threats;
- 3. the marketing organization audit, designed to assess the interactions between the marketing and the sales organization;
- the marketing systems audit, to evaluate procedures used to obtain information, plan and control marketing operations;
- 5. the productivity audit, assessing accounting data to determine optimal sources of profits, as well as potential cost savings; and
- 6. the marketing function audit, reviewing key marketing functions based primarily on prior audit findings.

The major contributions of the marketing audit approach were that it represented the first systematic attempt to assess marketing effectiveness (cf. Kotler, 1977; Dunn et al., 1994), and that it was in many ways an important precursor of later work on market orientation (e.g. Jaworski and Kohli, 1993) and marketing capabilities (e.g. Day, 1994). However, from an implementation perspective, the marketing audit approach has suffered from significant problems. These include: the lack of suitably qualified independent auditors (Kotler et al., 1977); gaining management cooperation from within marketing (Capella and Seckely, 1978), information availability (Rothe et al., 1997); and generating sufficient communication with top managers to ensure access and understanding of information (Bonoma, 1985). Combined, these problems may explain the lack of implementation of the marketing audit process in companies (Mokwa, 1986).

In addition to implementation problems, marketing audit approaches may also be viewed as having a number of conceptual weaknesses. First, audit approaches are not systematic marketing control systems. Rather, they are disconnected from the overall control system (e.g. Brownlie, 1993) and periodic rather than ongoing assessments of marketing performance (Kotler et al., 1977), with the objective of defining problems but not necessarily providing insights into solutions (e.g. Wilson, 1980). Second, marketing audit approaches were developed as universal, prognostic, normative tools rather than as firm-contingent performance measurement systems. As such, the audit measurement approaches used have been primarily qualitative checklists, with little empirical validation (Rothe et al., 1997), and, therefore, little or no knowledge concerning measurement properties such as validity and reliability.

1.5. An integrative perspective

Our review suggests that neither marketing productivity analysis nor marketing audits alone provide satisfactory bases for MPA. In addition to the implementation problems and conceptual deficiencies discussed, neither approach has been fully developed to reflect advances in a broader conception of organizational performance evident in organizational effectiveness, competitive advantage, and the resource-based view of the firm. Further, the incremental developments in both marketing productivity analysis and marketing audit approaches have not succeeded in integrating existing knowledge. Clearly, the field of MPA requires a new approach that: integrates past productivity and audit approaches; is grounded in current theoretical frameworks explaining organizational performance; and is capable of producing MPA systems that are relevant to management needs and implementable in different corporate contexts.

From this perspective, MPA systems can be viewed of as two distinct but related types — normative and contextual (Blenkinsop and Burns, 1992). A normative MPA system provides a universal conceptual framework that gives insights into the marketing performance process. It is consistent with the systems perspective of organizational effectiveness (e.g. Lewin and Minton, 1986). As representations of understanding of how the marketing performance process operates, such systems are relatively static, changing only as process understanding changes to a significant degree. A contextual MPA system is embedded in the organizational context of specific firms, reflecting prevailing organizational contingencies; it is the application of a normative system in a particular corporate context. Contextual MPA systems are therefore dynamic in the sense that they change to reflect changes in firm- and industry-specific contingencies. Contextual MPAs are more congruent with goal-oriented perspectives on organizational effectiveness (e.g. Lewin and Minton, 1986). We develop models of both types of MPA systems below.

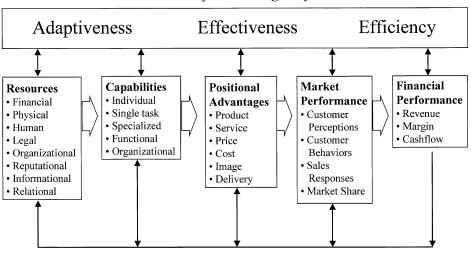
1.6. A normative system for MPA

Marketing performance is a dynamic (e.g. Dickson, 1996) and multidimensional (e.g. Bonoma and Clark, 1988) process. Both of these characteristics are therefore essential in building a normative MPA system. We represent both of these characteristics in a normative model of marketing performance represented in Fig. 1. From a dynamic perspective, competitive advantage theory suggests that marketing performance is a process (Kaplan and Norton, 1993; Hunt and Morgan, 1996) in which four broad stages can be identified: first, sources of advantage, regarding the acquisition, development, and deployment of the resources and capabilities of the firm; second, positional advantages, representing the realized strategy of' the firm concerning the value delivered to customers and the costs incurred by the firm relative to its competitors; third, market performance outcomes, which are customer and competitor responses to the firms' realized positional advantages; and fourth, financial performance outcomes, concerning the costs and benefits to the firm of the achieved level of market performance (Day and Wensley, 1988; Kerin et al., 1990; Day, 1994).

1.6.1. Sources of advantage

Recent advances in our understanding of the resourcebased view (RBV) of the firm suggest that sources of advantage concern both the resources available to the firm and the capabilities which transform these into valuable outputs through marketing strategy (e.g. Day and Wensley, 1988). Resources are firm-controlled assets that serve as inputs to organizational processes and have rent-earning potential (Aaker, 1989; Srivastava et al., 1998). The management and marketing literature has identified many different types of resources including: physical resources such as plant and facilities (Möller and Anttila, 1987); reputational resources such as corporate reputation and brand image (e.g. Aaker, 1989); human resources such as the number and quality of personnel (Aufreiter et al., 1996); organizational resources such as scale and culture (e.g. Moorman, 1995); financial resources such as marketing budget (e.g. Hunt and Morgan, 1995); informational resources such as market data (e.g. Glazer, 1991); relational resources such as the number and quality of existing relationships with customers, channel, and suppliers (Srivastava et al., 1998); and legal resources such as trademark protection and technology patents (e.g. Barney, 1991).

Despite their importance, superior resources are not a sufficient condition for superior performance. It is the degree to which resources can be leveraged into valuable outcomes by using them in conjunction with capabilities that defines the extent of performance (e.g. Dierickx and



Dimensions of Marketing Performance

Stages of Marketing Performance Process

Fig. 1. A normative MPA system.

Cool, 1989; Porter, 1996). Capabilities are the organizational processes that transform available resources into valuable outputs (Vorhies and Yarbrough, 1998). Capabilities are based on the coordination and integration of skills, knowledge, and activities (Möller and Anttila, 1987) and occur at multiple levels in the organization (Vorhies, 1998). These levels include: individual capabilities such as creative advertising copy ideas; single-task capabilities such as media planning; specialized capabilities such as integrated marketing communications management; functional capabilities such as marketing; and organizational capabilities such as new product development.

1.6.2. Positional advantage

Through combining available resources with marketing and other functional capabilities the organization is able to develop and execute competitive strategies (e.g. Day, 1994). The initial outcome of these competitive strategies are the realized positional advantages, which are the positions that the firm is able to actually obtain in the market relative to competitors (e.g. Day and Wensley, 1988; Kerin et al., 1990). Conceptualizations and operationalizations of positional advantages achieved in the strategy literature have focused upon competitive position in relation to product, service, image, channel, cost, and price as the most important dimensions of strategic performance (e.g. Miller and Friesen, 1986; Kim and Lim, 1988; Lawless and Finch, 1989).

1.6.3. Market and financial performance

Market performance concerns marketplace awareness and reactions to realized positional advantages achieved. These may be viewed from customer, competitor, and internal perspectives (e.g. Day and Nedungadi, 1994). From a customer perspective, market performance concerns cognitive and affective responses (e.g. brand awareness and perceived quality) and the subsequent behavioral consequences (e.g. purchase decision making and actions) of prospects and customers in the target market to the realized positional advantages achieved by the firm. From an internally oriented perspective, market performance is manifest in the subsequent effect of customer behaviors as seen in terms of unit sales and sales revenue. From a competitor perspective, market performance is seen in terms of indicators such as share of mind and market share. Ultimately, the sales performance of the firm in combination with the cost of sales in its market(s) will determine financial performance outcomes in terms of revenue, cash flow, and profitability (e.g. Day and Fahey, 1988; Kaplan and Norton, 1993).

1.6.4. Dimensions of marketing performance

As well as being dynamic in the sense outlined above, marketing performance is also a multidimensional process. The marketing literature has focused on three dimensions of marketing performance: effectiveness, the extent to which organizational goals and objectives are achieved; efficiency, the relationship between performance outcomes and the inputs required to achieve them; and adaptiveness, the ability of the organization to respond to environmental changes (Walker and Ruekert, 1987). The literature suggests that these three dimensions of performance may not converge over time due to inherent trade-offs between them (e.g. Ostroff and Schmitt, 1993; Bhargava et al., 1994). For example, cutting marketing communications spend and reducing the size of a sales force may be actions that maximize short-run marketing efficiency. However, such actions are also likely to reduce an organization's ability to sense and respond to changes in customer needs,

and hence lead to lower marketing adaptiveness. Additionally, less marketing communications spending may reduce brand awareness and erode positioning over time and hence reduce marketing effectiveness (cf. Walker and Ruekert, 1987). Normative models of the MPA system therefore need to enable performance to be assessed from efficiency, effectiveness, and adaptiveness perspectives within and between each of the stages of the marketing performance process.

From a normative perspective, MPA therefore involves assessing marketing resources and capabilities as sources of advantage, positional advantages achieved, market performance from customer perceptions through customer behaviors to customer post-purchase outcomes (customer perspective) and unit sales, market share, etc. (firm perspective) to financial consequences (revenue, cash flow, and profits). This model is consistent with historical marketing productivity analysis in allowing a focus upon marketing inputs and outputs but broadens understanding of the "black box" at the heart of most productivity models (Bonoma and Clark, 1988) by also focusing on marketing transformation processes and taking a dynamic perspective by examining the temporal relationships involved. The normative model may also be viewed as an extension of marketing audit approaches to assessing marketing activities and effectiveness, but broadens these approaches by incorporating a dynamic component and allowing assessments of marketing adaptiveness and marketing efficiency, as well as marketing effectiveness.

1.7. Contextual factors in MPA systems

From an individual firm-level perspective, the significant observable variations among firms in their marketing performance monitoring approaches suggests that MPA systems are not a "one-size-fits-all" type of organizational control system. Rather, contextual MPA systems are a subset of the normative MPA system described above that reflect industry and firm specific contingencies. Our understanding of relevant and important contingencies affecting MPA systems within organizations is currently limited by the scant empirical attention paid to this issue in the literature. We propose a model of the contingency, response, and performance factors that the extant marketing and management literatures suggest should be associated with the design and use of MPA systems within organizations in Fig. 2.

1.7.1. MPA system contingency variables

Given the centrality of MPA in the academic study and management practice of marketing, surprisingly little attention has been paid to the key contingencies reflected in the design and use of MPA systems within organizations. However, there are literature-based grounds for expecting that important contingencies are likely to include marketing strategy (e.g. Piercy, 1998), corporate context (e.g. Day and Wensley, 1988), and task environment variables (cf. Jaworski, 1988).

Two marketing strategy variables are highlighted in the literature as potentially important in MPA systems: marketing strategy goals (cf. Govindarajan and Gupta, 1985); and the competitive means proposed for achieving them (cf. Meyer, 1994). MPA systems need to reflect the marketing strategy goals being pursued and the competitive means being used to achieve them in terms of the performance assessment criteria and standard used (cf. Globerson, 1985; Eccles, 1991). Failure to align MPA performance standards with marketing strategy goals and competitive means can lead to two problems: using the wrong measures, i.e. those that allocate marketing effort and resources allocated to activities that do not contribute to effective marketing strategy implementation (false alarms); and failing to use

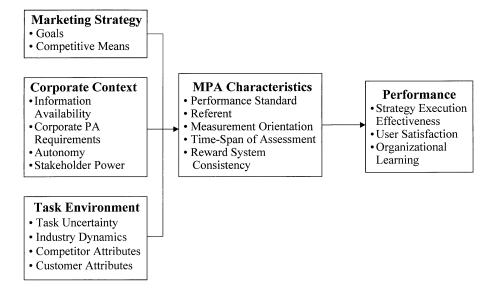


Fig. 2. A contextual MPA system.

the right measure, so that important marketing activities are not addressed (gaps) (cf. Dixon et al., 1990). The existence of such "false alarm" and "gaps" problems in MPA system

(cf. Schmenner and Volmann, 1994). Four corporate context variables affecting MPA systems are suggested as potentially important in the marketing and management literature: information availability; corporate performance monitoring requirements; SBU autonomy; and stakeholder power.

design may be associated with performance outcomes

Information availability concerns the ease with which various kinds of performance data may be collected. It has been suggested in the literature that managers performance assessment system choices may be influenced more by information availability than by strategic goals and competitive means (e.g. Morgan and Piercy, 1996; Piercy, 1997).

Corporate performance assessment requirements concern the performance information required by corporate-level managers for corporate planning and control purposes. Marketing performance measurement systems must be consistent with overall corporate performance measurement systems in order to support effective corporate planning and control. Additionally, the literature suggests that "fit" between MPA systems and those used in other functional areas may significantly aid general management decision making and effective strategy implementation (e.g. Hrebiniak and Joyce, 1984; Keegan et al., 1989).

SBU autonomy concerns the flexibility available to general and marketing managers to set the design parameters of their MPA systems in addition to the reporting of any performance information demanded by corporate-level managers and systems.

Stakeholder power concerns the relative influence of different groups who have an interest in the goals and operation of the firm. Different stakeholder groups may include stockholders, employees, and customers (e.g. Ford and Schellenberg, 1982). The relative influence of the various stakeholder groups may influence the selection, importance and level of different performance standards (e.g. Cameron, 1986) and the choice of performance standard referent and measurement orientation (Morgan and Katsikeas, 1997). Normative MPA approaches often assume that profit maximization is the overriding corporate objective suggesting that profit-based measures of financial efficiency should be the most important performance standard. However, this assumes that stockholders are the most important stakeholder group and that stockholders are primarily interested in short-run financial efficiency, which is often not true (e.g. Brown and Laverick, 1994). Rather, stakeholder influence is likely to vary between firms and this is likely to affect the characteristics of the MPA system adopted (cf. Tsui, 1990).

Four aspects of the task environment for marketing are likely to impact the MPA system used within organizations: environmental uncertainty, industry dynamics, competitor attributes, and customer attributes. Environmental uncertainty concerns the predictability of the environment within which managers operate. Environmental uncertainty has been identified as a significant factor in the design of organizational and marketing controls systems (e.g. Hirst, 1983; Jaworski, 1988). The control literature suggests that in uncertain environments the cost of measuring performance outcomes is higher (e.g. Eisenhardt, 1985) and that uncertainty also affects reliance upon accounting data in performance assessment (e.g. Hopwood, 1972; Govindarajan, 1984). Both increased cost and greater reliance on accounting-type data in uncertain environments are likely to affect the characteristics of MPA systems within organizations.

Industry dynamics concern the time spans involved in the various stages of the marketing performance process. The time taken between acquiring sources of advantage, achieving positional advantages, raising market performance, and the ultimate impact upon observed financial outcomes may vary significantly between industries (e.g. Feder, 1965). Since it is obviously important to assess marketing performance over appropriate time periods, it would seem reasonable to expect that industry dynamics will impact the characteristics of MPA systems used within organizations. Further, this implies that MPA systems may change over time to reflect product and organizational life-cycles (e.g. Richardson and Gordon, 1980; Eccles, 1991).

Competitor attributes describe the characteristics and behaviors of the competitors in the firm's environment. MPA systems may differ depending on these attributes. Day and Nedungadi (1994) propose that concentration of competition in an industry should make competitors more salient in managerial representations of advantage, suggesting systems that emphasize competitor interactions as the drivers of marketing performance. Similarly, threatening competitive behavior (e.g. Clark and Montgomery, 1998) may drive MPA systems toward a more zero-sum, warfare analogous understanding of what drives marketing performance.

Customer attributes describe the characteristics and behaviors of customers, which should affect the nature of MPA systems. For example, concentration of buyers — the extent to which a customer base is dominated by a few buyers seems likely to be an important driver of MPA systems. Aside from the notion that a concentrated customer base leads to increased buyer power and thus increased salience to the organization (Day and Nedungadi, 1994), monitoring marketing performance vs. a few customers is likely to produce a more informal and personal system, while monitoring marketing performance relative to a customer base in the millions lends itself to — indeed, may demand — use of sophisticated measurement systems such as scanner data analysis and data mining (e.g. Blattberg et al., 1994).

1.7.2. MPA system response variables

The literature suggests five MPA system response variables that may be affected by the contingency variables identified above: performance standards, referents, measurement orientation, measurement time span, and reward system consistency.

Performance standards address the criteria against which marketing performance is assessed (e.g. unit sales, customer satisfaction) and the level of performance on these criteria against which performance is assessed (e.g. 20% increase in unit sales, 85% customers scoring above average satisfaction levels or higher). The selection of performance standards is important not simply in terms of assessing the progress of marketing strategies and programs but also for the "signal" that they send to managers and employees concerning desired behavior (Ouchi, 1979; Govindarajan and Fisher, 1990).

Measurement orientation concerns the stakeholder perspective of the performance measures used. The organizational effectiveness and strategic management literatures suggest that different stakeholder frames of reference influence the choice of performance indicators used in empirical research (e.g. Cameron and Whetten, 1983; Hitt, 1988). While the organizational effectiveness and general management literatures have emphasized constituency, stakeholder, and resource perspectives (Pfeffer and Salancik, 1978; Van de Ven and Ferry, 1980), the strategic marketing literature has highlighted three measurement orientations relevant to performance assessment: customer-focused indicators, for instance, customer satisfaction and customer retention; competitor-centered indicators, including relative sales growth and relative market share; and internally oriented indicators, such as profitability and ROI (Day and Wensley, 1988; Day and Nedungadi, 1994). Day and Nedungadi (1994) report that managers primarily emphasize internally oriented representations of competitive advantage, but that this is followed closely by both customer-focused and competitor-centered evaluations.

Referents concern the perspective represented by the level of at which the performance standard discussed above is set and/or against which outcomes are actually assessed by managers using the MPA system. Performance assessments are inherently relative in nature, the question is relative to what? Typically, referents may be based on different perspectives including: the firm's past performance (e.g. last year's sales); competitors' current performance (e.g. current market share); targets set in written marketing plans; and, managers' "realistic" expectations about potential performance outcomes. The selection of a referent to use with an indicator of performance is of importance, as it will significantly affect the performance level observed (Cameron, 1986; Lewin and Minton, 1986). Again, the relative power of various constituencies of the firm such as stockholders, managers, and employees who may have widely differing objectives and expectations concerning desired performance criteria and levels is likely to be a significant contingency variable (Chakravarthy, 1986; Tsui, 1990). Eccles (1991) suggests that companies are better off using current competitor referents than

internally oriented past company performance. That said, we have no empirical knowledge to suggest that the use of any particular performance referent is inherently superior to any other.

Time span of assessment concerns the time period over which performance is measured. Chakravarthy (1986) suggests that monitoring a firm's strategic performance requires measures that capture its potential performance in the future, as well as its current and past performance. Simple reliance upon accounting-based measures is inadequate for these purposes as they reflect the financial outcomes of past strategy (Day and Wensley, 1988). It is clear that the time span of assessment in any MPA reflects the timetable associated with marketing strategy actions and the time lag and cumulative effects required for these to impact outcomes. These contingencies often do not coincide with or overlap financial accounting time periods (fiscal quarters and financial year-ends). While managers may therefore be tempted (or forced) to use time spans of assessment that do not reflect marketing strategy contingencies, the consequences of such actions may be significant and negative in that the "success" or "failure" of a marketing strategy may be assessed before it is reasonable to expect any actions taken to impact observable outcomes.

Reward system consistency concerns the alignment between the MPA system and the system used to evaluate and reward marketing personnel. Alongside performance measurement, reward systems are viewed as a central component of any control system (e.g. Anthony, 1988; Jaworski and Kohli, 1993). A number of studies have suggested that linking employee and management rewards with specified goals on appropriate criteria can influence behavior (e.g. Gupta and Govindarajan, 1984). The marketing literature in particular has concentrated upon the importance of both performance measurement and reward systems in shaping behaviors within the organization (e.g. Anderson and Chambers, 1985; Jaworski, 1988; Oliver and Anderson, 1994). By aligning reward systems with MPA systems, managers may send even stronger signals about desired behaviors and outcomes to managers and employees, and significantly enhance the effective implementation of desired strategies (cf. Floyd and Woolridge, 1992).

1.7.3. MPA system performance variables

1.7.3.1. User satisfaction. Performance assessments are not absolute and usually relate to user expectations and competitive referents, more than to abstract objective measures (e.g. Bonoma, 1989; Clark, 1998). Our model suggests that the greater the alignment between the MPA contingency and response variables identified, the more likely managers expectations are to be confirmed, and the greater the satisfaction of managers with the MPA system. Indeed, a cynic might wonder if this is not a driving factor behind how MPA systems are developed.

1.7.3.2. Strategy execution effectiveness. Effective MPA systems should aid the effective execution of marketing strategy (cf. Daft and Macintosh, 1984). Without alignment between the marketing strategy pursued, the marketing performance measures utilized, and the evaluation and reward system in the business unit, marketing strategies were unlikely to be effectively implemented (cf. Stata and Maidique, 1980; Eccles, 1991). Ineffective MPA systems may commonly fail to aid effective implementation of marketing strategy by: not changing MPA performance standards to reflect shifts in marketing strategy; using inadequate time periods of assessment and thereby under or over estimating strategy outcomes; and not aligning reward systems with MPA systems and continuing to reward "x" while monitoring "y". Although these concerns seem to cover a number of different areas, the literature supports considering goal setting, performance measurement and feedback linked into reward and evaluation as interconnected components of "cybernetic" models of management control (e.g. Anthony, 1988).

Organizational learning is the development of new insights or knowledge that may influence behavior and improve performance (Sinkula, 1994). Slater and Narver (1995) identify two distinct types of organizational learning: adaptive (or single loop) learning where insights and knowledge are bounded within the organizations' assumptions about the environment; and generative (or double loop) learning where insights and knowledge challenges such assumptions. MPA systems have the potential to considerably enhance the ability of the organization to learn in both adaptive and generative modes. However, MPA systems are unlikely to contribute significantly to organizational learning unless they are comprehensive (in the manner suggested in the normative MPA model) and adopt appropriate time spans. One of the biggest problems identified with productivity analyses in this context is that by treating the marketing process as a "black box" it is difficult, if not impossible to discern why inputs and outputs are linked and in what ways. Unless marketing managers are able to diagnose what works and what does not in analyzing inputs, actions and decisions, and outputs, then by definition, no learning can take place. Since organizational learning is a fundamental source of capability upgrading, any failure to learn degrades future competitiveness. Effective MPA systems may therefore be important in generating future marketing performance, as well as monitoring current marketing performance.

2. Discussion and implications

2.1. Discussion

Recent work indicates that senior corporate managers have inadequate knowledge of, and confidence in, their marketing organizations' performance (Pesmen, 1993; Sheth and Sisodia, 1995). We believe that inadequacies in MPA system understanding and implementation are largely responsible for this state of affairs. Marketing academics continue to chide managers for treating marketing budgets as overhead expenditure rather than capital expenditure in building revenue generating marketing assets. However, in the absence of valid, reliable, and credible MPA systems, marketing managers will remain unable to convince bottomline driven corporate executives that marketing expenditure should be protected. It is naive to suggest that corporate executives are simply being myopic and that marketing managers are "right" in their belief that marketing budgets are effectively utilized. The reality is that marketing managers themselves are often unable to uncover and confidently support cause and effect relationships between marketing inputs, marketing processes and marketing performance outcomes.

Given the problems identified in current MPA approaches, and corporate contexts that have for the large part been dominated by efficiency-based goals over the past decade (witness the effect of business process reengineering), many marketing managers have relied upon MPA systems that emphasize short-run assessments of tangible inputs and outputs (cf. Misterek et al., 1992). While this may be understandable, the use of such MPA systems may lead to decisions that do not maximize longrun, or even medium-term competitiveness (e.g. Hayes and Wheelwright, 1984; Wisner and Fawcett, 1991). Such MPA systems often lead to a focus on asset parsimony i.e. cutting inputs into the marketing productivity equation that can be sub-optimal for longer-term marketing performance outcomes (e.g. Piercy, 1986). For example, reducing "slack" resources can limit resources allocated to building sources of advantage (e.g. Eccles, 1991), reduce the firms absorptive capacity (e.g. Chakravarthy, 1982), limit creativity (e.g. Piercy and Morgan, 1997), and limit strategy implementation effectiveness (e.g. Bonoma and Crittenden, 1988).

Perhaps even more directly damaging to future performance is the inability of most MPA systems to contribute to effective organizational learning. The strategy literature increasingly suggests that knowledge is a meta-resource and organizational learning a meta-capability that enhance and upgrade all of other resources and capabilities of the firm. Organizational learning in particular is widely viewed as constituting a valuable, non-substitutable and inimitable source of competitive advantage (e.g. Slater and Narver, 1995). We believe that by focusing upon inputs and outputs, monitoring relatively few indicators, and not matching the time frame of assessment with industry dynamics and marketing strategy content, most MPA systems in use significantly impede organizational learning. The cycle of treating symptoms rather than causes in marketing strategy shifts is unlikely to be altered until some of these MPA design errors are addressed (cf. Cohen, 1998).

2.2. Implications for future research

Our review and conceptual model development suggest numerous opportunities for future research. Academic research in marketing has not focused upon MPA to any significant degree for the past 20 years. As a result, it is unsurprising that academic research has had a negligible impact on practice, leaving MPA systems in use in most (if not all organizations) flawed both conceptually and, perhaps more importantly, in the minds of the managers that use them. This represents a significant failing on the part of the marketing discipline with respect to one of its most important constituencies, and may be negatively affecting researchers ability to get management cooperation and access to research sites to conduct needed marketing strategy research. In addition, academic failures to develop strong conceptual insights and rigorous measures of marketing performance negatively impacts confidence in marketing strategy research where marketing performance is often the ultimate dependent variable of interest (Morgan and Katsikeas, 1997). Below, we highlight what we believe to be some of the research areas suggested by our research as being of most immediate value in enhancing both academic understanding and aiding improvements in management practice.

2.2.1. Multidimensional nature of performance

Extant management and marketing literature provides a strong theoretical basis not only for adopting multidimensional performance conceptualizations and operationalizations, but for examining interactions among the various dimensions of performance. However, few studies have explored the nature and significance of trade-off interactions among different marketing performance dimensions. For example, in increasingly dynamic market environments the adaptive dimension of marketing performance is becoming increasingly important. In such environments, adaptiveness may be viewed as a precursor of effectiveness and efficiency outcomes, suggesting a relationship between adaptiveness and other important dimensions of performance (Ruekert and Walker, 1987). To enhance knowledge development in the field, it is imperative that we gain a deeper understanding of such relationships. What are the trade-offs and when do they occur? Recent contributions suggest that data envelopment analysis, which identifies "efficiency" frontiers, represented by such trade-offs may be an appropriate methodology for researching such trade-offs (e.g. Bhargava et al., 1994).

2.2.2. Dynamics of marketing performance

Academic understanding of marketing processes is still relatively undeveloped (Piercy, 1998). An important first stage in studying processes is identifying key stages involved (e.g. Van de Ven, 1992). Here, we have used the theoretical literature concerning organizational performance to develop a normative model of the marketing performance process and suggest five distinct stages. However, from an empirical perspective, we have no evidence to support the number and characteristics of stages in the marketing performance process. Additionally, we have little or no understanding of the length of the time scales involved in movement between marketing performance stages under different conditions. Knowledge of the temporal dynamics of the marketing performance process is an essential prerequisite for developing MPA systems that utilize appropriate time scales of assessment. Although costly and time-consuming, longitudinal studies are better suited to capture the temporal character of, and explore the cause–effect relationships involved in, the marketing performance process.

2.2.3. Sources of advantage

Marketing researchers has largely ignored the resourcebased view literature, with a few notable exceptions (e.g. Day, 1994; Hunt and Morgan, 1995). As a result, we have almost no knowledge concerning sources of advantage in marketing performance. While we have identified theoretically anchored conceptualizations of marketing resources and marketing capabilities in our normative MPA model, we again have almost no empirical evidence. What are important marketing resources and capabilities? How may they be measured for academic purposes? How should managers set about assessing marketing resources and capabilities to improve their MPA systems? Available measures from the management literature are limited in both number and level of development (Miller and Shamsie, 1996), hence, there is a need for future research to develop measures of the sources of marketing advantage.

2.2.4. Contextual MPA systems

The goal-centered view of organizational effectiveness suggests that performance should be assessed from the standpoint of an internal "user", rather than an external "expert" (Miles, 1980; Lewin and Minton, 1986). In marketing strategy formulation and implementation, managers may often pursue goals incongruent with those of normative "experts". Managerial goals and objectives, and the subsequent criteria and standards used by managers in the appraisal of marketing performance, may therefore not relate well to academic "expert" assessments. It is therefore important that researchers gain a deeper understanding of why and how they evaluate marketing performance outcomes. The contextual MPA contingency, response, and performance factors identified in the contextual MPA model developed here represent a first step forward in this direction, but empirical insights are urgently required. Building knowledge of MPA systems in use will provide insights into the development of improved MPA systems and enable researchers to better explain relevant managerial behavior.

3. Conclusion

The potential benefits of extending the base of MPA knowledge and generating insights relevant to improving the assessment of marketing performance are substantial. In addition to helping marketing managers learn to better allocate marketing resources, the ability to demonstrate relationships between marketing inputs and outputs would be greatly welcomed by corporate-level managers who would then be better equipped to distinguish between marketing "expenditure" and marketing "investment". Improved MPA systems therefore have the potential to significantly shape corporate behavior. Additionally, the financial markets have already shown a desire to factor marketing performance into their assessments of future corporate performance. For example, a recent survey of equity analysts showed strong support for much greater reporting of marketing performance alongside traditional financial performance in annual reports, briefings to analysts, etc. (Brand Finance, 1998). Thus, while researchers in this area may be starting from a relatively low base, the indications are that the pay-offs from researching in this area may be significant.

References

- Aaker DA. Managing assets and skills: the key to sustainable competitive advantage. Calif Manage Rev 1989;31(2):91-106.
- AMA Management Report No. 32. Analyzing and improving marketing performance. New York: American Management Association, 1959.
- Anderson P, Chambers T. A reward/measurement model of organizational buying behavior. J Mark 1985;49:7–23 (Spring).
- Anthony RN. Planning and control systems: a framework for analysis. Boston, MA: Harvard Business School, 1965.
- Anthony RN. The management control function. Boston, MA: Harvard Business School Press, 1988.
- Aufreiter N, George M, Empres L. Developing a distinctive consumer marketing organization. J Mark-Focused Manage 1996;1:199–207.
- Barney J. Firm resources and sustained competitive advantage. J Manage 1991;17(1):99–120.
- Bhargava M, Dubelaar C, Ramaswami S. Reconciling diverse measures of performance: a conceptual framework and a test of methodology. J Bus Res 1994;31:235–46.
- Blattberg RC, Glazer R, Little JDC. The marketing information revolution. Boston: Harvard Business School Press, 1994.
- Blenkinsop S, Burns N. Performance measurement revisited. Int J Oper Prod Manage 1992;12(10):16–25.
- Bonoma TV. The marketing edge: making strategies work. New York: Free Press, 1985.
- Bonoma TV. Marketing performance what do you expect? Harv Bus Rev 1989;67(5):44-8.
- Bonoma TV, Clark BH. Marketing performance assessment. Boston: Harvard Business School Press, 1988.
- Bonoma TV, Crittenden V. Managing marketing implementation. Sloan Manage Rev 1988;7–14 (Winter).
- Brand Finance. The future of brand value. The Brand Finance Report. London: Brand Finance, 1998.
- Brown DM, Laverick S. Measuring corporate performance. Long Range Plann 1994;27:89–98.
- Brownlie DT. The marketing audit: a metrology and explanation. Mark Intell Plann 1993;11(1):4–13.

Bucklin LP. Productivity in marketing. Chicago, IL: AMA, 1978.

- Cameron K. Effectiveness as paradox: consensus and conflict in conceptualizations of organizational effectiveness. Manage Sci 1986;32:539– 53 (May).
- Cameron K, Whetten DA. Organizational effectiveness: a comparison of multiple models. New York: Academic Press, 1983.
- Capella I, Seckely W. The marketing audit: methods, problems and perspectives. Akron Bus Econ Rev 1978;37–41 (Fall).
- Chakravarthy BS. Measuring strategic performance. Strategic Manage J 1986;7:437–58.
- Chakravarthy BS. Adaptation: a promising metaphor for strategic management. Acad Manage Rev 1988;7:35–44.
- Clark BH. Managerial perceptions of marketing performance: efficiency, effectiveness, adaptiveness and satisfaction. Working Paper, Northeastern University, 1998.
- Clark BH, Montgomery DB. Deterrence, reputations and competitive cognition. Manage Sci 1998;44(1):62–82.
- Cohen HB. The performance paradox. Acad Manage Exec 1998;12(3):30-40.
- Crisp R. Auditing the functional elements of a marketing operation. Analyzing and improving marketing performance. New York: American Management Association, 1959. pp. 21–37 (Report No. 32).
- Daft RL, Macintosh NB. The nature and use of formal control systems for management control and strategy implementation. J Manage 1984; 10(1):43-66.
- Day GS. The capabilities of market-driven organizations. J Mark 1994; 58:37–53 (October).
- Day GS, Fahey L. Valuing market strategies. J Mark 1988;52:45-57 (July).
- Day GS, Wensley R. Assessing advantage: a framework for diagnosing competitive superiority. J Mark 1988;52(2):1–20.
- Day GS, Nedungadi P. Managerial representations of competitive advantage. J Mark 1994;58(2):31–44.
- Dickson PR. Towards a theory of competitive rationality. J Mark 1996; 56(1):69-84.
- Dierickx I, Cool K. Asset stock accumulation and sustainability of competitive advantages. Manage Sci 1989;35(12):1504–10.
- Dixon JR, Nanni AJ, Vollman TE. The new performance challenge: measuring operations for world-class competition. Homewood, IL: Irwin, 1990.
- Dunn MG, Norburn D, Birley S. The impact of organizational values, goals, and climate on marketing effectiveness. J Bus Res 1994;30:131–41.
- Eccles RG. The performance measurement manifesto. Harv Bus Rev 1991;131-7.
- Eisenhardt KM. Control: organization and economic approaches. Manage Sci 1985;31:134–49 (Jan–Feb).
- Feder RA. How to measure marketing performance. Harv Bus Rev 1965;43:132-42 (May-June).
- Fellman MW. Ghormley: science and art are fighting for headroom. Mark News 1998;2 (Sept. 14th).
- Floyd SW, Woolridge B. Managing strategic consensus: the foundation of effective implementation. Acad Manage Exec 1992;6(4):27–39.
- Ford JD, Schellenberg DA. Conceptual issues of linkage in the assessment of organizational performance. Acad Manage Rev 1982;7:49-58.
- Foster G, Gupta M. Marketing, cost management and management accounting. J Manage Account Res 1994;6:43–77.
- Glazer R. Marketing in an information intensive environment: strategic implications of knowledge as an asset. J Mark 1991;55:1–19 (Oct).
- Globerson S. Issues in developing a performance measurement criteria system for an organization. Int J Prod Res 1985;23(4):639–46.
- Goold M, Quinn JJ. The paradox of strategic controls. Strategic Manage J 1990;11:43–57.
- Govindarajan V. Appropriateness of accounting data in performance evaluation: an empirical examination of environmental uncertainty as an intervening variable. Account Organ Soc 1984;9(2):125–35.
- Govindarajan V. A contingency approach to strategy implementation at the business-unit level: integrating administrative mechanisms with strategy. Acad Manage J 1988;31(4):828–53.
- Govindarajan V, Gupta AK. Linking control systems to business unit strategy: impact on performance. Account Organ Soc 1985;10(1):51-66.

- Govindarajan V, Fisher J. Strategy, control systems and resource sharing: effects on business-unit performance. Acad Manage J 1990;33(2): 259–85.
- Green SG, Welsh AM. Cybernetics and dependence: reframing the control concept. Acad Manage Rev 1988;13(2):287–301.
- Gupta AK, Govindarajan V. Build, hold, harvest: converting strategic intentions into reality. J Bus Strategy 1984;4(3):34–47.
- Hayes RH, Wheelwright SC. Restoring our competitive edge. New York: Wiley, 1984.
- Herremans IM, Ryans JK. The case for better measurement and reporting of marketing performance. Bus Horiz 1995;38(5):51–61.
- Hirst MK. Reliance on accounting performance measures, task uncertainty, and dysfunctional behavior: some extensions. J Account Res 1983; 21:596–605.
- Hitt MA. The measuring of organizational effectiveness: multiple domains and constituencies. Manage Int Rev 1988;28:28-40.
- Hopwood AG. An empirical study of the role of accounting data in performance evaluation. J Account Res 1972;10:156–82.
- Hrebiniak LG, Joyce WF. Implementing strategy. New York: Macmillan, 1984.
- Hunt SD, Morgan RM. The comparative advantage theory of competition. J Mark 1995;59:1–15 (April).
- Hunt SD, Morgan RM. The resource-advantage theory of competition: dynamics, path dependencies, and evolutionary dimensions. J Mark 1996;60(4):107-15.
- Jaworski BJ. Toward a theory of marketing control: environmental context, control types, and consequences. J Mark 1988;52:23-9 (July).
- Jaworski BJ, Kohli A. Market orientation: antecedents and consequences. J Mark 1993.
- Johnson HT, Kaplan RS. Relevance lost the rise and fall of management accounting. Cambridge, MA: Harvard Business School Publishing, 1987.
- Kaplan RS, Norton DP. The balanced scorecard measures that drive performance. Harv Bus Rev 1993;71–9 (January/February).
- Keegan DP, Eiler RG, Jones CR. Are your performance measures obsolete? Manage Account 1989;45–50.
- Keller KL. Conceptualizing, measuring, and managing customer-based brand equity. J Mark 1993;57(1):1–22.
- Keller KL. Strategic brand management. Upper Saddle River, NJ: Prentice-Hall, 1998.
- Kerin RA, Mahajan V, Varadarajan PR. Contemporary perspectives on strategic market planning. Englewood Cliffs, NJ: Prentice-Hall, 1990.
- Kim L, Lim Y. Environment, generic strategies, and performance in a rapidly developing country: a taxonomic approach. Acad Manage J 1988;31(4):802–27.
- Kotler P. From sales obsession to marketing effectiveness. Harv Bus Rev 1977;55:67-75 (Nov-Dec).
- Kotler P, Gregor W, Rodgers W. The marketing audit comes of age. Sloan Manage Rev 1977;18(2):25–43.
- Lawler EE, Rhodes JG. Information and control in organizations. Pacific Palisades, CA: Goodyear Publishing, 1976.
- Lawless MW, Finch LK. Choice and determinism: a test of Hrebiniak and Joyce's' framework on strategy–environment fit. Strategic Manage J 1989;10(4):351–65.
- Lewin AY, Minton JW. Determining organizational effectiveness: another look, and an agenda for research. Manage Sci 1986;32(5):515-38.
- Meyer C. How the right measures help teams excel. Harv Bus Rev 1994;74 (May-June).
- Miles RH. Macro-organizational behavior. Santa Monica, CA: Goodyear, 1980.
- Miller D, Friesen PH. Porter's generic strategies and performance. Organ Stud 1986;7:37–56.
- Miller D, Shamsie J. The resource-based view of the firm in two environments: the Hollywood film studios from 1936 to 1965. Acad Manage J 1996;39(3):519–43.
- Misterek SDA, Dooley KJ, Anderson JC. Productivity as a performance measure. Int J Oper Prod Manage 1992;12(1):29–45.

- Mokwa M. The strategic marketing audit: an adoption/utilization perspective. J Bus Strategy 1986;6:88–95 (Spring).
- Möller K, Anttila M. Marketing capability a key success factor in small business? J Mark Manage 1987;3(2):185–203.
- Moorman C. Organizational market information processes: cultural antecedents and new product outcomes. J Mark Res 1995;32:318–35 (Aug).
- Morgan NA, Piercy NF. Competitive advantage, quality strategy and the role of marketing. Br J Manage 1996;7:231–45.
- Morgan NA, Katsikeas CS. Firm-level export market performance assessment: a critique of the empirical literature. University of Cambridge Research Papers in Management Studies No. 7, 1997.
- Oliver RL, Anderson E. An empirical test of the consequences of behavior- and outcome-based sales control systems. J Mark 1994; 58(4):53-67.
- Ostroff C, Schmitt N. Configurations of organizational effectiveness and efficiency. Acad Manage J 1993;36(6):1345-62.
- Ouchi WG. A conceptual framework for the design of organizational control mechanisms. Manage Sci 1979;25:833–47 (Sept).
- Oxenfeldt A. Executive action in marketing. Helmont, CA: Wadsworth Publishing, 1966.
- Parker DD. Improved efficiency and reduced cost in marketing. J Mark 1962;26(2):16.
- Pesmen S. CEO's flunk marketing test: need to join yes. Bus Mark 1993;78(2):13-7.
- Petty RD. Advertising law in the United States and the European union. J Public Policy Mark 1997;16(1):2–13.
- Pfeffer J, Salancik GR. The external control of organizations. New York: Harper and Row, 1978.
- Piercy NF. Marketing asset accounting: the way forward? Eur J Mark 1986;20(1):104-7.
- Piercy NF. Market-led strategic change: transforming the process of going to market. Oxford: Butterworth-Heinemann, 1997.
- Piercy NF. Marketing implementation: the implications of marketing paradigm weakness for the strategy execution process. J Acad Mark Sci 1998;26(3):222-36.
- Piercy NF, Morgan NA. The impact of lean thinking and the lean enterprise on marketing: threat or synergy? J Mark Manage 1997;13: 679–93.
- Porter ME. What is strategy? Harv Bus Rev 1996;74(6):61-78.
- Richardson PR, Gordon JRM. Measuring total manufacturing performance. Sloan Manage Rev 1980;21(2):47–58.
- Rothe JT, Harvey MG, Jackson CE. The marketing audit: five decades later. J Mark Theory Pract 1997;5(3):1–16.
- Ruekert RW, Walker OC. Interactions between marketing and R&D departments in implementing different business strategies. Strat Manage J 1987;8:233–48.
- Schibrowsky JA, Lapidus RS. Gaining a competitive advantage by analyzing aggregate complaints. J Consum Mark 1994;11(1):15–26.
- Schmenner RW, Volmann TE. Performance measures: gaps, false alarms, and the usual suspects. Int J Oper Prod Manage 1994; 14(12):58–69.
- Selnes F. Analyzing marketing profitability: sales are a dangerous cost driver. Eur J Mark 1992;26(2):15–27.
- Sessions R. What a soundly conducted marketing audit can accomplish. Analyzing and improving marketing performance. New York: American Management Association, 1959. pp. 12–20 (Report No. 32).
- Sevin CH. Marketing productivity analysis. New York: McGraw-Hill, 1965.
- Sheth JN, Sisodia RS. Feeling the heat. Mark Manage 1995;4(2):8–23.
- Shuchman A. The marketing audit: its nature, purposes and problems. Analyzing and improving marketing performance (vol. 31). New York: American Management Association, 1959. pp. 1–11.
- Simon CJ, Sullivan MW. The measurement and determinants of brand equity: a financial approach. Mark Sci 1993;12(1):28-52.
- Simons R. Strategic orientation and top management attention to control systems. Strategic Manage J 1991;12(1):49–62.
- Sink DS. Productivity management planning: measurement and evaluation, control and improvement. New York: Wiley, 1985.

- Sinkula JM. Market information processing and organizational learning. J Mark 1994;58:35–45 (Jan).
- Skinner W. The productivity paradox. Harv Bus Rev 1986;64(4):55-9.
- Slater SF, Narver JC. Market orientation and the learning organization. J Mark 1995;59(3):63-74.
- Srivastava RK, Tassaduq A, Shervani TA, Fahey L. Market-based assets and shareholder value: a framework for analysis. J Mark 1998;62(1):2–18.
- Stata R, Maidique MA. Bonus system for balanced strategy. Harv Bus Rev 1980;156–63 (Nov–Dec).

Tannenbaum A. Control in organizations. New York: McGraw-Hill, 1968.

- Tsui AS. A multiple constituency model of effectiveness: an empirical examination at the human resource sub-unit level. Adm Sci Q 1990; 35:458-83.
- Van de Ven AH. Suggestions for studying strategy process: a research note. Strategic Manage J 1992;13:169–88.

- Van de Ven A, Ferry DL. Measuring and assessing organizations. New York: Free Press, 1980.
- Vorhies DW. An investigation of the factors leading to the development of marketing capabilities and organizational effectiveness. J Strategic Mark 1998;6:3–23 (March).
- Vorhies DW, Yarbrough L. Marketing's role in the development of competitive advantage: evidence from the motor carrier industry. J Mark-Focused Manage 1998;2(4):361–86.
- Walker OC, Ruekert RW. Marketing's role in the implementation of business strategies: a critical review and conceptual framework. J Mark 1987;51:15–33 (July).

Wilson M. The management of marketing. Westmead, England: Gower, 1980.

Wisner JD, Fawcett SE. Linking firm strategy to operating decisions through performance measurement. Prod Inventory Manage J 1991; 5–11 (Oct–Dec).