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Marketing Metrics: Status of Six Metrics in Five Countries

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A study of marketing expenditure in five industrial countries found that most firms regularly report one or more of six marketing metrics to the Board. Market share (79 per cent) and perceived product/service quality (77 per cent) are most used, while estimated customer or segment lifetime value is reported used by only 40 per cent of firms. There are significant country differences, with German firms claiming to be the heaviest users and Japanese firms the lightest. There is a consistent pattern of intended increased use in the future for all metrics in all countries. Statistical analysis suggests that the six metrics are complementary in practice: most firms adopting metrics tend to measure several rather than picking just one, the average being 3.9 out of the six studied here. The paper concludes with suggested areas for future research.

Keywords: Marketing metrics, Advertising expenditures, International comparisons

There is increasing pressure on senior marketing managers to deal explicitly with the long-standing problem of measuring the impact and value of marketing (Clark, 1999; Kokkinaki and Ambler, 1999; Marketing Week, 2001). This trend seems to be global. In response, the Marketing Science Institute has made assessing marketing productivity its top research priority (MSI, 2002).

One approach to this problem is through the adoption of 'marketing metrics' — internal and external measurements related to marketing and market position which are believed to be linked to short- and long-term financial performance (Ambler, 2003). We define a metric as 'a [quantitative] performance measure that top management should review regularly' (Ambler *et al.*, 2001, p. 18). This paper explores the current status of adoption of six metrics in the top five global markets: the USA, Japan, Germany, UK, and France.

Theoretical Background: Why the Growth in Use of Marketing Metrics?

Ambler *et al.* (2003) list five theoretical perspectives which may account for the growing interest in marketing metrics. First, *control theory* suggests the need for *ex-post* information on marketing programs as an essential part of the cycle of analysis, planning, implementation, and control (Jaworski, 1988; Kotler, 2003, pp. 684–699). The central concept of control theory is that a combination of unanticipated events (both good and bad) and stronger or weaker than expected execution cause the outcome to be better or worse than planned. In this context, metrics are used both to evaluate past performance and to improve future strategy and execution. This suggests that metrics should usually be comparative, not only with previous periods but also with plans and, where possible, competitors, especially if evaluation is an important part of the process (Ambler *et al.*, 2001).

Related to evaluation is the issue of incentives. In principle, *agency theory* (Jensen and Meckling, 1976) fits the context of marketing metrics well: it focuses on the contract between a principal and an agent, and specifically on the need for the terms of the contract to be structured to incentivise the agent to act in a way most likely to meet the principal's objectives. Agency theory assumes both parties to be rational actors. For the contract to be enforceable, it needs ex-post data on the extent to which the principal's objectives have been met — in other words, metrics. In practice, however, the focus of agency theory has been on the contract between shareholders and corporate management, not on that between corporate and functional (e.g. marketing) management. In contrast, marketing metrics have to-date been largely internal to the firm, although it has been argued that they should also be communicated to shareholders, subject to commercial confidentiality (Ambler *et al*., 2001).

Planning and control are hardly new, however, nor are the incentive issues addressed by agency theory. Why, then, the recent interest in marketing metrics? Two of the other perspectives referred to by Ambler *et al*. (2003) may help to provide the answer. *Brand equity* was developed as a concept in the late 1980s in response to the perceived narrowness and short-termism of financial measures of performance (Leuthesser, 1988; Barwise, 1993a). Customer-based brand equity is usually defined to include a combination of behavioral and attitudinal dimensions (e.g. Aaker, 1991; Keller, 1993; Srivastava and Shocker, 1991) and it has been argued that it cannot validly be reduced to a single number (Barwise, 1993b; Ambler and Barwise, 1998). Growing recognition that intangible assets account for a large and increasing proportion of shareholder value has reinforced the interest in brand equity, leading to the need for metrics to measure its various dimensions. From this perspective, the growth of marketing metrics is part of a wider quest for a 'balanced scorecard' of performance (Kaplan and Norton, 1996).

The literature on *market orientation* offers a further clue. Competition is steadily forcing firms to be more market-oriented. At the same time, research suggests that market-oriented firms tend to enjoy superior performance, although the issues are complex and the patterns and causalities are not clearcut (Jaworski and Kohli, 1993; Greenley, 1995; Moorman, 1995; Narver and Slater, 1990; Meehan, 1997). Market orientation has been defined in many ways, but they all involve a combination of 'market sensing' and appropriate, cross-functional responsiveness to the resulting data. Metrics are part of 'market sensing'.

Finally, as marketing metrics become more widespread among firms, *institutional theory* (Meyer and Rowan, 1977) suggests that their use will become an institutional norm, encouraging further uptake among late-adopting businesses. Indeed, surveys of adoption such as the study reported here can contribute to this institutional process by showing late adopters that they are 'behind the curve'. Most marketing metrics have yet to be shown to be associated with current and future financial performance (Lehmann, 2002). For example, there has been extended debate on whether market share is really related to performance and, if so, on the direction of the relationship (Capon *et al*., 1996). Nevertheless, the increasing emphasis on intangibles, a 'balanced scorecard', and market orientation suggest that successful firms will indeed need to use metrics, even if this cannot (yet) be proved empirically.

Aims

The aim of this paper is to explore current practice in the use of metrics in the top five global markets: the USA, Japan, Germany, UK, and France. These countries account for almost two-thirds of global marketing expenditure. Six metrics were selected: market share, perceived product or service quality, customer loyalty or retention, customer or segment profitability, relative price (i.e. [value market share] + [volume market share]), and actual or potential customer/segment lifetime value. The first five of these were chosen as popular metrics (Ambler, 2003; Ambler *et al*., 2001) which span the behavioral, attitudinal, and financial dimensions of marketing performance. Customer/segment lifetime value (LTV) was added as an indicator of the growing use of customer relationship management approaches which seek to allocate resources partly in response to LTV, although the validity and usefulness of this measure have recently been questioned (Ambler, 2003, pp. 77–78; Netzer, 2003). Our starting-point in this study was to calibrate the current situation to provide the possibility of tracking developments over time, as well as to measure some correlates of the use of metrics.

Our discussion of theory suggests that marketing performance (including brand equity) is multidimensional, so that different metrics should theoretically be seen as complements rather than substitutes. An empirical question is whether businesses also see things this way.

In summary, this study had three specific objectives:

1. To establish a benchmark of the actual and planned use of selected metrics in each of the five countries.
2. To explore possible relationships between the use of metrics and firm characteristics (size, sector, ownership), including possible interactions with country.
3. To explore the extent to which the adoption patterns suggest that firms see these metrics as complements versus substitutes.

Method

The data were collected by Kudos Research, London, using structured telephone interviews with chief marketing officers of for-profit businesses (marketing director, VP marketing) in July–August 2002. The main goal of the study was to identify trends in the marketing expenditure of businesses spending more that $1 million (1 million Euros) per year within the particular country under study (Barwise and Styler, 2002). The sampling lists for each country were based on leading national advertisers. 'Expenditure' was defined to exclude in-house staff, equipment costs, overheads and market research. In addition to detailed data on marketing expenditure, respondents were asked to identify, from a list of the six marketing metrics, which ones were regularly reported to the board and which others the respondent anticipated being used in the near future. Usable data on the metrics question were obtained from 697 businesses out of 1475 contacted, a response rate of 47 per cent.

Results

Most businesses said that they now report one or more of the six metrics to the Board (Table 1), with market share (79 per cent) and perceived product/service quality (77 per cent) the most used. Least-used (40 per cent) — and the only measure used by less than half of the sample — was the relatively new and complex customer/segment lifetime value — strictly speaking a derived estimate rather than a directly measurable number.

There are significant differences between countries. Germany is above average for all six metrics, especially market share (97 per cent) and relative price (84 per cent). Japan is below average on all metrics, with only 57 per cent of the sample reporting market shares. The USA and UK samples are fairly close to average (UK a bit lower), while France is high on both market share and customer/segment lifetime value.

Reporting of each of the metrics is expected to increase in the near future, especially customer/loyalty retention and customer/segment lifetime value (Table 2). Even if the predictions are fulfilled, less than half of the sample will use lifetime value measures.

Sociodemographic differences among the five countries are small. All are members of the G7, with high *per-capita* income measures and literacy rates, low birth rates, long life expectancies and ageing populations. Each has a single dominant language. There are, however, some documented differences in terms of organizational cultures in which Japan and Germany are quite different (Deshpandé *et al*., 2000). For example, in a study of representative business-to-business (B2B) firms in these five same countries, Japanese firms were found below average in measured Market Orientation while German firms were on average highest. Japanese firms were more collectivist (lower than average on Hofstede's (1980) individualism scale) while all the other countries except France were above average on individualism. Japanese firms were highest in consensual corporate culture styles, while German firms were well below average. Relatedly, Japanese firms measured lowest on entrepreneurial organization culture while the Germans scored highest. The differences between countries in Table 1 seem to reflect some of these cultural differences, especially the variation in market orientation. Other research has similarly found significant differences in the metrics used in the UK, Spain, and China (Llonch *et al*., 2002; Ambler and Wang, 2002).

Unsurprisingly, there are also some systematic firm-related differences. For example, multinational subsidiaries and larger firms tended to use more of the metrics. However, there was no significant difference related to industry in the likelihood of a firm not using metrics. (Seventeen different classes of 'Main Business' were used, ranging from luxury/fashion consumer products to utilities and industrial firms.)

Metrics: Substitutes or Complements?

It follows from the results in Table 1 that many firms use multiple metrics. In fact, only 4 per cent of the firms studied used no metrics at all (Table 3).

All the German firms studied used at least one of the metrics. Use of no metrics was reported by 7 per cent of US firms, 6 per cent of Japanese firms, 4 per cent of French firms and 3 per cent of UK firms. Only a fifth of the firms studied reported plans to add met-

Table 1 Current Metrics Regularly Reported to the Board (*% of those mentioning any now or planned*)

Metric	Total (*n*=697)	USA (*n* = 224)	Japan (*n* = 117)	Germany (*n* = 120)	UK (*n* = 120)	France (*n* = 116)
Market share	79	73	57	97	80	90
Perceived prod/serve quality	77	77	68	84	71	75
Customer loyalty/retention	64	67	56	69	58	65
Customer/segment profitability	64	73	40	74	65	59
Relative price	63	65	48	84	53	63
Actual/potential customer/segment lifetime value	40	32	35	51	32	58
Average	64	64	51	77	60	68

Source: Barwise and Styler (2002)

Table 2 Metrics Planned to be Regularly Reported to the Board (*% of those mentioning any now or planned*)

Metric	Total (*n* = *697*)	USA (*n* = *224*)	Japan (*n* = *117*)	Germany (*n* = *120*)	UK (*n* = *120*)	France (*n* = *116*)
Market share	2	2	3	1	4	6
Perceived prod/serve quality	2	2	0	4	11	11
Customer loyalty/retention	8	12	6	9	10	5
Customer/segment profitability	5	5	4	6	6	4
Relative price	3	1	2	0	7	6
Actual/potential lifetime value	8	10	4	7	12	4
Average	5	6	3	4	9	5

Source: Barwise and Styler (2002)

Table 3 Number of Metrics Used

Number of Metrics	Percent of Firms Reporting Use	Percent of Firms Planning to Add
0	4	80
1	10	13
2	12	1
3	16	1
4	21	0
5	19	0
6	18	0

rics, and the great majority planned to add only one metric.

Table 4 shows results of a factor analysis of the entire data base from the study. The left-hand column shows that the six metric measures load significantly (loading greater than 0.4) on a single factor that contained no significant loadings for any other of the marketing expenditure measures used in the study. The right-hand column in Table 3 also shows that the anticipated use of metrics similarly loaded alone on another factor. The two factors are not correlated.

This confirms that those firms which use or expect to use metrics tend to use multiple measures. The result may also reflect some response-style differences, with some respondents more likely to interpret 'regularly reported to the Board' more broadly than others. Nevertheless, the high loadings on a single factor do suggest that firms perceive these six metrics as complementary to each other, justifying the use of several measures.

Discussion

Measuring the impact of marketing on firm performance is a complex matter. At a minimum, it at least requires reliable aggregate market information from external sources as well as attitude data drawn from surveys. In addition, complex statistical analysis as well as assumptions about the future are needed to produce estimates of the value of a customer or profitability of a segment.

Nonetheless, it is evident that most large and mid-sized firms in these top five markets have adopted one or more marketing metrics, particularly market share and perceived quality. German firms are particularly heavy users of marketing metrics, while Japanese firms are relatively light users. As a group, the sample anticipates increased use of metrics in the future. Use of more than one metric is the rule rather than the exception. On average, the sample uses 3.9 of the six metrics, with German firms averaging 4.6 and Japanese firms only 3.1.

Table 4 Factor Loading of Metrics which are Reported and which may be Reported to the Board

Metrics Reported to Board		Metrics which May Be Reported to Board in Future	
None	−0.650	None	−0.912
Customer loyalty/retention	0.573	Actual or potential customer/segment lifetime value	0.688
Perceived product/service quality	0.571	Customer/segment profitability	0.616
Price relative to average price for category	0.556	Customer loyalty/retention	0.524
Market share	0.544	Perceived product/service quality	0.459
Customer/segment profitability	0.519	Price relative to average price for category	0.450
Actual or potential customer/segment lifetime value	0.495	Market share	0.421

(*Principal Component Analysis with Varimax Rotation of dimensions*)

Areas for Future Research

This study suggests a number of possible areas for future research:

1. Replication of this study of the use of the same six metrics in mid-sized and large, mostly advertising-heavy, businesses in the same five countries, and extension to other metrics, countries, and types of business.
2. What are the views of senior marketing and non-marketing managers about the validity and usefulness of metrics? One nontrivial issue is how many metrics should be reported to the top management team: is there an optimum number of metrics at board level?
3. This study collected simple data for an initial benchmark. It would be helpful to have more detailed data on the scope and frequency of the measurement and reporting of metrics. Also, to what extent do the reported metrics include comparative figures (previous period, plan, competition)?
4. This study was descriptive, but following Ambler *et al*. (2003), we noted that there are several theoretical perspectives which could throw further light on the antecedents and consequences of marketing metrics. Future research might develop these to enable formal hypothesis testing in the context of marketing metrics. For instance, previous research on market orientation and brand equity could be developed to yield specific hypotheses about metrics. Similarly, agency theory might be extended from corporate management to marketing management.
5. From a managerial perspective, it would be helpful to have guidelines from research on the interrelationships between these (and other) metrics and, especially, their relationship with current and later financial performance.
6. There is scope for further research on the incidence and future potential of communicating marketing metrics to shareholders and other external stakeholders (Ambler *et al*., 2001).
7. Finally, the substantial research investment in brand equity over the past decade (Keller, 2002) has the potential to provide some more over-arching metrics which incorporate and integrate the good features of elements like those under study in this paper. Systematic testing of this approach is likely to continue in the future, while stopping short of the holy grail of a single, all-encompassing measure (Barwise, 1993b; Ambler, 2003).

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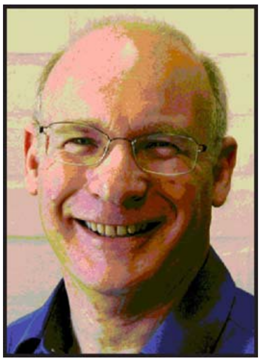

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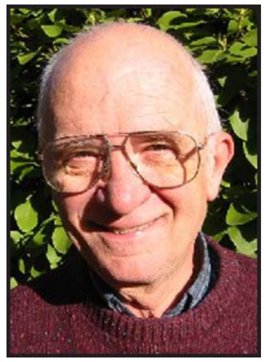

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