

# **Use and Perceived Importance of Marketing Metrics in Different Business Settings**

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## **Abstract**

Marketing metrics that link marketing activities to business performance are key to integrating marketing management with the firm's decision-making and operating process. Earlier studies (Ambler et al. 2002; 2004) have found a connection between top management orientation and the metrics used, moderated by business sector. Using empirical evidence from an extensive survey of 1119 Finnish companies, this paper examines the role of business sector and external turbulence as mediating factors, identifying that sector and nation-specific turbulence influence the use and perceived importance of marketing metrics.

## **Introduction**

It has been theoretically suggested and empirically verified that the ability to measure marketing performance has significant impact on firm performance (e.g. profitability, stock returns) and marketing's stature within the firm (Ambler 2003; O'Sullivan and Abela 2007). Although managers have become increasingly interested in the assessment of marketing performance (e.g. Clark 1999), it still seems that marketing performance measurement is among the most neglected management activities within firms. This study is a follow-up for Ambler et al. (2002; 2004), who examined which marketing metrics are in use and which are found important in companies. In addition to partial replication, we extend the analysis to consider how measurement practices are influenced by various levels of environmental turbulence, as suggested by Ambler et al. (2004).

This study attempts to answer the following questions: (1) What are the key metrics currently in company use? (2) Which metrics do top managers find important? (3) How do external market characteristics, environmental turbulence in particular, impact on practices in regard to marketing metrics? We present our findings from an analysis of survey data gathered from top managers of over 1,000 companies based in a European country (Finland). Specifically, we list the marketing metrics that are most frequently used and those found most important by the top managers. In addition, environmental turbulence is taken into more detailed examination as potential moderator of marketing performance measurement. The findings are discussed in relation to extant research from various business contexts (e.g. Ambler and Xiucun 2003; Llonch, Eusebio and Ambler 2002).

## **Theoretical Background**

The measurement of marketing performance has been a central concern in marketing for decades (Clark 1999; Morgan et al. 2002), and Marketing Science Institute has repeatedly assigned marketing metrics as a top research priority in recent years. As there are no absolute measures of marketing success (Ambler and Kokkinaki 1997), the question about the most appropriate metrics for marketing performance measurement has been a widely discussed issue among marketing academics and professionals (e.g. Lenskold 2007; Ambler 2006). Lately, metrics such as shareholder value and customer lifetime value have been emphasized (e.g. Doyle 2000; Lukas et al. 2005; Srivastava et al. 1998).

To investigate the reasoning underlying the selection of particular metrics, Ambler et al. (2002; 2004) conducted an empirical study in the UK. They divided metrics into six categories: *accounting*, *competitive*, *consumer behaviour*, *consumer intermediate*, *direct trade customer* and *innovativeness*. Their results indicate that accounting metrics are in dominant position in use and importance relative to other categories in measuring the value of marketing. Also, business sectors (e.g. B2B/B2C, goods/services) were found to moderate the selection of metrics. The present study takes the studies of Ambler et al. as a starting point for its analyses, attempting to replicate the findings as well as develop novel understanding by including analysis of the effects of external environmental turbulence on metric use and importance.

The relationship between turbulence and marketing metrics is an interesting, yet unstudied issue. Especially external business environment possesses considerable amount of explanatory power and could provide useful benchmarks for companies with given traits. Some studies have been conducted, but they concentrate almost solely on national and business sector differences in metrics use (e.g. Llonch, Eusebio and Ambler 2002; Ambler and Xiucun 2003). To our knowledge, market turbulence has not been taken into analysis when examining either the importance or use of marketing metrics. Turbulence refers to either market or technological turbulence, and it has been in use in relation to many other phenomena, such as market orientation (e.g. Kohli and Jaworski, 1993; Slater and Narver 1994) and new product development strategy planning (Calantone, Garcia and Droge 2003). Since the competitive environment has a profound influence on the nature of marketing productivity (cf. Rust et al. 2004) and evaluation of marketing (Clark 2000), it most likely also impacts metrics decision.

## **Methodology**

An empirical study was deployed to describe the use and importance of marketing metrics in companies based in a European country, specifically Finland. The data was collected by a web-based questionnaire as a part of a study examining the current state of marketing in Finnish companies in 2008. A pilot version of the questionnaire was sent to 114 managing directors, of whom 34 completed the questionnaire. Some misspellings were corrected and a few clarifications in the wording made. The pre-tested survey was addressed to top management in Finnish companies with more than five employees. The targeted sample consisted of 6 867 companies. Altogether, 1 157 responses were received from 1 099 different companies, adding up to the total firm level response rate of 16%. The most frequent title of the respondent was CEO (38%). Considering the high positions of the respondents and the considerable breadth and depth of the questionnaire, the response rate was considered adequate as well as fairly typical for a web-based survey.

An exploratory study by Ambler et al. (2002), describing the state of marketing metrics in the UK, was used as a basis in formulating the questions for this part of the survey. Respondents were asked to mark the metrics currently in use and of importance from a 41-item listing. While Ambler et al. (2002; 2004) used five- and seven-point Likert scales, we simply used binary codes (is in use, is important). Still, the setting was considered similar enough to allow comparisons between the two studies. Contextual data were also collected in order to determine the impact of environmental factors. For the purposes of this study, 38 responses were found inappropriate, resulting in final sample size of 1119. The distribution by firm type is as follows: B2C goods (195 firms), B2B goods (276), B2C services (96), B2B services (464), retail (44), and other (44). The distribution is comparable to that in Ambler et al. (2002; 2004).

To establish a measure for encountered external turbulence, the survey instrument contained a set of items querying the intensity of competition, rate of change in technology, customer needs and market offering, development lead time and product life cycles on a seven-point Likert scale. The items were mainly drawn from two key marketing performance studies (Kohli and Jaworski 1993; e.g. Hooley et al. 2005) and supplemented by two new items. A turbulence index was calculated as an arithmetic mean of these. Respondents were then divided into quartiles by volume, representing different extents of perceived turbulence.

## Results and Analysis

On average, the respondents reported using 22.2 of the listed 41 metrics (median = 23). The statistics for both use and importance of 15 most used metrics, derived from the present study, are presented in table 1. Financial metrics - sales, profit/profitability and gross margin - represent the leading metrics in terms of both use and importance.

Table 1 also compares the statistics to the findings of Ambler et al. (2002; 2004). Further, findings from Finnish and the UK companies are rather similar: both consider financial metrics the most important, while innovativeness metrics are ranked low. The most remarkable difference was detected at competitive metrics (e.g. market share, relative price) that were the least important in Finland but the third of six metrics categories in Ambler et al. (2004). In terms of metrics use, most significant differences are identified at perceived quality/esteem and customer satisfaction. While Finnish companies find perceived quality/esteem, market share, and awareness more important, firms in the UK rated shareholder value metric considerably more important than those in Finland.

**Table 1. Use and importance of marketing metrics (all sectors).**

Metric	% claiming to use metric		% rating as very important	
	Frösén et al.	Ambler et al.	Frösén et al.	Ambler et al.
Sales (value and/or volume)	90	91	86	71
Profit / Profitability	89	92	85	80
Gross margin	81	81	79	66
Perceived quality / esteem	78	64	73	37
Total number of consumers	73	66	59	24
Consumer satisfaction	72	68	68	48
Market share (volume or value)	68	78	62	37
Awareness	67	78	63	28
Marketing spend	66	65	48	39
Number of consumer complaints	65	69	57	45
Number of new consumers	64	57	58	57
Loyalty / retention	63	64	62	47
Shareholder value / EVA / ROI	63	53	54	79
Customer Satisfaction	63	45	63	58
Brand/product knowledge	60	55	48	45

The data for metric use and metric importance were subjected to an exploratory factor analysis. Using eigenvalue criteria, while excluding indicators with loading below threshold value 0.5, nine and eight metrics factors, respectively, were identified. Cronbach's alpha coefficients indicate satisfactory internal consistency as they all, without one exception, were above 0.6, as suggested for exploratory research by Malhotra and Birks (2006). The factors for the use and importance data from the Finnish survey are reasonably similar to the categorization of Ambler et al. (2002) and consistent with each other.

## Turbulence

For assessing the role of turbulence, the two extreme quartiles were pulled for comparison. For both the top and bottom 25% most turbulent environments, the responses to marketing metric use and importance were divided according to business sector (Ambler et al. 2004). Within each subgroup, the prominence (importance) of marketing metric groups (factors) refers to corresponding average factor scores, as presented in Tables 2 and 3.

**Table 2. Marketing metric group prominence by business sector (importance; least turbulent 25%).**

Sector		B2C goods	B2B goods	B2C services	B2B services	Retail	Other
Factor \	N	64	52	27	116	10	11
End user		0.383	<u>-0.305</u>	0.073	-0.059	<b>0.698</b>	0.197
Accounting		0.013	-0.023	<u>-0.349</u>	<u>-0.264</u>	0.148	<b>0.486</b>
Value		-0.094	-0.074	0.059	0.075	0.481	0.393
Innovativeness		0.084	<b>0.227</b>	-0.042	0.094	<u>-0.024</u>	-0.378
Customer convenience		<b>0.547</b>	-0.003	<b>0.488</b>	-0.155	0.097	<u>-0.694</u>
Competitive		-0.131	0.088	0.275	-0.244	0.325	0.181
Customer portfolio		0.049	-0.153	0.486	0.021	0.463	0.227
Leads		<u>-0.145</u>	-0.036	-0.279	<b>0.122</b>	0.101	-0.022

**Table 3. Marketing metric group prominence by business sector (importance; most turbulent 25%).<sup>1</sup>**

Sector		B2C goods	B2B goods	B2C services	B2B services	Retail	Other
Factor \	N	44	85	27	107	9	8
End user		0.140 (-)	-0.106 (+)	-0.009	-0.058	0.447 (-)	<u>-0.696 (--)</u>
Accounting		<u>-0.089 (-)</u>	<b>0.361 (+)</b>	<u>-0.709 (-)</u>	-0.070 (+)	0.333 (+)	<b>0.828 (+)</b>
Value		-0.063	0.001	0.130	-0.038 (-)	0.273 (-)	-0.265 (--)
Innovativeness		0.068	-0.063 (-)	-0.350 (-)	-0.166 (-)	<u>-0.674 (--)</u>	-0.690 (-)
Customer convenience		<b>0.344 (-)</b>	0.125 (+)	-0.085(--)	<u>-0.453 (-)</u>	<b>0.576 (+)</b>	0.008 (++)
Competitive		-0.066	0.112	-0.068(-)	0.023 (+)	0.087 (-)	0.145
Customer portfolio		0.213 (+)	<u>-0.428 (+)</u>	<b>0.515</b>	0.010	0.445	-0.136 (-)
Leads		-0.059	-0.305 (+)	0.031 (+)	<b>0.158</b>	-0.380 (-)	-0.270 (-)

<sup>1</sup> An increased (decreased) prominence vis-à-vis the least turbulent quartile of at least 0.1 is signified by a plus (minus) sign. Two signs signify a change of 0.5 or more.

Although the values in Tables 2 and 3 cannot be used as a direct, scaled measure of shift in importance between metrics, they do permit an assessment of the relative importance placed on metric types. Some trends are easily detected. For *B2C goods*, the differences are not very pronounced: a slightly increased emphasis on the importance of metrics of customer acquisition and loyalty when moving to more turbulent environments. In *B2B goods*, a more turbulent environment is associated with more emphasis on accounting measures and end user perception and convenience, and less on managing the customer portfolio. In *B2C services*, there is a distinct difference between the quartiles: more turbulence coincides with much less emphasis on measures of customer convenience (including satisfaction) and accounting metrics, and more emphasis on new customer acquisition. For the *B2B services* sector, more turbulence means more emphasis on accounting and competitive measures, but less on value, innovativeness and customer convenience metrics. *Retail* sector also exhibits strongly differing emphases depending on turbulence. In more turbulent environments there is distinctly less emphasis on measuring innovativeness and customer acquisition and distinctly more on customer convenience. The firms not fitting in any of these categories exhibit strong shifts in emphasis to accounting and customer convenience and away from innovativeness, value and end user behaviour, and perceptions.

All factors exhibit a notable change in some sector's turbulence differences. Across the board, innovativeness metrics are seen as less important in every sector the more turbulent the environment is. For all the other factors, differences caused by turbulence vary by sector.

The same analysis on the most used metrics yields nine similar factors. When compared across sectors in the least and most turbulent environments, the shifts in emphasis correspond closely with the ones discussed here. On a general level, higher turbulence is associated with markedly less emphasis on competitive, innovativeness and delivery channel metrics in all but one sector for each metric factor. Accounting metrics also become more common in all but one sector with higher turbulence. In-depth analysis and discussion of the "in use" set is left out due to space restrictions.

### **Discussion**

Due to the breadth and depth of the overall survey instrument, this study falls short of a complete reproduction of Ambler et al. (2004). The added perspective of external turbulence, however, adds a great deal to the general-level confirmation of the initial study and its international replications (e.g. Llonch et al. 2002; Ambler and Xiucun 2003).

In general, the findings on the effects of turbulence on metric importance fit in well with an understanding of the nature of competition in the various sectors. The role and practical importance of customer relationships rises as a potential explanation of many of the emphasis shifts. In retail especially, with growing turbulence, there is a shift away from measuring value creation to measuring value appropriation. This is in line with a larger phenomenon: on a general level, the most conclusive finding of the study is that innovativeness metrics are used less and felt to be less important when operating in a turbulent environment. The results reflect an understanding of how turbulence affects business. With seemingly less time to focus on long-run value creating mechanisms, such as innovation management, top management priorities are more often found in exploitation of the present business and survival on the marketplace. Differences in metrics that are in use and metrics seen as important clearly attest to this. The logical next question is whether companies that can limit possibly unnecessary influence of external turbulence on their operating mechanisms can outperform others.

The data collection and analysis methodologies are reliable, but validity of the findings rests more on qualitative interpretation. The grouping of metrics by factor analysis to simplify comparison clearly gives good indication of general directions, but cannot be construed as more than that. Due to exploratory nature of the study, restrictions for bold generalizations exist. The findings should be interpreted with caution also because of subjective metric and turbulence measurement, and low firm frequency in certain groups.

Implications for managers are found in comparative reflection of the metrics in use in different situations – and above all in considering how differing foci can give an edge in measuring marketing activities and thus managing the marketing effort more effectively. Further research with the same data set can permit the linking of metric and turbulence data to other internal processes and business performance. Based on the findings, looking at investments, product development, and other value creation mechanisms could provide fruitful avenues for investigation.

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