DRAFT PAPER

Marketing Metrics: A Review of Performance Measures in Use in the UK and Spain

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Abstract

This paper explores how firms assess their marketing performance, together with differences by industry sector, firm size and nationality (the UK and Spain). We are concerned with marketing metrics that reflect both common usage and best practice. Using survey methodology, content validity and scale purification techniques, 54 measures originally identified were reduced to a common practice list of 19 metrics on the basis of top management review and perceived importance for assessing performance. Of these 19 metrics, five were associated with higher performing firms, although this does not imply that the metrics predict performance. This research describes the metrics of choice.

A common short list of metrics would allow practitioners and researchers to compare findings across projects; and give a clearer view for assessment and benchmarking. On the other hand, metrics provide mileposts to determine progress against each firm's individual strategy. Marketing performance assessment requires the short-term metrics to be adjusted by any change in the marketing asset(s), e.g. brand equity. Therefore the measurement of brand equity and performance assessment substantially overlap.

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Introduction

In today's business environment, the opportunities to improve profits through cost-cutting face diminishing returns. Given this, company boards might be expected to pay renewed attention to the ultimate source of cash flow: the end user or consumer. The extent to which top management does, in fact, review consumer and other market measures is the subject of this paper.

A farmer whose livelihood depends on a river flowing through his land would be foolish not to be concerned with the upstream situation, especially if a neighbor could divert it to his property. Similarly we might expect top management to be increasingly concerned with issues of consumer behavior; how consumers' minds work, how many are recruited, their rate of churn, their attitudes to price and quality. This premise is supported by the focus on customer orientation among both practitioners and academics in recent years. The academic literature has shown customer orientation to be positively correlated with company performance (e.g. Narver and Slater 1990; Jaworski and Kohli 1993; Slater and Narver 1994; Kokkinaki and Ambler 1999).

The objective of the present study is twofold. First we explore how firms in a variety of business sectors assess their marketing performance. In doing so, we identify significant differences by industry sector, firm size and nationality (UK versus Spain). Secondly we develop a common practice set of reliable measures for assessing marketing performance. The number of required metrics is a key issue for practitioners (Davidson 1999). A review of the literature identified 54 potential measures; survey research was conducted for 38 of these metrics. This group was further refined to identify a working set of measures reflecting common usage. A small common set of metrics would give practitioners and researchers the ability to compare performance across brands and countries and benchmark other companies. On the other hand, metrics act as milestones to indicate progress along each company's individual strategic direction. As such they need to be differentiated. The current study follows on previous research (Kokkinaki and Ambler 1999; Shaw and Mazur 1997) and considers contextual effects towards the development of unambiguous, individual and, ideally, predictive performance measures.

Data from UK and Spanish companies are presented to give an indication of the extent to which metrics usage might generalize across Europe. UK data was originally collected to support the ongoing Marketing Metrics research programme[1], and the use of UK and Spanish samples allows for strong comparisons between northern and southern European business practices. This paper

[1] Sponsored by the Marketing Society, the Marketing Council, the Institute for Practitioners in Advertising, the Sales Promotions Consultants Association, the London Business School and the Marketing Science Institute.

should be regarded as exploratory. We are mostly concerned with (i) the extent to which the measures are used by the company at any management level, (ii) whether they are seen by top management and (iii) how useful they are for marketing assessment. Since marketing performance assessment is a combination of short-term (e.g. those in the profit and loss account) metrics and the change in the marketing asset (e.g. brand equity, Kokkinaki and Ambler 1999), performance and brand equity measurement substantially overlap.

The paper is structured as follows. After briefly noting performance metrics from the literature, we describe the methodology and compare usage between countries, between marketing and accounting respondents and across sectors. As we have no objective basis for establishing the usefulness of these metrics, we report the perceptions of their users. We then use content validity to reduce our 38 measures to 30 and then apply scale purification for a further reduction to 19 items. Finally, we explored the possibility that the usage of measures might be associated with performance. This is not suggesting that the metrics themselves would predict performance, only that the higher performing companies might indirectly indicate “best practice” in metrics usage.

Measures in Use

There is a large body of literature which deals with overall competitive performance of companies and the alternative ways in which that performance can be gauged. (Frazier and Howell 1982; Buckley et al. 1988). Success measures from this literature can be classified broadly as either financial or non-financial. The imprecision of marketing language as seen by other disciplines (Shaw and Mazur 1997) has indicated a need for formal metrics. Early work in firm-level measurement of marketing performance focused on financial measures: profit, sales and cash flow (Sevin 1965, Feder 1965, Day and Fahey 1988). In the 1980’s, market share gained popularity as a strong predictor of cash flow and profitability (e.g. Buzzell and Gale 1987).   Over the past decade, non-financial measures such as customer satisfaction (e.g. Yi 1990), customer loyalty (Dick and Basu 1994), and brand equity (see Keller 1998 for review) have attracted tremendous attention from practitioners and researchers. Clark (1999) suggests marketing performance metrics have expanded not only to non-financial measures, but have also moved toward using “input” measures such as marketing audit, implementation and orientation, and toward using multidimensional measures such efficiency or effectiveness.

A literature search of five leading marketing journals yielded 19 different measures of marketing “success”. Table 1 (taken from Ambler and Kokkinaki 1997) summarizes the metrics gathered from 145 empirical studies published in the Journal of Marketing, Journal of Marketing Research, Marketing Science, International Journal of Research in Marketing, and the Journal of the Academy of Marketing Science over the period 1991-96. The Journal of Consumer Research and Strategic Management Journal were originally included but were dropped due to the low inclusion of any success related articles (4/229 and 9/288 respectively).

Table 1: Number of Empirical articles applying Marketing Success criteria

SUCCESS CRITERIA	JM	IJRM	JMR	MS	JAMS	TOTAL
Sales	15	5	8	7	2	37
Sales Growth	6	0	1	0	1	8
Market Share	6	4	11	9	1	31
Profit Contribution	8	3	7	4	1	23
ROI/ROA	5	1	1	0	2	9
ROS	0	1	0	0	0	1
Brand Strength/Equity	2	2	4	1	0	9
Customer/Brand Loyalty	1	2	2	3	0	8
Customer Satisfaction	5	0	2	1	0	8
New Customers Gained	0	1	4	1	0	6
Repeat Purchasing Frequency	1	0	1	3	0	5
Brand Preference/Purchase Willingness	6	6	3	1	7	23
Positive Attitude(s)	2	2	0	0	2	6
No. of New Products Introduced	2	1	1	0	0	4
Lead Generation	0	1	0	1	0	2
Met Goals/Perceived Effectiveness	7	0	3	0	3	13
Higher Prices	1	1	2	0	0	4
Stock Returns	2	0	1	0	0	3
Other Success Measures	2	1	4	0	0	7
Total Success Articles Surveyed	43	25	38	24	15	145

Clark (1999), in his history of marketing performance measures, showed how traditional financial measures (profit, sales, cash flow) expanded to a range of non-financial (market share, quality, customer satisfaction, loyalty, brand equity), input (marketing audit, implementation and orientation) and output (marketing audit, efficiency/effectiveness, multivariate analysis) measures.

Key to marketing is being able to measure the “success” or “failure” of marketing initiatives. Despite the proliferation of measures and detailed analysis considered by researchers, marketing’s performance as a whole has had limited attention in practice. Measurement has traditionally focused on macro-level financial indicators such sales and sales growth. This may be explained in part by the difficulty in relating marketing activities to long-term effects. An added obstacle is the challenge in defining and correlating soft data, such as customer attitudes, with performance. Many businesses find it problematic to measure even relatively quantitative behaviors such as customer retention, and the inevitable result is that many companies have been unwilling to expend the time, energy, and resources to do it effectively. Fortunately, this appears to be changing. New measures are appearing, such as balanced scorecards, customer satisfaction measures, process metrics and activity-based costing. The US Institute of Management Accountants report the growing use of non-financial measures (IMA 1993, 1995, 1996). The Marketing Science Institute has raised marketing metrics to become its leading capital research project.

The search for marketing metrics can be explained by control theory (e.g. Palmer and Pickett 1999). In this, managers seek to reduce performance variances by identifying performance predictors, modeling the relationships between the predictors and performance and then monitoring the predictors. These mental models are not explicit, except perhaps in the most sophisticated firms, but an intuitive sense of the importance of measures for understanding performance drives firms in their selection of metrics. That selection is also not as a package but incremental as metrics are added to, and culled from, the portfolio. This research explores measures in use but later work may be able to deduce the implied models from the metrics employed.

Methodology

Measures of marketing performance were obtained independently from the literature and through an in-depth qualitative study of 24 UK firms. At the pilot stage, 54 metrics were investigated, and respondents were encouraged to identify additional metrics they used. Respondents complained about the pilot survey length and no new metric had more than the original supporter.

To keep the survey instrument to a length respondents would tolerate, some types of measures were discarded:

- Year on year changes, i.e. trends or derivatives.
- Diagnostics, i.e. analyses of metrics by channel, region, product size etc.
- Composites of other metrics, i.e. the profit to sales ratio where both profits and sales were already included as separate metrics.
- The same metrics for different time periods, e.g. sales for the period of the promotion and sales for the whole year.

The aim was to whittle down the hundreds of possible marketing measures to a set of distinct pertinent key metrics. Metrics which found no usage in the pilot phase were eliminated. Metrics used solely for trending and analysis rather than marketing assessment were discarded as noted above.

Redundancy among measures also resulted in discarded items. This elimination involved some hard choices. For example, in choosing between sales, market size and market share, one is strictly redundant but which one? The general rule applied was to select the most frequently used measures when possible. Appendix A shows the original metrics and those eliminated.

The resulting 38 metrics were classified into the six categories developed by Kokkinaki and Ambler (1999):

- Consumer/end user thoughts and feelings (e.g. awareness, consumer satisfaction, perceived differentiation)
- Consumer/End User Behavior (e.g. number of new customers, loyalty, number of consumer complaints)
- Trade Customer (e.g. distribution/availability, customer satisfaction)
- Competitive Market (e.g. market share, relative price, penetration)
- Innovation (e.g. number of new products, revenue of new products)
- Financial (e.g. sales, gross margins, profitability, marketing spend)

A telephone survey was conducted of 301 marketing or finance senior executives across the UK and Spain. An additional 31 questionnaires were completed by UK marketing executives at the pilot stage giving a total of 332 responses. The survey instrument was unchanged apart from reformatting for telephone usage. The UK telephone survey was conducted using lists supplied by The Marketing Society and The Institute of Chartered Accountants of England and Wales. In both cases, only senior practitioners were selected. In the event, some of those had changed role since the lists were compiled but they were still in senior roles in their companies and qualified to respond. The acceptance level for the telephone interviews, i.e. response level, was 50.1%. This excludes wrong numbers and other technical blockages. The Spanish protocol replicated the UK as closely as possible.

Respondents were asked to indicate the importance of each measure for assessing the overall marketing performance of the business on a 5-point scale from very important (5) to not at all important (1). They were also asked to indicate the highest level of routine review of this metric within the firm, on a scale ranging from the [group's] top board level (5) through junior marketing (1) to not used at all (0). Respondents were also asked to add any relevant measures not listed. Performance was operationalized as the mean of responses to four 5-point scales asking participants to rate the firm's performance relative to major competitors, the business plan, and prior sales performance; and to rate its overall marketing performance.

Contextual data were also collected in order to determine the impact of environmental factors such as firm size, business sector, organization structure, and age of business. Tables 2 – 6 set out the composition of the sample. Table 2 shows an even spread across firm size and sector. For completion time reasons, the Spanish questionnaire needed to be slightly reduced. Table 3 shows the structural make-up of respondents firms. Given the spread of firm size, we expect a similar pattern in Spain. As businesses are in more than one sector, multiple responses explain why the rows do not sum to the totals.

Table 2: Respondents by firm size and sector – Total

# Employees	**Retail**	**Consumer goods**	**Consumer Services**	**B2B goods**	**B2B Services**	**Other**	**Total**
Less than 50	3	3	3	7	28	7	**51**
50-249	5	10	9	13	24	10	**71**
250-499	1	7	7	16	8	4	**43**
500-999	4	12	9	11	8	9	**53**
1000-5000	8	10	6	14	6	8	**52**
More than 5000	6	13	12	5	13	9	**58**
Missing values						4	**4**
Total	**27**	**55**	**46**	**66**	**87**	**51**	**332**

Table 3: Respondents by structure and sector – UK only

# Employees	Retail	Consumer goods	Consumer Services	B2B goods	B2B Services	Other	**Total**
One unit without marketing dept	4	4	27	4	23	9	**46**
One unit with marketing dept	5	7	6	11	15	6	**50**
Subsidiaries with one board	7	8	5	11	13	5	**49**
More complex	6	13	10	15	15	25	**84**
Missing values						2	**2**
Total	**22**	**32**	**23**	**41**	**66**	**47**	**231**

Table 4 shows that the great majority of the business have been in business for more than five years and can therefore be expected to have built stable reporting systems.

Table 4: Respondents by years in business and sector – Total

Age of Firm	Retail	Consumer goods	Consumer Services	Business -to- Business	Business -to- Business services	Other	Total
Less than 1 year					4		**4**
1-5 years	5	3	3	3	9	6	**29**
5-15 years	5	2	6	7	24	11	**55**
15-50 years	8	18	18	33	26	14	**117**
>50 years	9	33	16	25	23	16	**122**
Missing values						5	**5**
Total	**27**	**56**	**43**	**68**	**86**	**52**	**332**

Although the telephone calls and questionnaires were addressed to individually named marketers and accountants (50/50), Tables 5 and 6 show that a sizeable minority of respondents were in other roles, either because the individuals had changed positions or had assigned the survey to a more suitable colleague.

Respondents also varied by role within the firm, with marketers more heavily weighted towards consumer and retail product sectors, and finance executives more strongly represented for industrial product sectors.

Table 5: Respondents by Sector and Role – Total

Sector	Finance	Marketing Manager	Other	**Total**
Retail	7	14	6	**27**
Consumer Goods	15	34	7	**56**
Consumer Services	16	21	9	**46**
B2B Goods	34	27	7	**68**
B2B Services	32	24	30	**87**
Other	24	12	11	**47**
Total	**128**	**132**	**65**	**332**

Table 6: Respondents by Number of Employees and Role – Total

Number of employees	Finance	Marketing Manager	Marketing Services Agency	Other	**Total**
Less than 50	13	7	1	30	**51**
50-249	30	28		13	**71**
250-499	22	17		4	**43**
500-999	30	18		5	**53**
1000-5000	17	29		6	**52**
More than 5000	15	31	1	11	**58**
Missing values				4	**4**
Total	**127**	**130**	**2**	**73**	**332**

Results and Discussion

First we report the usage, the importance ascribed to the measures as indicators of performance and frequency of the metrics being seen by top management. One might expect the perceived importance of measures and top management review to correlate. Tables 7 and 8 examine that. Then we analyze sector and respondent role (marketer vs. accountant) differences. Content validity and scale purification techniques are used to reduce the 38 metrics to 22 and then 19. Finally, we seek best practice by regressing performance on metric usage.

Table 7 ranks the top 15 (> 62%) metrics by frequency of use compared with the frequency that it was rated as "very important" and the frequency that it reached top management for the UK respondents. In the UK, unlike the USA and Spain, top management and top "board" are synonymous.

Table 7: Ranking of Marketing Metrics – UK

Metric	% of Firms Reported Using Measure	% firms rating as very important	% firms that say metric reaches their Top Board	Pearson Correlation between Level and Importance
1. Profit/Profitability	92	80	71	.719**
2. Sales, Value and/or Volume	91	71	65	.758**
3. Gross Margin	81	66	58	.827**
4. Awareness	78	28	29	.732**
5. Market Share (Volume or Value)	78	37	34	.727**
6. Number of New Products	73	18	19	.859**
7. Relative Price (SOMValue/Volume)	70	36	33	.735**
8. Number of Consumer Complaints (Level of dissatisfaction)	69	45	31	.802**
9. Consumer Satisfaction	68	48	37	.815**
10.Distribution/Availability	66	18	11	.900**
11. Total Number of Customers	66	24	23	.812**
12. Marketing Spend	65	39	46	.849**
13. Perceived Quality/esteem	64	37	32	.783**
14. Loyalty/Retention	64	47	34	.830**
15. Relative perceived quality	63.	39	30	.814**

n = 231, ** $p < .01$

Table 7 highlights the correlation between the proportion of UK firms viewing a measure as "very important" and the level of routine review by the top board. However, a deeper inspection of the data at respondent level reveals strong correlation between level and importance for fewer measures when the effect of the measure's usage by the firm is accounted for - see Table 8. Scatter plot analysis reveals that the importance scale varies less than the highest level of routine assessment.

We were surprised by the relatively low levels reported for basics such as sales and profitability. Every board must see these figures as part of their financial accounts but the context here was marketing. For example, the board of a multi-brand company may not see profits for each brand. We interpreted these results in terms of the respondents' understanding of what the board looked at when they were considering marketing but this needs to be tested.

Table 8: Partial Correlations for Top 15 Metrics

Metric	% of Firms Using Measure	Partial Correlations between Level and Importance	P value
1. Profit/Profitability	92	.128	.005
2. Sales, Value and/or Volume	91	.128	.050
3. Gross Margin	81	.049	.459
4. Awareness	78	.607	***
5. Market Share (Volume or Value)	78	.473	***
6. Number of New Products	73	.826	***
7. Relative Price (SOM Value/Volume)	70	-.015	.815
8. Number of Complaints (Level of dissatisfaction)	69	.319	***
9. Consumer Satisfaction	68	.221	.001
10.Distribution/Availability	66	.876	***
11.Total Number of Customers	66	.648	***
12. Marketing Spend	65	.126	.059
13. Perceived Quality/esteem	64	.124	.062
14. Loyalty/Retention	64	.208	.002
15. Relative Perceived Quality	63	.246	***

*** p<.001

Spanish respondents rated most metrics as less important than their UK colleagues, and very few reported the metrics as reaching top board review. This is probably because, as noted above, Spanish boards are less involved in day-to-day management that their British counterparts. On the other hand, more respondents claimed that the metrics were in use. Table 9 compares the frequencies of those ascribing "very important" to the metrics but lists only those where the two countries differed by more than 10 percentage points.

Table 9: Main Differences of Importance Rankings UK/Spain

Metric	% UK firms rating as very important for assessing overall marketing performance	% Spanish firms rating as very important for assessing overall marketing performance
Profit/Profitability	80	56
Number of Consumer Complaints (Level of dissatisfaction)	45	30
Consumer Satisfaction	48	34
Loyalty/Retention	47	21
Relative Perceived Quality	39	20
Number of New Customers	33	18
Number of Direct (Trade) Customer Complaints	33	21
Percent Discount	20	35
Sample size (n)	231	101

In line with Kokkinaki and Ambler (1999), we found that most firms rely primarily on internally generated financial figures to assess their marketing performance. The last column in Table 10 shows the earlier results adjusted from its 7-point to a 5-point scale. While the differences between the other groups were not large, the main changes were the higher ratings for direct customer and innovativeness.

Table 10: The importance of metrics by group

	UK Mean	Spanish Mean	Kokkinaki and Ambler (1999) adjusted (UK)
Financial	4.54 (n=222)	4.54 (n=90)	4.68
Direct Customer	4.19 (n=138)	4.36 (n=51)	4.02
Competitive market	4.05 (n=211)	4.27 (n=77)	3.95
Innovativeness	4.03 (n=211)	4.42 (n=55)	3.69
Consumer behavior	3.96 (n=207)	3.12 (n=78)	3.92
Consumer intermediate	3.95 (n=202)	3.18 (n=82)	3.95
n =			525[2]

Sector Differences

In the UK, business sector was found to have a significant effect on the usage of specific items, particularly consumer intermediate (e.g. attitudes), competitive market and financial measures. Distinctions between sectors were greater for level of importance measures than level of review. As would be expected, consumer oriented items are more important for consumer sectors. Table 11 shows the nine most significant differences (of 38).

[2] Due to missing values there were small variations in sample size per cell.

Table 11: ANOVA for significant metric variations by business sector - UK

	Level of Importance		Level of Review	
	df	F	df	F
Other attitudes e.g. liking	228	8.88***	229	4.66***
Image/personality/identity	226	7.91***	229	4.36**
Penetration	225	7.67***	229	3.07**
Salience	225	3.81	229	3.15**
Commitment/purchase intent	228	6.88***	229	3.45**
Distribution/availability	218	6.83***	228	6.14***
Awareness	227	5.84***	229	3.05**
Relevance to consumer	226	5.34***	228	2.61**
Marketing spend	228	5.12***	229	2.55**
Market share	226	5.02***	229	2.63**
Share of voice	225	4.93***	229	4.82**
Brand/product knowledge	228	4.54**	229	2.62**
Conversions	225	2.55**	228	2.96**
Margin of new products	225	3.95**	228	2.60**
Purchasing on Promotion	225	11.87***	229	5.88***

$n = 231$, ** $p < .05$, *** $p < .001$

Of these results, perhaps the most surprising is the variation in importance ascribed to market share. Tables 11a and 11b detail the industry differences. These reveal overall lower review attached to these metrics by business to business firms, particularly services. Differences are less marked for level of importance measures.

Table 11a: Means for significant metric variations by business sector - UK
Level of Importance

	Retail (N=22)	Consumer Goods (N=32)	Consumer Services (N=23)	B2B goods (N=41)	B2B services (N=66)	Other (N=46)
Other attitudes e.g. liking	2.82	2.97	2.61	3.02	1.06	1.47
Image/personality/identity	2.72	3.50	1.83	1.53	2.71	2.44
Penetration	2.00	3.59	2.95	2.15	1.11	1.89
Salience	1.64	2.34	1.81	0.80	0.85	1.56
Commitment/purchase intent	2.55	3.47	3.39	1.54	1.55	1.77
Distribution/availability	1.48	2.84	0.9	1.6	0.53	1.07
Percent Discount	2.0	2.72	2.19	1.76	0.74	0.87
Awareness	3.09	3.41	3.68	1.83	1.88	2.85
Relevance to Consumer	1.91	3.22	3.52	1.68	1.47	2.36
Marketing Spend	3.73	3.78	3.27	3.51	2.14	2.39
Market Share	3.23	3.88	3.36	3.51	2.08	2.68
Share of Voice	1.64	2.66	1.70	1.54	0.71	1.13
Brand/product knowledge	3.13	2.94	3.17	1.88	1.55	2.38
Conversions	1.52	1.56	3.30	1.80	2.55	2.20
Margin of New Products	2.52	2.56	2.70	3.07	1.32	1.89
Purchasing on Promotion	2.64	1.81	1.30	1.29	0.62	0.96

Table 11b: Means for significant metric variations by business sector - UK
Level of Review

	Retail (N=22)	Consumer Goods (N=32)	Consumer Services (N=23)	B2B goods (N=41)	B2B services (N=66)	Other (N=46)
Other attitudes e.g. liking	2.55	2.47	1.57	0.95	1.12	1.20
Image/personality/identity	2.36	2.94	2.22	1.51	1.24	2.37
Penetration	1.73	2.69	1.91	1.93	1.08	1.70
Salience	1.23	1.84	1.39	0.46	0.74	1.24
Commitment/purchase intent	2.31	2.84	1.96	1.44	1.29	1.57
Distribution/availability	1.14	2.22	0.48	1.39	0.41	0.89
Percent Discount	2.09	2.65	2.10	1.49	0.86	1.24
Awareness	2.86	2.90	3.00	1.81	1.70	2.37
Relevance to Consumer	1.82	2.66	2.04	1.41	1.22	1.91
Marketing Spend	3.64	3.66	2.87	3.46	2.50	2.52
Market Share	3.27	3.44	2.57	2.95	2.09	2.34
Share of Voice	1.27	2.25	1.04	1.20	0.50	0.93
Brand/product knowledge	2.64	2.50	2.43	1.39	1.53	2.15
Conversions	1.14	0.91	2.43	1.32	2.11	1.67
Margin of New Products	2.19	2.37	2.13	2.59	1.21	1.80
Purchasing on Promotion	2.64	1.81	1.30	1.29	0.62	0.96

For the Spanish data, sector had less impact on the importance ratings. Only four measures (number of trade customer complaints, relative price, revenue of new products, and percent discount) showed significant differences by industry sector. There were no significant differences for level of review measures by sector.

Differences By Role

Marketers reported 17% more metrics in use by their companies than their finance peers. With the exception of shareholder value and number of new customers, finance respondents' reported use of a given metric was always lower than marketers'. Differences were greater for level of importance than for level of review. These differences probably indicate different awareness levels as distinct from actual usage within the firm due to marketers' greater familiarity with their measures. Differences between the groups were greatest for consumer attitude and behavior measures. Table 12 highlights those metrics where the differences between marketers and accountants are significant.

Table 12: ANOVA for significant metric variations by role – UK

	Level of Importance		*Level of Review*	
	df	F	Df	F
Distribution/Availability	218	5.726***	*	*
Awareness	229	8.78***	229	2.936**
Other Attitudes, eg liking	228	6.110***	229	2.599**
Relevance to consumer	226	5.43***	*	*
Image/personality/identity	226	5.074**	*	*
Perceived Differentiation	227	3.329**	*	*
Conversions	225	2.976**	*	*
Salience	225	5.436***	*	*
Commitment/Purchase intent	228	3.354**	*	*
Purchasing on Promotion	225	8.922***	*	*
Penetration	225	3.754**	229	2.887**
Share of Voice	225	9.877***	229	7.952***
Percent Discount	226	3.443**	*	*
Loyalty/Retention	228	3.147**	*	*
Number of Products Per Customer	226	4.543**	*	*
Market Share	226	7.72***	*	*
Brand/Product Knowledge	228	5.320***	*	*
Revenue of New Products	225	2.845**	*	*
Marketing Spend	228	5.979***	*	*

n = 231 surveys, * not significant, ** $p < .05$, *** $p < .001$

Table 12a: Means for significant metric variations by role – UK

	Level of Importance		*Level of Review*	
	Finance (N=79)	Marketing (N=81)	Finance (N=79)	Marketing (N=81)
Distribution/Availability	0.58	1.92	n.s.	n.s.
Awareness	1.76	3.49	1.80	2.86
Other Attitudes, eg liking	1.04	2.42	1.87	1.83
Relevance to consumer	1.38	2.93	n.s.	n.s.
Image/personality/identity	1.76	3.22	n.s.	n.s
Perceived Differentiation	1.62	2.80	n.s.	n.s.
Conversions	1.57	2.59	n.s.	n.s.
Salience	0.66	1.95	n.s.	n.s.
Commitment/Purchase intent	1.51	2.68	n.s.	n.s.
Purchasing on Promotion	1.03	2.70	n.s.	n.s.
Penetration	1.82	2.70	1.72	2.14
Share of Voice	0.71	2.31	1.55	1.95
Percent Discount	0.87	1.96	n.s.	n.s.
Loyalty/Retention	2.42	3.59	n.s.	n.s.
Number of Products Per Customer	1.08	2.20	n.s.	n.s.
Market Share	2.53	3.87	n.s.	n.s.
Brand/Product Knowledge	1.62	3.01	n.s.	n.s.
Revenue of New Products	1.86	2.90	n.s.	n.s.
Marketing Spend	2.46	3.78	n.s.	n.s.

Reducing the set of metrics

Content validity focuses on the adequacy with which the domain of the characteristic is captured by the measure (Churchill 1979), and may be viewed as the minimum requirement for measurement adequacy and the first step in construct validation of a new measure. Defining the domain is therefore a critical element in generating a content valid instrument. The task of definition is typically expedited by examining the literature to determine how the variable has been previously defined and used. Given that it is unlikely that all definitions agree or are sufficiently developed, the researcher must identify which elements underlie the desired use for the term. In developing concrete metrics for marketing performance, the underlying elements should be recognized by practitioners as important. We examine that first and then the extent which usage of the metric is associated with reported firm performance.

A review of the measures ranking as "very important" and "reaching the top board" highlight eight measures which were used and valued by less than 50 percent of UK practitioners: salience, purchasing on promotion, number of products per customer, other attitudes, number of leads generated/inquiries, penetration, commitment/purchase intent, and number of direct (trade) customer complaints. Fifty percent was viewed as an appropriate cutoff given the need for both adequate domain sampling and parsimony in developing content and construct validity (Cronbach and Meehl 1955). Given the large starting set of measures, these items were eliminated from the scale development.

The 30 items that emerged from the content validity process were then subjected to scale purification procedures using responses from the UK sample of 231. The high correlation among the Spanish responses for both the level of review and level of importance measures made this data set inappropriate for scale development purposes. Construct validity was assessed with the guidelines outlined by Churchill (1979) and Gerbing and Anderson (1987). We examined item-to-total correlations and the factor structure (through principal components) for each scale. The decision criterion for item deletion was an improvement in corresponding alpha values to the point at which all items retained had corrected item-total correlations greater than 0.5. Eight items were eliminated, varying slightly as to whether the level of review or level of importance was considered.

Table 13: Recommended item set for scale development (UK data only)

	If level of review is measured		***If level of importance is measured***	
Construct	Alpha	**Items**	Alpha	**Items**
Consumer Attitudes	.85	**7 items:** Awareness Perceived Quality Consumer Satisfaction Relevance to consumer Image/personality Perceived differentiation Brand/product knowledge	.84	**6 items:** Awareness Perceived Quality Consumer Satisfaction Relevance to consumer Perceived differentiation Brand/product knowledge
Consumer Behavior	.78	**5 items:** Total number of consumers # new consumers Loyalty/retention Conversions # consumer complaints	.83	**4 items:** Number of new consumers Loyalty Leads generated Conversions
Trade Customer	.80	**2 items**: Customer satisfaction Number of complaints	.79	**3 items:** Distribution/availability Customer Satisfaction Number of customer complaints
Relative to Competitor	.79	**2 items**: Relative Consumer Satisfaction Perceived Quality	.80	**3 items**: Relative Consumer Satisfaction Perceived Quality Share of Voice
Innovation	.84	**3 items:** Number of new products Revenue of New products Margin of new products	.81	**3 items:** Number of new products Revenue of New products Margin of new products
Financial	.81	**3 items:** Sales Gross Margins Profitability	.77	**3 items:** Sales Gross Margins Profitability
	TOTAL : 22 items		**TOTAL : 22 items**	

n = 231

The two columns (level of review and importance) are shown for comparison. 19 items match.

Survey respondents were asked to rate their firm's performance over the past year along four dimensions:

- Overall marketing performance

- Overall performance relative to major competitors
- Profit performance
- Sales performance

Table 14 shows that mean values for these items varied significantly by nationality for three out of four measures. In the UK, here were no systematic differences across sectors or by role; however reported profit and sales performance did vary significantly with the number of years in business. For the UK data, a reliability analysis yielded an alpha coefficient of .67 for the four items, with the two financial performance measures, Profit Performance compared with Plan (50) and Sales Performance compared with Prior Year (51), having an alpha of 0.75.

Table 14: Performance Measures

	UK Mean	Spanish Mean
Marketing performance	2.51	3.48
Performance relative to competitors	2.63	2.76
Profit Performance	3.06	3.70
Sales performance	2.86	3.78
n =	231	102

The Spanish data revealed significant differences by sector and role for Performance Relative to Competitors and by role in rating Overall Marketing Performance. For this data set, the four performance measures had an alpha coefficient of .6285.

Multivariate regression was used to explore the relationship between marketing metrics usage and firm performance (Table 15). The dependent variable used was the sum of sales and profit performance, and the analysis looked at different scenarios such as sector differences. Size and years of operation were found to be significantly associated with performance, while sector, structure and role were not. However, no strong relationships were found between individual metrics and the reported performance. The best fit independent measures varied slightly with market sector. For instance, with business to business services, the level of importance measures proved better indicators of performance than the level of review, as one would expect. Brand/product knowledge, image/personality/identity and perceived differentiation were the strongest items. For consumer goods, the most important metrics arising from the factor analysis were financial (profit, marketing spend, gross margin, percent discount) and market share.

Overall, the most significant metric associated with performance was found to be profitability (p<.029). Three measures, consumer satisfaction, brand/product knowledge, and sales, had a negative relationship with reported performance. These results, coupled with the low R^2 indicate the need for further study and measure development. Possible factors influencing the weak regression relationships include respondent fatigue and the use of level of review within the firm as opposed to another gauge. The low R^2 may be attributed to the tenuous relationship between firm performance and any internal metric; the existence and application of an internal yardstick does not in of itself predict success. The negative betas for several of the factors are surprising at first glance, but may reflect an increased emphasis on these metrics by poorer performing firms. For example, *relative* consumer satisfaction has been shown to be a better performance predictor than satisfaction without the benchmark (Ryan, Rayner, and Morrison 1999, Varki and Rust 1997, Vredenburg and Wee1986) and is likely to be preferred by the better performing firms. Similarly, profit is a more sophisticated measure than sales.

Table 15: Regression of financial performance on Level of Review Metrics Best Fit model - UK

		beta (standardized)	T
F	4.358***		
R^2*	.082		
Independent factors	Consumer satisfaction	-.112	.172
	Other attitudes	.138	.071
	Brand/product knowledge	-.111	.164
	Relative consumer satisfaction	.102	.162
	Sales	-.141	.063
	Profitability	.167	.029
	Constant	8.468	

* adjusted

Managerial Implications

Practitioners seek a small set of metrics each of which is necessary (no redundancy) and, taken together, are sufficient both to monitor the immediately past performance and to predict the future. Multiple measures are inevitable but more than a dozen or so are hard to comprehend.

This research confirms the validity of the main metrics categories: consumer intermediate (in the mind) and behavior, trade customer, relative to competitor, innovation and financial. Table 11 showed more consistency than the raw data between the importance ascribed to the metrics and the managerial level they reach. Table 16 consolidates those lists by retaining only those metrics which meet both criteria. Note that these constructs do not refer to their internal validity for monitoring and forecasting performance. If that were the case, some of these metrics would be redundant. Some may indeed co-vary and therefore be unnecessary but the question here is a different one. Table 16 shows consistency in metrics use by practitioners, not their functionality. Table 16 therefore summarizes common practice.

Table 16: Common key metrics

Metrics category	Metrics
Consumer Intermediate	Awareness
	Perceived quality
	*Consumer Satisfaction
	Relevance to consumer
	Perceived differentiation
	*Brand/product knowledge
Consumer Behavior	Number of new consumers
	Loyalty/retention
	Conversions
Trade Customer	Customer satisfaction
	Number of complaints
Relative to Competitor	*Relative Consumer Satisfaction
	Perceived Quality
Innovation	Number of new products
	Revenue of new products
	Margin of new products
Financial	*Sales
	Gross margins
	*Profitability
Total	19 items

Table 16 is accordingly a starting point for practitioners to develop a tailor-made list of metrics appropriate for their firm and sector. The five asterisked items integrate the findings from correlating performance. Again we need to be careful. These five metrics do not improve or predict performance, we can only infer that higher performing firms are associated with their usage. They give these five metrics high level attention and regard them as important.

These exploratory results describe common practice but do not provide normative solutions for practitioners. On the other hand we believe that the discussion will help practitioners to develop their own answers. We now address other limitations.

Limitations and further research

Although care was taken to assemble the pre-pilot list of measures in use, the total range is so wide – Meyer (1998) quotes over 100 – that it is possible that key measures, at least in particular sectors, have been omitted.

Davidson (1999) independently provided 46 performance measures which show considerable overlap:

Table 17: Comparison of Davidson measures with this research

Reasons for non-use in this research	**# Davidson measures**
Used in both studies	18
Diagnostics	4
Trends (derivatives)	4
Composites	6
General business measures outside what is generally seen as "marketing", e.g. logistics, R&D and employee issues	10
Candidates for future use (see below)	4
Total	46

The four measures not excluded by our methodology are: recommend to a friend, number of marketing awards, advertising as a % of sales, and brand preference. In our research these did not collect supporters in the space left for other metrics, but they should be considered in future research.

A second limitation concerns the use of subjective rather than objective performance measures. This has been much debated (see Dawes 1999, Dess and Robinson 1984, Venkatraman and Ramanujam 1987) with the broad conclusion that they are correlated but not perfectly. Ideally, objective measures should also be used.

A third limitation concerns the artificial nature of the regression analysis which was based more on statistical convenience than theory. We justify this procedure on the grounds that the research is exploratory.

The sampling methodology provided a broad spectrum of firm sectors and sizes and response rates were high (about 50%) but we cannot be sure that the same is fully representative.

Comparing the data from UK and Spanish companies indicated some differences. For explain profit is seen as more important in the UK but market share has a greater following in Spain. Further multinational research would be required to establish the patterns and causes.

Although this exploration has widened the net, no study has yet found a parsimonious set of metrics to monitor and predict performance. Agarwal and Rao (1996) found that ten popular brand equity measures (such as perceptions and attitudes, preferences, choice intentions, and actual choice) were convergent. Perceptions, preference and intentions (five in all) predicted market share but "all these brand equity constructs may be necessary to fully explain choice." In other words, the extent of covariance was not enough to allow measures to be dropped altogether.

As highlighted earlier, a host of financial and non-financial measures of marketing performance have been considered in recent years. In practice, the proliferation of potential leading indicators is managerially problematic and rarely implemented. This study is a first step towards identifying a meaningful, parsimonious and practical set of metrics to assess marketing performance. We were recording current practice and only weak relationships emerged between metrics and perceived performance. This suggests two streams of future research.

The first links with brand equity. On the basis that performance is given by short-term profits, however expressed, adjusted by the change in brand equity. The question becomes one of measuring brand equity. We need to establish the constructs for parsimoniously describing brand equity which, ideally, are independent of [stakeholder] segment and business sector. For example, loyalty is an important concept but it would be measured differently for consumers, trade customers, employees and investors. Thus we need to consider brand equity measures at both construct and variable levels.

Secondly, we need for greater understanding of causality among constructs, both for advancement of theory and to advise managers on the metrics which will be most predictive for their businesses (Clark 1999). The direction, form, strength and temporal nature of these relationships must be tested.

Conclusions

This paper has explored the marketing metrics in use in the UK and, to a lesser extent, in Spain. We reported on how firms in a variety of business sectors assess their marketing performance, together with differences by industry sector, firm size and nationality. We then reduced our original 54 measures to a common practice list of 19 on the basis of top management review and perceived importance for assessing performance. Of those, five were associated with use by higher performing firms although that does not imply they are necessarily performance indicators. No doubt individual practitioners can identify metrics that better predict performance for their own firms. For example, marketing expenditure, perhaps surprisingly, did not reach this short list.

A common short list of metrics would allow practitioners and researchers to compare findings across projects; and give a clearer view for assessment and benchmarking. On the other hand, metrics provide mileposts to determine progress against each firm’s individual strategy. Marketing performance assessment requires the short-term metrics to be adjusted by any change in the marketing asset(s), e.g. brand equity. Therefore the measurement of brand equity and performance assessment substantially overlap.

For most companies, their reputation, or brand equity, is their most valuable asset. We should now be moving to an age where this is recognized, professionally measured and managed. This report describes current practice for this and, thereby, for the assessment of marketing performance.

Appendix A

Metrics used in the Survey Instrument
(* after number indicates dropped after pilot)

	CONSUMER / END USER THOUGHTS AND FEELINGS	
1	**Awareness**	Prompted, unprompted or total
2	**Salience**	Prominence, stand-out
3	**Perceived quality/ esteem**	How highly rated
4	**Consumer satisfaction**	Confirmation of expectations
5	**Relevance to consumer**	"My kind of brand"
6	**Image/ personality/ identity**	Strength of individuality
7	**(Perceived) differentiation**	How distinct from other brands
8	**Commitment/ purchase intent**	Expressed likelihood of buying
9	**Other attitudes, e.g. liking**	May be a variety of indicators
10	**Knowledge**	Experience with product attributes
	CONSUMER / END USER BEHAVIOUR	
11	**Total number of consumers**	
12	**Number of new consumers**	
13	**Loyalty/ retention**	e.g. % buying this year and last
14	**Price sensitivity/ elasticity**	Any measure of volume sensitivity
15	**Purchasing on promotion**	
16	**# products per consumer**	The width of range end user buys
17	**# leads generated/ inquiries**	Number of new prospects
18	**Conversions (leads to sales) %**	Prospect to sales conversions
19	**# consumer complaints**	Level of end user dissatisfaction
20 *	**Warranty expenses**	Cost of quality rectification
21 *	**Weight ratio**	SOM/{Penetration* Loyalty (share of requirements)}
22 *	**Target market fit**	Actual and target consumer profile match (demo/ psychographics)

	TRADE CUSTOMER/ RETAILER	
23*	**Cost per contact**	Cost of sales call
24	**Distribution/ availability**	e.g. number of stores
25 *	**Share of shelf**	Retailer space as % total
26 *	**Features in store**	Number of times during year
27 *	**Pipeline stockholding (days)**	Stock in channel
28 *	**Out of stock**	% of stores with no stock
29 *	**% sales on deal**	Proportion of sales on promotion
30 *	**On-time delivery**	
31	**Customer Satisfaction**	
32	**# customer complaints**	
	RELATIVE TO COMPETITOR	
33	**Market share**	% SOM (Share of Market) by Volume
34	**Relative price**	e.g. SOM Value/ SOM Volume
35	**Loyalty (share)**	Share of category requirements
36	**Penetration**	% of total who buy brand in period
37	**Relative consumer satisfaction**	e.g. satisfaction vs. competitor
38	**Relative perceived quality**	Perceived quality as % leader
39	**Share of voice**	Brand advertising as % category
	INNOVATION	
40	**# of new products in period**	New product launches
41*	**Satisfaction from new products**	
42	**Revenue of new products**	Turnover, sales
43	**Margin of new products**	Gross profit
	FINANCIAL	
44	**Sales**	Value (turnover) and/ or volume
45*	**Sales volume**	Quantity of sales in standard units
46	**% discount**	Allowances as % of sales
47	**Gross margins**	Gross profit as % sales turnover
48*	**New customers gross margins**	Ditto but for recent customers
49*	**New customer acquisition cost**	

50	**Marketing spend**	e.g. ads, PR, promotions
51	**Profit/ Profitability**	Contribution, trading, or before tax
52	**Shareholder value/ EVA/ ROI**	The true financial bottom line
53*	**Stock cover**	Inventory expressed as days sales
54*	**New products revenue share**	

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