

IDENTIFYING MARKETING EFFECTIVENESS METRICS (Case study: East Azerbaijan`s industrial units)

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Summary

The Paper attempts to identify marketing effectiveness metrics in industrial units. The metrics investigated in this study are completely applicable and comprehensive, and consequently they can evaluate marketing effectiveness in various industries. The metrics studied include: Market Share, Profitability, Sales Growth, Customer Numbers, Customer Satisfaction and Customer Loyalty. The findings indicate that these six metrics are impressive when measuring marketing effectiveness. Data was generated from the sample of 75 marketing executives in industrial units of East Azerbaijan, one of the most important industrial zones in terms of the number of manufacturing companies in Iran, through a survey questionnaire consisting of 21 items. Results of this study clarify marketing effectiveness metrics and moreover indicate the importance of quantitative measures versus qualitative ones. Finally, a model of evaluating marketing effectiveness is presented.

1. INTRODUCTION

In spite of the importance of business performance, unfortunately there is insufficient adequate research on metrics used to evaluate marketing effectiveness. First, the complexity of unraveling short term from long term marketing effects and second, the existence of numerous components that reflect parts of marketing performance are reasons for the lack of an efficient model for measuring the effectiveness of marketing.

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Difficulties in measuring qualitative Metrics constitute another reason for the weak tendency of managers to use different models of evaluating marketing effectiveness. Given that marketing plays a major role in a company's survival and sometimes imposes high cost on them, it constitutes a fundamental contribution to long term business success. Therefore, marketing effectiveness and marketing audits are two famous metrics for monitoring marketing controlling variables (Kotler *et al*, 2006). Although we should take into account that marketing effectiveness is not so simple, good results may be due to a division being in the right place at the right time rather than the consequence of effective management (Kotler, 1977).

First, the present research examines a further set of major marketing metrics among marketing executives in industrial units of East Azerbaijan, one of the most significant industrial regions in terms of the number of manufacturing companies in Iran. Second, it presents a comprehensive and applicative model of both qualitative and quantitative measures of evaluating marketing effectiveness. Third, the study benchmarks measures to reveal the importance of marketing metrics.

The study is structured in four sections. The first part describes the concept of marketing effectiveness and reviews existing literature. The following sections describe how the empirical study was undertaken and presents the results and the findings. Finally, the last section sets conclusions and recommendations.

2. THEORETICAL FRAMEWORK

2.1. The concept of marketing effectiveness

The purpose of marketing effectiveness is to optimize marketing spending for the short and long term in support of, and in alignment with, the brand strategy by building a market model using valid and objective marketing metrics and analytics (Powell, 2008).

Marketing effectiveness calls for managers to have sufficient information for the purposes of planning and effective resource allocation to varying markets, products and territories. Marketing effectiveness is also contingent upon the adeptness of managers to deliver profitable strategies from their philosophy, organization and information resources. Ultimately, marketing effectiveness depends on the ability to implement marketing plans successfully at various levels of the organization (Adu *et al*, 2001).

There are four basic dimensions of marketing effectiveness (Nwokah, 2006; Nwokah and Ahiauzu, 2008). These are:

(1) **Corporate** – A company's budget, size and ability to make organizational changes determine its bounds which operate within.

(2) **Competitive** – A company which operates in a certain category is not alone and it is monitored by many other companies. In a competitive market, marketers have to gain perfect information to act as successfully as their competitors.

(3) **Customers** – Information of customers' behavior such as making purchasing decisions can help marketers to enhance their marketing effectiveness.

Customers who have similar needs act in the same way which causes their segmentation. Customers of each segment make their choices in relation to product values and characteristics in return for the price they paid. Customers also build brand value through information they receive from advertising, word of mouth and any other company promotional actions.

(4) Exogenous factors – Corporate, competitive and customer environmental factors can influence marketing effectiveness. Interest rate, weather, government regulations are examples of external factors that affect marketing effectiveness.

Nwokah determines five factors driving the level of marketing effectiveness that marketers can achieve (Nwokah, 2006; Nwokah and Ahiauzu, 2008):

(1) Marketing strategy – Marketing strategy is important for achieving organizational goals. It draws insights from market research and focuses on positioning a product mix correctly. Choosing and executing a superior marketing strategy will improve marketing effectiveness and lead to extraordinary results.

(2) Marketing creative – Creative marketing can improve company's outcomes even without a change in its strategy. Creative directly connected to growth rate. Consequently, the introduction of a new creative can increase it.

(3) Marketing execution – Marketers can improve marketing effectiveness by improving how they go to market. For example, optimization of the way they enter a market can achieve great results without making any changes in the marketing strategy or marketing creation. By making small changes in any or all of the 4Ps of the marketing mix, marketers can enhance their marketing effectiveness and revenue. (Noubar *et al*, 2011)

(4) Marketing infrastructure – Improving marketing creates a competitive advantage for each company and organization and can lead to significant gains for them. Management in any field of marketing activities fundamentally improves competitiveness and results of a company.

(5) Exogenous factors – Marketers have to take advantage of the environmental factors which affect marketing effectiveness. Opportunities that have been drawn from monitoring these exogenous factors can help marketers to improve the effectiveness of their marketing activities.

The concept of marketing effectiveness has also been extensively discussed because of its strong association with many valuable organizational outcomes such as stable, long-term growth, enhanced customer satisfaction, a competitive advantage, and a strong marketing orientation (Webster, 1995).

Research of marketing effectiveness could be divided into two major viewpoints. According to the first viewpoint, scholars study the concept of marketing effectiveness and try to determine its components. In the second one, scholars study marketing effectiveness metrics and examine its measures.

First viewpoint: This view was among the first, and it was developed by Philip Kotler (1977). He mentioned that marketing effectiveness of a company, division, or

product line depends largely on a combination of five activities: Customer philosophy, Integrated marketing organization, Adequate marketing information, Strategic orientation and Operational efficiency. Kotler's marketing effectiveness and its components are outlined in Table 1.

Table 1: Kotler's marketing effectiveness model

Attributes	Components
Customer philosophy	<ul style="list-style-type: none"> • Management's commitment to market needs and wants • Market segmentation strategy • Holistic marketing approach
Integrated marketing organization	<ul style="list-style-type: none"> • Marketing integration and control • Synergy with other marketing units • New product process
Adequate marketing information	<ul style="list-style-type: none"> • Conduct of market research • Management knowledge of the market • Cost-effectiveness of marketing expenditure
Strategic orientation	<ul style="list-style-type: none"> • Extent of formal marketing planning • Quality of marketing strategy • Extent of contingency planning
Operational efficiency	<ul style="list-style-type: none"> • Top-down communication of marketing thinking • Effectiveness of marketing resources • Responsiveness to uncertainties

The first view consists of extensive research in which some scholars examine the impact of various factors on marketing effectiveness (Dunn *et al*, 1994; Webster, 1995 and Nwokah and Ahiauzu, 2008, 2009). Also, others have investigated Kotler's (1977) amalgam of five components presented in Table 1, and applied it to a certain country or industry (Yoon and Kim, 1999; Stefanov and Todorov, 2004; Cizmar and Weber, 2000 and Adu *et al*, 2001).

Finally, we could claim that this view of marketing effectiveness is based on Kotler's (1977) paper.

Second viewpoint: This view mostly consists of evaluating and measuring marketing performance. This view gained importance because Marketing Science Institute has made Accountability and ROI of marketing expenditure one of its research priorities since 2000. Researches classified in this view attempts to identify and represent various measures and metrics of evaluating marketing effectiveness.

Despite the importance of measuring business performance (see, for example, Meyer, 1998), there is little research on measures which evaluate marketing effectiveness. Reasons for the lack of research of marketing metrics include the complexity of unraveling short- from long-term effects (Dekimpe and Hanssens, 1995), difficulties of measuring brand equity (Marketing Leadership Council, 2001) and perhaps excessive importance business management attributes to financial measures (Eccles, 1991; Kokkinaki and Ambler, 1999).

2.2. Measurement of marketing effectiveness

There is research mentioning a variety of marketing metrics. For example, Clark's (1999) study identifies about 20 measures, 38 metrics were tested by Ambler and Riley (2000), while Davidson (1999) considers ten more useful metrics of marketing effectiveness and Meyer (1998) mentions hundreds. Also, Barwise and Farley (2004) examine six metrics in five industrial countries. However, Clark (1999) suggests that it is better to use existing metrics rather than present new ones.

Kokkinaki and Ambler (1999) establish marketing success in six main categories:

- (1) Financial measures (such as turnover, contribution margin and profit).
- (2) Competitive market measures (such as market share, advertising and promotional share).
- (3) Consumer behavior measures (such as consumer penetration, loyalty and customer gained).
- (4) Consumer intermediate measures (such as brand recognition, satisfaction and purchase intention).
- (5) Direct customer measures (such as distribution level, profitability of intermediaries and service quality). And
- (6) Innovativeness measures (such as products launched and their revenue).

After the investigation made by Kokkinaki and Ambler (1999), different research has been done using the conclusions of their research. In an exploratory study, Eusebio *et al* (2006) focuses on six categories of marketing effectiveness measures to compare the way of measuring marketing performance in two groups of Spanish firms (Tourism and Hospitality firms and industrial firms) and concludes that consumer based measures have a leading role in evaluating marketing effectiveness in Tourism and Hospitality companies. Llonch *et al* (2002) and Ambler and Riley (2000) compare marketing success measures between Spain and UK. Their findings led to the fact that Spanish respondents saw financial metrics as less important than their UK counterparts and they appeared to be more marketing oriented. Ambler and Xiucun (2003) made another investigation in China and got the same results as Spain.

2.3. Hypotheses

Based on the above mentioned framework and the operational conceptual framework, the following hypotheses are presented:

HA1: Customer numbers of a firm are effective when evaluating marketing effectiveness.

HA2: Customer satisfaction with a firm is effective when evaluating marketing effectiveness.

- HA3: Market share of a firm is effective when evaluating marketing effectiveness.
- HA4: Sales growth of a firm is effective when evaluating marketing effectiveness.
- HA5: Profitability of a firm is effective when evaluating marketing effectiveness.
- HA6: Customer loyalty of a firm is effective when evaluating marketing effectiveness.

3. METHODOLOGY

The primary purpose of the study was to examine the metrics for marketing effectiveness within the industrial sector. A cross-section of industrial firms was required to provide the data necessary to answer the research question. The sample of firms derived from the classification of industries by Iran’s industrial and mineral organization. Two screening criteria were used in creating the sampling frame - firms must have at least 50 employees and an executive with marketing responsibilities must be identified in the listing.

Table 2: Data collection

Information collection method	Face to face & postal survey
Sample unit	Marketing executives
Scope	East Azerbaijan, Iran
Universe or population	222 industrial firms
Sample size	75
Sampling error	0.065
Confidence level	95% , p=q=0.50
Fieldwork	Pre test (May 2010), Mailing (September 2010)

The research instruments were designed using existing literature and the opinions of marketing executives. Two sets of instruments were designed. First, a 5 item open questionnaire for gathering executives opinions about measurable metrics and second, a 19 item five-point Likert scale anchored by “1” strongly disagree to “5” strongly agree was developed to examine the metrics of marketing effectiveness.

Validity of research instrument and measurement scales

Content validity was checked by consulting an expert panel of 10 colleagues from marketing or business administration departments in Tabriz universities. As a result, one item was added and two replaced by versions following the suggestions of experts.

Validity of research instrument and measurement scales

After completion of the survey, reliability of the scales was further examined by computing their coefficient alpha (Cronbach alpha). All measures were found to exceed a minimum threshold of 0.7.

The actual results of the scales' reliability analysis are reported in Table 3.

Table 3: Marketing effectiveness measures and their reliability

Measures	Item	Mean	Std. deviation	Cronbach's α
Customer Number	New customer gained	3.53	.794	0.724
	Customer Losses	2.77	1.400	
	Retention rate	3.93	0.604	
Profitability	Churn rate	2.53	1.274	0.772
	Gross profit	3.14	0.850	
	Net profit	3.25	.989	
Market Share	Segment profitability	3.50	.934	.844
	Market growth	3.86	.911	
	Market share	4.00	.936	
Sales Growth	Market demand	3.87	.935	.768
	Market Penetration	3.99	.814	
Customer Loyalty	Sales-variance analysis	3.76	.942	.716
	Micro sales analysis	3.68	.956	
Customer Satisfaction	Brand loyalty	4.21	.776	0.714
	Customer lifetime	3.88	.788	
	Product satisfaction	4.41	.617	
	Place satisfaction	4.09	.640	
	Price satisfaction	3.96	.779	
	Promotion satisfaction	3.60	1.040	

4. RESULTS

The aim of the analysis was to select a set of metrics that could be used to evaluate marketing effectiveness. First, we asked the respondents about their degree of satisfaction with their metrics of evaluating marketing effectiveness.

Within the sample, 43 firms have a developed marketing system and assess marketing effectiveness. (Table 4).

Table 4: Frequencies of the firms

Question	Yes	No
1. Is there a developed marketing system in your company?	43	31
2. Is marketing effectiveness being assessed in your company?	43	31

Although most of the firms have a developed marketing system and assess its effectiveness, marketing executives said that they don't have any comprehensive model for evaluating marketing effectiveness. Therefore, this research examines six metrics that most of the industrial firms deal with.

In order to know which metrics are more important for marketing executives, the researchers conducted a t-test analysis for each hypothesis as marketing effective-

ness metrics. Table 5 shows the mean values and the significance of the T -test. It was observed that there were significant statistical differences for all of the six metrics.

Table 5: t-test of metrics categories for evaluating marketing effectiveness

Metrics	Mean	Std. deviation	T -test
Customer Loyalty	4.047	.632	14.335*
Customer Satisfaction	4.017	.577	15.250*
Market Share	3.933	.742	10.896*
Sales Growth	3.713	.863	7.160*
Profitability	3.310	.780	3.399*
Customer Number	3.186	.723	2.222*

Note: * p< 0.05, H₁: μ>3

The results show that from marketing executives' point of view, all of the six metrics could contribute to evaluating marketing metrics (p>0.05). Based on the results, the most important marketing metrics for industrial firms are Customer loyalty (4.046), Customer satisfaction (4.017), Market share (3.933), Sales Growth (3.713), Profitability (3.310) and Customer Number (3.186).

Table 6 shows the results of a confirmatory factor analysis (CFA) of entire data from the study. The KMO measures of sampling adequacy (KMO=.674) indicate that CFA analysis is acceptable and its findings could be universally generalized. The final confirmatory model indicated a very good fit with a no significant χ^2 of 103.757 (P<0.01, df= 15).

The left hand column shows that six metrics measure loading significantly (loading greater than 0.4) on a single factor that contained no significant loading for any other of the marketing expenditure measures used in the study.

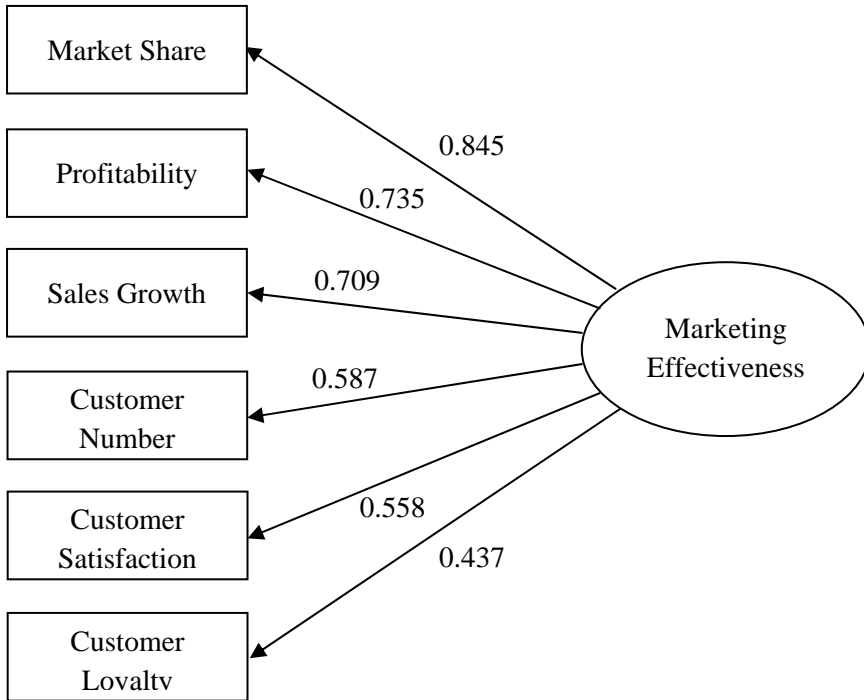
Table 6: Factor loading of metrics

Metrics	Loading
Market Share	.845
Profitability	.735
Sale Growth	.709
Customer Number	.587
Customer Satisfaction	.558
Customer Loyalty	.437

Confirmatory factor analysis before varimax rotation of dimentions

Finally, according to the results of CFA, Figure 1 presents a marketing effectiveness measurement model.

Figure 1: Marketing Effectiveness Measurement Model



5. CONCLUSION AND IMPLICATIONS

Assessing the effectiveness of marketing is a critical issue. However, relevant empirical research remains surprisingly sparse, and its output tends to focus on financial aspects of effectiveness despite the calls for the adoption of a more holistic view of marketing effectiveness.

Accordingly, the study presented in this paper adopted an integrated view of marketing effectiveness. It tested six metrics; these metrics were gathered from marketing executives' opinions of 12 successful industrial firms, extended literature and previous measures which have been examined. Four of the metrics address quantitative aspects of evaluating marketing effectiveness and two of them examine the impacts of qualitative metrics on marketing effectiveness. All of the metrics were confirmed by a t-test and their effects marketing effectiveness were tested by a confirmatory factor analysis.

The survey findings suggest that a valid instrument for evaluating marketing effectiveness of industrial firms can be developed. Marketing effectiveness appears to consist of six metrics and is evaluated by using 19 questionnaire items.

In particular, the paper results indicate that from the point of view of marketing executives, quantitative metrics have more impact on measuring marketing effective-

ness than qualitative ones. These findings are consistent with research conducted by Kokkinaki and Ambler (1999), and Ambler and Riley (2000).

In light of these identified shortcomings, we indicate some implications for marketing executives of industrial firms, in their task of evaluating marketing effectiveness. First, managers have to be aware of the importance of an accurate measurement of marketing effectiveness. The goal of evaluating marketing effectiveness is to provide knowledge and understanding of reasons and results of any particular decisions marketers make. Thus, managers have to consider marketing effectiveness as a regular and systematic process in their activities.

Second, as it was shown in the systematic process, correctness has a high frequency in the evaluative process and extended financial and non-financial metrics. In addition to this, the future of industrial firms suggests that special importance needs to be given to financial metrics such as market share, profitability, sales growth and customer number.

This work has various limitations. First, a variety of assessable metrics exists. Second, managers are not familiar with the metrics and third, there are difficulties in gathering data. For future research we suggest considering certain industries and doing the same study in the services sector. Finally, we believe it would be very useful to investigate these issues in the context of new technologies.

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ODREĐIVANJE METRIKE UČINKOVITOSTI MARKETINGA (Studija slučaja: Industrijske jedinice Istočnog Azerbajdžana)

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Sažetak

Cilj ovog rada je odrediti metriku učinkovitosti marketinga u industrijskim jedinicama. Metrika koju ovaj rad istražuje u potpunosti je primjenjiva i sveobuhvatna, te se može koristiti za ocjenu učinkovitosti marketinga u raznim industrijskim granama. Spomenuta metrika uključuje: tržišni udjel, rentabilnost, rast prodaje, broj kupaca, zadovoljstvo kupaca, vjernost kupca. Nalazi sugeriraju kako navedena metrika mjeri učinkovitost marketinga na impresivan način. Podaci su prikupljeni na uzorku od 75 marketinških direktora u industrijskim jedinicama Istočnog Azerbajdžana, jedne od najvažnijih industrijskih zona po broju proizvodnih kompanija u Iranu, i to putem ankete s upitnikom koji se sastojao od 21 pitanja. Rezultati studije pojašnjavaju metriku učinkovitosti marketinga, te ukazuju na važnost kvantitativnog mjerenja u odnosu na kvalitativno. Zaključno, predstavljen je model ocjene učinkovitosti marketinga.

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