

Investigation of Relationship between Marketing Mix and Increase in Selling Educational Packages in Mahan Free Higher Education Institute

Sahar Soleimani¹, Mansoureh Aligholi², Mandan Momeni³

¹Department of Executive Management, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

²Department of Business Management, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

³Department of Public Management, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

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ABSTRACT

The present research aims to investigate the relationship between marketing mix and increase in selling educational packages in Mahan Free Higher Education Institute. Research methodology was descriptive survey and it was of correlation type. The statistical population of the research included all employees of Mahan Institute in Tehran province (175 people). Cochran's formula was used to pick 120 people as sample members by means of simple random sampling. In this research, a researcher-made questionnaire was used for collecting data. The questionnaire had 23 questions. The validity of the questionnaire was verified by the ideas of experts. Reliability coefficient (Cronbach's alpha) was equal to 0.89. Kolmogorov-Smirnov test, Spearman correlation coefficient and Friedman ranking tests were used for testing the hypotheses. Furthermore, data were analyzed by SPSS software. Results showed that there is a significant relationship between elements of marketing mix and increase in selling educational packages of Mahan Institute. From employees' viewpoints, product element had the strongest and distribution element had the smallest influence on increasing educational packages sale in Mahan Institute.

KEYWORDS: marketing mix, elements of marketing mix, Mahan Institute

INTRODUCTION

In any organization, either a production or a service one, the main factor for organizational survival is customers. If an organization fails to attract their loyalty, it will not guarantee its long-term survival. The present era is full of unpredictable transformations and companies are confronted with the harshest competitive conditions due to factors like unclear borders of markets, fragmentation of markets, short products lifecycles, and rapid changes in customers' purchase desires and awareness of customers (Tavanazadeh and Aligholi, 2014). In today's competitive era, organizations use marketing techniques and marketing research. Investigations showed that companies' failure is resulted from their inability to use marketing techniques. These companies ignore market changes and customers' consumption patterns and deal with sale instead of advanced marketing and prefer acquiring higher profits to customers' satisfaction. Marketing is a war but there is no weapon or gun. Instead, as Albert Emry says: "marketing is a civilized war in which successful companies are those which use more favorable ideas, words and intellectual discipline. In other words, they should have up-to-date and integrated marketing management in order to be able to take steps in fighting against competition arenas (Constantinides, 2004). Marketing management is one of the sections of macro-management in organization which investigates effective factors by considering organizational elements, their relationships, their interactions and their internal relations as an integrated system. To put it more simply, in this process, we conduct "marketing research" in order to investigate internal and external factors in depth. Further, we investigate intra-organizational factors and product-related factors from different managerial, financial, qualitative and marketing aspects which are effective and determining. Marketing means searching for finding the most appropriate market sections in which an organization can be present more effectively and helpfully and can respond to people's needs. In other words, marketing is an attempt for allocation of resources (Roosta, Venous and Ibrahimi, 2004). Marketing is a human activity aimed at satisfying needs via transaction process. Marketing refers to a collection of commercial activities which guide flow of products or services from production to final consumer. Marketing is a young science which has been created in the 20th century (Mehrani and HoseiniKia, 2003). A marketer might fail without having a proper understanding of the fact that who is the customer? How, when, where and why he or she purchases? Today, companies try to use "customers' satisfaction" and "more sale and profitability" and emphasize on marketing research and understanding of customers' needs and survive

*Corresponding Author: Mansoureh Aligholi, Department of Business Management, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran. Email: man.aligholi@iauctb.ac.ir; Tel: (+98)21-66921499

in the fierce competition. One of the ways for achieving the above targets is investigation and analysis of marketing mix in any business (Ali Mirzaee, 2004). Managers should have special features, abilities and potential competencies, knowledge, experience and socio-communicational skills in order to manage organizations effectively. Managers should start from targets and pay attention to their resources and especially human resources (Vazifehdost, Vaezi and Tavanazadeh, 2014). For decades, a company's value was measured based on its equipment, properties, tangible assets and factories. However, it is now believed that the real value of a company is somewhere in potential consumers' minds (Heidarzadeh et al, 2011). Customers' trust is also necessary in this case. Customer's trust is a psychological state which results in favorable expectations of others' behaviors. Therefore, it indicates trust in honesty and reliability of the both sides (Haghighi et al, 2011). Elements of marketing mix are controllable marketing variables which are combined by companies for achieving marketing targets in target market and for necessary response. This combination includes any kind of action which can be done by the company to affect demand. These elements are titled "4p": product, price, promotion and place. These elements have been presented in table 1 and are bases for marketers' activities (Kotler, 2006). Marketing mix was first introduced in 1950s by Niles Bourden and is known as 4p. Marketing mix overcame traditional models and methods like Alderson's function-oriented dynamic method and other systematic methods and also parameter theory which were developed by Kopenhagen University. New methods like product viewpoint, duty-based viewpoint and geographical viewpoint experienced also similar methods. Only a few of these models were able to survive after introduction of 4p (Granroos, 1997). Marketing mix is a collection of instruments for intervening market which act in inter-dependent form (Moheb Ali, 2002). Marketing mix indicates basic activities of marketing managers. After selection of a target market, marketing managers must design a systematic plan for sale and establishment of long-term relationship. A marketing plan is made up of decisions concerning product, price, promotion and distribution. These are the main sections to which organizational resources are allocated by marketing managers in order to reach profitability (Goldsmith, 1999).

Table 1: combination of marketing mix elements and main variables for every p from Kotler's viewpoint

product	Sales price	promotion	Distribution place
Products diversity	Price list	Sales promotion discounts	Distribution channels
quality	discounts	Media discounts	Being in stock
plan	unplanned discounts	Sales employees	Supply points
features	payment time	Public relations	inventory
Commercial letter	credit conditions	Direct marketing	transport
packaging			
size			
services			
guarantees			
number of the returned products			

Philip Kotler believes that marketing mix is a collection of measurable variables (instruments) which are combined for responding to target market. Elements of marketing mix have been described in the next sentences along with special marketing variables (Kotler, 2006). From Kotler's viewpoint, marketing mix includes 4 dimensions:

1. Promotional activities: promotional activities or promotion includes all activities which are done by a company for promoting its products in target market. Promotion activities include sales promotion, media advertisements, sales employees, public relations and direct marketing.
2. Place: place involves all activities which are done for providing customers with the products. Place of supply includes distribution channels, product coverage, product homogeneity, supply points, inventory and transport. A company's strategy may involve its products be sent to customers as soon as possible and with the lowest cost.
3. Product: it is the main element in marketing mix. Product is the result of tangible supply for the market. It includes items like diversity, design, quality, features, brand, packaging, services, guarantees and returned items. In the present research, by product, we mean Mahan Institute educational packages.
4. Sale price: sale price is a sensitive element in marketing mix and it refers to the amount of money which is paid by customers for buying the product. Sale price includes price list, discounts, payment time and credit conditions (Kotler, 2006).

The present research investigates relationship between marketing mix and sales increase in educational packages of Mahan Institute. Product mix, price mix, promotion mix and distribution mix are independent variables and increase in educational packages sales is the dependent variable. Therefore, the main question for this research is whether there is any relationship between marketing mix and sales increase in educational packages of Mahan Institute?

Research hypotheses

Main hypothesis: marketing mix (4p) has relationship with sales increase in educational packages of Mahan Institute.

Subsidiary hypotheses

1. Product mix has relationship with increasing educational packages sales in Mahan Educational Institute.
 - 1.1 All indices of product element have relationship with sales increase in educational packages of Mahan Institute.
2. Price mix has relationship with increasing educational packages sales in Mahan Educational Institute.
 - 2.1 All indices of price element have relationship with sales increase in educational packages of Mahan Institute.
3. Promotion mix has relationship with increasing educational packages sales in Mahan Educational Institute.
 - 3.1 All indices of promotion element have relationship with sales increase in educational packages of Mahan Institute.
4. Distribution mix has relationship with increasing educational packages sales in Mahan Educational Institute.
 - 4.1 All indices of distribution element have relationship with sales increase in educational packages of Mahan Institute.

RESEARCH METHODOLOGY

Research methodology was descriptive survey. It is also a correlation study. In terms of objective, it is an applied research. Statistical population of the research included all employees of Mahan Institute in Tehran Province. According to statistics revealed by management of the institute, the number of employees who worked for Mahan Institute in Tehran Province was 175 people. According to Cucheran's formula, sample size equals 120. Simple random sampling method was used for picking sample members. A researcher-made questionnaire was used for collection of data. it contained 23 items which measured marketing mix (product, price, place, and promotion). The questions were based on Likert scale. The validity of the questionnaire was verified by experts and reliability coefficient was calculated by Cronbach's alpha (=0.89).

Kolmogrov-Smearnov Test

Selection of an appropriate statistical method is very important for calculation of the appropriate statistic and conducting logical inference on research hypotheses. Therefore, it is necessary to determine distribution of data. We used Kolmogrov-Smearnov test for investigation of normality of research data. We tested H0, which refers to normality of data distribution in 5% error level. Therefore, if the statistic is greater than 0.05, there is no reason for rejecting H0. In other words, data distribution will be normal. Statistical hypotheses for normality test include: H0: data distribution for each variable is normal. H1: data distribution for variables is not normal. Considering table 2, the significance level for Kolmogrov-Smearnov test for all variables is smaller than 0.05. Consequently, all variables in this research based on Kolmogrov-Smearnov test do not have normal distributions and H0 is rejected and H1 is verified.

Table 2.results of Kolmogrov-Smearnov test

index	Product and its indices	Price and its elements	Promotion and its elements	Distribution and its elements
Sample size	120	120	120	120
Kolmogrov-Smearnov statistic	2.369	1.981	2.295	2.729
significance	0.000	0.003	0.000	0.002

Spearman correlation test

Decision-making rule: correlation coefficient is a statistical coefficient for determining the type and degree of relationship between two quantitative variables. Correlationcoefficient is a criterion for using in determination of correlation between two variables. Correlationcoefficient indicates the strength and type of relationship (direct or inverse) between two variables. This coefficient ranges between 1 and -1. It is equal to zero when there is no relationship between two variables. The output table of this test yields a correlation coefficient and a significance level. If significance level is smaller than error value, it is inferred that the correlation coefficient is significant. Since these tests are assumed in 5% error level, if the significance level is smaller than 5%, the correlation coefficient will be significant (Azar, 2010).

Main hypothesis test

Marketing mix (4p) has relationship with sales increase in educational packages of Mahan Institute.

Table 3: correlation coefficient between marketing mix and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
Marketing mix	Sales increase	0.028	0.433

The result of the test shows that because the calculated significance level is above 5%, H₀ is rejected. In other words, there is relationship between marketing mix (4p) and sales increase in educational packages of Mahan Institute. Therefore, the main hypothesis is verified with 95% of certainty.

First subsidiary hypothesis test: there is relationship between product mix and sales increase in educational packages of Mahan Institute.

Table 4. correlation coefficient between product mix and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
product	Sales increase	0.011	0.506

The result of the test show that the calculated significance level is smaller than 5%. Therefore, H₀ is rejected. In other words, there is a relationship between product mix and sales increase in educational packages of Mahan Institute. Therefore, the first subsidiary hypothesis is verified with 95% of certainty.

Second subsidiary hypothesis test

There is a relationship between price mix and sales increase in educational packages of Mahan Institute.

Table 6. correlation coefficient between price mix and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
price	Sales increase	0.000	0.471

The result of the test shows that because the calculated significance level is smaller than 5%, H₀ is rejected. In other words, there is a relationship between price mix and sales increase in educational packages of Mahan Institute. Therefore, the second subsidiary hypothesis is verified with 95% of certainty.

2.2 subsidiary hypothesis tests

There is a relationship between all indices of price element and sales increase in educational packages of Mahan Institute.

Table 7. correlation coefficient between price element indices and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
Appropriate price	Sales increase	0.000	0.493
Price stability	Sales increase	0.000	0.366
discounts	Sales increase	0.000	0.483
Instalments payment conditions	Sales increase	0.000	0.445
Special cash conditions	Sales increase	0.000	0.426
Payment time	Sales increase	0.000	0.387

The result of the test shows that because the calculated significance level is smaller than 5%, the H₀ is rejected. In other words, there are significant relationships between price element and sales increase in educational packages of Mahan Institute. Therefore, the 2.2 subsidiary hypothesis is verified with 95% of certainty.

Third subsidiary hypothesis test there is a relationship between promotion mix and sales increase in educational packages of Mahan Institute.

Table 8: correlation coefficient between promotion mix and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
promotion	Sales increase	0.001	0.424

The result of the test shows that because the calculated significance level is smaller than 5%, the H₀ is rejected. In other words, there is relationship between promotion mix and sales increase in educational packages of Mahan Institute. Therefore, the third subsidiary hypothesis is verified with 95% of certainty.

3.3 subsidiary hypothesis tests

There is a relationship between all indices of promotion element and sales increase in educational packages of Mahan Institute.

Table 9. correlation coefficient between all indices of promotion element and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
Promotion advertisements	Sales increase	0.000	0.468
Sales employees	Sales increase	0.000	0.345
CRM	Sales increase	0.000	0.378
Continuous relationship with customers	Sales increase	0.000	0.458
Marketing strategy	Sales increase	0.000	0.411

The result of the test shows that because the calculated significance level is smaller than 5%, the H0 is rejected. In other words, there are significant relationships between promotion elements and sales increase in educational packages of Mahan Institute. Therefore, the subsidiary hypothesis 3.3 is verified with 95% of certainty.

Fourth subsidiary hypothesis test

There is a relationship between distribution and sales increase in educational packages of Mahan Institute.

Table 8: correlation coefficient between distribution and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
distribution	Sales increase	0.002	0.389

The result of the test shows that because the calculated significance level is smaller than 5%, H0 is rejected. In other words, there is a relationship between distribution and sales increase in educational packages of Mahan Institute. Therefore, the fourth hypothesis is verified with 95% of certainty.

4.4 subsidiary hypothesis tests

There is relationship between all indices of distribution element and sales increase in Mahan Institute.

Table 9. correlation coefficient between indices of distribution element and sales increase

Independent variables	Dependent variable	Sig. level	Correlation coefficient
Distribution channels	Sales increase	0.000	0.406
Distribution place	Sales increase	0.000	0.349
Supply time	Sales increase	0.000	0.326
Product inventory	Sales increase	0.000	0.388
Sales agencies	Sales increase	0.000	0.423

The result of the test shows that because the calculated significance level is smaller than 5%, the H0 is rejected. In other words, there are significant relationships between distribution elements and sales increase in educational packages of Mahan Institute. Therefore, the subsidiary hypothesis 4.4 is verified with 95% of certainty.

CONCLUSION AND DISCUSSION

In general, it must be noted that the competitive structure of market involves management awareness and knowledge about customers' ideas and expectations and evaluation of the way of using marketing mix in the market in order to achieve higher sales and profitability. Awareness of the importance given by customers to marketing mix elements can specify the strengths/weak points of the institute activities. Considering the fact that marketing mix is an important factor in marketing strategy and sales increase, we need to evaluate the impact size and role of its elements in increasing sales. The results showed that there is significant relationship between elements of marketing mix (product, price, place and promotion) and sales increase in educational packages of Mahan Institute. In other words, as marketing mix elements are higher in Mahan Institute, the sales amount will increase. Marketing mix is an introduction to successful implementation of educational packages sales increase. When individuals have special skills and capabilities and appropriate channels of marketing mix are used in an appropriate organizational structure, the managers will become more market-oriented and all individuals will

become committed to organizational targets and use any opportunity for improvement of organizational performance (educational packages sales increase) and entering market and sales increase for acquiring higher profits.

Recommendations

1. results of the hypotheses 1 and 1.1 showed that there is a relationship between product mix and its elements with sales increase in educational packages of Mahan Institute. Therefore, managers are proposed to pay attention to the quality of educational packages to minimize the number of returned packages. This increases the validity of the brand of the institute, increases customer attraction and increases educational packages sales.

2. the result of testing the hypotheses 2 and 2.2 showed that there is relationship between price element its elements with sales increase in educational packages of Mahan institute. Based on this result, managers are proposed to determine prices in a way that the prices have enough stability. Necessary discounts should be allowed and payment time should be determined based on customer benefits. This increases educational packages sales in Mahan Institute.

3. the results of testing hypotheses 3 and 3.3 showed that there is significant relationship between promotion and its elements with sales increase in educational packages of Mahan Institute. Based on this result, managers are proposed to use effective advertisements to influence customers and establish strong relationships with customers. Further, managers should be able to use marketing strategies effectively in order to increase the number of educational packages sold by the institute.

4. considering the results of testing the hypotheses 4 and 4.4 showed that there is significant relationship between distribution and its elements with sales increase in educational packages of Mahan Institute. Based on this result, managers are proposed to use customers' ideas in selecting distribution channels and supply of educational packages. Further, transport process is done appropriately so that proper transport can be conducted. This can lead to increase in the number of educational packages sold by the institute.

REFERENCES

- Ali Mirzaee, Saeed (2004), research marketing guide, Tehran, Sargol publications, first printing.
- Azar, Adel (2010). Statistics and its applications to management, SAMT publications, p 225.
- Constantinides, E.(2004), Influencing the online consumer's behavior, Internet Research, Vol.14, No.2, pp.111-126.
- Goldsmith, R.(1999), The personalized marketplace: beyond the 4p,s, Marketing Intelligence & and Planning, Vol.7, No.5, pp. 178-185.
- Granroos, C.(1997), From marketing mix to relationship marketing, Mangement Decision, Vol.35, No.4, pp.322-339.
- Haghighi, Mohammad; Dorosti, Ali; Rahnama, Afshin; Hoseinpour, Ali;(2012) Afshin; Alaei, Abbas; Shafae, Javad; Ariana, Ali;(2012); 'Evaluation of factors affecting customer loyalty in the restaurant industry' African Journal of Business Management Vol. 6(14), pp. 5039-5046.
- Heidarzadeh Hanzaee, Kambiz; Khoshpanjeh, Mahsa & Rahnama, Afshin., (2011). "Evaluation of the effects of product involvement facets on brand loyalty" African Journal of Business Management Vol. 5(16), pp. 6964-6971.
- Kotler, Philip (2006), marketing management (analysis, planning, implementation, control), translated by BahmanForouzandeh, Tehran, Amoukhteh publications, third printing.
- Kotler, Philip and Armstrong, Garry (2001), marketing principles, translated by Ali Parsaeian, Tehran, Jahan-e-No publications, first printing.
- Kotler, Philip (2000), Kotler in marketing management, translated by AbdorrezaRezaeeNejad, Tehran, NashreFara publications, first printing.
- Mehrani, Hormoz and HoseiniKia, SeyyedTaghi (2003), the role of marketing in successfulness of Hoteling industry in Iran, journal of marketing, number 8.
- Moheb Ali, Davoud (2002), "market management", Tehran, Amir Kabir Publications, second printing.
- Roosta, Ahmad; Venous, Davar; and Ibrahimi, Abdolhamid (2004), marketing management, Tehran, SAMT publications, fourth printing.

- Tavanazadeh, Somayeh., Aligholi, Mansoureh., (2014). "Investigation of Relationship between Service Quality Dimensions and Customers' Satisfaction (case study: Saderat Bank Branches in Tehran City, Iran)" *Mediterranean Journal of Social Sciences*, Vol 5 No 20, 3116-3120.
- Vazifehdoost, Hossein; Vaezi, Maryam & Tavanazadeh, Somayeh., (2014). "Investigation of the Role of Innovation Dimensions and Knowledge-Based Trust in Accepting Mobile Banking" *Journal of Applied Environmental and Biological Sciences* Vol 5(2), 106-112
- Vazifehdoost, Hossein., Rahnama, Afshin., Mousavian, Seyed Javad., (2014). "Evaluation of the Impact of Brand Purchase Involvement, Satisfaction, Experience and Brand Trust on Loyalty to Brand" *Mediterranean Journal of Social Sciences*, Vol 5 No 20, 3054-3063.