

THE IMPACT OF MARKETING MIX (5 PS) ELEMENTS ON SALES OF UPS:A CASE OF KARACHI MARKET – BUYER’S PERSPECTIVE

ABDUL SALAM¹, SYED GHAZANFER INAM²,
³WASIM ABBAS AWAN

¹ Faculty of Management Sciences, Shaheed Zulfikar Ali Bhutto Institute of
Science and Technology
abdul.salam@msn.com

² Faculty of Business Administration, Mohammad Ali Jinnah University
Karachi
sghazanfer@yahoo.com

³ Faculty of Management Sciences, Shaheed Zulfikar Ali Bhutto Institute of
Science and Technology
Waawan0092@gmail.com

ABSTRACT *This paper gives an analytical insight about the influencing impact of marketing mix 5 P's (Product, Price, Promotion, Packaging, and Placement) on sales of UPS industry for Karachi market from a buyer's point of view. Since all P's of marketing mix have its own level of impact on sales but vary from product to product and market to market. Pakistani UPS market is to huge extent undocumented and untouched having very high level of competition and low profit margin. We have the 5 P's as our independent variables whereas sales as dependent variable. Collection of primary data have been done through a questionnaire comprising of mixed questions like 5-likert scale, MCQs, open ended, and rating scale based on the buyers' opinions. The collected data were analyzed through multiple regressions to know the significance of relationship of individual P of marketing mix with sales by using t-test and the strength and nature of relationship by Pearson's Correlation Coefficient. The overall significance of model was tested through ANOVA. The descriptive statistics were also used to determine average level of point of views as well as the variation in the buyers' opinions. The final result of this study reveals that out of 5 only 4 P's (product, price, placement, and promotion) have positively significant impact on sales whereas the packaging has negative and very low level of impact on sales. It does imply that product, placement, promotion, price have descending level of impacts on sales in UPS market, respectively.*

Keywords: Marketing Mix; UPS; Sales; Karachi

Introduction One of the most important element in business management is the marketing mix. Today's business world has become so demanding that the adaptation of suitable marketing strategies to provide needed products or services at the right time on the right place has become extremely critical. The purpose of this research is to practically analyse the impact of various marketing mix elements on the sales of UPS (UN interruptible power supply). In recent past the duration of load shedding per day up to twelve hours in some areas has increased substantially that provides opportunities to new entrance in the market to come up with suitable products and services so that consumers can solve their energy related problems and become more productive. The companies must develop marketing strategies which help them in creating a distinct image in the consumers' mind. In this connection organizations need to identify

their target markets and factors influencing making decisions about UPS purchase. Keeping in view the shortfall of the energy, many small entrepreneurs started their business. With this progress consumers have choice to choose between locally manufactured UPS or imported products mainly from China. As many locally manufactured and imported UPS are available in the market, it has become very imperative for the companies to design marketing mix elements that are sustainable in the long run, and at the same time the designed marketing strategies should help companies in differentiating their products and the services from the competitors. Businesses must generate profits through sales to continue providing better products and services to their consumers and satisfy internal customers.

Research Objectives: The main objective of this research is to know the impact of marketing mix 5 P's (product, price, promotion, place & packaging) on sales of UPS (Uninterruptible Power Supply) in Karachi market from buyer's point of view. This objective is tested through sub-objectives as given below:

To examine the impact of each Ps of marketing mix on sales of UPS.

To know the level of intra-strength of relationship among all variables (5 P's and sales).

To check how much packaging (5th P) of UPS is impactful on sales.

To infer the significance about the overall impact of all 5 P's of marketing mix on sales of UPS.

We have limited our research only on the sustainable marketing strategies for UPS (Uninterruptible Power Supply) in Karachi, Pakistan. Although there are other power generating products however this study is confined for the UPS (Uninterruptible Power Supply).

Literature Review The modern era of marketing focus customers rather competitors. Only this very objective ensures the survival of an organization in the market. In order to meet this objective organizations are now deemed to pay significant amount of salary to their sales persons followed by an extensive amount of expenditure on promotional campaigns. Moreover, organizations are now more interested in addressing the buying behaviors. Consumer behavior is not an easy task to deal with, there may be a difference in their need and act, they may respond appropriately but change at the last minute. The answer of these deviation lies between two questions; why they buy and how they buy? The first part is difficult to address, however how they buy can be answered through marketing mix strategy.

The concept of marketing mix started sparkling in every eye in 1964 when Neil H. Borden highlighted it in an article. The term was in teaching since late 1940's when marketing manager was described by James Culliton as "mixer of ingredients" later McCarthy categorized them and is known today as 4Ps of marketing (LING, 2007).

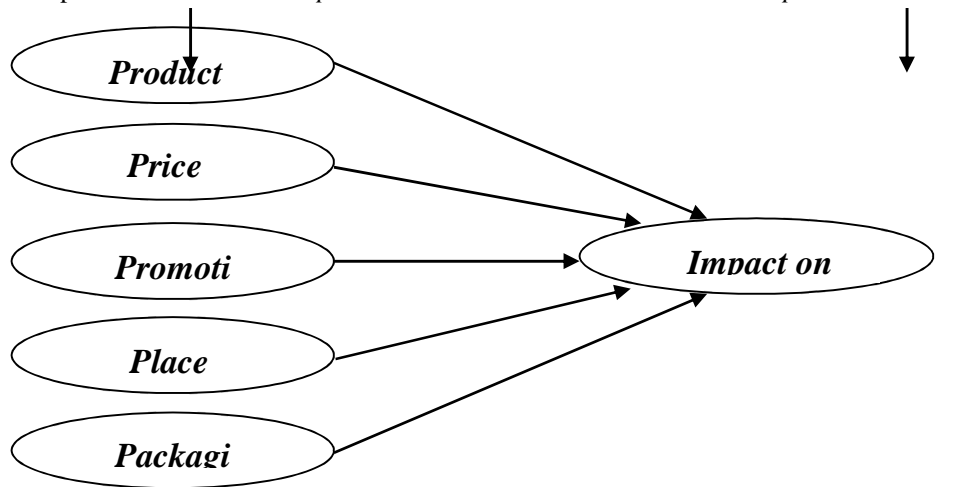
The marketing mix model is known for creating and implementing strategies. It helps in achieving both; organizational and consumer objectives. It is discussed that target market should be considered by marketers for achieving the right strategy with the proper blend of Ps only then the wants will be satisfied (LING, 2007).

In order to generate positive response and to create perceived value marketing manager must adhere with marketing mix considering internal and external marketing environment. There is a strong critic on marketing mix that it does not generate shareholder value because it is not grounded in financial objectives (Doyle, 2000). Moreover, Doyle argues that ignoring profitability and pursuing ROI approach can be problematic. However, considering net present value and to maximize shareholder value may lead to rational framework which will work.

Furthermore, critics against Kotler's 4Ps are that these do not address industrial products and services of marketing. Later the growing trends of markets led Kotler to add more Ps to marketing mix (Kotler, 2005). The marketing mix model has limitation to concept of physical evident product. In modern era marketers are more into the additional Ps i.e. people, process etc. There are critics, however the most common base of marketing is marketing mix which is strongly followed by many organizations and is been part of textbooks (LING, 2007).

Conceptual Framework:

Figure 1: Conceptual Framework *Independent Variables*



Methodology This study was done by analyzing both primary and secondary data. The first part, secondary data comprising of literature review done by reviewing number of papers and other authentic materials as well as some data from the industry. The second part, primary data were gathered through questionnaire filled by the mix of current and expected user of UPS taken from different part of Karachi city.

Target Population:Following were the basic characteristics of target population which were to reflect in our targeted sample:

Individual customer was to be mature and literate.

He had a monthly household income atleastRs. 25,000.

He had been living in Karachi city for last atleast 1 year.

He had the power and good sense of making such buying decision as a head or supporting unit of family

There was not any strict gender restriction, but preferably male because mostly they make such decisions.

Sampling Design:A sample size of 185 people was taken, including the current, expected and ex-user of UPS showing the above attributes of the target population. Sampling without replacement was used with a blend of probability and non-probability sampling technique. In probability sampling, we used the cluster sampling, made the clusters of some regions of Karachi like PECHS, Gulshan-e-Iqbal, North Nazimabad, Gulistan-e-Jauhar, Malir. In non-probability sampling we used the convenience sampling because it was convenient to contact a large number of people through our personal contacts and networking channels like Facebook, LinkedIn, etc.

The data were analyzed at 5% significance level by using descriptive as well as inferential statistics with the help of Statistical Software, SPSS 19.0.

Description of Questionnaire:The questionnaire was made set such that people could give their feedback on the basis of their previous experience of purchasing and using UPS as well as their expected change in plan to either switch onto another UPS or any other power backup system. The questions were a mix of open ended, closed ended including 5-point Likert Scale, rank order scale giving nominal, ordinal, and interval type data about the demographics of respondents as well as their opinions about the 5 P's and sales of UPS.

Research Hypotheses: To achieve the main research objective and its sub-objectives, this study was done by constructing two hypotheses as follows:

H_A : Each individual P of marketing mix (Product, Price, Place, Promotion and Packaging) has a positive impact on Sales of UPS.

H_B : Overall the 5 P's marketing mix has a positive impact on Sales of UPS

Analysis Of Results And Findings Given below are the findings from primary data through different statistical techniques used to complete this study.

Descriptive Statistics

Below Table 1 gives a descriptive statistics of the opinions of 185 respondents about the overall 5 P's of model and sales. It is very clear that all respondents showed their interest to provide their opinions. The average values (mean = 2.79, median = 3.0 & mode = 3.0) for packaging reflect that people are either neutral or give low importance to the packaging of UPS. Their 75th Percentile (75% of the respondents) confirms the previous statement. Further, the standard deviation shows the data are more scattered than among other variables. Near about same situation remained with promotion, but in a better position than packaging means people want good options for the promotions and they are more than neutral about the importance of promotion this is further firmed by the 75% percentile value of 3.7 means 75% of the respondents give importance to the promotion.

Mean values for product (mean = 3.72, median = 3.78, and mode = 3.56) and sales (mean = 3.77, median = 3.75, and mode = 3.75) which suggest that respondents agreed to give high importance to both the variables. This is further confirmed by their 75th percentile values of 4.22 and 4.25, respectively, and their low value of standard deviation that people are less variant from the mean value.

The average values for price (mean = 3.47, median = 3.5, and mode = 4) and placement (mean = 3.57, median = 3.67, and mode = 4) are not so high but a bit higher than packaging and promotion, which reflects that people are more than neutral or more to give high level of importance to the mentioned both variables. The values of standard deviation tell that they are a bit variant in their opinion as compare to the others. We can get a better picture of their opinion by its 75th percentiles, a score of 4 shows that 75% of people give high importance to both the variables.

Table 1: Descriptive Statistics of Overall 5P Model and Sales.

Description		Overall Packaging	Overall Product	Overall Price	Overall Placement	Overall Sales	Overall Promotion
N	Valid	185	185	185	185	185	185
	Missing	0	0	0	0	0	0
Mean		2.7957	3.7153	3.4730	3.5694	3.7703	3.2870
Median		3.0000	3.7778	3.5000	3.6667	3.7500	3.4000
Mode		3.00	3.56	4.00	4.00	3.75	3.40 ^a
Std. Deviation		.83274	.68892	.88270	.72074	.68410	.62323
Skewness		-.437	-.548	-.366	-.403	-.425	-.366
Kurtosis		-.027	.724	.012	-.069	-.196	-.029
Percentiles	25	2.2000	3.3333	3.0000	3.0000	3.3750	2.8500
	50	3.0000	3.7778	3.5000	3.6667	3.7500	3.4000
	75	3.4000	4.2222	4.0000	4.0000	4.2500	3.7000

a. Multiple modes exist. The smallest value is shown

It can be concluded from the above discussion that the majority of people give high importance to the 4 P's (product, price, promotion, placement) of marketing mix but less importance to 5th P (packaging) to create a good sales of UPS.

Correlation Statistics Given Table 2 is the correlation matrix among all the variables (dependent as Sales and independent as 5 P's of marketing mix). The main purpose of this correlation table is to know about the nature (either positive or negative) and level of strength of the relationship among the independent variables as well as between the dependent and independent variables. We can get a very good picture from the table that all the 5 P's are positively correlated with the sales. All the 4 P's (product, price, place, promotion) are more toward moderately correlated with sales having values of correlation 0.3 or more with a true relationship of product with sales is at the top with a score of 0.383, which tells that the variables are not very strong in relationship but considerable to make any conclusion or prediction. Unfortunately, 5th P (packaging) has shown a very low strength in relationship having score 0.09 which tells that sales of UPS is not so much effected by the packaging either good or bad.

Further, these relationships are statistically significant as well except for packaging means at 5% significant level all the P-values of t-statistic for 4 P's are less than 0.025 (5%/2) but the packaging is having its P-value greater than 0.025, so it becomes statistically insignificant.

Similarly, the significant intra-variable strength can also be seen that Packaging is only significantly correlated with product and price, Product is significantly correlated with all the other variables, price is also significantly correlated

with all other variables whereas the placement and promotion are also statistically significantly correlated with all other variables except packaging.

Table 2: Correlations with its statistical significance

		Overall Packaging	Overall Product	Overall Price	Overall Placement	Overall Sales	Overall Promotion
Overall Packaging	Pearson Correlation	1	.294**	.157*	.025	.089	.087
	Sig. (2-tailed)		.000	.032	.739	.229	.239
Overall Product	Pearson Correlation	.294**	1	.306**	.211**	.383**	.228**
	Sig. (2-tailed)	.000		.000	.004	.000	.002
Overall Price	Pearson Correlation	.157*	.306**	1	.229**	.320**	.166*
	Sig. (2-tailed)	.032	.000		.002	.000	.024
Overall Placement	Pearson Correlation	.025	.211**	.229**	1	.362**	.187*
	Sig. (2-tailed)	.739	.004	.002		.000	.011
Overall Sales	Pearson Correlation	.089	.383**	.320**	.362**	1	.322**
	Sig. (2-tailed)	.229	.000	.000	.000		.000
Overall Promotion	Pearson Correlation	.087	.228**	.166*	.187*	.322**	1
	Sig. (2-tailed)	.239	.002	.024	.011	.000	

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

It concludes that all the 4 P's are worthfull to make a positive relationship with sales of UPS means working on all these P create an increasing impact on sales, butthe packaging is not worth full to increase the sales of UPS which does not imply that packaging is completely out of worth but it varies from product to product but in case of UPS not so effective.

Regression Analysis The overall model summary in Table 3 suggests three very important things, first adjusted R² which is nearly 30% (0.274) means in total only 30% of the error in sales of UPS data is explained by all the 5 P's which is a fair enough level of fitness in case of multiple regression run between dependent and independent variables since this study is all about to deal with human psychology and to know about their preferences which is obviously difficult to predict so lesser value, no problem. It also tells that the model does not have the overfitting problem because the difference between R²and adjusted R² is not too much. Secondly, the value of R (0.542) which tells two things one all the 5 P's are positively correlated with the sales, another is the level of strength which tells that in total 5 P's are moderately but towards strongly correlated with sales means good for making helpful predictions. Last the Durbin Watson value of 1.946 concludes that there does not exist any positive or negative serial correlation among the error terms of variables because DW values for lower is 1.718 and for upper is 1.820 at the sample size of 185 having 5 independent variables.

Table 3: Overall Model Summary.^b

R	R Square	Adjusted Square	Std. Error of Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. Change	
.542 ^a	.293	.274	.58302	.293	14.867	5	179	.000	1.946

a. Predictors: (Constant), Overall Promotion, Overall Packaging, Overall Placement, Overall Price, Overall Product

b. Dependent Variable: Overall Sales

Hypothesis Testing

First Hypothesis (H_A):

Our first hypothesis H_{A1} is comprising of 5 individual hypotheses which will be our alternative ones means to be tested through our study, as follows:

H_{A0} : Each individual P of marketing mix (Product, Price, Place, Promotion and Packaging) does not have a positive impact on Sales of UPS.

H_{A1} : Each individual P of marketing mix (Product, Price, Place, Promotion and Packaging) has a positive impact on Sales of UPS.

Table 4 gives an overall idea about the statistical significance of above described 5 hypotheses. It is very clear that each individual P of marketing mix is positively related with the Sales of UPS except the Packaging which is showing a reverse impact means a decrease in Sales. Our all four hypotheses are statistically significant at 5% significance level means all 4 P's (Product, Price, Place, Promotion individually) is having P-values of t-statistic less than 0.025 (5%/2) so null hypotheses are rejected. It suggests that there exists an individual positive relationship of each of the 4 P's with the Sales of UPS means each P has its important contributes in its proportion to increase the Sales volume of UPS. Unfortunately, Packaging is insignificant due to having P-value > 0.025 so null hypothesis is not rejected and Packaging does not have any positive impact on Sales of UPS, which means that the relationship between Packaging and Sales is not enough worthy to consider in the case of product like UPS. People don't find any reasonable level of interest in the Packaging of UPS to purchase it.

Table 4: Regression Coefficients

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.98	0.343	-	2.854	0.005
Overall Packaging	-0.027	0.054	-0.033	-0.494	0.622
Overall Product	0.246	0.07	0.248	3.538	0.001
Overall Price	0.126	0.052	0.163	2.411	0.017
Overall Placement	0.225	0.063	0.237	3.586	0.000
Overall Promotion	0.216	0.072	0.197	3.008	0.003

a. Dependent Variable: Overall Sales

The beta coefficients of especially two variables (Product and Placement) are a bit higher than the others which tells that these two variables have more impact to increase the Sales of UPS. The other two variables (Price and Promotion) also have reasonably increasing impact on Sales whereas the beta for Packaging suggests very very low impact with a marginal decrease in the Sales means not so much harmful but also not a fruitful one.

Second Hypothesis (H_B):

Our second hypothesis is all about to test the overall significance of the model, as given below:

H_{B0} : Overall the 5 P's marketing mix does not have a positive impact on Sales of UPS.

H_{B1} : Overall the 5 P's marketing mix has a positive impact on Sales of UPS.

To test this hypothesis, we need to have an ANOVA table as given in Table 5. It comes very clear from the table that P-value for F-statistic is 0.000 which is less than 0.05. It implies that the overall model is statistically significant. We reject the null hypothesis and becomes firm that the overall 5 P marketing mix suggested for the UPS has a positive impact on to increase the Sales of UPS. So the model is good for making predictions.

Table 5: ANOVA Table.^b

Model Sources	Sum of Squares	df	Mean Square	F	Sig.
Regression	25.267	5	5.053	14.867	.000 ^a
Residual	60.845	179	.340		
Total	86.111	184			

a. Predictors: (Constant), Overall Promotion, Overall Packaging, Overall Placement, Overall Price, Overall Product

b. Dependent Variable: Overall Sales

Conclusion The conclusion of the above analysis remained that from the buyer's point of view people were more inclined towards the product and the placement. In product they were more concerned about the value added features of the UPS, whereas for placement people were reluctant to have the UPS at nearby places so that they could save their extra costs apart from the cost of buying. Next people showed a mix behavior towards pricing and promotion. Of course price does matter for everyone but wants a reasonable quality of product as well, so for the higher prices they showed an attitude to switch to generators. So individually, each of the 4 P's of marketing mix has a positive (or increasing) impact on the Sales of UPS but Packaging factor did not create an ample spark to increase the Sales which suggested that Packaging factor is not impactful in the case of product like UPS but it does not mean that it is irrelevant because Packaging contains several safety measure and information to know about the product if it is provided correctly but in total the 5P model has positive impact on the Sales of UPS means the negativity of Packaging factor is diluted.

Further, the 5 P's of marketing mix has a reasonable level of strength in their relationship with the Sales as well as among themselves, which also confirms that the model is good for the making any future recommendation about the buyer's behavior of purchasing UPS in Karachi market.

REFERENCES

- [1] Doyle, P. (2000). *Value based marketing*. Wiley.
- [2] Kotler, P. K. (2005). *Marketing Management*. Prentice Hall.
- [3] LING, A. P. (2007). *THE IMPACT OF MARKETING MIX ON CUSTOMER SATISFACTION: A CASE STUDY DERIVING CONSENSUS RANKINGS FROM BENCHMARKING*.
- [4] Gallup Pakistan Energy sector draft [Report]. - [s.l.] : Gallup Pakistan, 2011.
- [5] Gallup Pakistan Energy sector draft report [Report]. - 2011, pg. 28.
- [6] Pro Pakistani, Pakistani IT and Telecom news Website [Online]. - 2013.