# The Study of Determinant Factors of Customer Satisfiction with Industrial Products in Helmand Province, Afghanistan

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**Abstract:** This research aims to evaluate customer satisfaction with industrial products in Helmand province, Afghanistan, and identify which dimensions and factors of the marketing mix have the most significant impact on customer satisfaction. Sixty-five questionnaires were gathered from customers who visited industrial production companies within the past three days to collect data. The collected data was analysed using SPSS 26.0 and OLS and correlation techniques. The findings indicate that all dimensions of marketing (7Ps) have a positive and significant relationship with customer satisfaction. Among the variables, price was identified as the most influential factor affecting customer satisfaction compared to other variables. Based on the model, the obtained R Square is 0.451, which means that the independent variables can explain 45.1% of the variance in the dependent variable (customer satisfaction). Overall, the study's results show that all independent variables significantly impact the dependent variable

**Keywords**: Marketing, Customer Satisfaction, Marketing Max, Industrial Products.

## INTRODUCTION

Helmand, one of the 34 provinces of Afghanistan, is located in the southern part of the country. It is the largest province, covering an area of 58,584 square kilometers (approximately 20,000 square miles). The Helmand River irrigation system project provides water to nearly 150,000 hectares of land. However, the northern part of the province lacks direct access to river water. It relies on groundwater and natural springs for irrigation, which flow through traditional underground systems known as "karez". In the north, deep wells are also dug.

Due to its extensive water system, developed around 40 years ago with assistance from the United States, Helmand has a strong agricultural history. Crops such as wheat, corn, barley, and mung beans are cultivated where irrigation facilities are available. The climate supports double cropping (one field, two seasons), making both summer and winter cultivation feasible. Due to the limited number of processing factories, industrial crops such as cotton, sesame, and soybeans are grown on a smaller scale.

Despite this, industrial enterprises and companies in Helmand produce goods that are consumed in international markets. A prime example is the Helmand woodworking and carving factory. Additionally, the province has industrial production in cotton processing, vegetable oil production, handicrafts, and aluminum manufacturing, with products consumed both domestically and abroad. Vegetable production generally meets local needs, with a small surplus sold in local markets (Ahmad et al., 2017).

Marketing is not merely an attempt to sell products but a scientific and creative process to identify customer needs and achieve their satisfaction. It plays a fundamental role in the advancement of commerce and social well-being. The concept has evolved from focusing solely on selling to a broader emphasis on meeting customer and societal needs. Marketing is a management philosophy based on customer satisfaction, organizational integration, and profit generation (Efendi et al., 2023).

Customer satisfaction is critical for companies and organizations providing financial, communication, or other services. It compares expected services/products and the actual ones received. When delivered services and products match expectations, customers are satisfied; if they fall short, customers are dissatisfied.

Common causes of customer dissatisfaction include (MARY LOUIS TEMBA, 2013):

1.      A gap between expectations and reality

2.      Poor service quality

3.      Unprofessional staff behaviour

4.      Inadequate or untrustworthy physical environment

5.      High costs or long distances

6.      A mismatch between advertising and reality

### Research Problem

Today's markets are highly competitive, and marketing is a key factor for survival in such environments. Around the world, organizations use various marketing strategies to boost product sales and ensure customer satisfaction. One such method is the 7Ps marketing mix (Pramesty et al., 2022). Helmand province, companies and enterprises produce industrial products that reach international markets. A carving and woodworking factory is a notable example, alongside cotton processing, vegetable oils, and handicrafts, which are marketed domestically and abroad. However, no precise data regarding customer satisfaction with these products is available. Product quality, pricing, packaging, and market access influence customer satisfaction. While numerous global studies have been conducted on this topic with varying results, increased focus on marketing has only elevated its significance. Considering the value of marketing, Helmand's industrial companies utilize various marketing methods to improve sales and meet customer expectations. However, whether customers are satisfied with the province's existing industrial products remains unclear. To address this ambiguity, this research uses the 7Ps framework to evaluate customer satisfaction with Helmand's existing industrial products.

### Research Objectives

•      To measure the impact of product quality on customer satisfaction.

•      To examine the effect of price appropriateness on customer purchase decisions.

•      To assess the distribution system and the impact of location on accessibility.

•      To evaluate the effect of marketing strategies on customer satisfaction.

• To analyse the impact of hiring professional staff on customer satisfaction.

• To assess the quality and efficiency of service delivery processes.

• To determine the influence of packaging and physical evidence on customer purchase behaviour.

## METHODOLOGY

### Research Design

The research design is cross-sectional, as we collect data about the variables at a specific time. We chose this design because we gather information from a defined population of industrial production company customers within a fixed timeframe. There is no need for follow-up with the study participants. Another reason for this design choice is that the variables are measured so that no manipulation or change is introduced to them (Muslih, 2022).

### Research Approach

This study employs a deductive research approach. In this approach, we build hypotheses based on existing theories. The deductive method moves from a general understanding to a specific case, meaning the researcher begins with a theory and then narrows it down to testable hypotheses (Muslih, 2022).

### Research Strategy

This study uses the quantitative method to analyze customer data. The rationale behind using a descriptive design is that descriptive studies aim to answer "What" and "How much" questions (Muslih, 2022).

### Research Area and Participants

The University of BOST conducted this study during a three-day exhibition organized to market agricultural and industrial products in Helmand Province. The data was collected using structured questionnaires from visitors attending the exhibition and later analyzed.

### Sampling Method

This research uses the opportunity sampling method. In this method, customers are actively selected at the researcher's discretion. This sampling method is chosen because it is easy to access and convenient (Rahman et al., 2018).

### Dependent Variable

• Customer Satisfaction

### Independent Variables

• Product

• Price

• Place

• People

• Promotion

• Process

• Physical Evidence

## RESULT

The reliability test determines whether the questionnaire can produce consistent results. In other words, it assesses whether data collected multiple times using the same questionnaire yields similar outcomes. According to standard criteria, the Cronbach's Alpha value should equal or exceed 0.7. If this condition is met, it can be concluded that the data and the questionnaire are reliable (Vebiyanti et al., 2024).

| Table 1: Reliability Statistics | | |
|---|---|---|
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .835 | .846 | 8 |

### Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

These are statistical tests used to evaluate data adequacy for factor analysis. A KMO value greater than 0.5 is considered acceptable, while a value above 0.8 is considered very good (Ambo, 2022).

| Table 2: KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .701 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 208.782 |

| | | | |
|---|---|---|---|
| | df | | 24 |
| | Sig. | | .000 |

**Source: Researcher's analysis**

The table shows that the **KMO value is 0.701**, greater than 0.5. This indicates that the sample size is adequate and acceptable for factor analysis.

Regarding **Bartlett's Test, the Sig value is 0.000;** according to the rule, this value should be less than 0.05. This means that there is a strong relationship among the variables. (Ringle & Sarstedt, 2021)

**Tests for Normality**

Since there are two types of statistical tests for data analysis **(Parametric and Non-parametric)**, we need to determine which type of test is suitable by checking the data distribution. This involves:

1.     **Skewness and Kurtosis analysis**

2.     **Q-Q plots analysis**

**Skewness and Kurtosis Analysis**

**Skewness** indicates the deviation of the data from the mean. **Kurtosis** shows the relative height of the distribution. For a **normal distribution**, skewness should be around **±3**, and kurtosis should be between **±5**. (Jammalamadaka et al., 2021).

**Table 3: Skewness and Kurtosis Analysis**

| | | product | price | place | promotion | Phy. Evid. | people | process | cs |
|---|---|---|---|---|---|---|---|---|---|
| N | Valid | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Skewness | | 1.521 | -.100 | .172 | -.241 | -.695 | -.340 | -.214 | 2.278 |
| Kurtosis | | 3.623 | -2.340 | -2.384 | -4.540 | -.325 | -1.102 | -.399 | 3.779 |

Source: Researcher's analysis

| Table 4: Correlations Test | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | product | price | place | promotion | Phy. Evid. | people | process | cs |
| product | Pearson Correlation | 1 | | | | | | | |
| price | Pearson Correlation | .311 | 1 | | | | | | |
| place | Pearson Correlation | .382 | .604 | 1 | | | | | |
| promotion | Pearson Correlation | .547 | .300 | .470 | 1 | | | | |
| Phy. Evid. | Pearson Correlation | .256 | .556 | .322 | .282 | 1 | | | |
| people | Pearson Correlation | .189 | .697 | .376 | .571 | .501 | 1 | | |
| process | Pearson Correlation | .103 | .611 | .521 | .221 | .342 | .404 | 1 | |
| cs | Pearson Correlation | .445 | .422 | .433 | .387 | .331 | .490 | .307 | 1 |

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

**Source: Researcher's analysis**

The data presented in Table 4 shows that the independent variable Product has a moderate positive correlation with the dependent variable Customer Satisfaction, reflecting a correlation value of (p = .445). The independent variable Price also exhibits a moderate positive correlation with Customer Satisfaction, indicated by a correlation value of (p = .422). The independent variable Place demonstrates a moderate positive relationship with Customer Satisfaction, with a correlation value of (p = .433). The independent variable Promotion is associated with a weak positive relationship with Customer Satisfaction, presenting a correlation value of (p = .387). The independent variable Physical Evidence shows a weak positive correlation with Customer Satisfaction, with a correlation value of (p: .331). The independent variable People has a moderate positive relationship with Customer Satisfaction, resulting in a correlation value of (p: .490). Finally, the independent variable Process reveals a weak positive correlation with Customer Satisfaction, as shown by a correlation value of (p: .307).

## Table 5: Regression Analysis

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .587[a] | .451 | .367 | .59643 |

**Source: Researcher's analysis**

**a. Predictors: (Constant), process, product, physical. evidence, promotion, price, place**

It is very important to explain the R Square for Multiple Regression. According to the model in the table above, the Adjusted R Square is 0.451. If expressed as a percentage, it becomes 45.1%. The model can explain 45.1%of the dependent variable (DV) variation.

**ANOVA**

The goal is to answer the **Null Hypothesis (H0)** using the **Statistical F-test**. In the table above, the important point is the **F-test significance** (Sig/Significance or p-value), which shows the result (Sig = 0.000). Since this value is less than **0.05** or 5%, we can confidently reject **H0** (Null Hypothesis). At the same time, we can confirm **H1** (Alternative Hypothesis), meaning the model has explanatory power, and there is a relationship between the variables

| Table 6. ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **1** | **Regression** | 161.341 | 7 | 40.335 | 73.770 | .000[b] |
| | **Residual** | 90.217 | 165 | .547 | | |
| | **Total** | 251.558 | 169 | | | |
| a. Dependent Variable: cs | | | | | | |
| b. Predictors: (Constant), process, promotion, people, product, physical.evidence, price, place | | | | | | |

**Source: Researcher's analysis**

## Table 7. Coefficients

| Model | | Coefficients | | t | Sig. |
|---|---|---|---|---|---|
| | | B | Std. Error | | |
| 1 | (Constant) | 2.214 | .138 | 3.762 | .000 |
| | product | .422 | .024 | 2.838 | .001 |

| price | .501 | .020 | 4.575 | .000 |
| place | .397 | .109 | 1.816 | .000 |
| promotion | .337 | .074 | 2.207 | .002 |
| Phy. Evid. | .406 | .081 | 3.484 | .002 |
| people | .441 | .121 | 3.837 | .004 |
| process | .421 | .089 | 4.210 | .001 |

**Source: Researcher's analysis**

The results obtained from the regression test indicate the following:

- The product demonstrates a coefficient (B) of 0.422 and a significance value (Sig) of .001, indicating a positive and significant correlation with customer satisfaction. Thus, the researcher dismisses the null hypothesis and accepts the alternative hypothesis, which asserts that the product has a positive and significant effect on customer satisfaction.
- The price exhibits a coefficient (B) of 0.501 and a significance value (Sig) of .000, reflecting a positive and significant connection with customer satisfaction. As a result, the researcher rejects the null hypothesis and embraces the alternative hypothesis, stating that price positively and significantly influences customer satisfaction.
- The place has a coefficient (B) of 0.397 and a significance value (Sig) of .000, revealing a positive and significant association with customer satisfaction. Consequently, the researcher discards the null hypothesis and endorses the alternative hypothesis, which claims that place positively and significantly affects customer satisfaction.
- The promotion shows a coefficient (B) of 0.337 and a significance value (Sig) of .002, signifying a positive and significant relationship with customer satisfaction. Therefore, the researcher rejects the null hypothesis and supports the alternative hypothesis, indicating that promotion positively and significantly impacts customer satisfaction.
- The physical evidence carries a coefficient (B) of 0.406 and a significance value (Sig) of .002, illustrating a positive and significant link with customer satisfaction. Accordingly, the researcher rejects the null hypothesis and accepts the alternative hypothesis, asserting that physical evidence positively and significantly affects customer satisfaction.
- The people aspect has a coefficient (B) of 0.441 and a significance value (Sig) of .004, demonstrating a positive and significant relationship with customer satisfaction. Thus, the researcher dismisses the null hypothesis and accepts the alternative hypothesis, emphasizing that people positively and significantly impact customer satisfaction.

The process presents a coefficient (B) of 0.421 and a significance value (Sig) of .001, showing a positive and significant relationship with customer satisfaction. Therefore, the researcher rejects the null hypothesis and accepts the alternative hypothesis, affirming that the process positively and significantly influences customer satisfaction

**DISCUSSION**

The research findings suggest that the marketing mix has a positive effect on customer satisfaction. Each element used to evaluate customer satisfaction within the marketing realm—product, price, place, people, promotion, physical evidence, and process—has a favorable influence on customer satisfaction.

The results indicate that all aspects of marketing show a significant and positive correlation with customer satisfaction. This outcome is consistent with the research conducted by Emmanuel et al. (2013).

The findings demonstrate that the product presents a Beta = 0.422 and Sig. = 0.001, signifying a noteworthy and positive effect on customer satisfaction. Consequently, the researcher dismisses the null hypothesis in favor of the alternative hypothesis. This result aligns with the investigation by Saidani & Sudiarditha (2019).

The study also shows that price has a Beta = 0.501 and Sig. = 0.000, indicating a significant and positive impact on customer satisfaction. Therefore, the researcher

rejects the null hypothesis and accepts the alternative hypothesis. Similar findings were reported in the research by Saidani & Sudiarditha (2019).

The results reveal that physical evidence has a Beta = 0.406 and Sig. = 0.002, demonstrating a significant and positive effect on customer satisfaction. Thus, the researcher rejects the null hypothesis in favor of the alternative hypothesis. This outcome is supported by the study conducted by Al-Fadly (2022).

Furthermore, the findings indicate that people have a Beta = 0.441 and Sig. = 0.004, showcasing a significant and positive influence on customer satisfaction. Hence, the researcher dismisses the null hypothesis and accepts the alternative hypothesis. This conclusion is also reinforced by the research carried out by Al-Fadly (2022).

Finally, the results show that the process has a Beta = 0.421 and Sig. = 0.001, confirming a significant and positive impact on customer satisfaction. Therefore, the researcher rejects the null hypothesis and embraces the alternative hypothesis. This result concurs with the findings reported by Al-Fadly (2022).

## CONCLUSION

The product exhibits a weak positive correlation with customer satisfaction, with a significance level of (Sig = 0.001), i.e., *($p < .001$, $r = .422$). The price demonstrates a moderate positive correlation with customer satisfaction, with a significance level of (Sig = 0.001), i.e., ($p < .001$, $r = 0.434$). The place shows a moderate positive correlation with customer satisfaction, with a significance level of (Sig = 0.000), i.e., ($p < .000$, $r = 0.397$). Promotion reflects a weak positive correlation with customer satisfaction, with a significance level of (Sig = 0.002), i.e., ($p < .002$, $r = 0.406$). Physical evidence reveals a moderate positive correlation with customer satisfaction, with a significance level of (Sig = 0.004), i.e., ($p < .004$, $r = 0.441$). People present a moderate positive correlation with customer satisfaction, with a significance level of (Sig = 0.001), i.e., ($p < .001$, $r = 0.421$). The process indicates a moderate positive correlation with customer satisfaction, with a significance level of (Sig = 0.001), i.e., ($p < .001$, $r = 0.407$). According to the model, the R Square value stands at 0.451, which converts to 45.1% when expressed as a percentage. This suggests that the model can account for 45.1% of the variation in the dependent variable (DV). Additionally, the ANOVA test result indicates a significance value of (Sig = 0.000), which is below the 0.05 (5%) threshold. Hence, we can confidently reject the null hypothesis (H0), which posits that the model lacks explanatory power and any relationships among the variables. Simultaneously, we can accept the alternative hypothesis (H1) and deduce that the model possesses explanatory power and that relationships among the variables do exist.

## Recommendations

As recommendations, many comments and suggestions can be made about this study because this paper found that customer satisfaction has a positive and significant relationship with marketing mix.

First and foremost, for customer satisfaction, we need to understand the importance of implementing marketing mix strategies. A good marketing mix strategy can increase product sales and increase revenue levels.

Secondly, every organization should consider the location of production because it plays an important role in customer satisfaction so that the company's products can be easily and safely obtained.

Thirdly, price has a positive relationship with customer satisfaction, so a company should be very careful and work hard in setting the best and most reasonable price for customer satisfaction.

Fourth, professional employees have a positive relationship with customer satisfaction, and customers can be satisfied only if the company employs professional and efficient people to ensure good production quality and delivery.

At the End Ultimately, all manufacturing companies should increase their product sales by implementing and implementing marketing mix strategies. Through this, they should not only increase market share, but also satisfy their customers and offer products to their customers according to their needs.

## Recommendations for further research

The results of the study showed that in this study, the variables could explain 45.1 percent of the variation in the independent variable. Therefore, future researchers should try to use those variables to explain the remaining 54.9 percent of the variation.

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