

Assessing the Effect of Marketing Mix Elements on Customer Satisfaction: The Case of Hawassa Chipwood Factory, Ethiopia

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Abstract: This study was aimed at assessing the effect of marketing mix elements on customer satisfaction of Hawassa Chipwood Factory PLC. The study used both primary and secondary data. The primary data were collected from 154 respondents' selected using stratified random sampling technique. The primary data used were questionnaires and the secondary data were collected from factory website, journals, articles, different books, internet and documents. After processing the data it was analyzed by quantitative and qualitative data analysis techniques. Descriptive and inferential statistical tools used to analyze the data. The descriptive analysis result showed that Hawassa Chipwood factory customers are neither satisfied nor dissatisfied, they are indifferent in product, price and promotion strategies of the factory and dissatisfied in place/distribution system of the factory. The correlation result showed that there is a positive and significant relationship between the four marketing mix elements and customer satisfaction. Even though all 4Ps have a positive relationship with customer satisfaction, product attributes have a high significant positive relationship with customer satisfaction as compared to other marketing mix elements. On the other hand, the result of multiple regression analysis revealed that 81.5% of the dependent variable (customer satisfaction) is explained by the independent variables (product attributes, price, promotion and place/distribution). The multiple regression analysis result further showed that product attributes, price, promotion, and place/distribution have a significant effect on customer satisfaction. Thus, the findings of this study may imply that the factory needs to assure the applicability of its marketing mix strategies in order to win customers' satisfaction and consequently achieve a competitive advantage.

Keywords: Marketing Mix, Customer Satisfaction, Hawassa Chipwood Factory

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I. Introduction

Business organizations develop market strategies that can help them exist sustainably and achieve long term objectives. They use various tools to set appropriate strategies so as to get the desired responses from their target markets. One of such tools is a marketing mix. It is a framework that firms use to pursue their marketing goals in the target markets. McCarthy classified marketing mix into four broad groups that he called four Ps of marketing: product, price, promotion and place (Chai Lee goi, 2009). The ultimate goal of any business establishment is to remain in business profitably through production and sales of products or services. But without customer satisfaction, a business firm cannot survive. The survival of organizations depends on its customers. Customers are the source of profits to be earned by a profit making organization and the primary reason for being in the operation for not for-profit organizations. Thus, customers are the backbone and lifeline of organizations. Often it is said that without customers there is no business' (Dwyer, 1987:23). Marketing opportunities are based on identification of customer wants and needs, an understanding of how customers make buying decisions, how they use the goods and services they buy, and their level of commitment to current brands (Anderson and Vince, 2004:85). Customers in this era are targeted by mass media and they change the customers' way of thinking through emotions, needs, wants and demands. Market researchers and organizations spent billions of dollars on customer research to identify important factors that influence customer decisions. The analysis of customer behavior is effective in detecting the orientation of customers' behavior (Thapa, 2011).

It is visibly known that Ethiopia is one of the countries with the fastest growing economy in Africa. As an indicator to this reality, in the last nine years, the economy has registered sustainable double digit growth. This showed that the country is on the right truck to achieve its development objectives (MOFED, 2010). The growth of the economy has been from different economic sectors; of the sectors construction sector or industry is one of the sectors that show significant and remarkable growth. Because there is fertile government investment policy a high rate of building construction has been flourishing (GTP, 2010). Ethiopia's huge infrastructure expansion and urban centers' remarkable building construction activities provided an opportunity for rapid increase in demand for construction materials (AFDB, 2010).

The degree of demand is increasing with expansion and growing of construction industry. The construction industry is an economic sector of vital importance in many respects. Once man left the natural shelter of caves and began to build his own shelter where he wanted it, the most universally available material was usually wood and wood products. Hawassa Chipwood Factory PLC is located in Hawassa town of the Southern Nations and Nationalities' Peoples Regional State (SNNPR) 275 Kms. south of Addis Ababa. The factory is designed to produce 40,000 cu.m of chipboard annually for local and export markets. The purpose of the factory, among others, include forest development and harvesting of trees for the production of Chipwood and projected expansion and innovation plan for manufacture and marketing of high quality particle board with 6 mm – 40 mm thickness for use in furniture making, roofing, internal building, wall partition and also as packing material. The establishment of the Factory plays a significant role to increase job opportunities and generation of income for the Region. Of the products the factory produces and as the connection within the customer satisfaction the researcher takes a closer look at how the Hawassa Chipwood Factory PLC products are competing comparing to the other Factory products in Hawassa city concerning the 4Ps (<http://www.AwassaChipwoodPlant.html>).

This research is intended to understand the basic factor of any business; customer satisfaction. With today's competitive business environment every business should assess its marketing mix strategies to answer the basic questions, i.e. what the customer needs, what kind of service, ideas or products should be rendered and what type of strategies should be used to win the minds of the customers. This study is particularly interested to examine the effects of the four Ps (product, price, promotion, and place/distribution) on customer satisfaction in Hawassa Chipwood Factory PLC

1.1 Statement of the problem

Customer satisfaction is a determinant factor for the long term survival of any business organization (Jeans, 2004:54). So in today's competitive business world customer satisfaction has become a decisive factor for the success or failure of business objectives. For this reason companies meeting their customers' needs and wants are enjoying the market with the customer loyalty and getting positive response for their product. The impressive growth that has been registered in Ethiopia during the last five years adds value to faster and enhance development of the industrial sector in the country. This phenomenon enables the industrial sector to be the foundation and key sector for country's development activities (GTP, 2010).

Large amount of Chipwood products are used every day in the country. Chipwood product (Particle Board) is the main product being produced by Hawassa Chipwood Factory PLC. Even though Hawassa Chipwood Factory PLC is producing and distributing the products all over the country together with another two Chipwood factories in Ethiopia; the demand of the Chipwood market still is not satisfied. Hawassa Chipwood factory has been striving to please its customers by installing new machines and producing more. It has been observed that the main problem of the factory towards the customers is that even though the buying interest of customers of Hawassa Chipwood Factory PLC has significantly rising; the company's products are unavailable in abundance.

Second, the distribution (product Placement) system of the factory has brought dissatisfaction to its customers. Third, the promotion system of the company is also inefficient. Besides this, it is observed that the Company did not evaluate or assess the effect of its marketing mix strategies on fulfilling the customer satisfaction. Because of absence of such evaluation and shortage of the product, customers of Hawassa Chipwood Factory started to shift their brand choice to other competitive products. Therefore, the intention of this research is twofold: first, to explore the reason behind the claim of the customers on the product placement (distribution), the product quantity and the promotion; second to identify the effects of marketing mix elements on customer satisfaction.

1.2. Objectives of the study

The objectives of the study are classified into two, namely, general objective and specific objectives.

1.2.1. General objective

The general objective of this study is to assess the effect of marketing mix elements on customer satisfaction of Hawassa Chipwood Factory PLC.

1.2.2. Specific objectives

- To investigate the influence of product on customer satisfaction.
- To determine the effect of price on customer satisfaction.
- To identify the influence of promotion on customer satisfaction.

..... To find out the effect of place/distribution on customer satisfaction.

1.2.3. Research questions

- Does product has any significant effect on customer satisfaction?
- What is the significance of price on customer satisfaction?
- Does promotion has any significant effect on customer satisfaction?
- What is the effect of place/distribution on customer satisfaction?

1.4. Significance of the study

The research aims to explore the effect of marketing mix elements on customer satisfaction in Hawassa Chipwood Factory PLC. The study will help to understand how the four marketing mix elements affect the satisfaction of the customers of the factory.

The significance of this study is divided into two. First, it will be worthwhile to Hawassa Chipwood Factory PLC itself. The result of this study makes the company to be competent at the market. It also helps the company to know its customer satisfaction level with regard to the product, price, and promotion and place/distribution aspects of the factory. This will help the company to produce chip wood products based upon customers' need and wants. If Hawassa chip wood factory applies the suggestions and recommendations given in this study the customers may benefit from quality products, products accessibility, promotion and a better price of the company's products

Secondly, the findings of the study are used for other similar studies in the future. The basis of this study will help other interested researchers in undertaking a detailed study in the area. So, it is expected that this research can contribute a lot to the efforts made by the factory for the fulfillment of customer satisfaction through provision of appropriate product and service to the its customers.

II. Literature Review

The study conducted by Pour, Nazari and Emami (2013) titled "The effect of marketing mix in attracting customers: case study of Saderat Bank in Kermanshah province". Since researchers sought to explore the relationship between combining elements of marketing and attracting customers to the bank in Kermanshah Province using survey method and the research was descriptive type. The study used hypothesis saying that "Marketing mix elements and the relationship between bank customers are significant". After test has been made the researchers has drawn the following conclusions. They conclude that there is a significant positive relationship between the bank customers and the marketing mix elements to advance the goals of the bank.

Dr.Faris, Thaer, Mahir (2016) conducted a study to investigate the impact of marketing mix element on customer satisfaction for tourism industry in context of Malaysia. The researchers used survey questionnaire to conduct the study from a sample of 123 tourism firms participated in the study. The findings revealed the significant positive relationship of seven marketing mix elements with customer satisfaction for tourism services in the context of Malaysia.

Belay (2013) studied on marketing mix framework analysis for Pepsi cola at MOHA soft drinks industry the researcher tried to analyze the marketing of Pepsi cola at Mohammed Hussein Ali al Amoudi (MOHA) soft drinks industry share company, within the framework of the 4ps of marketing. The researcher used a mixed approach, both quantitative and qualitative. To this effect, primary as well as secondary sources of data have been used. Combination of instruments has been applied to gather information for the study. The result showed that the application of the 4ps in the overall marketing management of the company is well underway. However, there existed minor cases that need to be addressed in terms demand, availability and delivery of the product

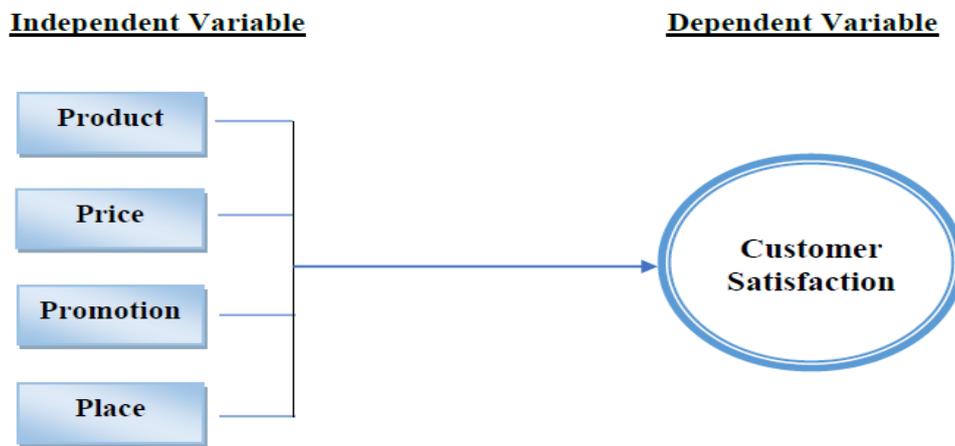
Dereje, Dr.Prasada, and Wako (2014) Studied on the Impact of Marketing Mix on Customer Satisfaction the Case of MOHA Soft Drinks Industry S.C, Hawassa Millennium Plant. The findings show that marketing mix elements have impact on customer satisfaction. All the independent variables are positively and directly related to customer satisfaction. The relationship between marketing mix and customer satisfaction is significant. The researchers' recommended that the company should revisit the controllable marketing mix elements to satisfy the customer. And to invest more on attracting new customers and retaining the existed ones with regard to marketing mix to increase customer satisfaction

Zelalem (2011) conducted a study which focuses on the assessments of marketing mix elements in prompting customer satisfaction in the case of the producer of the aforementioned factory, the National Alcohol and Liquors Factory. The objective of the study was that to find out whether customers are satisfied with regard to the four controllable variable marketing mix factors (product, price promotion and distribution). The researcher collected the data by using primary sources of data collection (interviews and questionnaires) and secondary sources of data collection (factory documents, by visiting library and online journals). The study

concludes that customers are satisfied with the quality of products and the distribution (place) systems of the factory yet they are not satisfied with the price and that of the promotional practices of the factory.

2.3 Conceptual Framework

The conceptual links between the independent variables product, price, promotion and place/distribution and the dependent variable customer satisfaction are presented below



Source: (Adapted from Darni 2010)

Fig 2.1 Conceptual frame work

III. Research Methodology

3.1 Research design

This study is about assessing the effect of marketing mix elements on customer satisfaction in Hawassa Chipwood Factory PLC products. In order to meet this objective, descriptive and explanatory research designs are employed. Descriptive research design is typically concerned with determining the frequency with which an event occurs or it describes the relationship between two study variables (Malhotra, 2004). Thus, it is favorable to describe the relationship between the two variables on factors that affect customer satisfaction (product, price, promotion & distribution) and customer satisfaction with regard to HCWF PLC products by giving special emphasis in Hawassa city. Explanatory research design is the research whose primary purpose is to explain why events occur to build, elaborate, extend or test theory (Malhotra, 2004). The data was collected through questionnaire. To analyze data, descriptive and inferential data analysis techniques were used. To evaluate the effects of marketing mix elements on customer satisfaction the inferential statistics tools like correlation and regression analysis tools were used.

3.2 Types and Sources of data

The data sources used in this research are Primary and Secondary data. Primary data was collected through structured questionnaire from from selected customers of Hawassa Chipwood Factory PLC, while secondary data were obtained from journals, articles, different books, and internet sources.

3.3. Target population

The target populations of this study included building material shops and Furniture makers from the total eight sub-cities of Hawassa city. Five sub cities (Tabor, Meneharia, Mehal-Ketema, Haik Dar, and Misrak) were selected as a target population because of the researcher's former knowledge to the study area which can help to judge the active sub-cities towards the subject matter of the study. The five sub-cities are selected by using judgment sampling technique. The total number of building material shops and furniture makers were 257

3.4. Sample size and Sampling technique

To determine the sample size for finite population (HCWF PLC Customers), the researcher used Krejcie & Morgan (1970), formula.

$$S = \frac{X^2NP(1 - P)}{d^2(N - 1) + X^2P(1 - P)}$$

Where:

S = Required Sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size (257)

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%) d = Degree of accuracy (5%), expressed as a proportion (0.05); It is a margin of error.

$$S = \frac{1.96^2 257 \times 0.5(1 - 0.5)}{0.05^2(257 - 1) + 1.96^2 \times 0.5(1 - 0.5)} = 154.225 \approx \mathbf{154}$$
 is the sample size

To categorize the sample size to the five sub-cities, the researcher divided the total study population to the determined actual sample size.

$$n_o = S \times \frac{P_o}{N}$$

To further categorize the sample size in terms of building material shops and Furniture makers in each sub-city, the researcher used proportional division in each shops and furniture makers. Totally 154 respondents were selected from the total 257 target population

Table 3.1 the sampling frame of the five sub cities

Name of Sub- city	Total population (N)	Total sample unit (S)		
		Building Material Shops	Furniture Makers	Total
Tabor	70	25	17	42
Meneharia	74	29	15	44
Mehal Ketema	47	18	10	28
Haik Dar	39	12	12	24
Misrak	27	7	9	16
Grand Total	257	91	63	154

3.5. Data Collection method

Structured questionnaire were the major instrument for collecting primary data. Secondary data were obtained from journals, articles, different books, internet, and documents. In order to gather relevant information, structured questionnaire are distributed to building material shops and Furniture makers who are the direct customers of the factory. Each question in the questionnaire was designed properly to meet research objectives; the entire questionnaire has been translated to Amharic to help those respondents who cannot understand English. The translation was conducted with the help of language experts. In the questionnaire five point likert scales 1= Strongly Disagree 2=Disagree 3=Neutral 4= Agree & 5= Strongly Agree is used to rate customers attitude, knowledge and opinion towards the questions.

The questions have been organized into two sections as follows: The first section of the questionnaire is about respondents` general information. The second section of the questionnaire is designed to know the customer satisfaction regarding product, price, promotion, and place/distribution. To determine the probable usefulness of the questionnaire and to check further revision is needed prior to conducting the survey; the questionnaire have been put a pilot test. In the pilot survey 15 subjects were selected randomly and asked if they had any problems in understanding the questionnaire or have specific comments regarding it. In addition to that, the subjects were encouraged to be very free with their responses, make suggestions for improvement, and outline any difficulties they found. After each questionnaire is accomplished, every question is asked what he/she meant in checking various answers. Comments were solicited on the questions and what the changes

should be done in order to make the questions simpler. These respondents also gave their comments on understanding the instructions about the scaling and the time taken to answer the questions. The test found no grave problems and minor modifications have been made to survey questions based on the verbal opinion that are received from the comments.

3.6 Reliability and Validity Tests

Alpha reliability is regarded as a measure of internal consistency of the mean of the items at the time of administration of questionnaire. Cronbach's alpha is a reliability coefficient that indicates how well the items in the set are positively related to one another (Kothari, 2004). George and Mallery (2003) also stated that a reliability score of greater than 0.9 is excellent, greater than 0.8 is good, greater than 0.7 is acceptable, greater than 0.6 questionable, greater than 0.5 is poor and less than 0.5 is unacceptable. Table 3.2 below depicts reliability of the survey questionnaire using Cronbach's alpha. As it is indicated in the result the reliability of the questionnaire is acceptable.

Table 3.2 Reliability test

Variables	No. of Items	Cronbach's Alpha	Level
Independent variables			
Product	12	.779	Acceptable
Price	9	.751	Acceptable
Promotion	11	.745	Acceptable
Place /Distribution	9	.779	Acceptable
Dependent variable			
Customer satisfaction	4	.800	Acceptable

Source: (Own survey, 2019)

3.8.2. Validity

According to The Center for the Enhancement of Teaching, validity refers to how well a test measures what it is purported to measure. Expert opinion has been considered to assess the validity of the data collection instruments. The researcher used to improve validity, by matching assessment measure to the goals and objectives and by making useful adjustments to the research instruments after the pilot study

IV. Data Analysis and interpretation

Data has been collected from respondents through questionnaire were coded, and ready for analysis. So that completeness, consistency, and reliability of the data can be achieved. Coding of data has been involved and symbols were assigned to the raw data. Therefore, it was easy and understandable for computer to analyze data. To analyze data that was collected from respondents, the researcher used quantitative data analysis approach. The primary data generated through the questionnaire were categorized in a way that suits to address the research questions raised in the study. The categorization includes: Product dimension, Price dimension, Promotion dimension, Place/distribution dimension towards customer satisfaction. The raw data has been entered to the software called statistical package for the social science [SPSS] version-23. Then frequency tables were produced for all response variables in the data set. Therefore, descriptive analysis like frequency, mean and standard deviations were used to analyze the given data and inferential statistical analysis like correlation and multiple regression analysis have been used to analyze data.

Table 4.1 Back ground Information of the Respondents

No.	Respondents General Information	Category	Frequency	Percentage
1	From which business activity you are on?	Building Material Shop	91	59.1
		Furniture Maker	63	40.9
		Total	154	100
2	Have you ever used Products of Hawassa Chipwood factory, PLC?	Yes	140	90.9
		No	14	9.1
		Total	154	100
3	How often do you use products of Hawassa Chipwood factory, PLC?	Daily	14	9.1
		Once a week or more	14	9.1
		2 – 3 times a month	21	13.6
		Once a month	49	31.8
		Seldom	56	36.4
		Total	154	100
4	How long you have been customer of Hawassa Chipwood factory, PLC?	1 – 5 Years	119	77.3
		5 – 10 Years	28	18.2
		> 10 Years	7	4.5
		Total	154	100

Source: (Own survey, 2019)

4.2 Analysis of mean and standard deviation for variables

4.2.1 Descriptive Analysis for the variable

Responses were analyzed by using descriptive statistics like mean and standard deviation. All the items were measured by using five point likert scales ranging from 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree and 5= Strongly Agree. This is to illustrate the level of agreement of the respondents. However, while making interpretation of the results of the means and standard deviations, the scales were reassigned as follows to make the interpretation easy (Al-Sayaad et al. 2006 Cited in Bassam, 2013).

Table 4.2 Likert’s-Scaled Criteria

No.	Range	Response option
1	1.00 - 1.80	Strongly Disagree
2	1.81 - 2.60	Disagree
3	2.61 - 3.40	Neutral
4	3.41 - 4.20	Agree
5	4.21- 5.00	Strongly Agree

Source: (Al-Sayaad et al. 2006 Cited in Bassam, 2013).

Table 4.3 Summary of descriptive statistics

Variables	Minimum	Maximum	Mean	Std. Deviation	Response
Product	1.83	4.83	3.00	.553	Neutral
Price	1.22	5.00	3.27	.933	Neutral
Promotion	2.00	4.73	2.90	.482	Neutral
Place/distribution	1.22	4.67	2.35	.819	Disagree
Customer Satisfaction	1.00	4.50	2.99	.697	Neutral

*N=154

Source: (Own survey, 2019)

The table 4.3 above depicts the summary of descriptive statistics of the variables. The mean value of the product is 3.00. It clearly portrays that most of the respondents' answered neutral on the questions related to the product. Price has mean value 3.27 showing that most of the respondents' answered neutral on the questions related to price. The mean value observed for questions relating to promotion is 2.90 and the result portrays that most of the respondents' answered neutral on questions related to the promotion. The mean value for place/distribution is 2.35, this showed that most of the respondents' answered disagree so it also showed that customers are dissatisfied for place/physical distribution system of the factory. The study of the customer satisfaction result showed with mean 2.99 and this result represents that the customers of Hawassa Chipwood Factory PLC are neither satisfied nor dissatisfied; they are indifferent towards product attributes, price, promotion, and disagree for place/physical distribution of the company.

4.2.1 Inferential Analysis

Inferential analysis is concerned with the various tests of significance for testing research questions in order to determine with what validity data can be said to indicate some conclusion or conclusions. It is also concerned with the estimation of population values (Kothari, 2004). Pearson correlation and multiple linear regressions are the main inferential methods employed in this study to analyze the relationship between independent variable and dependent variable.

4.2.2 Pearson Correlation Coefficient

The association between independent variables Product, Price, Promotion, and Place and dependent variable customer satisfaction was analyzed using Pearson correlation coefficient. According to Pallant (2007), Pearson correlation was used when the strength and the direction (positive or negative) of association between two continuous variables need to be explored. Theoretically, there could be a perfect positive correlation between two variables which is represented by +1 or perfect negative correlation which is -1.

The following table (table 4.4) shows the correlations between the four Marketing Mix elements (product, price, promotion, and place/distribution) and Customer Satisfaction.

Table 4.4 Relationship between Independent Variables and Customer Satisfaction

Correlations		
Variables		Customer satisfaction
Product	Pearson Correlation	.699**
	Sig. (2-tailed)	.000
	N	154
Price	Pearson Correlation	.538**
	Sig. (2-tailed)	.000
	N	154
Promotion	Pearson Correlation	.466**
	Sig. (2-tailed)	.000
	N	154
Place	Pearson Correlation	.597**
	Sig. (2-tailed)	.000
	N	154
Customer satisfaction	Pearson Correlation	1
	Sig. (2-tailed)	
	N	154

** . Correlation is significant at the 0.00 level (2-tailed).

Source: (Own survey, 2019)

In table 4.4 above, there is a significant and positive relationship between the independent variables Product, Price, Promotion, and Place with the dependent variable customer satisfaction. This showed that all the independent variables have significant positive correlation with dependent variable customer satisfaction

It can be concluded that there is a strong positive relationship between product and customer satisfaction ($r = .699$, $p < 0.05$). The result indicated that there is a strong positive and significant relationship between Price and customer satisfaction ($r = .538$, $p > 0.05$). The promotion result ($r = .466$, $p < 0.05$) showed moderate positive relation between promotion and customer satisfaction than other variables. And it is because the factory is not advertizing its products this days so the customers judge any of its promotional strategy and also the factory's products has already built in positive attitude in their mind so many of the respondents answered towards neutral response. There is a strong positive relation between place and customer satisfaction ($r = .597$, $p < 0.05$). To conclude this, the highest significant and positive association was between product ($r = .699$) and customer satisfaction followed by place ($r = .597$), price ($r = .538$) and promotion ($r = .466$). This implies that at 5% significant level, it was revealed that the independent variables have a significant role in affecting customer satisfaction.

4.3.2. Regression Analysis

In order to explore the predictive ability of the independent variable on one continuous dependent variable this study used multiple regression. Multiple regression analysis is one of the most widely used of all statistical method (Kutner, Nachtsheim, Neter, & Li, 2005). Multiple regressions analysis is a statistical tool for the investigation of relationship between variable. According to Nabede (2007), multiple regressions used to explain the amount of variance in the study and it was the amount of percentage of the independent variable components explain in the dependent variable. The objective of this analysis is to make a prediction about the dependent variable based on its covariance with all the concerned independent variables. It also indicates the respective contribution of each of this independent variable and help to determine whether the results are statistically significant or not.

Table 4.5 Multicollinearity Test

Coefficients				
Model		B	Collinearity Statistics	
			Tolerance	VIF
1	(Constant)	-.477		
	product	.561	.636	1.572
	price	.397	.571	1.752
	promotion	.415	.480	2.085
	place	.089	.558	1.793

a. Dependent Variable: customer satisfaction

Source: (Own survey, 2019)

According to Gliner and Morgan (2000), VIF value of each independent variable should be less than 5 in order to avoid multi co linearity among the independent variables. Based on the above table 4.10, the test reflects tolerance is more than .20 and the VIF is less than 5. So the variables used in this study are free from Multi co linearity.

Table 4.6 Coefficients table

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.477	.209		-7.082	.000
	product	.561	.052	.476	10.764	.000
	price	.397	.035	.531	11.389	.000
	promotion	.415	.074	.287	5.638	.000
	place	.089	.040	.104	2.214	.028

a. Dependent Variable: customer satisfaction

The standardize value of Beta Coefficient in the above table 4.6 indicates, the contribution of each predictor on dependent variable. The test will be significant if the p-value is less than 5%. The beta coefficient is used to determine which independent variables have the most influence on the independent variable. The variables employed in multiple regressions are product, price, promotion and place as independent variable and customer satisfaction as dependent variable in testing the influence between the variables

In the above table among the independent variable, price has the highest beta coefficient (B= .531) this indicates the preference of price towards customer satisfaction in better than other variables and it also increases by .531.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

$$Y = -.477 + 0.476\text{product} + 0.531\text{price} + 0.287\text{promotion} + 0.104\text{place}$$

Where; Y= dependent variable (Customer satisfaction)

a= intercept

b1, b2, b3= coefficient of independent variable

X1 = Product attributes

X2 = Price

X3= Promotion

X4= Place/distribution factors

From the regression equation, the constant value $B_0 = -.477$, this implies if the independent variable above mentioned in this study are kept constant as they exist. This showed that product, price, promotion and place are necessary for customer satisfaction. Based on the value coefficient variable, price has high significant

influence on customer satisfaction followed by product, promotion, and Place. This means that if price of the product is adjusted to the preferable price by one unit, it increases customer satisfaction in choosing the factory's product by .531. Customer satisfaction will increase by .476 when product increases by one unit. Promotion also has a positive significant influence on brand preference in choosing the factory's product. If promotion increases by one unit, it will increase the customer satisfaction by .287. If place/distribution factors also increases by one unit, it will increase customer satisfaction in choosing the factory's product by .104.

V. Conclusion

With the increasing number of businesses and growing competitions today, each company wants to be the customers' first choice. To achieve this, organizations need to design effective strategies to lead the organizations to their twin objective of satisfying their customers and making profits. The objective of this research is to assess the effects of marketing mix element on customer satisfaction in Hawassa Chipwood Factory PLC.

Based on summary of the findings of the study the descriptive analysis result showed that of Hawassa Chipwood factory customers are neither satisfied nor dissatisfied, with product, price and promotion strategies of the factory and dissatisfied on place/distribution system of the factory. The correlation analysis result revealed that there is a positive and significant relationship between the four marketing mix elements (product, price, promotion and place/distribution) and customer satisfaction. Even though all 4Ps have a positive relationship with customer satisfaction, product attributes has a high significant positive relationship with customer satisfaction. Multiple regression analysis revealed that 81.5% of the dependent variable (customer satisfaction) is explained by the independent variables (product attributes, price, promotion and place/distribution). The multiple regression analysis result further showed that product attributes, price, promotion, and place/distribution have a significant effect on customer satisfaction.

VI. Recommendations

- ❖ From the findings, it was observed that the majority of the consumers were influenced by the placement/distribution system of the factory. The company's placement strategy is not effective. Therefore, it is important to recommend that in order to attract more consumers and effectively sustain its value in customers' mind the company should revise its placement/distribution strategy so as to preserve former customers as well as draw new ones. The company also should increase the distribution facilities to make the products more accessible to its consumers.
- ❖ It was observed that the majority of the consumers were neither satisfied nor dissatisfied by the factory's pricing system. In order to increase sales volume and attract more customers the company has to apply different pricing system
- ❖ The result of the study has also shown that, most of the consumers were neither satisfied nor dissatisfied by Hawassa Chipwood Factory, PLC product attributes. The study result showed most customers are switching to other competitors in search of better quality especially well sanded (laminated particle boards). Therefore the company is advised to produce quality product by considering the needs of its customers
- ❖ It was observed that the company has produced goods (.55cm*110cm) in stock but the produced goods are not wanted by the customers. Therefore, in order to solve this problem the company needs to survey the market and distinguish the products needed by customer before producing.
- ❖ It is observed that for any business promotion is a very vital issue; any business should advertize its ideas, products and services in order to get better results. However, in case of Hawassa Chipwood Factory, PLC the factory is selling its products just by using its former name (good will); more factories are opening in the coming years with different methods of particle board production (Chip wood products). Hence, the company needs to work more on its promotional strategy
- ❖ Furthermore, the company should conduct and assess market research to identify marketing mix related problems inherent in its production in order to augment sales and increase customer satisfaction.

Future research Direction

This research presents result focusing on assessing the effects of marketing mix elements on customer satisfaction: the case of Hawassa Chipwood factory. First, the sample was drawn only from 154 customers. This study may be limited in its sample size. Thus, future research should be more extended in sample size to cover more diversified customers and should have to draw an increased number of sample respondents in order to make the findings more reliable. Second, it is suggested that future researchers to externalize their research out of Hawassa city on this subject matter. Because this study was conducted only in Hawassa city it would be very helpful if HCWF as well as other similar companies had the idea of their customers towards their marketing mix strategies.

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Appendix I
SPSS RESULT – Multi co linearity statistics
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.477	.209		-7.082	.000		
	product	.561	.052	.476	10.764	.000	.636	1.572
	price	.397	.035	.531	11.389	.000	.571	1.752
	promotion	.415	.074	.287	5.638	.000	.480	2.085
	place	.089	.040	.104	2.214	.028	.558	1.793

a. Dependent Variable: customer satisfaction

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