



**Research Paper**

## **A Study on Factors Influencing the Purchase of Wooden Plywood Flooring**

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### **EXECUTIVE SUMMARY**

*In today's everchanging world, the life style of an individual is changing day by day individuals are becoming more selective in choosing and buying things for themselves and for family. Individuals are looking for superior quality and better cost. Individual's feels that their surrounding should be good are giving importance to interior and floor designs. To make a better flooring and style need of good wooden flooring is important, which should be good in quality, good warranty, better price list, which is used for both strength and even under harsh weather conditions. These wooden flooring are made to make sure that there is no gaps between layers of plywood and laminate and provide, quick, permanent and strong solution, formulated to create flooring joints stronger than other flooring material.*

*New opportunities were arising in the field of plywood industry. From a small player to capture market through their complete package strategies such to expand to decoration, furniture, flooring products with unique patterns and accessories. Maintaining quality and quantity with feasible prices attracts them to capture market faster and fairly. Technology with new techniques to serve according to the flavoursof customer's needs. Tie up with real estate and builders help to create consumers' confidence to purchase the products. Adapting new marketing strategies such as online marketing, video marketing with familiar faces also creates great impact in customers.*

*The analysis data from primary source, while also collecting information from various journals as a source of secondary data to reach a conclusion for this project.*

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### **I. INTRODUCTION**

Plywood is manufactured by assembling various layers of wood that bonded together. It is having various applications, mostly used for the manufacturing of furniture, flooring, decorative material etc. plywood industry accounts of two thirds of the wood consumption. Introduction of new designs and diverse products range of furniture's, flooring have further helped in creating a demand among consumers. Expanding distribution network and exclusive outlets of furniture manufacturers in the region has also helped in influencing the market for plywood. The end-use the market is segmented as commercial and residential.

Wooden flooring is the product manufactured from timber that is designed for flooring, either structural or aesthetic. Wood is a common choice as flooring material and is available in various styles, colors, cuts, and pieces.

Individuals are giving lot of importance to interior and flooring designing at home and at work place. Individuals want this ambience to last for a longtime, which no doubt need good quality ingredients at a competitive price, to make this happen there is a need for plywood wooden flooring. The wooden flooring should be long lasting even under harsh weather conditions. Apart from the following features like Water resistance, latest designs, high quality, warranty etc. are the features which make the plywood wooden flooring unique.

#### **1.1 STATEMENT OF THE PROBLEM**

Plywood industry is a vital industry in the world and is an important ingredient for the manufacture of several products. This project helps to understand consumer's perception about the product. This study is done so that the people can be aware of the benefits that the wooden plywood products can provide and why it is the future of opportunities in the plywood industry.

## **1.2 OBJECTIVE OF THE STUDY**

- To find out predominant factors preferred by customers to purchase wooden flooring.
- To find out the relationship between income and preference towards wooden flooring.

## **1.3 HYPOTHESIS OF THE STUDY**

Null hypothesis: There is no relationship between the income and preference towards wooden flooring.

Alternative hypothesis: There is a relationship between the income and preference towards wooden flooring.

## **1.4 SIGNIFICANCE OF THE STUDY**

By undertaking the study on marketing strategy formulation researcher can provide insights to the marketers and business owners with a metric that they can manage and improve the business. The result of the study will help you to reduce customer churn and it help to improve the lifetime value.

## **1.5 SCOPE OF THE STUDY**

- The study was conducted on Indian plywood industry.
- The study was conducted for a period of 30 days.
- The data for the study was collected from the customers residing in Kerala.
- To understand what factor attracts a customer to buy a product and make it a branded.

## **1.6 LIMITATIONS OF THE STUDY**

- 30 days research.
- The sample size is limited to only 75 which constitute only a very small portion of the actual customers.

## **II. REVIEW OF LITERATURE**

Arkhipova, Vladykina, Donets, Osipova, & Uryupina, (2020)-They stated that customer always want something unique in the product or services which has the ability to influence the customers and ultimately has positive role in business success.

Z. Liu, Hung, & Liang (2019); Saragih (2019)-They stated that the promotion of brand loyalty is most important. Brand loyalty can be developed with the help of customer satisfaction. Higher customer satisfaction level has the ability to promote business performance of this industry.

Chen, Tsai, & Ke, (2019)-They stated that innovative brand always has different features which can attract the customers and increase the performance of the company. Innovative brand has major importance for the companies.

Zhou, Chen, Zhao, & Yang, (2018)-They mentioned that the industry has major importance for the business market, as the contribution of this industry in the business market is increasing which has central importance for the development economic welfare of the country. Therefore, Bamboo plywood market is emerging and growing with significant speed in the current market.

Rahi, Yasin, & Alnaser, (2017)-They stated that the brand loyalty has the major concern of companies as it has influence on the business activities.

R Krishna Vardhan Reddy (2016)-He concluded on the research on FMCG product and concluded that in order to improve the marketing strategies the organisations have to study the consumer behaviour by understanding the psychology of how consumer make decision between different alternatives, and how consumers are influenced by his/her environment and how the behaviour affect the marketing decision while purchasing.

R Krishna Vardhan Reddy (2015)-He stated on his research that among the subscribers of telecommunication services to find out their satisfaction level with mobile value-added services, he highlighted in his research that any business to prosper need to constantly do research and re-engineer their process on continuous basis by adapting generic strategies of Micheal E.

Vyas, Pandya, and Shukla, (2015)-They have done a comparative experiential examination of media influence and media habits on buying decisions of rural v/s urban consumers, their study highlighted the point that print and electronic media habit has the influence on buying decisions of both urban and rural consumers.

R Krishna Vardhan Reddy (2015)-Reddy had studied the relationship between emotional response and consumer buying behaviour, and he concluded that consumers purchase the product by emotional response. This attachment had generally created by promotion of product.

## **III. RESEARCH METHODOLOGY**

**3.1 RESEARCH DESIGN-** Descriptive research is used for the study. Descriptive study helps to gather descriptive information. The data needed for the study are collected through questionnaire methods.

**3.2 SAMPLE DESIGN**

**a) SAMPLING METHOD-**In this research the sampling method which has been used to collect information is convenient sampling through questionnaire.

**b) SAMPLING POPULATION-**The population in this study is customers of Wooden Plywood industry in Kerala.

**c) SAMPLE FRAME-**List of all people who are the customers of wooden plywood.

**d) SAMPLE SIZE-**Sample size taken for this research is 75.

**3.3 DATA COLLECTION**

1. **Primary Data:**They were obtained through structured questionnaire. Primary Data was collected from customers of Indian Plywood Industry, residing in Kerala.

2. **Secondary Data:** It was collected from magazine, website books, google etc.

**3.4 STATISTICAL TOOLS AND SOFTWARE USED FOR ANALYSIS**

After the collection of data from actual respondents, the next step in the research process is data analysis. The purpose of tools (SPSS) for the analysis of data is to interpret and draw conclusions from the data collected. The tools used are:

- **PERCENTAGE ANALYSIS-** is used to find out the Percentage distribution of respondents within the survey with respect to the demographic profile information asked in the survey.
- **FACTOR ANALYSIS-**It is the technique used to reduce the number of factors effecting into fewer number of factors.Used to find out the most prioritize variable with the customer perception towards purchase of plywood.
- **CROSS TABULATION -**It is data table that represent group of respondents with variables effecting factors. This hypothesis finds out significant relationship with respondents and variables. (Income & preference towards wooden flooring)

**IV. DATA ANALYSIS AND INTERPRETATION**

**4.1 DEMOGRAPHIC PROFILE**

**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	36	36.0	48.0	48.0
	2	39	39.0	52.0	100.0
	Total	75	75.0	100.0	
Missing	System	0	0		
Total		75	75		

**Inference:** From the table 36 % were males respondents and represented as 1. And balance 39 % were females represented as 2.

**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	69	69.0	92.0	92.0
	2.00	3	3.0	4.0	96.0
	3.00	2	2.0	2.7	98.7
	4.00	1	1.0	1.3	100.0
	Total	75	75.0	100.0	
Missing	System	0	0		
Total		75	75		

**Inference:** From the table 69 % respondents were between 20-30 years and represented as 1, 3% respondents were between 31-40 years and represented as 2, 2% respondents were between 41-50 years and represented as 3, 1% respondents were between 51-60 years and were represented as 4.

**Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	4.0	5.3	5.3
	2.00	33	33.0	44.0	49.3
	3.00	36	36.0	48.0	97.3
	4.00	2	2.0	2.7	100.0
	Total	75	75.0	100.0	
Missing	System	0	0		
Total		75	75		

**Inference:** From the table 4% respondents were high school educated people and represented as 1, 33 % were graduated people and represented as 2, 36 % were post graduates and represented as 3, 2% were Ph.D. holders and were represented by 4.

**Monthly Income**

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	1	33	33.0	44.0	44.0
	2	15	15.0	20.0	64.0
	3	18	18.0	24.0	88.0
	4	2	2.0	2.7	90.7
	5	7	7.0	9.3	100.0
	Total		75	75.0	100.0
Missing	System	0	0		
Total		75	75		

**Inference:** From the table 33% respondents earn salary below 50000 and represented by 1, 15% respondents earn salary between 50000 and 100000 and represented by 2 , 18% respondents earn salary between 100000 and 300000 and represented by 3 , 2% respondents earn salary between 300000 and 500000 and represented by 4, 7% respondents earn salary above 500000 and represented by 5.

**Occupation**

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	1.00	18	18.0	24.0	24.0
	2.00	8	8.0	10.7	34.7
	3.00	5	5.0	6.7	41.3
	4.00	26	26.0	34.7	76.0
	5.00	18	18.0	24.0	100.0
	Total		75	75.0	100.0
Missing	System	0	0		
Total		75	75		

**Inference:** From the table 18% respondents are self-employed people and represented by 1, 8% respondents are business people and represented by 2, 5% respondents are government sector employees and represented by 3, 26% respondents are private sector employees and represented by 4, 18% respondents are students and represented by 5.

**4.2 FACTOR ANALYSIS**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.922
Bartlett's Test of Sphericity	Approx. Chi-Square	835.192
	df	66
	Sig.	.000

KMO measures the sampling adequacy with respect to the response. From the table KMO value is “0.922” (sample adequacy ratio).

Therefore, the sample size adequate to conduct the study.

Bartlett’s test indicates the strength of the relationship among variables. From the table Bartlett’s test significant value is “0.000”. Therefore, reject null hypothesis that means that correlation matrix is not an identity matrix.

From the table below-correlation matrix, 0.795 of the variance in “brand ambassador” is accounted for, while 0.557% of the variance in "outlets” is accounted.

**Correlation Matrix**

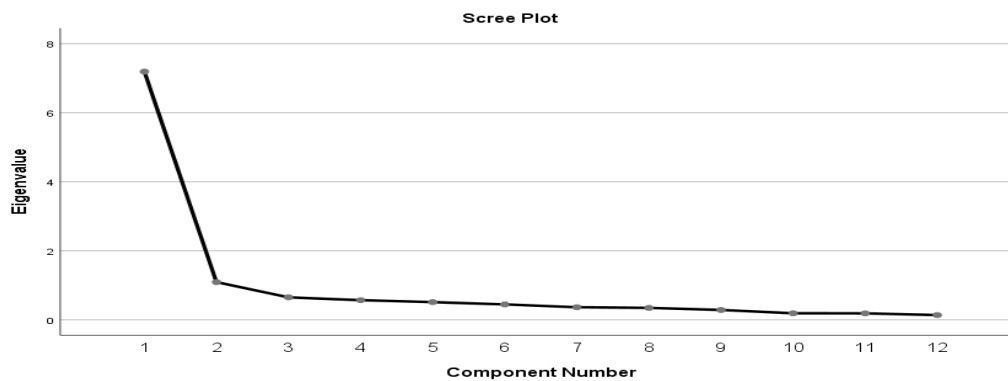
	Durability	Appeal Flooring	Maintenance	Reparability	Installation	Latest Design	Plywood Image	Merchandising	Outlets	Brand Ambassador	Brand Selling	Promotion
Durability	1.000	.795	.741	.642	.698	.607	.620	.658	.620	.328	.375	.560
Appeal Flooring	.795	1.000	.768	.620	.707	.664	.586	.593	.593	.311	.453	.569
Maintenance	.741	.768	1.000	.640	.760	.620	.725	.638	.592	.354	.490	.436
Reparability	.642	.620	.640	1.000	.561	.624	.541	.604	.601	.299	.371	.493
Installation	.698	.707	.760	.561	1.000	.644	.701	.677	.484	.527	.533	.583
Latest Design	.607	.664	.620	.624	.644	1.000	.613	.601	.534	.418	.465	.473
Plywood Image	.620	.586	.725	.541	.701	.613	1.000	.618	.524	.397	.378	.460
Merchandising	.658	.593	.638	.604	.677	.601	.618	1.000	.582	.577	.510	.635
Outlets	.620	.593	.592	.601	.484	.534	.524	.582	1.000	.403	.455	.530
Brand Ambassador	.328	.311	.354	.299	.527	.418	.397	.577	.403	1.000	.508	.532
Brand Selling	.375	.453	.490	.371	.533	.465	.378	.510	.455	.508	1.000	.489
Promotion	.560	.569	.436	.493	.583	.473	.460	.635	.530	.532	.489	1.000

**Communalities**

	Initial	Extraction
Durability	1.000	.783
Appeal Flooring	1.000	.775
Maintenance	1.000	.791
Reparability	1.000	.640
Installation	1.000	.734
Latest Design	1.000	.629
Plywood Image	1.000	.632
Merchandising	1.000	.721
Outlets	1.000	.557
Brand Ambassador	1.000	.795
Brand Selling	1.000	.605
Promotion	1.000	.625

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.190	59.920	59.920	7.190	59.920	59.920	5.340	44.502	44.502
2	1.095	9.124	69.044	1.095	9.124	69.044	2.945	24.542	69.044
3	.654	5.452	74.496						
4	.572	4.763	79.259						
5	.515	4.290	83.549						
6	.449	3.742	87.291						
7	.367	3.060	90.351						
8	.348	2.899	93.249						
9	.288	2.399	95.648						
10	.193	1.605	97.254						
11	.190	1.581	98.835						
12	.140	1.165	100.000						

From the table first factor accounts for 59.920% of the variance table, the second value 9.124% of the variance. All the remaining factors are not significant.



### Component Matrix

	Component	
	1	2
Durability	.839	-.282
Appeal Flooring	.839	-.266
Maintenance	.850	-.261
Reparability	.761	-.244
Installation	.856	.022
latest Design	.788	-.089
Plywood Image	.781	-.150
Merchandising	.831	.174
Outlets	.746	-.028
Brand Ambassador	.588	.670
Brand Selling	.635	.450
Promotion	.722	.322

### Rotated Component Matrix

	Component	
	1	2
Durability	.855	.227
Appeal Flooring	.847	.240
Maintenance	.853	.251
Reparability	.770	.215

Installation	.702	.490
latest Design	.707	.360
plywood Image	.734	.305
Merchandising	.598	.603
Outlets	.638	.387
Brand Ambassador	.122	.883
Brand Selling	.282	.725
Promotion	.425	.667

**Component Transformation Matrix**

Component	1	2
1	.835	.551
2	-.551	.835

**INTERPRETATION**

Factor1:**Aesthetics and Maintenance**- Durability, Appeal flooring, Maintenance, Reparability, Installation, Latest design, Plywood image.

Factor2: **Brand Image**-Brand ambassador, Brand Selling, Promotion.

**4.3 CROSS TABULATION**

**Income \* Preference towards flooring**

Null hypothesis: There is no relationship between the income and preference towards the wooden flooring.

Alternative hypothesis: There is a relationship between the income and preference towards wooden flooring.

		Preference towards flooring					
		1.00	2.00	3.00	4.00	5.00	Total
Annual Income	1	8	6	16	1	2	33
	2	4	6	4	1	0	15
	3	2	7	6	2	1	18
	4	0	1	1	0	0	2
	5	2	1	2	2	0	7
Total		16	21	29	6	3	75

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.613 <sup>a</sup>	16	.047
Likelihood Ratio	14.111	16	.190
Linear-by-Linear Association	.152	1	.297
N of Valid Cases	75		

**INTREPRETATION**

P value is 0.047 which is less than 0.05. Hence we reject null hypothesis. It is found that there is a significant relationship between income and preference towards wooden flooring.

**V. FINDINGS**

- It was found that of the 89% respondents were between the age group of 20-30 years.
- It is clear that 57% of the respondents are females.
- 46% of respondents are post graduates and 43% are graduates.
- 34% of the customers are private sector employees with monthly income below Rs. 50,000.
- 50% of the respondents purchased from India Plywood by the recommendation of family and friends.
- 66% of the respondents did not feel any difficulties during the purchase procedure and it was handled well by the company staffs.
- 40% of the respondents on the basis of interaction with the company said that they are friendly, clearly explained the complaints, product features, the showroom were well displayed, good product brochure.

- 34% of the respondents said that the pricing in their arrival during purchase decision is important.
- 37% of the respondents prefer durability of the flooring.
- 35% of the respondents give importance to appearance and appeal of the flooring.
- 33% of the respondents prefer ease of maintenance of flooring.
- 30% of the respondents give importance to ease of reparability of the flooring.
- Ease of installation of the flooring is not given much importance by the respondents.
- 33% of the respondents prefer latest design of the flooring.
- 38% of the respondents said that advertising for such product is very important.
- 49% of the respondents said that T.V advertisement will work best for product.
- 74% of the respondents purchase directly from the outlets.
- From the factor analysis 2 factors were retained as it shows consumers prefer the brand due to its performance and characteristics assure to the product within the price limits.
- From the cross tabulation, it is clear that consumers are conscious about the quality.

## **VI. SUGGESTIONS**

- Majority of the respondents are earning annual income below Rs 50,000. So that product pricing should be kept in such a way that they are affordable by common people also.
- It is observed that people are deciding to buy the wooden plywood and plywood products by the recommendation of family and friends, so always try to keep a good relationship with the customers.
- Most of the companies sell their products through online. Adopting such a strategy can be helpful so that customers at distant places can conveniently purchase products.
- Pricing is given more important than product quality. So always fix the price which is affordable.
- Wooden flooring should be made in such a way that it can be repaired in future.
- Customers prefer latest design and styles, so ensure that companies are able to provide the customers with latest design and trends.
- Always try to maintain good image among the customers.
- Sales promotion activities like advertisement must be improved.
- Companies should try to improve the level of advertisement. So that the products get a better reach among the ordinary people.
- Companies must conduct market surveys to change their product according to the likes and dislikes of customers.
- Company should consider the customer expectation level of pricing and quality of products. By the survey it is clear that maximum respondent influenced by the factors like quality and pricing. So it is suggested to increase and maintain the quality of products.
- From the study, it is clear that this may economical. Its performance and characteristics make unique. The product may fulfil the needs of consumer in affordable pricing with their performances.
- Company should tie up with builders and real estate agencies, since this plywood sector is a developing a tie up with builders and real estate agencies will give them a recognition and exposure with big players. This will help them to get wider reach and get works, contracts in future.

## **VII. CONCLUSIONS**

After conducting the research study on the topic it is observed that consumers buying behaviour had changed. People prefer quality of the product with latest design and styles which have a long lasting. This study has done all it has set out to do, and thus we can conclude that the influence of plywood industry today is not small. It is an integral and essential part of our daily lives, anything that has to do with products gains significance, and this significance only grows stronger with the growth of brands.

So the project concludes that consumer perceptions are very much important to complete and improve the sales of the products.

## **BIBLIOGRAPHY**

- [1]. D'Astous, Alain and Jacob, Isabelle, "Understanding consumer reactions to premium based promotional offers", European Journal of marketing, 2020.
- [2]. Kureshi, Sonal and Vyas, Preeta, (2020) "An Exploratory Study of Sales Promotional activities in Toilet Soap Category: An insight into Consumer and Retailer Perception", IIMA Working papers, IIMA Research Department and Publication Department.
- [3]. Palazon Vidal, Mariola and Delegado, Ballester, Elena, "the New Power of Sales Promotion", The ICFAI Press, 2020.
- [4]. Bridges, Eileen, Briesch, Richard A and Yim, Chi Kin (Bennet), Journal of Retailing, April 2019, pp 295-307.
- [5]. Neilson, "China trend watch-A Neilson consumer report", A Neilson study February 2018.
- [6]. Rai, N (2019), "Impact of Advertising on Consumer Behaviours and Attitude with reference to Consumer Durables", International Journal for Management Research and Business Strategy, 2(2), ISSN-2319-3456.
- [7]. Josephine Lalitha, J and Panachanatham, N (2015), "Impulsive Buying Behaviour of Rural People: With Reference to FMCG Products", International Journal of Research in Commerce and Management, Vol.4, No.10, October, 2018, pp.82-86.



- [8]. Sunil, Kumar, Agarwal, (2016), "A study of Consumer Buying Behaviour of FMCG Products in Madhya Pradesh", VSRD International Journal of Business and Management Research, Vol. IV. No.1, January,2017, pp.11-14.
- [9]. R Krishna Vardhan Reddy (2015), "A Study on Impact of Advertising on Consumer Buying in Twin cities of Hyderabad and Secunderabad", Osmania Journal of Management, ISSN No. 0976-4208, Volume-XI Number-2, April-June 2015, pp89-95.
- [10]. R Krishna Vardhan Reddy (2016), "Impact of Advertising on Consumer Buying Behaviour : A Study on select Personal Care Products in Hyderabad" Contemporary Issues in Marketing, Finance and HRM & IT, ISBN- 978-93-85506-01-7, pp-178-187
- [11]. R Krishna Vardhan Reddy (2015), " A Study to Analyse the Customer Satisfaction level with Mobile Value Added Services In Hyderabad," International Journal of Business Quantitative Economics and Applied Research Management (ijbemr) ISSN- 2349-5677(online) volume –II issue: 12 Dec 2015.pp133-140.
- [12]. Vyas, P, Pandya, M, and Shukla, P, (2015), " A Comparative Experiential Examination of Media Influence and Media Habits on Buying Decisions of Rural versus Urban Consumers", SEMCOM-Management and Technology Review, An International Peer Reviewed Research Journal (Bi Annual), 2(2), ISSN-2321-5968.