

INFLUENCE OF RETAIL STORE ATTRIBUTES ON CUSTOMERS'SHOPPINGBEHAVIOR

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Introduction:

Consumer Behaviour is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society. It blends elements from psychology, sociology, social anthropology, marketing and economics. It attempts to understand the decision-making processes of buyers, both individually and in groups such as how emotions affect buying behavior. It studies individualities of specific consumers such as demographics and behavioral variables in an effort to know people's wants. It also tries to assess influences on the consumer from groups such as family, friends, sports, reference groups, and society in general.

Retailers are known to design store environments in a manner that will enhance consumers' positive feelings, under the statement that this will lead to desired consumer behaviors, such as a higher willingness to purchase or stay in the store for longer time. The importance of store environment in enhancing the shopping experiences of consumers has long been appreciated. The shopping situation of a consumer will also influence their response to an environment. Many retailers acknowledge the importance of store environment as a tool for market differentiation.

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Consumers' evaluate alternative stores on a set of attributes, and depending on their individual preferences. Customer's choice of a particular store depends on shopping orientation as well as satisfying experience. In addition, a customer's attitude towards the store may result from his/ her evaluation of the perceived importance of store attributes, molded and remolded by direct experiences with the store's overall offerings.

Retail Store Attributes

The store attributes namely store ambience (i.e. music, air conditioning, layout and decoration), merchandise attributes like product, price, quality and availability are the important factors that influence the purchase of a product. The enriched services offered by the retail outlets include employee approach, exchange and refund waiting time of the customers and providing fast check-out facilities to the customers' to enhance customers' to visit their premises again and again. Customers' should be satisfied with products and service provided by the retail stores. The retail stores must provide convenient parking facilities and it should be easy accessible to the customers' for shopping. Advertising and many promotional offers also help to create a positive influence on the store. Moreover, if the retail store provides attractive window display it would create better shopping experience to the customers.

Research Methodology:

Type of Study: Descriptive

Nature of Study: Quantitative

Type of Questionnaire: Structured

Type of Questions: Limited probing

Time dimension: Cross sectional

Type of Analysis: Statistical

Primary data collection: Survey

Contact method: Personal /online survey

Research Instruments: Questionnaire

Population:

The division of the Nagpur city according to zones is as follows:

1. North Nagpur – Koradi Rad, KT Nagar, Sadar, HazariPahad, Godhni, Gorewada and ZingabaiTakli
2. South Nagpur – Besa, hanuman nagar, Manewada, Sakkardara, Somalwada, Trimurti nagar, Pratapnagar, Narendra nagar, Chinchbhavan
3. East Nagpur - Nandanwan, Pardi, Surya nagar, Wardhamannagar
4. West Nagpur – Bajaj nagar, Laxminagar, Dharampeth, Ravi nagar, Shivajinagar, Amravati road, Jaitala, Swavalambinagar, Hingna road
5. Central Nagpur – CA Road, Civil lines, Dhantoli, Mahal, Ramdaspath, Sitabuildi.

Sample Size: 100 respondents

Sampling technique: Stratified Random Sampling

Hypothesis:

H01: There is no relation between merchandise attributes and demographic profile of the customer.

H02: There is no relation between convenience, satisfaction and demographic profile of the customer.

Hypothesis testing:

H01: There is no relation between merchandise attributes and demographic profile of the customer.

In order to test this hypothesis multiple regression is used.

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable. The variables we are using to predict the value of the dependent variable are called the independent variables.

The first table of interest is the **Model Summary** table. This table provides the R , R^2 , adjusted R^2 , and the standard error of the estimate, which can be used to determine how well a regression model fits the data:

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956 ^a	.914	.907	.559
a. Predictors: (Constant), occasion ofvisitingoutlet, Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation				

The "**R**" column represents the value of R , the *multiple correlation coefficient*. R can be considered to be one measure of the quality of the prediction of the dependent variable; in this case, **Merchandise attributes**. A value of 0.956, in this example, indicates a good level of prediction. The "**R Square**" column represents the R^2 value (also called the coefficient of determination), which is the proportion of variance in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). You can see from our value of 0.914 that our independent variables explain 91.4% of the variability of our dependent variable, **Merchandise attributes**. However, you also need to be able to interpret "**Adjusted R Square**" (*adj. R^2*) to accurately report your data.

Statistical significance

The F -ratio in the **ANOVA** table (see below) tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F(8,91) = 121.121$, $p < .0005$ (i.e., the regression model is a good fit of the data).

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	302.940	8	37.867	121.121	.000 ^b
	Residual	28.450	91	.313		
	Total	331.390	99			
a. Dependent Variable: merchandiseattributes						
b. Predictors: (Constant), occasion ofvisitingoutlet, Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation						

Estimated model coefficients

The general form of the equation to predict Merchandise attributes from Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation, is:

predicted Merchandise attributes = 0.373 – (0.239 x gender) – (0.486 x Age) + (0.117 x education) + (0.021 x occupation)+(0.427 x marital Status)+(0.916 x Family size)+(0.063 x monthly income)

This is obtained from the **Coefficients** table, as shown below:

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.	95.0% Confidence Interval for B		
		B	Std. Error	Beta		Lower Bound	Upper Bound	
1	(Constant)	.373	.268		-.1389	.168	-.905	.160
	Gender	.239	.140	.065	1.712	.090	-.038	.516
	Age	-.486	.117	-.219	-4.152	.000	-.719	-.254
	Education	.117	.062	.089	1.906	.060	-.005	.240
	occupation	.021	.189	.016	.111	.911	-.354	.396
	MaritalStatus	.427	.172	.117	2.488	.015	.086	.769
	Familysize	.916	.106	.599	8.659	.000	.706	1.126
	Monthlyincome	.063	.083	.049	.760	.449	-.102	.228
a. Dependent Variable: merchandiseattributes								

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. Consider the effect of Gender in this example. The unstandardized coefficient, B_1 , for Gender is equal to 0.239 (see **Coefficients** table). This means that for each one year increase in gender, there is an increase in merchandise attributes of 0.239.

Statistical significance of the independent variables

You can test for the statistical significance of each of the independent variables. This tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population. If $p < .05$, you can conclude that the coefficients are statistically significantly different to 0 (zero). The t -value and corresponding p -value are located in the "t" and "Sig." columns, respectively, as highlighted in the above table.

Putting it all together

You could write up the results as follows:

- General

A multiple regression was run to predict merchandise attributes from Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, and occupation. These variables statistically significantly predicted merchandise attributes, $F(8,91) = 121.121, p < .0005, R^2 = .914$. All the variables added statistically significantly to the prediction, $p < .05$.

From the above calculations we can say that the Null hypothesis H01: There is no relation between merchandise attributes and demographic profile of the customer, is rejected and alternate hypothesis H11: There exist a relation between merchandise attributes and demographic profile of the customer, is accepted.

H02: There is no relation between convenience, satisfaction and demographic profile of the customer.

In order to test this hypothesis multiple regressions is used.

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable. The variables we are using to predict the value of the dependent variable are called the independent variables.

The first table of interest is the **Model Summary** table. This table provides the R , R^2 , adjusted R^2 , and the standard error of the estimate, which can be used to determine how well a regression model fits the data:

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923 ^a	.852	.839	.569
a. Predictors: (Constant), Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation				

The "**R**" column represents the value of R , the *multiple correlation coefficient*. R can be considered to be one measure of the quality of the prediction of the dependent variable; in this case, Convenience and satisfaction . A value of 0.923, in this example, indicates a good level of prediction. The "**R Square**" column represents the R^2 value (also called the coefficient of determination), which is the proportion of variance in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). You can see from our value of 0.852 that our independent variables explain 85.2% of the variability of our dependent variable, Merchandise attributes . However, you also need to be able to interpret "**Adjusted R Square**" (*adj. R^2*) to accurately report your data.

Statistical significance

The F -ratio in the **ANOVA** table (see below) tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F(8,91) = 65.607$, $p < .0005$ (i.e., the regression model is a good fit of the data).

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	170.200	8	21.275	65.607	.000 ^b
	Residual	29.510	91	.324		
	Total	199.710	99			
a. Dependent Variable: convenienceandsatisfaction						
b. Predictors: (Constant), Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation						

Estimated model coefficients

The general form of the equation to predict Convenience and satisfaction from Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, occupation, is:

predicted Convenience and satisfaction = - 0.590 + (0.250 x gender) – (0.358 x Age) + (0.676 x education) - (0.465 x occupation)+(0.003 x marital Status)+(0.347 x Family size)-(0.204 x monthly income)

This is obtained from the **Coefficients** table, as shown below:

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Beta	Lower Bound
1	(Constant)	-.590	.273		-2.160	.033	-1.133	-.047
	Gender	.250	.142	.087	1.757	.082	-.033	.532
	Age	.358	.119	.208	3.003	.003	.121	.595
	Education	.676	.063	.661	10.786	.000	.552	.801
	occupation	-.465	.192	-.449	-2.413	.018	-.847	-.082

	MaritalStatus	.003	.175	.001	.017	.986	-.345	.351
	Familysize	.347	.108	.292	3.219	.002	.133	.561
	Monthlyincome	-.204	.085	-.205	-2.411	.018	-.372	-.036
a. Dependent Variable: continenceandsatisfaction								

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. Consider the effect of **Gender** in this example. The unstandardized coefficient, B_1 , for **Gender** is equal to 0.250 (see **Coefficients** table). This means that for each one year increase in gender, there is a increase in merchandise attributes of 0.250.

Statistical significance of the independent variables

You can test for the statistical significance of each of the independent variables. This tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population. If $p < .05$, you can conclude that the coefficients are statistically significantly different to 0 (zero). The t -value and corresponding p -value are located in the "**t**" and "**Sig.**" columns, respectively, as highlighted in the above table.

Putting it all together

You could write up the results as follows:

- General

A multiple regression was run to predict merchandise attributes from Age, Gender, MaritalStatus, Education, monthlyincome, Familysize, and occupation. These variables statistically significantly predicted merchandise attributes, $F(8,91) = 65.607, p < .0005, R^2 = .852$. All the variables added statistically significantly to the prediction, $p < .05$.

From the above calculation we can say that Null hypothesis H02: There is no relation between convenience, satisfaction and demographic profile of the customer, is rejected and alternate hypothesis H12: There is no relation between convenience, satisfaction and demographic profile of the customer, is accepted.

Conclusion:

Customer behavior study is based on consumer buying behavior, with the customer playing the three distinct roles of user, payer and buyer. Research has shown that consumer behavior is difficult to predict, even for experts in the field. Relationship marketing is an influential asset for customer behavior analysis as it has a keen interest in the re-discovery of the true meaning of marketing through the re-affirmation of the importance of the customer or buyer. A greater importance is also placed on consumer retention, customer relationship management, personalization, customization and one-to-one marketing. Social functions can be categorized into social choice and welfare functions.

Store attributes related to a retail outlet can be grouped in terms of store atmospherics and store location. Retailers of the modern world have realized the importance of store attributes and systematically so they have tried to enrich, reframe the ambience, emphasizing on colors, music wall decorations, displays so as to attract their target customers'. Further, purchase decision-making has become complex due to inseparability of product and services offered in retail outlets.

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