



Study of Factors Determining Consumer Buying Behaviour of Insurance Product :An Empirical Study of Ahmedabad Customers

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Abstract

This study is attempt towards finding out what factors mostly influence customers while making company selection. List of factors are taken into account for the purpose like Tax benefits, Goal Achievement, Contingencies, Convenience, Risk aversion etc. The variations on the perception of choices with regard to factors will provide a useful insight to insurance companies when selecting their marketing strategies, concerned about the value for money. Insurance institutions need to create a lucrative customer base in order to increase their market share and need to identify factors that influence the choice of insurance companies" selection and work on improving them. The insurance companies have realized the need to adopt a people-oriented approach, rather than only concentrating on the profit-oriented approach, towards improving customer service. Since customers are becoming more demanding and sophisticated, therefore, it has become important for the insurance sector to consider each of this factor in their strategies to achieve market and customer growth.

1. Introduction

The development of the economy depends on the soundness of its financial system. Insurance sector is one of the major players in financial system. Insurance sector in India is growing at a very fast pace. As a result of liberalization of Indian economy, new private sector insurance companies had came into existence which competed with both foreign insurance companies and Indian companies for market share. Insurance companies are competing not only with

themselves but also with other financial institutions within the financial industry. With the entry of private sector insurance companies the number of insurance companies in all over the country has gone up. High level of competition is the most important factor in influencing the structure and activities of the insurance system around the globe.

Indian insurance industries have been undergoing rapid changes, reflecting a number of underlying developments. The competition among the insurance companies is essentially based on the technology and innovative products and services provided by the insurance companies which may help them to attract and retain the customers. The competition and saturation in the insurance industry requires insurance companies to be more customer focused as the customers today are much determine the factors which are pertinent to the customers for choosing a company.

The consumer market can be segmented on the basis of demographic disparities and thus, the impact of these variables on influence of customer's choice should be evaluated. Thus, improper identification of true determinants of consumers' company selection decision may result in losing potential customers.

II. Literature Review

1) Fishbein and Ajzen' s (1975) theory of reasoned action is part of the "buyer behavior school" of marketing theory (Sheth, Gardner, & Garrett, 1988, p. 110). This school focuses on customers in the marketplace in two ways. These are, first, in terms of customers' personal demographic characteristics, and second, possibly more important, in terms of why customers behave in certain ways. That is, "How do customers and consumers really behave?" (Day & Montgomery, 1999, p. 3).

Sheth et al. (1988) assert that the buyer behavior school "has had the greatest impact on the discipline of marketing," except possibly with the exception of the managerial school (p. 110). In today's marketplace, with the growing attention to the consumer's wants, needs, and desires and especially seniors' greater buying power (Marcus & Thomson, 2001), the study of consumer behavior becomes increasingly important for both theory and practical application in marketing.

S Krishnamurthy et al. (2005), in the paper titled, "Insurance Industry in India: Structure, Performance and Future Challenges", clearly explained the status and growth of Indian Insurance

Industry after liberalization and also presents future challenges and opportunities linked with the Insurance. Insurance is the backbone of country's risk management system and influence growth of an economy in several ways. Penetration of Insurance largely depends on availability of Insurance products, insurance awareness and quality of services. The future growth of this sector will depend on how effectively the insurers are meeting the expectations of their customers and able to change the perceptions of the Indian consumers and make them aware of the insurable risks. The paper has also drawn attention on emerging structure, role of banc assurance, agents and customer services in the success of life insurance business.

M. Rajkumari (2007) in the paper titled "A Study on Customers' Preference towards Insurance Services " examined the awareness, satisfaction and preferences of customers towards various Insurance services . The study has been undertaken by the researcher in order to identify the customer's attitude towards purchase of insurance products and services formats available through banks. He also gave suggestions to improve customer awareness on performance of banks in selling insurance policies Hyderabad ICFAI publication has clearly mentioned in his book that how banc assurance will be beneficial for banks, insurers and customers and also present challenges and opportunities of banc assurance in India. He identified cultural differences between banks and insurance companies could pose a major challenge to the growth of banc assurance. Large customer base and people trust on bank is the main opportunity for the banks as a distribution channel for insurance companies

J. Campbell Alexandra (2003) " While increasingly demanding customers have prompted many firms & corporation to implement better sales programme , little is known about the internal processes that assist corporation-wide learning about individual customer services."

Ranjan et al.(2009) "The efficient and automated management of customer interactions is the need of today. The customer services have helped organizations to increase the interaction with customers. Organization also needs to analyze the customer data to uncover trends in customer behavior and understand the true value of their customers. Analyzing customer relationships from a lifetime perspective is critical for success."

III. Research Methodology

The researcher has gone through primary data i.e. interviewing customers and using schedules. The total of 520 respondents were contacted, the respondents were the customers of insurance companies in the city of Ahmedabad .

3.1 Research Objectives: -

- 1) To identify various factors influencing customers choice for insurance as a product.
- 2) To determine relative importance of each factor influencing customer choice..

3.2 Research Design: -

The research design used for the purpose was descriptive and various factors are taken into account for understanding the customer's choice for a insurance company.

3.3 Research Instrument:

Structured Schedule was prepared for the use in the survey based on objectives of the study. The questions were divided and organized into two sections: in the first section of the questionnaire questions were asked regarding the age, income, and education.

The second section of the questionnaire asked respondents questions related to insurance product, and asked to rate the relative importance of 30 insurance products' attributes when choosing a company. They were measured on a seven point Likert-type scale of importance ranging from 1(strongly disagrees) to 7(strongly agree)

3.4 Sample and Data collection:

The present study has been conducted in Ahmedabad city of Gujarat state. A purposive sample of 520 individuals who had an experience of offline and online insurance system was taken. The respondents were requested to give their responses with respect to the factors they would consider while making a choice of Insurance products.

4. Data Analysis.

Collected data was analysed to get an insight of customer behaviour while choosing insurance product. Exploratory factor analysis is the dominant tool in data analysis. This tools not only explored different variables for research but also decide their relative importance.

4.1 Demographic Details

Table 4.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	296	56.9	56.9	56.9
	Female	224	43.1	43.1	100.0
	Total	520	100.0	100.0	

Out of 520 total respondents about 296 customers are male and 224 customers are female with 56.9% and 43.1% respectively. Male respondents are little more in numbers but the difference is not large so, that their individual differences can be studied on the factors determining investment in insurance.

Table 4.2 Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<30,000	91	17.5	17.5	17.5
	31,000-60,000	121	23.3	23.3	40.8
	61,000-80,000	153	29.4	29.4	70.2
	>80,000	155	29.8	29.8	100.0
	Total	520	100.0	100.0	

With respect to the Income levels of the respondents around 17.5% of the respondents are belong to personal monthly income of less than 30,000 per month. About 121 respondents are falling in the income range of 31,000 to 60,000 which contributes to 23.3% of the total respondents. About

29.4% of the respondents' income falls under the range of 61,000 to 80,000 per month that constitute to around 153 respondents. Out of 520 respondents of the survey, around 155 respondents belong to income group of more than 81,000 per month which is 29.8% of the total respondents.

Table 4.3 Investment Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<5 Years	98	18.8	18.8	18.8
	5-10 Years	167	32.1	32.1	51.0
	> 10 Years	255	49.0	49.0	100.0
	Total	520	100.0	100.0	

Investment experience of the respondents plays very important role in generating demand of life Insurance Investment and also affects its determinants in grater aspect. Investment experience refers to their attachment with the Life insurance plans as customer. In this study around 18.8% has less than 5 years experience of life insurance investment. Around 32.1 % of the respondents have between 5 to 10 years experience of investment in life insurance products from various organised companies that comes to around 167 respondents out of 520. About total of 255 respondents have investment experience of more than 10 years that is 49% of the total respondents.

Table 4.4 Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25 years	96	18.5	18.5	18.5
	25-35 years	117	22.5	22.5	41.0
	36-45 years	163	31.3	31.3	72.3
	46-55 years	109	21.0	21.0	93.3
	>55 years	35	6.7	6.7	100.0
	Total	520	100.0	100.0	

With regards to age factor of the respondents, around 6.7 % of the total respondents are of more than 55 years that comes to 35 respondents of the total 520. About 109 respondents belong to 46-

55 years that is 21% of the total. Highest of all is 163 respondents out of 520 belong to 36-45 years, which is 31.3% of the total 100%. Around 22.5% of the total respondents are belong to 25-35 years and about 96 respondents are falling in the age group below 25 years, which is 18.5 % of the total.

4.2 Exploratory Factor Analysis

In multivariate statistics, exploratory factor analysis (EFA) is a statistical method used to uncover the underlying structure of a relatively large set of variables. EFA is a technique within factor analysis whose overarching goal is to identify the underlying relationships between measured variables. It is commonly used by researchers when developing a scale (a scale is a collection of questions used to measure a particular research topic) and serves to identify a set of latent constructs underlying a battery of measured variables. It should be used when the researcher has no a priori hypothesis about factors or patterns of measured variables. Measured variables are any one of several attributes of people that may be observed and measured.

4.2.2 KMO and Bartlett's Test of Sphericity

Further, before conducting factor analysis, we must check the appropriateness of using this multivariate analysis technique. This can be done using Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity (Nargundkar, 2003). As recommended by Kaiser, values above 0.7 are good whereas between 0.5 to 0.7 also acceptable (Andy Field, 2005).

The KMO measures the sampling adequacy which should be greater than 0.5 for a satisfactory factor analysis to proceed. If any pair of variables has a value less than this, consider dropping one of them from the analysis. The off-diagonal elements should all be very small (close to zero) in a good model.

Looking at the table 4.5 below, the KMO measure is 0.879 hence it is inferred that the sample size is the adequate for the factor analysis.

Table 4.5 KMO & Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.879
Bartlett's Test of Sphericity	Approx. Chi-Square	28170.980
	df	406
	Sig.	0.000

Bartlett's test of sphericity tests the null hypothesis that the original correlation matrix is an identity matrix. For factor analysis, this is an important starting point since the technique is useful only if the variables are correlated. Therefore, for the test to be significant the p-value should be less than 0.05. In this data, the Bartlett's test shows the p-value as 0.000 for chi-square statistic (28170.980) at 406 degrees of freedom and hence the null hypothesis of correlation matrix being an identity matrix is rejected. Therefore, it is established from the statistical measures that the variables have some correlation and therefore, factor analysis is appropriate.

4.2.3 Eigenvalues and factor extraction

Table 4.6 Eigen Values of Exploratory Factor Analysis

Total Variance Explained									
Component	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	12.992	44.799	44.799	12.992	44.799	44.799	4.869	16.790	16.790
2	3.675	12.674	57.473	3.675	12.674	57.473	4.852	16.732	33.521
3	3.155	10.880	68.354	3.155	10.880	68.354	4.268	14.717	48.239
4	2.771	9.556	77.910	2.771	9.556	77.910	3.955	13.637	61.875

5	1.379	4.755	82.665	1.379	4.755	82.665	3.839	13.239	75.114
6	1.137	3.921	86.587	1.137	3.921	86.587	3.327	11.473	86.587
7	.779	2.686	89.273						
8	.545	1.880	91.153						
9	.503	1.735	92.888						
10	.352	1.213	94.100						
11	.343	1.182	95.283						
12	.263	.909	96.191						
13	.239	.825	97.016						
14	.185	.639	97.656						
15	.159	.547	98.203						
16	.110	.379	98.582						
17	.096	.331	98.913						
18	.079	.272	99.185						
19	.059	.204	99.389						
20	.045	.155	99.544						
21	.040	.139	99.683						
22	.025	.088	99.770						
23	.020	.069	99.839						
24	.014	.049	99.888						
25	.011	.037	99.925						
26	.009	.031	99.955						
27	.006	.022	99.977						
28	.004	.014	99.992						
29	.002	.008	100.000						

Extraction Method: Principal Component Analysis.

The initial solution was determined using PCA method. A method widely used for determining a first set of loadings. This method seeks values of the loadings that bring the estimate of the total communality as close as possible to the total of the observed variances.

Table 4.6 lists the Eigen values, associated with each linear component (factor) before extraction, after extraction and after rotation. All factors with Eigen values greater than 1 are extracted which leaves us with 29 variables reduced to six factors. Rotation has the effect of optimizing the factor structure and one consequence for these data is that the relative importance of six factors is equalized. First factor explain approximately 44.799 % of variance and other five factors also explain the significantly high variance. Also, it shows a cumulative percentage of 87% of the total variance explained by the six factors and leaving 13% of the variance to be explained by the other 23 components.

Using Kaiser's criterion, the study sought variables with eigenvalues greater than or equal to 1. The first six components had eigenvalues greater than or equal to 1 and accounted for 87 percent of the variance, with component 1 accounting for 44.799percent of the variance, component 2 explained 12.674 percent of the variance, component 3 explained 10.880 percent of the variance, component 4 explained 9.556 percent of the variance, component 5 explained 4.755 percent of the variance and last component explained approximately 4 percent of the variance. Therefore based on the total variance explained analysis, a maximum of 6 components could be extracted from the combined data set.

The Kaiser criterion has a weakness as observed by Nunny and Berstein (1994) as its tendency to overstate the number of factors. Stevens (2002) proposes the use of a scree plot in determining the number of components to retain.

The scree plot graphs the eigenvalues against the component number and displays a point of inflexion on the curve, which can be used in determination of number of components to extract. In a scree plot, the components before this point indicate the number of factors to retain while the components after the point of inflexion show that each successive factor is accounting for smaller and smaller amounts of variations hence should not be retained.

The rotated component matrix shows the factor loadings of each variable onto each factor. Factor loadings less than 0.4 have not been displayed. As cited by Field (2009), the original logic

behind suppressing loadings less than 0.4 is based on Stevens’ suggestion that this cut-off point is appropriate for interpretative purposes (i.e. the loadings greater than 0.4 represent substantive values.)

The rotated component matrix helps to determine what the factors represent as the factor loadings denote the correlation (coefficients) between the variable and the factor. The object of the rotation is to ensure that all the variables have high loadings only on one factor. While the researcher has the option of selecting from the two rotation methods: Orthogonal and Oblique; the first method has been selected here so that the rotated factors remain uncorrelated. For this purpose, the rotation method used is ‘Varimax’.

4.2.4 Factor Loadings

Larger loadings on a single factor help to interpret the underlying factor. Finally, the factor analysis procedure gives six factors reduced from 29 variables.

This procedure helps to identify various factors and variables which are very important to be measure to understand its effect on customer experience following table 4.7 describes various factor loadings found very much important to measure customer experience.

Table 4.7 Factor Loadings for Exploratory Factor Analysis

Rotated Component Matrix						
	Component					
	1	2	3	4	5	6
Investment in life insurance products helps to reduce future risks	.923					
Life Insurance products are less risky than Investments in other financial markets	.850					
Investment in life insurance products reduces risks in investment portfolio	.835					
Life insurance products is a good hedging tool for investors	.820					
Life insurance products are safe in volatile market	.915					

situations						
Investments in life insurance helps to realize various long terms financial goals		.927				
Life Insurance products helps in fulfill financial needs at regular intervals		.784				
Life Insurance products are more reliable to meet financial goals then other tools		.931				
Life insurance products adequately satisfy future financial needs		.769				
All kinds of future financial goals can be achieved with the help of insurance		.811				
Life insurance is good tool for tax saving						.680
Investment in life insurance is efficient enough to save tax						.623
Life insurance products can suffice all my tax saving needs						.778
Life insurance is good tool for tax planning						.666
Tax savings becomes simple with Life Insurance						.786
Investment in life insurance provides good future value of investment			.849			
Life insurance investments provides reasonable returns			.763			
Returns from life insurance products are adequate			.835			
Returns from life insurance are effective enough against other marketable tools			.847			
The returns are worth the premium paid.			.746			
Life insurance helps in unforeseen circumstances					.803	
Investment in life insurance products are good source of contingencies					.678	
Life insurance investments are relief in case of loss of earning person of family					.736	
Life Insurance products helps in terms of loan					.877	

during financial troubles						
Contingency support of life insurance products are very effective				.857		
It's very simple to understand Life insurance products than other tools				.857		
I receive tailor made solution for my needs in life insurance products				.722		
Life insurance products are transparent than other tools				.839		
Investment in Life insurance products is more convenient tool.				.716		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 8 iterations.						

A Varimax with Kaiser Normalization rotation method revealed a six component structure as shown in Table 4.7. The original 29 items in the instrument had been loaded on the seven components.

5. Conclusion

Component one had 5 items loading on it with the item, “Investment in life insurance product helps to reduce future risk.” reflecting the highest factor loading of (0.923) , followed by “Life insurance products are safe in volatile market situations” (0.915), “Life Insurance products are less risky than Investments in other financial markets.” (0.850), “Investment in life insurance products reduces risks in investment portfolio.” (0.835) and “Life insurance products are a good hedging tool for investors.” (0.820). The 5 items converged on the factor Risk Aversion.

Surrogate variable which is selection of a single variable with the highest factor loading to represent a factor in the data reduction stage instead of using a summated scale or factor score, is “Investment in life insurance product helps to reduce future risk” reflecting the highest factor loading of 0.923.

A set of 5 items loaded on component two. The item that explained the greatest variations in component two were, “Life Insurance products are more reliable to meet financial goals than other tools.” (0.931), “Investments in life insurance helps to realize various long terms financial goals” (0.927), “All kinds of future financial goals can be achieved.”(0.811) “Life Insurance products help in fulfills financial needs at regular intervals.” (0.784) and “Life insurance products adequately satisfy future financial needs.” (0.769). The 5 items that loaded on component two were interpreted as the financial goals.

A total of five items loaded on component three. The greatest variation in component three was explained by the items “Investment in life insurance provides good future value of investment.” (0.849), followed by “Returns from life insurance are effective enough against other marketable tools.”(0.847),“Returns from life insurance products are adequate.” (0.835), “Life insurance investments provides reasonable returns” (0.763) and “The returns are worth the premium paid.” (0.746).A close examination of the 5 items led to their interpretation as the factor price and the item “Investment in life insurance provides good future value of investment”, is the surrogate variables of Capital Gain

Component four had five items loading on it. The item with the highest factor loading was, “Contingency support of life insurance products is very effective.” (0.857) followed by. ”It’s very simple to understand Life insurance products than other tools” (0.857), “Life insurance products are transparent than other tools” (0.839), “I receive tailor made solution for my needs in life insurance products.” (0.722), and “Investment in Life insurance products is more convenient tool.” (0.716). the five items were interpreted as the factor Convinces

Four items loaded on component five. “Life Insurance products help in terms of loan during financial troubles.” (0.877), followed by “Life insurance helps in unforeseen circumstances” (0.803), “Life insurance investments are relief in case of loss of earning person of family.” (0.736), “Investment in life insurance products are good source of contingencies.” (0.678). the four items were interpreted as the factor Social

Five items loaded on component six. “Tax savings becomes simple with Life Insurance ” (0.786), followed by “Life insurance products can suffice all my tax saving needs” (0.778), “Life insurance is good tool for tax saving.” (0.680), “Life insurance is good tool for tax planning”

(0.666), and “Investment in life insurance is efficient enough to save tax.” (0.623). the five items were interpreted as the factor Tax Benefits

References:

[1]. Arrow, K. J. (1965). „Insurance, Risk and Resource Allocation“ in “Foundations of Insurance Economics”, G. Dionne and S. E. Harrington (eds.), Kluwer Academic Publishers.

[2]. Beck, T. and I. Webb (2003) “Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries”, World Bank Economic Review, Vol. 17; pp 51-88.

[3]. Kwon, W. Jean (2002) “The Insurance Markets of South Asia”, IIF Occasional Paper, No. 4; International Insurance Foundation, Washington, DC

[4]. Mossin, J. (1968) “Aspects of rational Insurance Purchasing” Journal of Political Economy, Vol. 79; pp 553-568.

[5]. Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley

[6]. Kardes, F. R. (2002). Consumer behavior and managerial decision making (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

[7]. Kumar, N., Cohen, M. A., Bishop, C. E., & Wallack, S. S. (1995). Understanding the factors behind the decision to purchase varying coverage amounts of long-term care insurance

[8]. Anderson, E. & Sullivan, M.W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms, Marketing Science, Vol. 12 (2), pp. 125-143. [9]. Lee, J., and

(9) Marlowe, J. (2003). How consumers choose a financial institution: Decision-making criteria and heuristics. International Journal of Bank Marketing, 21 (2), 53-71.