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Role of Demographic Variable Education Level of the Rural Consumer on Consumer Innovativeness in Rural Mobile Telecom Services

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ABSTRACT

Consumer innovativeness is highly regarded tool being used by the marketers for successful diffusion of innovation with the intention to ensure overall profitability and to attain competitive advantage. This study has been conducted to measure consumer innovativeness of rural mobile telecom services among rural consumers, the study followed the quantitative research approach, empirical based and each construct is measured and quantified to understand the magnitude of relation among the other constructs. The various constructs are service attributes satisfaction, innovation and uniqueness, satisfaction, loyalty, product involvement, opinion leadership, venturesomeness, price insensitivity related to rural consumer innovativeness have been considered for this study. The existing rural mobile consumers in the states of Karnataka and Andhra Pradesh have been considered as the target population to collect samples followed survey research method, in turn, the Questionnaire as data collection method, sample design is stratified random sample based on various pockets in the state of Andhra Pradesh and Karnataka. In Data analysis both descriptive statistics and inferential statistics are used in this research.The results of the study open the discussion on impact of consumer innovativeness for rural telecom services, which may be helpful for telecom service providers to reach and serve the rural consumers effectively and profitably.

Keywords: Consumer innovativeness, rural consumer, service attributes satisfaction, loyalty, product involvement, opinion leadership, venturesomeness, price insensitivity.

INTRODUCTION:

India has over 6,30,000 villages, each with an average population of about 1,200 people. Most of the households in rural India earning is below Rs.4,000 per month. India is the fastest growing telecommunication market, with total mobile subscriber base of 1183.41 million users as on 31st March 2018 (TRAI report 2018), out of which 662.18 are urban mobile subscribers and 521.23 are rural mobile subscribers with overall teledensity is 91.09%.

Diffusion and adoption of innovation are major issues in the discipline of consumer behavior that affect the acceptance of new products and services and decide the spread of innovation from the source to the consumers. The continuous invention of new technologies, consumer awareness with change in preferences, perception and satisfaction not only shorten the life cycle of products or services but also develop a need for innovation to gain sustained competitive advantage and satisfy the consumers demands. Innovation is business can be classified on the basis of firm, product, market and consumer orientation (Roerich, 2004).Innovation leads to the emergence of new products and services. Product oriented innovation leads to the introduction of a new product with the disruption of an established behavior pattern, market oriented innovation is related to the degree of exposure to consumers for new products or services and consumer oriented innovation stresses on the perception of consumers towards new rather than physical features. Innovation requires substantial money and

time. Hence, it is imperative to understand recognize consumer innovators for successful adaption with the aim to maximize profits during the product life cycle and to eliminate the chances of diffusion failure (Ho and Wu, 2011). The mobile telecom services industry is one of the important sectors and plays a crucial role in generating substantial revenue to the economy. At a time when industry is facing sluggish growth due to continuous decline of the average revenue per user per month and minutes of use per connection, implementing and searching innovative features seem to be important for maintaining sustainability. The innovators made in products and services in the telecom industry are highly associated with the need of potential users; hence, constant innovation is required to retain the existing subscription market share (Corrocher and Zirulia, 2010). The present study has been conducted to measure mobile telecom service innovativeness for the rural consumers as this population segment is considered the target market for mobile telecom services that influences the adaption and diffusion of innovation for the telecom industry. Measuring consumer innovativeness opens a new paradigm for marketers to comprehend innovative buying behavior of the consumer that affects the acceptance or rejection of new products and services in a particular category.

LITERATURE REVIEW:

Consumer innovativeness is a key success factor for the diffusion of innovation and acts as a source of accelerating innovative behavior (Roehrich, 2004). Consumer innovativeness is a construct that relates with consumers behavior along with novelty seeking and creativity that received great attention by consumer researchers since last couple of decades (Hirschman, 1980). Conceptualization of innovativeness was first introduced by Rogers and Shoemakers (1971); they expressed innovativeness as "the degree to which an individual is earlier in adopting new ideas than the average number of his or her social system." In 1978, Midgley and Dowling suggested innovativeness as "the degree to which an individual is receptive to new ideas and makes innovative decisions independently of the communicated experience of others." Consumer innovativeness can be classified into two broad categories—open processing innovativeness and domain-specific innovativeness (Donnell and Sauer, 2005; Goldsmith and Hofacker, 1991; Hui and Wan, 2004). Open processing innovativeness refers to the reaction of individuals on new products based on their intellectual, perceptual and attitudinal characteristics, while domain-specific innovativeness is grounded on the area of interest of individuals. According to Goldsmith and Hofacker (1991), domain-specific innovativeness is positively associated with opinion leadership, time and money spent on new product categories. High consumer innovativeness postulates the willingness of consumers to accept the changes in concepts and things, and to influence others to adopt innovative features and ideas, quick decision power and comparatively faster rate and time of adoption of the innovation in a social group (Dobre et al., 2009; Ho and Wu, 2011). Success of innovation depends on the degree of acceptance by the consumers: higher the acceptance, higher will be the adoption rate; thus, understanding the consumers' innovativeness and explicating products accordingly are the most revelatory ways to success of diffusion of innovation. The organizations that develop new products regularly can easily attract the consumers who are more innovative in buying behavior. Innovative buying behavior depends on the consumer personality—unique psychological characteristics that lead to relatively consistent and lasting responses to one's own environment, consumer perception—the process by which an individual selects, organizes and interprets stimuli into a meaningful picture and consumer learning—the process by which consumers acquire the purchase, consumption knowledge and experience that they apply to future related behavior (Amue and Adiele, 2012). Park et al., (2010) classified consumers into two categories, namely, cognitive innovators and sensory innovators. They further suggested that innovative behavior of a consumer significantly affects shopping styles: cognitive innovators are more price-sensitive as compared to the sensory innovators and are more focused towards the utilitarian value, while the sensory innovators are more inclined towards the aesthetic or hedonic value of the products. This behavioral pattern of consumers gives valuable insights into marketing communication and brand management. Chao, Reid and Mavondo (2012) empirically examined the positive association between domain-specific innovativeness and the adoption of new consumer electronic products. Park, Chung and Hur (2011) identified trust as an important factor to influence the adoption of new products in the internet phone services domain and further suggested that consumer innovativeness has substantial effect on trust and influences intention to use the innovative services.

RESEARCH METHODOLOGY:

Research objectives:

The study is designed to measure "consumer innovativeness" for existing rural mobile telecom service users

among the rural consumers based on the education level of rural consumers with the following constructs:

1. Service attributes satisfaction.
2. Satisfaction
3. Loyalty
4. Opinion leadership
5. Product involvement
6. Price insensitivity
7. Venturesomeness
8. Innovativeness and need for Uniqueness
9. Customer innovativeness

Hypothesis formulation:

The hypotheses framed in this study in order to make inferences are as follows:

H1 : Rural mobile telecom services service attribution is significant.
H2 : Rural mobile telecom services satisfaction is significant.
H3 : Rural mobile telecom services loyalty is significant.
H4: Rural mobile telecom services opinion leadership is significant.
H5: Rural mobile telecom services product involvement is significant.
H6: Rural mobile telecom services price insensitivity is significant.
H7: Rural mobile telecom services venturesomeness is significant.
H8: Rural mobile telecom services innovativeness and need for uniqueness is significant.
H9: Rural mobile telecom services customer innovativeness is significant.

Sampling Design Process:

The rural mobile subscribers of Karnataka and Andhra Pradesh are considered as a target population for the study. The existing mobile telecom customers of various service providers in different rural pockets of both the states have been considered as a sampling frame for the study. Self administered questionnaire is used and collected the response from 1000 customers.

RESULTS AND DISCUSSION:

Table 1: Respondents data by Education

	Frequency	Percentage
<10th Std	500	50.0%
<12th Std	156	15.6%
Diploma	44	4.4%
Degree	266	26.6%
Post Graduate	34	3.4%

Table 2: Measurement of mobile telecom services on various constructs by Education level of rural consumers

	Education Level	N	Mean	Std. Dev	F value	Sig value
Service Attribute Satisfaction	<10th Std(A)	500	3.80	0.75	7.97	0.00
	<12th Std(B)	156	3.44	0.67		
	Diploma(C)	44	3.54	0.91		
	Degree(D)	266	3.63	0.80		
	Post Graduate(E)	34	3.82	0.66		
Satisfaction	<10th Std(A)	500	4.61	0.38	2.14	0.07
	<12th Std(B)	156	4.51	0.55		
	Diploma(C)	44	4.48	0.49		
	Degree(D)	266	4.57	0.51		
	Post Graduate(E)	34	4.55	0.51		
Loyalty	<10th Std(A)	500	4.40	0.51	2.69	0.03

	Education Level	N	Mean	Std. Dev	F value	Sig value
	<12th Std(B)	156	4.48	0.53		
	Diploma(C)	44	4.42	0.59		
	Degree(D)	266	4.33	0.64		
	Post Graduate(E)	34	4.21	0.84		
Opinion Leadership	<10th Std(A)	500	4.52	0.59	1.29	0.27
	<12th Std(B)	156	4.62	0.51		
	Diploma(C)	44	4.50	0.55		
	Degree(D)	266	4.59	0.53		
	Post Graduate(E)	34	4.51	0.56		
Product Involvement	<10th Std(A)	500	4.48	0.56	0.27	0.90
	<12th Std(B)	156	4.50	0.62		
	Diploma(C)	44	4.43	0.57		
	Degree(D)	266	4.46	0.63		
	Post Graduate(E)	34	4.51	0.59		
Price Insensitivity	<10th Std(A)	500	4.40	0.71	1.54	0.19
	<12th Std(B)	156	4.46	0.57		
	Diploma(C)	44	4.36	0.61		
	Degree(D)	266	4.51	0.59		
	Post Graduate(E)	34	4.52	0.45		
Venturesomeness	<10th Std(A)	500	4.29	0.83	0.44	0.78
	<12th Std(B)	156	4.28	0.76		
	Diploma(C)	44	4.17	0.75		
	Degree(D)	266	4.24	0.91		
	Post Graduate(E)	34	4.16	1.01		
Innovativeness and need for Uniqueness	<10th Std(A)	500	4.40	0.66	0.77	0.55
	<12th Std(B)	156	4.33	0.63		
	Diploma(C)	44	4.47	0.63		
	Degree(D)	266	4.40	0.61		
	Post Graduate(E)	34	4.30	0.65		
Customer innovativeness	<10th Std(A)	500	4.42	0.45	0.26	0.90
	<12th Std(B)	156	4.44	0.37		
	Diploma(C)	44	4.39	0.41		
	Degree(D)	266	4.44	0.40		
	Post Graduate(E)	34	4.40	0.45		

On the analysis of the above table with refer to education level of the rural customers, we draw the following inferences.

Service Attribute Satisfaction:
The Post Graduate respondents achieved the highest mean score of 3.82, <10th Std respondents achieved the mean score of 3.80, Diploma respondents achieved the mean score of3.54, Degree respondents achieved the mean score of 3.63 while <12th Std respondents achieved the lowest mean score of3.44. The analysis of the above table brings out that the F value is 7.97 and P value is 0.00. Since the significance value is less than 0.00, the mean difference existing about the perception of this factor is significant at 1% level. Hence null hypothesis is rejected and alternate hypothesis is accepted.
Satisfaction: The <10th Std respondents achieved the highest mean score of 4.61, Post Graduate respondents achieved the mean score of 4.55, <12th Std respondents achieved the mean score of 4.51, Degree respondents achieved the mean score of 4.57 while Diploma respondents achieved the lowest mean score of 4.48. The analysis of the above table brings out that the F value is 2.14 and P value is 0.07. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Loyalty: The <12th Std respondents achieved the highest mean score of 4.48, <10th Std respondents achieved the mean score of 4.40, Diploma respondents achieved the mean score of 4.42, Degree respondents achieved the mean score of 4.33 while Post Graduate respondents achieved the lowest mean score of 4.21. The analysis of the above table brings out that the F value is 2.69 and P value is 0.03. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Opinion Leadership:
The <12th Std respondents achieved the highest mean score of 4.62, <10th Std respondents achieved the mean score of 4.52, Post Graduate respondents achieved the mean score of 4.51, Degree respondents achieved the mean score of 4.59 while Diploma respondents achieved the lowest mean score of 4.50. The analysis of the above table brings out that the F value is 1.29 and P value is 0.27. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Product Involvement:
The Post Graduate respondents achieved the highest mean score of 4.51, <10th Std respondents achieved the mean score of 4.48,<12th Stdrespondents achieved the mean score of 4.50, Degree respondents achieved the mean score of 4.46 while Diploma respondents achieved the lowest mean score of 4.43. The analysis of the above table brings out that the F value is 0.27 and P value is 0.90. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Price Insensitivity:
The Post Graduate respondents achieved the highest mean score of 4.52, <10th Std respondents achieved the mean score of 4.40,<12th Stdrespondents achieved the mean score of 4.46, Degree respondents achieved the mean score of 4.51 while Diploma respondents achieved the lowest mean score of 4.36. The analysis of the above table brings out that the F value is 1.54 and P value is 0.19. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Venturesomeness:
The <10th Std respondents achieved the highest mean score of 4.29, Diploma respondents achieved the mean score of 4.17,<12th Stdrespondents achieved the mean score of 4.28, Degree respondents achieved the mean score of 4.24 while Post Graduate respondents achieved the lowest mean score of 4.16. The analysis of the above table brings out that the F value is 0.44 and P value is 0.78. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Innovativeness and need for Uniqueness:
The Diploma respondents achieved the highest mean score of 4.47, <10th Std and Degree respondents achieved the mean score of 4.40,<12th Std respondents achieved the mean score of 4.33 while Post Graduate respondents achieved the lowest mean score of 4.30. The analysis of the above table brings out that the F value is 0.77 and P value is 0.55. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

Customer innovativeness:
The <12th Std and Degree respondents achieved the highest mean score of 4.44, <10th Std respondents achieved the mean score of 4.42, Post Graduate respondents achieved the mean score of 4.40 while Diploma respondents achieved the lowest mean score of 4.39. The analysis of the above table brings out that the F value is 0.26 and P value is 0.90. Since the significance value is more than 0.05, the mean difference existing about the perception of this factor is not significant at 5% level. Hence null hypothesis is accepted.

CONCLUSION:

This study primarily focuses on role of consumer innovativeness of rural mobile telecom services innovativeness along with other constructs such as Service attributes satisfaction, Satisfaction, Loyalty, Opinion leadership, Product involvement, Price insensitivity, Venturesomeness, Innovativeness and need for Uniqueness with consumer education level. The findings of this study will be helpful for the marketers of mobile telecom services operators to reach and serve the rural area consumers effectively.

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