

Impact of customer life style on the perception towards innovative features of 4G cellular services: An empirical investigation

Impacto del estilo de vida del cliente en la percepción hacia características innovadoras de los servicios celulares 4G: una investigación empírica

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Received: 20/06/2019 • Approved: 24/09/2019 • Published 07/10/2019

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ABSTRACT:

The basic purpose of this paper was to examine the causality between 4G cellular service customers' life style profiles and their perception on product innovation. The study was based on field survey in Odisha state of India and exploratory in nature. Measurement scales of two latent variables of study, Customer Life Style and Customer Perception were tested properly. Multiple regression analysis was applied to test the causality of life style profile on the perception about service innovation. Life styles like, maker, innovator, striver, survivor, & believer were found to have significant effect on customers' perception on innovation.

Keywords: Life Style, Customer Perception, Product Innovation, 4G Cellular Services

RESUMEN:

El propósito fue examinar la causalidad entre los perfiles de estilo de vida de los clientes del servicio celular 4G y su percepción sobre la innovación del producto. El estudio se basó en un estudio de campo en el estado de Odisha, India, y de naturaleza exploratoria. Las escalas de medición de dos variables de estudio latentes, estilo de vida del cliente y percepción del cliente se probaron correctamente. Se aplicó un análisis de regresión múltiple para probar la causalidad del perfil de estilo de vida en la percepción sobre la innovación del servicio. Se encontró que los estilos de vida como creador, innovador, luchador, sobreviviente y creyente tienen un efecto significativo en la percepción de los clientes sobre la innovación.

Palabras clave: Estilo de vida, Percepción del cliente, Innovación de productos, Servicios celulares 4G

1. Introduction

Lifestyle marketing is a marketing stream which includes the concept of establishing

links between various offerings by the marketers in the market and that of the targeted lifestyle groups. It deals with segmenting the market on the ground of dimensions of lifestyle study, positioning the product in a way that appeals to the activities, interests and opinions (AIOs) of the targeted market population and carrying out specific target oriented promotional campaigns which exploit lifestyle appeals to enhance the market value of the offered product.

The services sector worldwide has shown its potential ability to grow over the past few decades and in any sort of economies, let it be developed or developing, this sector constitutes approximately 50 per cent of the GDP (Das and Saha, 2011). As the importance of services sector keeps on increasing, more and more businesses are expanding their service offerings in accordance with the evolving consumer demands. One of the crucial results of the increasing interest in services has been reflected in the identification of the necessity of interactions between the customer and the service provider (Solomon et al., 1985), and especially, the role of the front-line employees of the firm (Bitner et al., 1990).

The Indian telecom sector is expected to generate four million direct and indirect jobs over the next few years according to estimates by Randstad India. The employment opportunities are expected to be created due to combination of government's efforts to increase penetration in rural areas and the rapid increase in smartphone sales and rising internet usage. The various 4G LTE operators commercially functional in India are Bharti Airtel (Including Telenor & Tata DoCoMo), Reliance Jio Infocomm & Vodafone-Idea Limited where as the Government owned BSNL (Including MTNL) is carrying out its 4G testing phases in various telecom circles of the country.

Airtel was the first operator in India to launch 4G services via dongles & other modems, on 10th April 2012. It started offering 4G LTE services for cellular phones from February 2014 onwards. It later on started offering the VoLTE services in few circles, which are still in testing phase at many areas.

Reliance Jio Infocomm Limited or Jio provides wireless 4G LTE service network (without 2G/3G-based services) and is the only 'VoLTE-only' (Voice over LTE) operator in the country which lacks legacy network support of 2G and 3G, with coverage across all 22 telecom circles in India. The services were first beta-launched to Jio's partners and employees on 27 December 2015 on the eve of 83rd birth anniversary of late Dhirubhai Ambani, founder of Reliance Industries and later services were commercially launched on 5th September 2016. The company commercially launched its services on 5 September 2016. Within the first month of commercial operations, Jio announced that it had acquired 16 million subscribers. This is the fastest ramp-up by any mobile network operator anywhere in the world. In May 2016, Jio launched a bundle of multimedia apps on Google Play as part of its upcoming 4G services.

Vodafone Idea Limited is the largest telecom operator in India post merger of the individual operators of Vodafone & Idea, which took place on 31st August 2018. Before the merger, Vodafone had started offering its 4G LTE services in India from 8th December 2015 onwards. Later on, it started offering VoLTE services also in few of its telecom circles. Likewise, pre-merger Idea cellular had started offering 4G LTE services in all of its 20 telecom circles and later on, Since June 2018 it started offering VoLTE service in all the 20 circles.

In the above context, this research paper aims at examining the cause-effect relationship between 4G Cellular Service customers' life style profiles and their inner perception on innovative product features.

2. Literature Survey

The word 'lifestyle' comes mainly from the streams of psychology and sociology. It refers to an individual's specific way of living, and has been always used primarily to examine the various living patterns and preferences of various social classes (Lin et al., 2012). Using the study of lifestyle to segment customers & markets began in the 1960s (Plummer, 1974). Lifestyle study is often used to determine the relationship between

psychographic as well as demographic variables and behavioral patterns for acceptance or resistance of technology-enabled services and products (Lee et al., 2009; Yu, 2011).

Chantatub et al. (2015) in their research paper have given importance upon that the effects of consumer e-lifestyles on consumer resistance to mobile banking, using the perspective of innovation resistance. Their conclusion was drawn from a survey of nearly 1,900 Thai and Taiwanese respondents which discovered five principal factors that significantly influence and shape people's e-lifestyles. Further they have stated that the influence of each of these factors was unequal and differed between Thai and Taiwanese respondents. The results indicated that the e-lifestyle of customers, significantly moderates the effects of traditional practices, perception, and usage barriers to consumers' resistance to using mobile banking innovations.

In the current global scenario, study and application of lifestyle is one of the most commonly used concepts in marketing (Solomon et al., 2009). Markets are now being segmented based on lifestyle and combined with themes of attitudes, perceptions, and personalities in many cases (Kardes et al., 2011).

The word 'psychographics' is now being often used interchangeably with that of 'lifestyle' (Shim and Bickle, 1994; Solomon et al., 2009). Therefore, it is clearly evident that psychographic research is a worthy tool to measure life-style based marketing analytics (Lantos, 2011). This new approach of study has gradually but definitely developed into a more specialized method to understand consumers from marketing point of view. Based on the work of Solomon et al. (2009), the psychographic research approach can be used in six different key areas to define the target market, to create a new view of the market, positioning the product in consumers' mind, communicating product attributes in a better way, to develop an overall strategy and dealing with the social and political issues related to marketing.

Values are the selection bases that customers use to choose & justify their course of actions & perceptions and to evaluate objects and the other's behaviors. Every single person has a specific value structure of his own. Kahle (1996) in his work, has claimed that values are shaped by means of an individual's past experiences & whole learning process. Rokeach (1973) in his work has shown two groups of values: terminal values (the end goals that an individual would like to achieve); and instrumental values (the means or the preferred ways of behaving in order to achieve the goals).

Elena Fraj and Eva Martinez (2006) in their study has highlighted about the environmental patterns and self-fulfillment values, that best characterize the market segment from ecological perspective. They have stated that the particular group of consumers was characterized by their self-fulfillment feeling i.e. They always try to improve themselves and take actions which pose a new challenge for them.

Along with the existing traditional information communication and entertainment services, mobile devices in today's world and further in future, can be used to support a variety of advanced information and communication technology oriented services, for example global location based services (Pura 2005), cell phone based advertising (Tsang et al. 2004), mobile banking (Lee et al. 2003; Luarn and Lin 2005), m-commerce (Massoud and Gupta 2003; Pedersen 2005a, b), online based mobile ticket reservation, mobile chatting application services (Nysveen et al. 2005a), mobile based gaming (Nysveen et al. 2005b), mobile based multimedia services etc. Frankly speaking, advanced mobile based services are becoming increasingly important to business firms and consumers simultaneously (Nysveen et al. 2005b). But, according to the work of Bhattacharjee (2000), having a major group of adopters is a necessary precondition when it comes to yielding profitable amount of revenues from these kinds of services.

Based on the review of literature following research hypotheses were formulated:

H1: There lies a significant impact of the personal factors of the 4G Cellular Service customers over the perception of the same customers.

H2: There exists a significant impact of customer life style profile on the perception of the same customers in relation to product innovation.

3. Research Methodology

The study was focused on field survey and was exploratory in nature. For survey purpose, a sample of 107 customers was drawn of various locations situated at different cities in Odisha during April-June, 2017. Initially a sample of 200 customers was planned, but because of non-response categories, it was restricted to 107. Method of judgmental sampling was considered to select the mobile phone users and they were approached by personal contact approach. A well-developed tailor-made questionnaire was considered to collect the primary data. The two latent variables of study Customer Life Style (CLS), and Customer Perception (CP) were having 28, and 8 measuring items respectively. Both of these measurement scales were tested for its reliability and validity content wise. Multiple regression analysis was followed to test the existence of significant effect of customers' life style profile on their perception about 4G Cellular Service features.

4. Results and Discussion

One-way ANOVA was applied between the demographic factors & customer perception. The result obtained out of this analysis is given in table 1, for 4G Cellular Service customers. In this analysis, studies were made to confirm whether there exists significant impact of customers' personal factors on their perception level. Through the output of ANOVA whether a statistically significant difference between various customer groups means exist, that can be found out. From table 1, it can be seen that, in case of the 4G Cellular Service customer perception, F- values related to personal factors like age, gender, education and monthly family income, all are insignificant ($p > 0.05$) and, therefore, there is no statistically significant difference in the mean customer perception level between the different age groups, gender groups, educational groups & income groups. Thus, H1 is rejected for all of the personal factors of 4G Cellular Service customers.

Table 1
ANOVA Results Showing the Effect of Customers' Personal Factors on their Perception on Innovation (4G Cellular Service)

Personal Factors	F - Ratio Values	
	Customer perception	P
Age	0.964	0.431
Gender	0.493	0.484
Education	1.117	0.346
Monthly Family Income	0.982	0.421

Since all the F-values related to 4G Cellular Service customer perception were found to be insignificant, it is interpreted that customer personal factors have no role in creating variation in customer perception.

Table 2
Regression Analysis Showing the Impact of CLS Dimensions on Customer Perception of Innovation (4G Cellular Service)

CLS Dimensions	Indices of Simple Linear Regression Analysis				
			B (Unstandardized		

	R2	F	Coefficient)	Std. Error	t	Remarks
Thinker	0.018	1.924	0.112	0.081	1.387	H2a rejected
Experiencer	0.017	1.794	0.082	0.061	1.340	H2b rejected
Achiever	0.005	0.565	0.066	0.088	0.752	H2c rejected
Maker	0.043	4.665*	0.138	0.034	2.160*	H2dsupported
Innovator	0.215	28.814*	0.235	0.044	5.368*	H2e supported
Striver	0.107	1.843*	0.054	0.040	1.358*	H2f supported
Survivor	0.124	14.857*	-0.191	0.050	-3.854*	H2g supported
Believer	0.059	6.537*	-.177	0.049	-3.612*	H2h supported

* p < 0.05

Table 2 shows the regression analysis results showing the presence of significant impact of five Customer Life-Style dimensions (i.e. Maker, Innovator, Striver, Survivor & Believer) on customer perception in relation to 4G Cellular Service providers.

The R2 value indicates how much of the total variation in the dependent variable (customer perception), can be explained by the independent variable (customer life-style). All individual dimension of CLS explained variation of CP ranging from 4.3% to 21.5% in significant basis. The next indicator "F" values in the table 2, reports how well the regression equation fits the data or predicts the customer perception. Since 'F' values for the four CLS factors are statistically significant at 0.05 level (p < 0.05), overall the regression model significantly predicts the outcome variable of customer perception, i.e., it is a good fit for the data with respect to 4G Cellular Service users, from the specific five CLS factors point of view.

The unstandardized coefficient (B) in the table represents the necessary information to predict customer perception from different Customer Life-style dimensions, as well as determine whether CLS contributes significantly to the model. Since five of the 't' values corresponding to these coefficients are statistically significant at 0.05 level (p < 0.05), it is interpreted that all the hypotheses H2d to H2h are accepted for 4G Cellular Service users. That means, all those five CLS dimensions have significant impact on customer perception for 4G Cellular Service users.

5. Conclusion

As the study indicated, the current adoption and likely future adoption of 4G Cellular Services appear to relate to certain customers' lifestyles patterns and attributes toward 4G services. Therefore, it is clear that 4G services serve different purposes for customers of different lifestyles. As the study revealed that mostly the 5 types of Customer Lifestyles namely, Maker, Innovator, Striver, Survivor & Believer are having significant impact upon the customers' perception towards the adoption of the 4G cellular services, therefore the various marketing strategies followed by 4G Cellular Service providers should be planned accordingly to yield maximum desired result. Hence, advertisements on 4G Cellular Services should focus on several target groups based on their life style profiles. Also, more differentiated service features should be introduced to the target group, for better growth of the business.

References

- Bhattacharjee A (2000) Acceptance of e-commerce services: the case of electronic brokerages. *IEEE Trans Syst Man Cybern* 30(4):411–420.
- Bitner, M.J., Booms, B.H. and Tetreault, M.S. (1990), "The service encounter: diagnosing favourable and unfavourable incidents", *The Journal of Marketing*, Vol. 54 No. 1, pp. 71-84.
- Das, S.P. and Saha, A. (2011), *On the Growth of the Services Sector*, S.N, New Delhi.
- Fraj Elena and Eva Martinez (2006), "Environmental values and lifestyles as determining factors of ecological consumer behaviour: an empirical analysis", *Journal of Consumer Marketing*, 23(3), 133–144.
- Kahle, L.R. (1996), "Social values and consumer behaviour: research from the List of Values", *The Psychology of Values: The Ontario Symposium*, Vol. 8, Lawrence Erlbaum Associates Publishers, Hillsdale, NJ, pp. 135-50.
- Kardes, F.R., Cronley, M.L. and Cline, T.W. (2011), *Consumer Behavior*, South-Western Education Publications, Mason, OH.
- Lantos, G.P. (2011), *Consumer Behaviour in Action: Real-life Applications for Marketing Managers*, M.E. Sharpe, Armonk, New York.
- Lee M, McGoldrick P, Keeling K, Doherty J (2003) Using ZMET to explore barriers to adoption of 3G mobile banking services. *International Journal of Retail Distribution Manage* 31(6):340–348.
- Lee, H.J.; H. Lim; L.D. Jolly; and J. Lee. 2009. Consumer lifestyles and adoption of high-technology products: A case of South Korea, *Journal of International Consumer Marketing* 21(3), 153-167.
- Lin, L.Y.; H.Y. Shih; and S.W. Lin. 2012. The influence of lifestyle and money attitude on purchase decisions: The moderating effect of marketing stimulation and personal value, *International Journal of Advanced Scientific Research and Technology* 2(2), 442-470.
- Luarn P, Lin H (2005) Toward an understanding of the behavioural intention to use mobile banking. *Computers in Human Behaviour* 21(6):873–891.
- Massoud S, Gupta OK (2003) Consumer perception and attitude toward mobile communication. *International Journal of Mobile Communication* 1(4):390–408.
- Nysveen H, Pedersen PE, Thorbjørnsen H (2005b) Intentions to use mobile services: antecedents and cross-service comparisons. *Journal of Academic Marketing Survey* 33(3):330–346.
- Nysveen H, Pedersen PE, Thorbjørnsen H., (2005a); Explaining intention to use mobilechat services: moderating effects of gender. *Journal of Consumer Marketing* 22(5):247–256.
- Pedersen PE (2005a) Adoption of mobile Internet services: an exploratory study of mobile commerce early adopters. *Journal of Organizational Computing & Electronic Commerce* 15(3):203–221.
- Pedersen PE (2005b) Instrumentality challenged: the adoption of a mobile parking service. In: Ling R, Pedersen PE (eds) *Mobile communications: re-negotiation of the social sphere*. Springer, London, 373–388.
- Plummer, J.T. 1974. The concept and application of life style segmentation, *Journal of Marketing* 38(1), 33-37.
- Pura M (2005) Linking perceived value and loyalty in location based mobile services. *Managing Service Quality* 15(6):509–538.
- Rokeach, M. (1973), *The Nature of Human Values*, Free Press, New York, NY.
- Shim, S. and Bickle, M.C. (1994), "Benefit segments of the female apparel market: psychographics, shopping orientations, and demographics", *Clothing and Textiles Research Journal*, Vol. 12 No. 2, pp. 1-12.

Solomon, M.R., Bamossy, G., Askegaard, S. and Hoog, M.K. (2009), Consumer Behaviour, Financial Times Prentice Hall, Harlow.

Solomon, M.R., Surprenant, C., Czepiel, J.A. and Gutman, E.G. (1985), "A role theory perspective on dyadic interactions: the service encounter", Journal of Marketing, Vol. 49 No. 1, pp. 99-111.

Tsang M, Ho S, Liang T (2004) Consumer attitudes toward mobile advertising: an empirical study. International Journal of Electronics Commerce 8(3):65–78.

Yu, C.S. 2011. Construction and validation of an e-lifestyle instrument, Internet Research 21(3), 214-235.

Yu, Chian-Son; Chien-Kuo Li & W. Chantatub. 2015.; Analysis of Consumer E-Lifestyles and Their Effects on Consumer Resistance to Using Mobile Banking: Empirical Surveys in Thailand and Taiwan, International Journal of Business and Information, 10(2),198-232.

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Revista ESPACIOS. ISSN 0798 1015
Vol. 40 (Nº 34) Year 2019

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