

MARKETING STRATEGIES OF CELLULAR SERVICES – A COMPARATIVE STUDY

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Abstract

India is currently the world's second-largest telecommunications market with a subscriber base of 1.05 billion and has registered strong growth in the past decade and half. The Indian mobile economy is growing rapidly and will contribute substantially to India's Gross Domestic Product (GDP), according to report prepared by GSM Association (GSMA) in collaboration with the Boston Consulting Group (BCG). The country is the fourth largest app economy in the world. The liberal and reformist policies of the Government of India have been instrumental along with strong consumer demand in the rapid growth in the Indian telecom sector. The government has enabled easy market access to telecom equipment and a fair and proactive regulatory framework that has ensured availability of telecom services to consumer at affordable prices. The deregulation of Foreign Direct Investment (FDI) norms has made the sector one of the fastest growing and a top five employment opportunity generator in the country. The changing needs of information communication and telecom have paved the way for innovative marketing strategies this papers deals with the marketing mix strategies adopted by the select cellular service providers in the select cities of Telangana state.

Keywords: marketing strategies, telecom, FDI, 4p's, GSMA.

INTRODUCTION

The Indian telecommunication industry is the world's fastest growing industry with 1,131.01 billion active mobile connections in May, 2018. The wireless subscription in urban areas increased 0.18 percent from 624.52 million in April 2018 to 625.66 million in May 2018. Wireless subscriptions in rural areas increased 0.96 percent from 500.55 million to 505.34 million during the month. Airtel has 344.553 million mobile phone customers on its network. The mergers, takeovers and price war between the subscribers are increasing day by day, subscribers are the ultimate beneficiaries of the competitive war. India's telecommunication network is the second largest in the world based on the total number of telephone users. It has one of the lowest call tariffs in the world enabled by the mega telephone networks and hyper-competition among them. India posses a diversified communications system, which links all parts of the country by telephone, internet, Radio, television and satellite. Indian telecom industry underwent a high pace of market liberalization and growth since 1990s and now has become the world's most competitive and one of the fastest growing telecom markets. The government has pragmatically

used modern telecommunication facilities to deliver mass education programmes for the rural folk of India.

OBJECTIVES OF THE STUDY

1. To study and to compare the marketing strategies adopted by select cellular services.
2. To evaluate the marketing strategies related to the 4G services of select service providers.

Methodology

Research Design - The study has employed both descriptive and exploratory research design sampling design – 750 respondents; samples are selected in Southern districts of Telangana state, 175 from BSNL, 335 from AIRTEL and 238 from JIO subscribers for the purpose of the study. Convenient sampling technique is used for the collection of the data. Collected data is tabulated while using various statistical tools were applied for testing of hypothesis Kruskal-Wallis H and Mann-Whitney test were used with the help of SPSS 20.

Hypothesis:

1. There is no significant difference in the product differentiation strategies of BSNL, Airtel and JIO telecom service providers.
2. There is no significant difference in the pricing strategies of BSNL, Airtel and JIO telecom service providers.
3. There is no significant difference in the place (distribution) strategies of BSNL, Airtel and JIO telecom service providers.
4. There is no significant difference in the promotional strategies of BSNL, Airtel and JIO telecom service providers.

REVIEW OF LITERATURE

(PAWAR, 2017) explained that promotional strategies play an important role in increasing the sales volume of Airtel services, the role of celebrity endorsements, loyalty rewards placed a positive image in the subscribers' mind, it made the company as a powerful brand its varied products and offerings to consumers on a huge scale to deliver its customers at its best.

(SHARMA, A COMPARATIVE STUDY OF TELECOMMUNICATION SERVICE PROVIDERS BSNL AND AIRTEL OPERATING IN GWALIOR DIVISION INDIA 2017)

Stated that the subscribers are satisfied with the performance of BSNL and AIRTEL in the parameters of provisioning of services, satisfied with network performance, reliability and availability, Customers satisfied with maintainability, Customers satisfied with supplementary and value added services, Customers satisfied with redressal, and Customers satisfied with overall service quality.

(Roshita Sodani, 2016) Focused that the entry of Reliance Jio in the telecom sector has paved the way to 4G revolution and it is viewed as a game changer, and other business aspects such as merger and acquisition, spectrum allocation, infrastructure, handset availability, call drop issue, competition, financial performance etc.

(Dr.Aparna J Varma D. T., 2016) studied that the liberalization policies have brought enormous changes in the Marketing Strategies of the various telecom service providers, Marketing strategy plays a very important role in the existence of the telecom service provider. The Indian telecom sector experienced major reforms and transformations during last two decades. The Indian consumers have witnessed a different marketing strategy by both domestic and foreign players and it which in turn resulted in the saturation of telecom services. The appropriate marketing strategies become imperative for the existence and prosperity of telecom service provider. The formulation and execution of marketing strategies significantly differ between BSNL and AIRTEL service provider, the effectiveness of marketing mix strategies adopted by BSNL and AIRTEL become imperative for the existence and prosperity of telecom services provider, the formulation and execution of marketing strategies are significantly differ between these two players.

(JAIN, 2014) in their article “ COMPARATIVE ANALYSIS OF MARKETING STRATEGIES OF BHARTI AIRTEL AND IDEA CELLULAR IN EASTERN RAJASTHAN” suggested that marketing mix, pricing strategies, integrated marketing communication, product distribution are the striving factors to distinct them from other rivalries, In today’s competitive world communication plays a very important role. Telecom sector has undoubtedly contributed for the rapid economic growth and the intensified competition in the market has lead subscribers to enjoy sumptuousness of choice and higher bargaining power. The ‘freedom to choose’ has made organizations customer centric.

LIMITATIONS OF THE STUDY

This study is limited to the southern districts of Telangana State and it is based on the primary data collected from the select districts, respondent’s answers to the questionnaire was a major limitation.

ANALYSIS AND INTERPRETATION

Hypothesis 1:

There is no significant difference in the product differentiation strategies of BSNL, Airtel and JIO telecom service providers.

Testing of hypothesis: Kruskal-Wallis test

The summary of ranked data corresponding to the variables ‘Excellent voice clarity’, ‘Excellent geographical network coverage’, ‘Value Added Services’, Variety of products, “very easy to connect or disconnect the calls’ and instant advance talk time in the form of loan’

Table 1: Kruskal-Wallis test statistics based on PRODCT based services delivered by select service providers

Details	Excellent voice clarity	Excellent geographical network coverage	More Value Added Services	variety of products	Connect or disconnect the calls very easily and quickly.	Instant advance talk time
Chi-Square	3.789	4.297	10.846	10.143	6.366	9.616
Df	2	2	2	2	2	2
Asymp.	.150	.117	.004	.006	.041	.008
Grouping Variable: Cellular Service Providers						

Table -2: Descriptive statistics of core benefits delivered by mobile service providers

Cellular Service Providers	N	Excellent voice clarity		Excellent geographical network coverage		More Value Added Services		variety of products		Connect or disconnect the calls very easily and quickly.		Instant advance talk time	
		Mean	Std.	Mean	Std.	Mean	Std.	Mean	Std.	Mean	Std.	Mean	Std.
BSNL	177	4.25	.920	3.64	1.130	3.90	1.028	3.51	.960	3.78	.961	3.65	1.109
AIRTEL	335	4.15	.941	3.61	1.014	3.66	.959	3.39	1.038	3.69	1.088	3.77	1.168
JIO	238	4.30	.837	3.79	.916	3.84	1.009	3.68	.914	3.89	1.024	3.40	1.377
Total	750												

Measured on a 5-point Likert Scale, Strongly Disagree =1, Disagree=2, Uncertain=3, Agree = 4, Strongly Agree=5;

(1) Post hoc test 1: The Airtel compared to the BSNL

(2) Post hoc test 2: The JIO compared to the BSNL

Post hoc test 1: The Airtel compared to the BSNL

Table -3: The Airtel Compared to the BSNL: Mann-Whitney U test

Mobile service provider	N	MEAN RANK					
		Excellent voice clarity	Excellent geographical network coverage	More Value Added Services	variety of products	Connect or disconnect the calls very easily and quickly.	Instant advance talk time
AIRTEL	335	359.93	361.07	348.72	351.47	359.60	399.57
BSNL	177	385.50	374.34	404.98	378.47	369.47	370.68
Total	512						

The above table shows the test statistic for the Mann-Whitney test on the focused comparison of the variables, 'Excellent voice clarity', 'Excellent geographical network coverage', 'More Value Added Services', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk time'. Pertaining to the mobile service providers Airtel and BSNL

Table -4: Mann - Whitney U test statistics based on core benefits delivered by Airtel and BSNL

Details	Excellent voice clarity	Excellent geographical network coverage	More Value Added Services	variety of products	Connect or disconnect the calls very easily and quickly.	Instant advance talk time
Mann-Whitney U	27658.000	28659.000	25186.500	27495.500	28765.500	27179.000
Wilcoxon W	83938.000	84939.000	81466.500	83775.500	85045.500	42932.000
Z	-1.358	-.657	-2.982	-1.415	-.586	-1.631
Asymp. Sig. (2-tailed)	.174	.511	.003	.157	.558	.103
Grouping Variable: Cellular Service Providers						

The summary of Mann – Whitney test statistics shown in above table indicates that the observed significance values of the variables 'Excellent voice clarity', and 'Excellent geographical network coverage', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk time', are greater than 0.0167, these variables do not significantly

differ between the mobile service providers Airtel and BSNL. But the observed significance values of the variable 'More value added services' connected to the network' is less than 0.0167, it significantly differs between the mobile service providers Airtel and BSNL. The value of mean ranking based on Mann-Whitney U test given in table indicates that the mobile service provider BSNL has significantly higher levels in the value of the variable 'Excellent voice clarity', and 'Excellent geographical network coverage', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk time', 'More value added services' than Airtel. So it can be concluded that BSNL is positively differentiated the Product benefit characteristics 'Excellent voice clarity', and 'Excellent geographical network coverage', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk time', 'More value added services' from the mobile service provider Airtel.

The JIO compared to the BSNL: Mann-Whitney U test

The summary of ranked data corresponding to the variables 'Excellent voice clarity', 'Excellent geographical network coverage', 'More Value Added Services', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk of the mobile service providers JIO and BSNL has been computed with Mann-Whitney U test. The test results are given in the table5.

Table 5: The JIO compared to the BSNL: Mann-Whitney U test

Mobile service provider	N	MEAN RANK					
		Excellent voice clarity	Excellent geographical network coverage	More Value Added Services	variety of products	Connect or disconnect the calls very easily and quickly.	Instant advance talk time
JIO	238	389.99	396.67	391.27	407.12	402.37	345.21
BSNL	177	385.50	374.34	404.98	378.47	369.47	370.68
Total	415						

The below table shows the test statistic for the Mann-Whitney test on the focused comparison of the variables 'Excellent voice clarity', 'Excellent geographical network coverage', 'More Value Added Services', 'variety of products', 'Connect or disconnect the calls very easily and quickly', 'Instant advance talk pertaining to the mobile service providers JIO and BSNL.

Table 6: Mann- Whitney U test statistics based on core benefits delivered by JIO and BSNL

Details	Excellent voice clarity	Excellent geographical network coverage	More Value Added Services	variety of products	Connect or disconnect the calls very easily and quickly.	Instant advance talk time
Mann-Whitney U	20843.000	19868.500	20306.000	19436.500	19113.500	19448.500
Wilcoxon W	36596.000	35621.500	48747.000	35189.500	34866.500	47889.500
Z Asymp. Sig. (2-tailed)	-.201	-1.059	-.660	-1.425	-1.750	-1.380
	.841	.290	.509	.154	.080	.168
Grouping Variable: Cellular Service Providers						

The summary of Mann – Whitney test statistics shown in the table indicates that the observed significance values of the variables ‘Excellent voice clarity’, ‘Excellent geographical network coverage’, ‘More Value Added Services’, ‘variety of products’, ‘Connect or disconnect the calls very easily and quickly’, ‘Instant advance talk time’ **are** greater than 0.0167, these variables do not significantly differ between the mobile service providers JIO and BSNL.. The value of mean ranking based on Mann-Whitney U test given in table indicates that the mobile service provider JIO has significantly higher levels in the value of the variable ‘Excellent voice clarity’, ‘Excellent geographical network coverage’, ‘variety of products’, ‘Connect or disconnect the calls very easily and quickly’ than JIO. So it can be concluded that BSNL is positively differentiated the core benefit characteristics ‘More Value Added Services’ and ‘Instant advance talk time’ from the mobile service provider JIO.

Hypothesis 2

There is no significant difference between the pricing strategies of BSNL, Airtel and JIO cellular service providers in Telangana.

Variables considered for the analysis of pricing strategies:

The variables considered for the analysis of pricing strategies of mobile telecom service providers in Telangana are: ‘reasonable or competitive price’, ‘after purchasing services’, ‘service package according to budget’, ‘pricing of 4G services compared to other competitive service providers’, ‘free SIM card’.

All items of the variables are measured by Likert Scale with five anchor points, specifically Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree.

1. Variety of Price related strategies offered to Prepaid-paid customers

Table 7: Mean ranking of Price based strategies offered to prepaid customers of select service providers based on Kruskal-Wallis test

Mobile service provider	N	MEAN RANK				
		Reasonable or competitive price	After purchasing services	Service package according to the budget	Pricing of 4G services compared to other competitive service providers	Free SIM card
BSNL	127	303.03	323.51	319.37	288.13	350.09
AIRTEL	302	323.74	326.12	320.05	322.78	320.25
JIO	232	355.76	341.46	351.61	365.17	333.21
Total	661					

The above table shows the test statistic for the Kruskal-Wallis test based on tariff variety offered to prepaid customers by the mobile service providers, the associated degrees of freedom and the significance. As the number of the mobile service providers considered for analysis is three, the degrees of freedom will be two.

Table 8: Kruskal-Wallis test statistics based on tariff variety offered to prepaid Customers by mobile service providers

Details	Reasonable or competitive price	After purchasing services	Service package according to the budget	Pricing of 4G services compared to other competitive service providers	Free SIM card
Chi-Square	7.825	1.193	4.553	15.583	2.358
Df	2	2	2	2	2
Asymp.	.020	.551	.103	.000	.308
Grouping Variable: Cellular Service Providers					

The table 8 above shows the descriptive statistics of the variables 'Reasonable or competitive price', 'After purchasing services' 'Service package according to budget', 'Pricing of 4G services compared to other competitive service providers', 'Free SIM card.' Pertaining to the mobile service providers BSNL, Airtel and JIO.

The summary of Kruskal-Wallis test statistics shown in above table indicates that the significance value is 0.020 for the variables 'Reasonable or competitive price, value is 0.551 for After purchasing services' for variable 'Service package according to budget value is 0.103', for variable 'Free SIM card' is .308 and for 'Pricing of 4G services compared to other competitive service providers' is .000 which is less than 0.05. Therefore, it can be concluded that the pricing

strategies associated with 'Reasonable or competitive price', 'After purchasing services' 'Service package according to budget' 'Free SIM card' are significantly different in BSNL, AIRTEL and JIO. Pricing of 4G services compared to other competitive service providers' is not significantly differ between BSNL, AIRTEL and JIO service providers.

The value of mean ranking based on Kruskal-Wallis test given in table indicates that JIO has significantly higher level in the value of the variable 'Reasonable or competitive price, After purchasing services , Service package according to the budget , Pricing of 4G services compared to other competitive service providers, Reasonable or competitive price'. The descriptive statistics of the variables given in the table also agrees to these findings.

Table - 9: Mann - Whitney U test statistics based on pricing strategies offered to Prepaid customers by Airtel and BSNL

Details	Reasonable or competitive price	After purchasing services	Service package according to the budget	Pricing of 4G services compared to other competitive service providers	Free SIM card
Mann-Whitney U	27084.500	29097.000	28268.500	26434.000	27502.500
Wilcoxon W	42837.500	44850.000	44021.500	42187.000	83782.500
Z	-1.689	-.361	-.904	-2.093	-1.279
Asymp. Sig. (2-tailed)	.091	.718	.366	.036	.201
Grouping Variable: Cellular Service Providers					

The summary of Mann – Whitney test statistics shown in anove table indicates that the observed significance values of the variables 'Reasonable or competitive price', 'After purchasing services' 'Service package according to budget', 'Pricing of 4G services compared to other competitive service providers', 'Free SIM card.' Therefore these variables significantly differ between the mobile service providers BSNL and AIRTEL. The value of mean ranking based on Mann-Whitney test indicates that the mobile service provider JIO has significantly higher levels of values of the variables, 'Reasonable or competitive price', 'After purchasing services' 'Service package according to budget', 'Pricing of 4G services compared to other competitive service providers', than BSNL and AIRTEL. The mean ranking indicates that BSNL has significantly higher levels of values of the variable 'Free SIM card'.

2. The JIO compared to the BSNL: Mann-Whitney U test

Table 10: Mann-Whitney U test of JIO compared with the BSNL

Mobile service provider	N	MEAN RANK				
		Reasonable or competitive price	After purchasing services	Service package according to the budget	Pricing of 4G services compared to other competitive service providers	Free SIM card
JIO	232	355.76	341.46	351.61	365.17	333.21
BSNL	127	303.03	323.51	319.37	288.13	350.09
Total	459					

Table 11: Mann - Whitney U test statistics based on pricing strategies offered to Prepaid customers by JIO and BSNL

Details	Reasonable or competitive price	After purchasing services	Service package according to the budget	Pricing of 4G services compared to other competitive service providers	Free SIM card
Mann-Whitney U	17332.000	19205.000	18021.000	15963.000	20518.000
Wilcoxon W	33085.000	34958.000	33774.000	31716.000	48959.000
Z	-3.230	-1.617	-2.635	-4.385	-.363
Asymp. Sig. (2-tailed)	.001	.106	.008	.000	.717
Grouping Variable: Cellular Service Providers					

The summary of Mann – Whitney test statistics shown in above table indicates that the observed significance values of the variables ‘After purchasing services’ ‘Service package according to budget’, ‘Free SIM card’ have more than 0.5 significant value. Therefore these variables significantly differ between the mobile service providers JIO and BSNL. The value of mean ranking based on Mann-Whitney test indicates that the mobile service provider JIO has significantly higher levels of values of the variables, ‘Reasonable or competitive price’, ‘After purchasing services’ ‘Service package according to budget’, ‘Pricing of 4G services compared to other competitive service providers’, than BSNL. The mean ranking indicates that BSNL has significantly higher levels of values of the variable ‘Free SIM card’.

Analysis of place (Distribution) strategies of BSNL, Airtel and JIO mobile telecom service providers in Telangana

Hypothesis 3

There is no significant difference in place strategies of select service providers.

Variables considered for the analysis of promotion strategies.

‘Purchase of services from various modes’, ‘availability of number of outlets’, ‘activating and deactivating of services while in roaming’, ‘response from the customer care, payment of prepaid and post paid can be done from anywhere’.

Table 12: Mean ranking of place strategies offered to BSNL, Airtel and JIO customers based on Kruskal-Wallis test

Cellular service providers	N	Mean rank				
		Purchase of services from various modes	Availability of number of outlets	Activating and deactivating of services while in roaming	Response from the customer care	Payment of prepaid and post paid can be done from anywhere
BSNL	177	382.53	383.68	343.92	408.64	372.53
AIRTEL	335	353.48	375.83	362.08	336.66	377.44
JIO	238	401.27	368.95	417.87	405.52	374.99
TOTAL	750					

In the above table the mean ranks for the selected variables Purchase of services from various modes’, ‘Activating and deactivating of services while in roaming’, ‘Response from the customer care, are high for JIO where as for the variables like ‘Availability of number of outlets’, ‘Payment of prepaid and post paid can be done from anywhere’, mean ranks are high for AIRTEL cellular services.

Table 13: Kruskal-Wallis test statistics based on Place related strategies offered to BSNL, Airtel and JIO service providers

Details	Purchase of services from various modes	Availability of number of outlets	Activating and deactivating of services while in roaming	Response from the customer care	Payment for prepaid and post paid can be done from anywhere
Chi-Square	7.899	.539	16.011	22.216	.068
df	2	2	2	2	2
Asymp. Sig.	.019	.764	.000	.000	.966

Table 14: Mann - Whitney U test statistics based on Place (Distribution) strategies BSNL, AIRTEL and JIO

Details	Purchase of services from various modes	Availability of number of outlets	Activating and deactivating of services while in roaming	Response from the customer care	Payment for prepaid and post paid can be done from anywhere
Mann-Whitney U	20170.000	20231.000	17003.000	20998.000	20924.500
Wilcoxon W	35923.000	48672.000	32756.000	49439.000	36677.500
Z	-.789	-.738	-3.563	-.058	-.120
Asymp. Sig. (2-tailed)	.430	.460	.000	.954	.904

From the Mann-Whitney U test statistics it is clear that the observed significant value for the variables 'Purchase of services from various modes, significant value is 0.430, 'availability of number of outlets sig. value is 0.460', 'response from the customer care' significant value is 0.954 and payment for prepaid and post paid can be done from anywhere' the significant value is 0.904, is higher than the 0.5 value, there is significant difference among the place (distribution) strategies of select cellular services for the variable 'activating and deactivating of services while in roaming sig. value is 0.000, hence it is less than the significant value of 0.5 there is no significant difference in activating the services while in roaming of select cellular services.

Analysis of promotion strategies of BSNL, Airtel and JIO mobile telecom service providers in Telangana

Hypothesis 4

There is no significant difference between the promotional strategies of BSNL, Airtel and JIO mobile telecom service providers in Telangana

Variables considered for the analysis of promotion strategies.

The variables used to test the hypothesis are: the “effectiveness of advertisements in understanding of the offers and benefits”, frequency of ad campaign, ‘attractiveness of the ad campaigns and publicity programs’, ‘impact of ad campaign in choosing the service provider’, ‘impact of advertisement on repeat association with service provider’,.

Table 15: Mean ranking of Promotional strategies offered to BSNL, Airtel and JIO customers by cellular service providers based on Kruskal-Wallis test

Cellular service providers	N	Mean rank				
		Effectiveness of advertisement s in understanding of the offers and benefits	Frequency of ad campaign	Attractiveness of the ad campaigns and Publicity programs	Impact of ad campaign in choosing the service provider	Impact of advertisement on repeat association with service provider
BSNL	177	350.99	336.55	380.31	380.31	378.09
AIRTEL	335	363.43	383.82	362.55	362.55	366.68
JIO	238	410.71	392.76	390.15	390.15	385.98
TOTAL	750					

The above table shows the value of mean ranking based on Kruskal-Wallis test given in table indicates that JIO has significantly higher level in the value of the variable “effectiveness of advertisements in understanding of the offers and benefits”, frequency of ad campaign, ‘attractiveness of the ad campaigns and publicity programs’, ‘impact of ad campaign in choosing the service provider’, ‘impact of advertisement on repeat association with service provider. It is evident from the descriptive statistics.

Table 16: Kruskal-Wallis test statistics based on Promotional strategies offered to BSNL, Airtel and JIO service providers.

Details	Effectiveness of advertisements in understanding of the offers and benefits	Frequency of ad campaign	Attractiveness of the ad campaigns and Publicity programs	Impact of ad campaign in choosing the service provider	Impact of advertisement on repeat association with service provider
Chi-Square	11.587	9.069	2.621	10.972	1.270
df	2	2	2	2	2
Asymp. Sig.	.003	.011	.270	.004	.530

Table 17: Descriptive statistics of Promotional strategies offered to BSNL, Airtel and JIO service providers

CELLULAR SERVICE PROVIDER	N	Effectiveness of advertisements in understanding of the offers and benefits		Frequency of ad campaign		Attractiveness of the ad campaigns and Publicity programs		Impact of ad campaign in choosing the service provider		Impact of advertisement on repeat association with service provider	
		MEAN	Std. Dev.	MEAN	Std. Dev.	MEAN	Std. Dev.	MEAN	Std. Dev.	MEAN	Std. Dev.
BSNL	177	4.05	.878	3.50	1.051	3.73	1.119	3.53	1.056	3.63	1.085
AIRTEL	335	4.07	0.928	3.78	0.884	3.69	0.981	3.37	1.094	3.58	1.091
JIO	238	4.29	0.771	3.79	0.972	3.78	1.100	3.66	0.987	3.71	0.961
TOTAL											

* Measured on a 5-point Likert Scale, Strongly Disagree=1, Disagree=2, Uncertain=3, Agree = 4, Strongly agree=5.

Table 18: Mann - Whitney U test statistics based on promotional strategies BSNL, AIRTEL and JIO

Details	Effectiveness of advertisements in understanding of the offers and benefits	Frequency of ad campaign	Attractiveness of the ad campaigns and Publicity programs	Impact of ad campaign in choosing the service provider	Impact of advertisement on repeat association with service provider
Mann-Whitney U	17695.500	17933.000	20554.000	19593.000	20641.000
Wilcoxon W	33448.500	33686.000	36307.000	35346.000	36394.000
Z	-3.070	-2.819	-.441	-1.284	-.371
Asymp. Sig. (2-tailed)	.002	.005	.660	.199	.711

The summary of Mann – Whitney test statistics shown in above table indicates that the observed significance values of the ‘frequency of ad campaign’, ‘attractiveness of the ad campaigns and publicity programs’, ‘impact of ad campaign in choosing the service provider’, ‘impact of advertisement on repeat association with service provider variables’ are more than the significant value of 0.5 hence, there is significant difference in promotional strategies of BSNL, AIRTEL and JIO services. Whereas for the variable ‘effectiveness of advertisements in understanding of the offers and benefits’ has a value of 0.002 it is in the acceptable level there is no significant difference in understand of advertisements related to offers and benefits.

CONCLUSION:

The changing demands and cut throat competition, pace of technological changes and increasing demand for new features and more value added services lead to so many changes in the telecom sector it has paved the way to mergers, takeovers which in turn resulted in saturation of telecom services. The appropriate marketing strategies become important to face the competition and to stand in the market for the existence and prosperity of the telecom service providers. However from the data analysis it is vivid that there is significant difference in the formulation and implementation of marketing strategies of BSNL, AIRTEL and JIO service providers. As per the findings from the analysis BSNL has ample of opportunities to formulate and implement strategic based strategies to grab the market opportunities.

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