

**AN ANALYTICAL STUDY OF MARKETING  
STRATEGIES OF INDIAN TELECOM  
SERVICE INDUSTRY**

**A Thesis**

**Submitted for the award of Ph.D. degree**

**IN BUSINESS ADMINISTRATION**

**(Faculty of Commerce & Management)**

**To the**

**University of Kota**

**By**

**Ms. Khushboo Niyarta**



**Under the Supervision of**

**Dr. R.A. Gupta**

**Department of Business Administration,  
Government Commerce College, Kota  
UNIVERSITY OF KOTA, KOTA (RAJASTHAN)**

**2019**

## **CERTIFICATE**

I feel great pleasure in certifying that the thesis entitled '**AN ANALYTICAL STUDY OF MARKETING STRATEGIES OF INDIAN TELECOM SERVICE INDUSTRY**' by **Ms. Khushboo Niyarta** under my guidance.

She has completed the following requirements as per Ph.D. regulations of the University.

- (a) Course work as per the university rules.
- (b) Residential requirements of the university (200days)
- (c) Regularly submitted annual progress report.
- (d) Presented his work in the departmental committee.
- (e) Published/accepted minimum of one research paper in a referred research journal.

I recommend the submission of thesis.

Date:

**Dr. R.A. Gupta**  
Supervisor

## **ANTI-PLAGIARISM CERTIFICATE**

It is certified that PhD Thesis Titled "**AN ANALYTICAL STUDY OF MARKETING STRATEGIES OF INDIAN TELECOM SERVICE INDUSTRY**" by **Ms. Khushboo Niyarta** has been examined by us with the following anti-plagiarism tools. We undertake the follows:

- a. Thesis has significant new work/knowledge as compared already published or are under copied verbatim from previous work unless it is placed under quotation marks and duly referenced.
- b. The work presented is original and own work of the author (i.e. there is no plagiarism). No ideas, processes, results or words of others have been presented an author's own work.
- c. There is no fabrication of data or results which have been compiled and analyzed.
- d. There is no falsification by manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
- e. The thesis has been checked using (i) SMALL SAE TOOLS - Plagiarism checker website (ii) Viper-The Anti-Plagiarism Scanner and (iii) plagiarismchcker.com, and any other genuine tools/ softwares found within limits as per HEC plagiarism Policy and instructions issued from time to time.

**Ms. Khushboo Niyarta**

Research Scholar

**Dr. R.A. Gupta**

Research Supervisor

Place: Kota

Date:

Place: Kota

Date:

## **ABSTRACT**

Telecommunication is imperative for holistic development of India. It is one exclusive industry that holds utmost significance in development of all other industries as basic need to grow is the exchange information. Where ever this exchange happens, communication lays the foundation. Telecom sector was completely revamped after Liberalization and privatization in India. At present, Indian telecom market is the hyper competitive play field for both public and private companies. Regular and frequent advancement in technology has also bought change in customer needs and ways by which they perceive products and services. Third generation technology has raised expectations of customers from fourth and subsequently fifth generation network, leading to the sky high demands from telecommunication by individuals and corporate. This has in turn increased the pressure on telecom service providers to enhance their performance, survive the deep neck competition and outshine in the telecom market.

This thesis is about analysing marketing strategies of four remarkable telecom service providers India, Bharti Airtel Limited, Vodafone, Bharat Sanchar Nigam Limited (BSNL) and Reliance Jio Infocomm Ltd. The sustainable market presence and thriving market share has lead these companies into head-to-head competition. The companies are fighting for customer acquisition and retention by keeping them satisfying and interested through different strategies. An interesting factor here is that basic product of all telecom companies is same. Yet these are far apart from each other in individual performance. This has laid the foundation of this study to analyse marketing strategies of each telecom player that is making them survive the stiff competition. The vital factors of study are product, place, price, promotion and elements of extended marketing mix; people, physical evidence and process, that may be accounted towards satisfaction of customer experiencing their services.

Chapter one constitutes the Conceptual Framework of the study. It focuses on different types of marketing strategies and various concepts related to it. It studies Portor's Generic Competetive Strategies, Ansoff Matrix, Warfare strategies

such as Defensive, Flanking and Guerilla marketing strategies. Marketing Mix strategies of four P's, Service Marketing strategies etc, and understanding these in relation to the telecom service industry of India.

Chapter two throws light on the literature that was studied for the purpose of the research. A vast collection of Indian and International literature related to marketing strategy, customer relationship management, telecommunication history and growth, marketing mix, extended marketing mix, service industry, discussed. Numerous publishes and unpublished work, research papers, theses, annual reports were studied to identify the gaps and develop a centric focus for the research.

Chapter three exclusively gives an overview of Indian Telecom Industry. It covers the historical development of Telecommunication sector in India. It briefly covers development of different services under telecom, major telecom players in India, recent technological developments, brief description of regulatory bodies and governing authorities of telecom industry in India.

Chapter four details about profiles telecom companies selected for the study and their individual marketing strategies. IT discusses about area of operations, history of growth and development, present scenario etc each of Airtel Vodafone, BSNL and Reliance Jio.

Chapter five consists of methodology adopted for the study including objectives, hypotheses of the study, type of research, sampling design, data collection tools, statistical tools used for the research including limitations faced during the study.

Chapter six is based on data analysis and interpretation that deliberates in detailing of primary information collected by the means of survey conducted on customers of selected telecom players for the study. It includes meticulous analysis, interpretation and comparison of marketing strategies of the undertakings and churns out the essence of research.

Chapter seven encompasses results of this analytical and comparative study, brief summary of research report, major findings of the study, recommendations and overall conclusion.

The study highlighted the factors that contribute holistic performance of a telecom player in dynamic competitive telecom market. The results indicated that all the strategies taken into consideration for the study holds different impact on customers of individual telecom player. To shine on top in the competitive market and become customers' favorite, it takes a right balancing of each strategy adopted telecom service provider.

## CANDIDATE'S DECLARATION

I, hereby, certify that the work, which is being presented in the thesis, entitled **AN ANALYTICAL STUDY OF MARKETING STRATEGIES OF INDIAN TELECOM SERVICE INDUSTRY** in partial fulfilment of the requirement for the award of the Degree of Doctor of Philosophy, carried under the supervision Dr. R.A. Gupta and submitted to the University of Kota, Kota represents my ideas in my own words and where others ideas or words have been included. I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree or diploma from any Institutions. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact source in my submission.

I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been property cited or from whom proper permission has been taken when needed.

-----  
Signature

-----  
**KHUSHBOO NIYARTA**  
-----

Date: .....

This is to certify that the above statement made by **Khushboo Niyarta** (Reg. No.: RS/237/10) is correct to the best of my knowledge.

Date: \_\_\_\_\_

Dr. R.A.GUPTA  
Research Supervisor

## **ACKNOWLEDGEMENT**

I would like to thank Almighty for blessing me with strength, knowledge, courage and warmth in my life and being the source of great opportunities in my academic pursuit.

Foremost, I would like to express my sincere gratitude to Dr. R. A. Gupta, Ex-Principal, Government College, Sikrai, Dausa, my research supervisor for his continuous support in completion of my Ph.D study. He gave me all the freedom to pursue my research, while silently and non-obtrusively ensuring that I stay on course and do not deviate from the core of my research. I am indebted for his patience; motivation and immense knowledge that helped me achieve my goals. I could not have imagined having a better mentor for my study. I extend my heartfelt gratitude towards his wife, Mrs. Santosh Gupta for her warmth and affection towards me.

I would like to thank the Department of Research, University of Kota for providing me an opportunity to pursue this study and carry out genuine research work successfully.

I am sincerely grateful towards all the respondents who participated in the survey, all the colleges and universities that allowed me to have access into their Libraries and reading material. A special thanks to the rich Library of Symbiosis International University, Pune, Library at Government Commerce College, Kota, and Scholarly facilities provided by University of Mumbai, Maharashtra.

I have great pleasure in acknowledging my gratitude towards Dr. Krishna Rani, Principal, Government Commerce College, Kota, all the faculty members this college, Senior Professors, Supporting Staff, Technical Experts and everyone associated with this college who assisted and encouraged me in various ways during the journey of this research.

A wholehearted thanks to my academic friends and acquaintances in ensuring that the fire keeps burning and being there at times when I required motivation and propelling me on the course of this thesis. It would be inappropriate



if I omit to mention name of Dr. Seema Rathore, Associate Professor, Department of English, Government Commerce College, Kota. She, in her own ways assisted me in whatever manner possible and ensured that good times keep flowing.

I am deeply grateful to Lieutenant Colonel Dinesh Garg for his unflinching support in completion of my study. I sincerely thank him for his assistance in survey and collection of data for my research work.

I take immense pride in extending my deepest gratitude towards the core of my strength: My Family. Only a mother can love and give without expecting anything in return. The blessings and unconditional support of my dotting mother, Shobha ji, made me what I am today, my loving sister Divya for her interesting insights and that one person who never let things get dull or boring: my adorable nephew Reyaansh, every one's Cookie. I thank them for their tremendous support and putting up with me in difficult times. This would not have been possible without their unwavering, unselfish love and support given to me at all times.

**Khushboo Niyarta**

# INDEX

Title	Page No.
Certificate	i
Anti-Plagiarism Certificate	ii
Abstract	iii-v
Candidate's Declaration	vi
Acknowledgement	vii-viii
Index	ix-xv
List of Tables	xvi-viii
List of Charts	xix
Abbreviation	xx-xxi
<b>CHAPTER –1: CONCEPTUAL FRAMEWORK</b>	<b>1-28</b>
1.1 DEFINITION AND CONCEPT OF STRATEGY	1
1.2 MARKETING STRATEGY	3
1.3 TYPES OF MARKETING STRATEGY	4
1.3.1 Porter's Generic Competitive Strategies	4
1.3.2 Growth Strategies	7
1.3.3 Market Position and Strategy	8
1.3.4 Market Entry Strategies	9
1.3.5 Warfare Strategies	11
1.3.6 Marketing - Mix Strategy	12
1.3.7 Product Life Cycle Strategies	14
1.3.8 Service Marketing Strategies	17
1.4 MARKETING STRATEGIES OF TELECOM PROVIDERS	21
<b>CHAPTER-2: REVIEW OF LITERATURE</b>	<b>29-61</b>
<b>CHAPTER-3: INDIAN TELECOM INDUSTRY</b>	<b>62-87</b>
3.1 THE INDIAN TELECOM MARKET	62
3.1.1 Historical Backdrop	63
3.1.2 Market Size	65
3.1.3 Major Developments	67
3.1.4 Role of Government	68
3.1.5 Future Prospects	68

	<b>Title</b>	<b>Page No.</b>
3.2	Major Players in Indian Telecom Market	69
3.2.1	Airtel	71
3.2.2	Idea	72
3.2.3	Vodafone India	72
3.2.4	BSNL	73
3.2.5	Reliance Communications	73
3.2.6	Aircel	74
3.2.7	Reliance-Jio	74
3.2.8	Tata Teleservices	75
3.2.9	Telenor India	75
3.2.10	MTNL	75
3.3	RECENT TRENDS IN INDIAN TELECOM MARKET	76
3.3.1	Initiatives taken by Telecom Companies	77
3.3.2	Strategies Undertaken	79
3.3.3	Mergers and Acquisitions in Telecom Sector	80
3.3.4	Mobile Number Portability: A Paradigm Shift in Indian Telecom Industry	80
3.4	REGULATORY BODIES AND RULES	81
3.4.1	The Beginning	81
3.4.2	TRAI- Governing Body	81
3.4.2.1	Secretariat	82
3.4.2.2	TRAI Mobile Apps	83
3.4.2.3	New Policies to support the Sector Development	83
<b>CHAPTER-4: PROFILE OF SELECTED TELECOM COMPANIES AND THEIR MARKETING STRATEGIES</b>		<b>88-118</b>
4.1	BHARAT SANCHAR NIGAM LIMITED (BSNL)	88
4.1.1	INTRODUCTION	88
4.1.2	GROWTH AND DEVELOPMENT	89
4.1.3	AREA OF OPERATION	90
4.1.4	MARKETING STRATEGIES OF BSNL	91
4.2	RELIANCE- JIO	96
4.2.1	INTRODUCTION	96
4.2.2	GROWTH & DEVELOPMENT	97
4.2.3	AREA OF OPERATION	97
4.2.4	MARKETING STRATEGIES OF JIO	100

	<b>Title</b>	<b>Page No.</b>
4.3	BHARTI AIRTEL LIMITED	102
	4.3.1 INTRODUCTION	102
	4.3.2 GROWTH AND DEVELOPMENT	104
	4.3.3 AREA OF OPERATION	105
	4.3.4 MARKETING STRATEGY OF AIRTEL	106
4.4	VODAFONE LIMITED	111
	4.4.1 Introduction	111
	4.4.2 Growth and Development	112
	4.4.3 Area of Operation	114
	4.4.4 Marketing Strategies of Vodafone	115
	<b>CHAPTER-5: RESEARCH METHODOLOGY &amp; DESIGN</b>	<b>119-130</b>
5.1	RESEARCH PROBLEM	120
5.2	BRIEF OVERVIEW OF THE RESEARCH OBJECTIVES	121
5.3	HYPOTHESES OF THE STUDY	121
5.4	RESEARCH DESIGN	122
	5.4.1 Population of the Study	122
	5.4.2 Type of the Study	123
	5.4.3 Nature of the Study	123
5.5	OPERATIONAL DEFINITION OF VARIABLES	123
	5.5.1 Product Strategies	124
	5.5.2 Promotion Strategies	124
	5.5.3 Pricing Strategies	124
	5.5.4 Distribution Strategies	124
	5.5.5 Customer Satisfaction	124
	5.5.6 Customer Loyalty	124
5.6	SAMPLING DESIGN	125
5.7	DATA COLLECTION	125
5.8	STATISTICAL TECHNIQUES	126
5.9	LIMITATIONS OF THE STUDY	127
5.10	PRESENTATION OF THE RESEARCH REPORT	128
	<b>CHAPTER-6: DATA ANALYSIS &amp; INTERPRETATION</b>	<b>131-191</b>
6.1	PROFILE OF THE RESPONDENTS	131
	6.1.1 Distribution According to Service Provider	132

	<b>Title</b>	<b>Page No.</b>
6.1.2	Distribution According to Occupation	133
6.1.3	Distribution According to Age	134
6.1.4	Gender	135
6.2	<b>DATA ANALYSIS AND HYPOTHESES TESTING</b>	<b>136</b>
6.2.1	Hypothesis-1	136
6.2.1.1	Wi-Fi & Broad Band Services	136
6.2.1.2	Best Combination of Services	138
6.2.1.3	Free of Cost 4G Services	139
6.2.1.4	Extra Services	140
6.2.1.5	Personalized Services (family recharges, pay as you use etc.)	141
6.2.1.6	People Oriented Service	142
6.2.1.7	Innovation of 4G made Price Affordable	143
6.2.2.1	Pricing	145
6.2.2.2	Good Pricing as Reason for being Loyal Customer	146
6.2.2.3	Winning Price War for Best Pricing Offers	147
6.2.2.4	Best Pricing for Pre-Paid Offers	148
6.2.2.5	Best Pricing for Post-Paid Offers	149
6.2.2.6	Best Pricing for Internet and Wi-Fi Plans	150
6.2.2.7	Charging Maximum Taxes and Hidden Cost	151
6.2.2.8	Offer of Good Services at Higher Price	152
6.2.2.9	Effect of Pricing of Add-On Services on Customers' Choice	153
6.2.2.10	Understanding Price Break up of Plan used	154
6.2.3.1	Bad Network Signals during Travelling	156
6.2.3.2	Providing Best Network	157
6.2.3.3	Networking Facility	158
6.2.3.4	Networking Facility as Reason for being Loyal Customer	159
6.2.3.5	Convenience of Bill Payment/Recharge	160
6.2.3.6	Availability of Bill Payment/Recharge options	161
6.2.3.7	Location of Customer Care Centre	162
6.2.3.8	Availability of Services at Single Store	163
6.2.4.1	Smart Phone Device offer as Promotional scheme	65

	<b>Title</b>	<b>Page No.</b>
	6.2.4.2 Effect of Brand of Smart Phone Offered on Customer's Choice	166
	6.2.4.3 Effect of Smart Phone with Value Added Services Offer	167
	6.2.4.4 Best Jingle	168
	6.2.4.5 Influence of Advertisement	169
	6.2.4.6 Best Tag Line	170
	6.2.4.7 Best Promised Incentive and Extra services	171
	6.2.4.8 Best Deals and Offers	172
	6.2.4.9 Deals and Offers as Reason for Loyal Customer	173
	6.2.4.10 Effectiveness of Promotional Campaigns	174
	6.2.4.11 Effectiveness of Emotional and Social Message Oriented advertisement	175
	6.2.4.12 Role of Peers in Choice of Brand	176
	6.2.5.1 Customer Services facility	178
	6.2.5.2 Customer Service Facility as Reason for being Loyal Customer	179
	6.2.5.3 Neat, Tidy and Professional Appearance of Staff	180
	6.2.6.1 Knowledge of Services Offered	182
	6.2.6.2 Friendly Procedures of Connection	183
	6.2.6.3 Easy Activation of Additional Services	184
	6.2.6.4 Updating Promotional Offers	185
	6.2.7.1 Visibility of Service Provider in Sponsorships, Events and Promotions	187
	6.2.7.2 CSR activities	188
	6.2.7.3 Appealing Physical Facilities	189
	6.2.7.4 Appealing Promotion Material	190
6.3	HYPOTHESES VIEWED AS PER THE ANALYSIS	191
<b>CHAPTER-7: MAJOR FINDINGS, CONCLUSION AND SUGGESTIONS</b>		<b>192-208</b>
7.1	Major Findings of the Study	192
	7.1.1 PRODUCT STRATEGIES	193
	7.1.1.1 Wi-Fi & Broad Band Services	193
	7.1.1.2 Best Combination of Services	193
	7.1.1.3 Free of Cost 4G Service facilities can affect the choice of Service provider	193

	<b>Title</b>	<b>Page No.</b>
	7.1.1.4 Extra Services	193
	7.1.1.5 Personalized Services (family recharges, pay as you use etc.)	194
	7.1.1.6 People Oriented Service	194
	7.1.1.7 Introduction of 4G made Price Affordable	194
7.1.2	<b>PRICING STRATEGIES</b>	195
	7.1.2.1 Pricing	195
	7.1.2.2 Good Pricing as Reason for being Loyal Customer	195
	7.1.2.3 Winning Price War for Best Pricing Offers	195
	7.1.2.4 Best Pricing for Pre-Paid Offers	195
	7.1.2.5 Best Pricing for Post-Paid Offers	195
	7.1.2.6 Best Pricing for Internet and Wi-Fi Plans	195
	7.1.2.7 Charging Maximum Taxes and Hidden Cost	196
	7.1.2.8 Offer of Good Services at Higher Price	196
	7.1.2.9 Effect of Pricing of Add-On Services on Customers' Choice	196
	7.1.2.10 Understanding Price Break up of Plan used	196
7.1.3	<b>DISTRIBUTION STRATEGIES</b>	197
	7.1.3.1 Bad Network Signals during Travelling	197
	7.1.3.2 Providing Best Network	197
	7.1.3.3 Networking Facility	197
	7.1.3.4 Networking Facility as Reason for being Loyal Customer	197
	7.1.3.5 Convenience of Bill Payment/Recharge	197
	7.1.3.6 Availability of Bill Payment/Recharge options	198
	7.1.3.7 Location of Customer Care Centre	198
	7.1.3.8 Availability of Services at Single Store	198
7.1.4	<b>PROMOTION STRATEGIES</b>	198
	7.1.4.1 Smart Phone Device offer as Promotional scheme	198
	7.1.4.2 Effect of Brand of Smart Phone Offered on Customer's Choice	198
	7.1.4.3 Effect of Smart Phone with Value Added Services Offer	198
	7.1.4.4 Best Jingle	199
	7.1.4.5 Influence of Advertisement	199

Title	Page No.
7.1.4.6 Best Tag Line	199
7.1.4.7 Best Promised Incentive and Extra services	199
7.1.4.8 Best Deals and Offers	199
7.1.4.9 Deals and Offers as Reason for Loyal Customer	199
7.1.4.10 Effectiveness of Promotional Campaigns	200
7.1.4.11 Effectiveness of Emotional and Social Message Oriented advertisement	200
7.1.4.12 Role of Peers in Choice of Brand	200
7.1.5 PEOPLE STRATEGIES	200
7.1.5.1 Customer Services facility	200
7.1.5.2 Customer Service Facility as Reason for being Loyal Customer	200
7.1.5.3 Neat, Tidy and Professional Appearance of Staff	201
7.1.6 PROCESS STRATEGIES	201
7.1.6.1 Knowledge of Services Offered	201
7.1.6.2 Friendly Procedures of Connection	201
7.1.6.3 Easy Activation of Additional Services	201
7.1.6.4 Updating Promotional Offers	201
7.1.7 PHYSICAL EVIDENCE STRATEGIES	202
7.1.7.1 Visibility of Service Provider in Sponsorships, Events and Promotions	202
7.1.7.2 CSR activities	202
7.1.7.3 Appealing Physical Facilities	202
7.2 CONCLUSION	202
7.3 SUGGESTIONS	204
<b>SUMMARY</b>	<b>209-221</b>
<b>BIBLIOGRAPHY</b>	<b>222-234</b>
<b>RESEARCH PAPER</b>	
<b>GLOSSARY</b>	
<b>QUESTIONNAIRE</b>	



## LIST OF TABLES

Table No.	Particulars	Page No.
3.1	Highlights of Telecom Subscription Data as on 30th June, 2018	66
3.2	Top Telecom Providers	69
3.3	Top Telecom Providers	71
6.1	Distribution According to Service Provider	132
6.2	Distribution According to Occupation	133
6.3	Distribution According to Age	134
6.4	Distribution According to Gender	135
6.5	Association between Respondents opinion regarding Wi-Fi & Broad Band Services and Service Provider	136
6.6	Comparison of Mean Rank for Best Combination of Services	138
6.7	Association between Respondents opinion regarding providing 4G Services free of cost and Service Provider	139
6.8	Association between Extra Services Offered and Service Provider	140
6.9	Association between Respondents opinion regarding Personalized Services Offered and Service Provider	141
6.10	Comparison of Mean Rank for Most People Oriented Service Provider	142
6.11	Association between Respondents opinion regarding Innovation of 4G made Price Affordable and Service Provider	143
6.12	Comparison of Mean Rank for Pricing offered by Service Providers	145
6.13	Comparison of Mean Rank for Good Pricing as Reason for being Loyal Customer	146
6.14	Comparison of Mean Rank for Winning Price War for Best Pricing Offers	147
6.15	Comparison of Mean Rank for Best Pricing for Pre-Paid Offers	148
6.16	Comparison of Mean Rank for Best Pricing for Post-Paid Offers	149
6.17	Comparison of Mean Rank for Best Pricing for Internet and Wi-Fi Plans	150
6.18	Comparison of Mean Rank for Charging Maximum Taxes and Hidden Cost	151

<b>Table No.</b>	<b>Particulars</b>	<b>Page No.</b>
6.19	Association between Respondents opinion regarding Offer of Good Services at Higher Price and Service Provider	152
6.20	Association between Respondents opinion on Effect of Pricing of Add-On Services on Customers' Choice and Service Provider	153
6.21	Association between Respondents opinion on Understanding Price Break up of Plan used and Service Provider	154
6.22	Association between Respondents opinion regarding Bad Network Signals during Travelling and Service Provider	156
6.23	Association between Respondents opinion regarding Providing Best Network and Service Provider	157
6.24	Comparison of Mean Rank for Networking Facility of Service Providers	158
6.25	Comparison of Mean Rank for Networking Facility as Reason for being Loyal Customer	159
6.26	Association between Respondents' Opinion regarding Convenience of Bill Payment/Recharge and Service Provider	160
6.27	Association between Respondents' Opinion regarding Availability of Bill Payment/Recharge options and Service Provider	161
6.28	Association between Location of Customer Care Centre and Service Provider	162
6.29	Association between Respondents opinion regarding Availability of Services at Single Store and Service Provider	163
6.30	Comparison of Mean Rank for Smart Phone Device offer as Promotional scheme	165
6.31	Association between Respondents opinion regarding Effect of Brand of Smart Phone Offered and Service Provider	166
6.32	Association between Respondents opinion regarding Effect of Smart Phone with Value Added Services Offer and Service Provider	167
6.33	Comparison of Mean Rank for Best Jingle	168
6.34	Association between Respondents opinion regarding Influence of Advertisement and Service Provider	169
6.35	Comparison of Mean Rank for Best Tag Line used by Service Provider	170
6.36	Comparison of Mean Rank for Best Promised Incentive and Extra services offered	171

<b>Table No.</b>	<b>Particulars</b>	<b>Page No.</b>
6.37	Comparison of Mean Rank for Deals and Offers of Service Providers	172
6.38	Comparison of Mean Rank for Deals and Offers as Reason for Loyal Customer	173
6.39	Association between Respondents opinion regarding Effectiveness of Promotional Campaigns and Service Provider	174
6.40	Association between Respondents opinion regarding Effectiveness of Emotional and Social Message Oriented advertisement and Service Provider	175
6.41	Association between Respondents opinion regarding Role of Peers in Choice of Brand and Service Provider	176
6.42	Comparison of Mean Rank for Customer Services facility of Service Providers	178
6.43	Comparison of Mean Rank for Customer Service Facility as Reason for being Loyal Customer	179
6.44	Association between Respondents opinion regarding Neat and Professional Appearance of Staff and Service Provider	180
6.45	Association between Respondents opinion regarding Knowledge of Services Offered and Service Provider	182
6.46	Association between Respondents opinion regarding Friendly Procedures of Connection and Service Provider	183
6.47	Association between Respondents opinion regarding Easy Activation of Additional Services and Service Provider	184
6.48	Association between Respondents opinion regarding Updating Promotional Offers and Service Provider	185
6.49	Comparison of Mean Rank for Visibility of Service Provider in Sponsorships, Events and Promotions	187
6.50	Association between Respondents Awareness regarding CSR activities and Service Provider	188
6.51	Association between Respondents opinion regarding Appealing Physical Facilities and Service Provider	189
6.52	Association between Respondents opinion regarding Appealing Promotion Material and Service Provider	190
7.1	Hypothesis Testing Results	203


## List of Charts

<b>Chart No.</b>	<b>Particulars</b>	<b>Page No.</b>
1.1	Porter's Generic Strategies	5
1.2	Ansoff Matrix	7
1.3	PLC stages and their characteristics	15
1.4	Hierarchy of Effects Model	24
3.1	FDI in communication services of India	67
3.2	Access Service Provider-wise Market Shares in term of Wireless Subscribers as on 30th June, 2018	70
6.1	Distribution According to Service Provider	132
6.2	Distribution According to Occupation	133
6.3	Distribution According to Age	134
6.4	Distribution According to Gender	135

## ABBREVIATION

2G	Second Generation
3G	Third Generation
4G	Fourth Generation
5G	Fifth Generation
ADSL	Asymmetric Digital Subscriber Line
AI	Artificial Intelligence
ANOVA	Analysis of Variance
ARPU	Average Revenue per User
BSNL	Bharat Sanchar Nigam Limited
CDMA	Code Division Multiple Access
CHAID	Chi-Square Automatic Interaction Detection
CRM	Customer Retention Management
CRM	Customer Relationship Management
CSC	Customer Service Centre
CSP	Communication Service Provider
D.F	Degree of Freedom.
DEMATEL	Decision Making Trial and Evaluation Laboratory
DOT	Department of Telecommunications
DSL	Digital Subscriber Line
DTH	Direct to Home
DTS	Departments of Telecom Services
EBITA	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation And Amortization
FDI	Foreign Direct Investment
FSP	Fixed Service Provider
FY	Financial Year
GDP	Gross Domestic product
GSM	Global System for Mobile communications
ICT	Information and Communication Technology
IDC	Internet data centre
ILD	International Long Distance
ISP	Internet Service Provider
IT	Information Technology
ITU	International Telecommunication Union
JIT	Just In Time

KPI	Key Performance Indicators
M.S.S.	Mean Sum of Squares
MCDM	Multiple Criteria Decision Making
MNP	Mobile Number Portability
MoU	Memorandum of Understanding
MPLS-VPN	Multiprotocol Label Switching – Virtual Private Network
MRP	Material Resource Planning
MTNL	Mahanagar Telephone Nigam Limited
NASDAQ	National Association of Securities Dealers Automated Quotation System
NCR	National Capital Region
NLD	National Long Distance
NLD&ILD	National and International Long Distance services
NSE	National Stock Exchange
NTP	National Telecom Policy
RIL	Reliance Industries Limited
RMR	Recurring Monthly Revenue
RTL	Reliance Telecom Ltd
SMS	Short Messaging Services
SWOT	Strength, Weakness, Opportunity, Threat
T.S.S.	Total Sum of Squares
TQM	Total Quality Management
TRAI	Telecom Regulatory Authority in India
TRAI	Telecom Regulatory Authority of India
USD	Unite States Dollar
VAS	Value Added Services
VOIP	Voice over internet protocol
VoIP	Voice over Internet protocol
VPN	Virtual Private Network
VSAT	Very Small Aperture Terminal
VSNL	Videsh Sanchar Nigam Limited
WiMAX	Worldwide Interoperability for Microwave Access
WLL	With Limited Liability



*Chapter -1*  
*Conceptual Framework*

# **CHAPTER –1**

## **CONCEPTUAL FRAMEWORK**

---

---

### **INTRODUCTION**

This chapter focuses on various concepts related with marketing strategy, its types covering competitive strategies, growth strategies, strategies pertaining to market position and entry, marketing mix and service marketing. Further, the researcher tried to discuss other aspects which could help a telecom company to market its products/services. The researcher therefore classified key issues for developing conceptual framework based on literature as follows:

- 1.1 Definition and Meaning of Strategy
- 1.2 Concept of Marketing Strategy
- 1.3 Types of Marketing Strategies
- 1.4 Marketing strategies of telecom service providers

Sources of data include textbooks, articles, theses in India and abroad, published and unpublished annual reports, research papers and other material published in journals and on the internet etc.

### **1.1 DEFINITION AND CONCEPT OF STRATEGY**

The word strategy denotes action plan to achieve a predetermined goal. It generally covers goal setting, deciding course of actions to accomplish the goal, and utilizing resources to perform the actions. In this way a strategy describes how the resources will be put to use to achieve predetermined goals. Strategy may be of two types i.e. intended or emerged. Intended strategy refers to proactive strategy while emerged denotes reactive strategy.

The term Strategy has been defined at different times by different authors. Few popular amongst them are as under:



According to Alfred Chandler, "Strategy is the determination of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals."

Michael Porter defined strategy as the "...broad formula for how a business is going to compete, what its goals should be, and what policies will be needed to carry out those goals" and the "...combination of the *ends* (goals) for which the firm is striving and the *means* (policies) by which it is seeking to get there."

Gluek (1984) defines strategy as "a unified comprehensive, integrated plan that relates the strategic advantages of the firm to the challenges of the environment and is designed to ensure that basic objectives of the enterprise are achieved through proper implementation process."

According to Bennet (1999), it is "a proposed series of actions intended to beat the competition by unifying the various decisions of the organization and determines logically and coherently the direction it is to follow."

Strategy has currently been viewed as market driven strategy in which the market and the customer that forms the market are regarded as initial point of business (Cravens & Piercy, 2003). It has guided how to gain market orientation and how it is expected to change in the future.

There are three levels at which strategies are formulated. Strategy formulated at the top level is called corporate strategy. Corporate strategy deals with decisions related to various business areas in which the firm operates and competes. At the business unit level, strategy is formulated to convert the corporate vision into reality. At the functional level, strategy is formulated to realize the business unit level goals and objectives using the strengths and capabilities of the organization.



Source: <https://seprianhidayatamin.wordpress.com>

## 1.2 MARKETING STRATEGY

A marketing strategy involves planning and activities to inform people and convert them into customers of the product or service that the business offers. The marketing strategy of a company contains the company's value proposition, important promotional messages, information on the target customers and other worthy elements.

Marketing Strategy is defined as:

"The marketing strategy lays out target markets and the value proposition that will be offered based on an analysis of the best market opportunities." (Philip Kotler & Kevin Keller, *Marketing Management*, Pearson, 14th Edition)

"Marketing Strategy is an over-riding directional concept that sets out the planned path." (David Aaker and Michael K. Mills, *Strategic Market Management*, 2001, p. 11)

"Marketing Strategy is essentially a formula for how a business is going to compete, what its goals should be and what policies will be needed to carry out these goals." (Michael Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, NY, Free Press, 1980)

## **Formulation of a Marketing Strategy**

Marketing Strategy is a combination of an organization's marketing goals and it sets out one comprehensive plan. A good marketing strategy is based on market research and it suggests the right product mix in order to achieve the maximum profit potential and overall growth of the business. The marketing strategy lays down the foundation of a marketing plan.

A marketing strategy comes out with the value proposition of an organization and refines the key marketing message(s) from that. Further, market research is carried out in order to identify target customers. An ultimate goal for the marketing strategy can be set then with all the subsequent marketing plans with a view to deliver it in the best possible manner.

A marketing plan is an operational document which is the core of every marketing strategy. Because it details the day-to-day tasks that a company indulges in to promote itself to the world.

## **1.3 TYPES OF MARKETING STRATEGY**

There are various types of marketing strategies that can be applied as per the situation prevailing in the market and requirements of a firm. In the following section the researcher tried to present as many as strategies that can guide decision makers to decide their future course of actions.

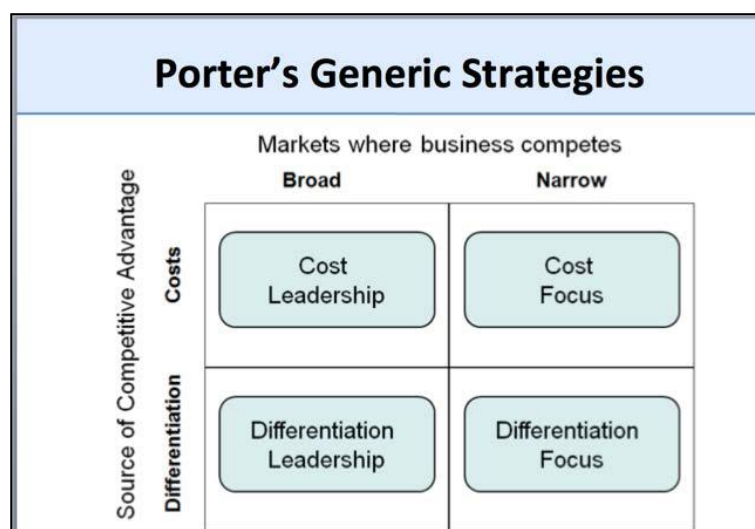
### **1.3.1 Porter's Generic Competitive Strategies**

In 1980, Michael Porter suggested an approach that proved relevant to every businessman in formulating their business strategies and helped scholars and practitioners to understand the subject of strategic management. According to him, strategic choices entail decisions about whether to strive for winning market share or for a specific target group (competitive scope) and whether to lead the market on costs or differentiation basis (competitive advantage).

A firm's relative position within its industry helps in determining its level of profitability in the context of the industry average. It can better portray whether a

firm's profitability is below or above the industry average. In order to gain above average profitability in the long run, a firm must have sustainable competitive advantage that can be: low cost or differentiation. The aforesaid types of competitive advantage lead to three generic strategies: cost leadership, differentiation, and focus.

**Chart 1.1**



Source: [www.tutor2u.com](http://www.tutor2u.com)

### 1. Cost Leadership

Here a firm attempts to produce the product at the lowest possible cost so that it can become the most economical producer in the industry. The cost advantage can be achieved in various ways that depends on the composition of the industry. The sources may include achieving economies of scale, technology ownership, superior access to raw materials and other inputs. To be a low cost producer one must search and exploit all possible sources of cost advantage. If a firm is successful in achieving and sustaining overall cost leadership, it will be an above average performer in its industry, provided its prices are at par or close to the industry average.

### 2. Differentiation

Here a firm seeks to be unique in its industry and attempts to maintain unique points of product difference perceived as desirable and widely valued by customers and for which they are prepared to pay premium prices. The firm chooses

one or more features that a lot of buyers perceive as essential, and uniquely position itself to meet those needs. It is rewarded by customers for its differentiated features by paying a premium price. The firm highlights a particular element that is seen by customers to be important and it becomes a basis for competitive advantage for which customers agree to pay premium price. Differentiation can also be achieved through adding extra features, brand image, and packaging etc.

### **3. Focus**

The firm does not compete in mass market with broader strategy, but instead selects one or more narrow target market that typically have specialized needs. With this, a firm is able to build greater in-depth knowledge of each segment and creates specialist reputation and serves them by way of creating barriers to entry for other players.

According to Porter, these strategies are mutually exclusive and a firm must choose one approach and eliminate all others. Firms that try all approaches simultaneously can present a confused market position which ultimately leads to below average returns. Any ambiguity about the firm's approach is a recipe for "strategic mediocrity" and any firm that tries to pursue two approaches simultaneously is said to be "stuck in the middle" and destined for failure.

The generic strategy of focus rests on the choice of a narrow competitive scope within an industry. The focuser selects a segment or group of segments in the industry and tailors its strategy to serving them to the exclusion of others.

The focus strategy is of two types.

- (a) Cost Focus
- (b) Differentiation Focus

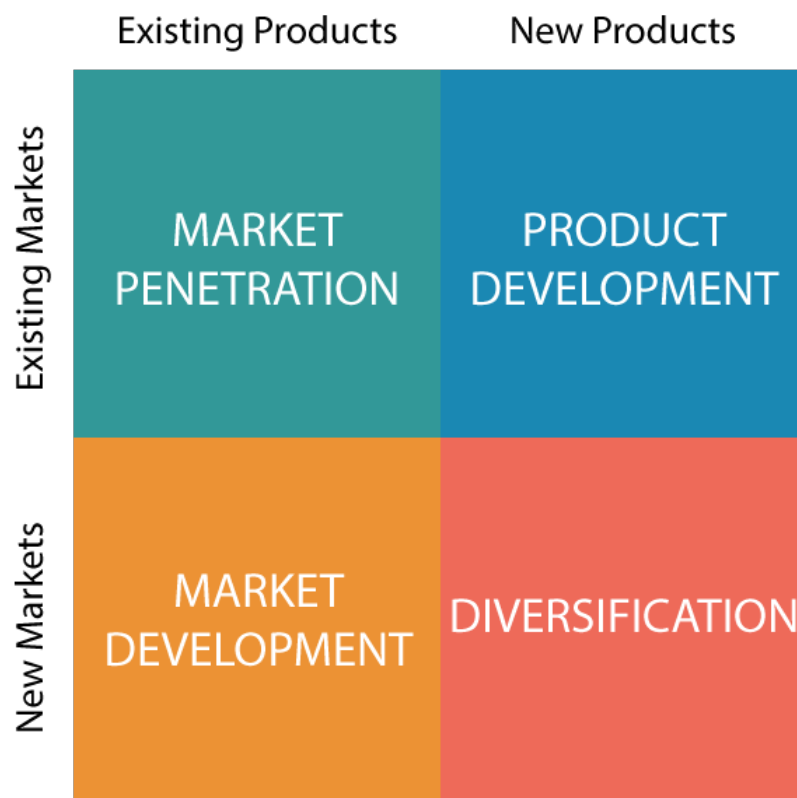
Both variants of the focus strategy rest on differences between a focuser's target segment and other segments in the industry. In Cost Focus a firm seeks a cost advantage in its target segment, while in Differentiation Focus a firm seeks differentiation in its target segment. The target segments must either have buyers with unusual needs or else the production and delivery system that best serves the

target segment must differ from that of other industry segments. Cost focus exploits differences in cost behaviour in some segments, while differentiation focus exploits the special needs of buyers in certain segments.

### 1.3.2 Growth Strategies

To succeed every business needs to put efforts for growth. It can be achieved by developing the market or by developing new products. The Ansoff product market growth matrix describes the two broad dimensions for achieving growth. It delivers four specific growth strategies: market penetration, product development, market development and diversification.

**Chart 1.2**  
**Ansoff Matrix**



Source: [www.executestategy.net](http://www.executestategy.net)

**Market penetration** involves selling existing products to existing consumers. This is a conservative, low risk approach since the product is already on the established market. It can be done in three ways:

- Converting non users into users
- Suggesting new uses of existing product
- More usage per use

**Product development** is the introduction of a new product to existing customers. This can include modifications to an already existing market which can create a product that has more appeal or adding new products in existing basket.

**Market development** involves the selling of existing products to new customers in order to identify and build a new clientele base. This can include new geographical markets, new distribution channels, and different pricing policies that bring the product price within the competence of new market segments.

**Diversification** is the riskiest decision for a business. This is where a new product is introduced in a new market. There are two type of Diversification; horizontal and vertical. 'Horizontal diversification focuses more on product(s) where the business is knowledgeable, whereas vertical diversification focuses more on the introduction of new product into new markets, where the business could have less knowledge of the new market.

### **1.3.3 Market Position and Strategy**

As far as market position is concerned, firms may be classified as market leaders, market challengers, market followers or market nichers.

**Market leader:** The market leader is the firm that dominates the market by attaining largest market share. They play defensive because there is enough to lose. Their main objective is to strengthen their top position using Public Relation to build up corporate image and to block competitors' brand by putting various strategies in action. Market leaders may adopt unconventional or unexpected approaches to build growth that may include: product proliferation; diversification; multi-branding;

raising barriers to entry; vertical and horizontal integration and corporate acquisitions.

**Market challenger:** It is the position occupied by the firm which has second highest market share in the category, following close to the market leader. They play generally offensive because they have less to lose and more to gain by taking risks. They put hard efforts to grow their market share by competing head to head with the market leader. They focus to gain market share through innovating product, packaging and service; developing new market and redefining their business to widen the scope and improve their position.

**Market follower:** In general they are satisfied with the market share they occupy in the category. They wait for the outcomes of R&D activities undertaken by market leaders and then follow them by adopting a “me-too” approach. They play neutral and typically strive to maintain their current market share by maintaining existing customers and capturing a fair share of any new segments. They sustain profits by controlling costs.

**Market nicher:** They occupy small niches in the market and serve them with their unique products in order to avoid head to head competition. Their main purpose is to identify unfulfilled needs of the customers and build a strong customer base; and develop strong loyalty with existing customers. They also play neutral. Strategically, nichers strive to advance the product or service offering, create value for money and offer superior after sales service, service quality and engage in similar value adding activities.

### **1.3.4 Market Entry Strategies**

Marketing strategies may support a decision maker to decide the time when to enter in a market. The alternatives differ depending on the unique situation of an individual firm. According to Lieberman and Montgomery, every entrant into a market whether new or existing, can be classified under given categories such as Market Pioneer, Close Follower or a Late follower. The question of whether to be a



pioneer or a follower is of increasing importance in the modern Age of Information/Uncertainty.

Pioneers: They are generally known to introduce a new product or service and open a new market based on a major innovation. A pioneering advantage or first-mover advantage is defined as the competence of a firm to get an advantage over its competitors through early introduction of a new product category (Suarez and Lanzolla, 2005). They highlight their innovation and studies have shown that early entrants or pioneers enjoy larger market-share advantages above all those who enter later. Pioneering and first-move advantage can be achieved in several ways: 1) innovating new products, 2) a new process, or 3) entering a new market (Heiens et al, 2003). In all cases, pioneers generate new market demand for their products/services and successfully meet the demand before other enterprises enter the same market. It has also been found that first-mover advantage can be availed by building awareness through advertising campaigns, offering price cuts and introducing new distribution techniques. Thus, by using pre-existing information risk can be reduced when entering first in a new market. It becomes easy to avoid higher switching costs compared to later entrants. For example, those who enter later are needed to put in more expenditure in order to grab customers away from early entrants. However, lower switching costs as the first-mover advantage, can be more costly because product innovation is more expensive as compared to product imitation. It has been observed that while Pioneers enjoy noteworthy market share advantages, they suffer larger cost disadvantages.

Close followers: Inspired by the success achieved by pioneers, many entrepreneurs get attracted depending on the benefits of the market. If the probability of success is high, many entrepreneurs would enter and follow the tactics of pioneers. These are better regarded as Close Followers. They can also be termed as challengers to the Pioneers and the Early Followers. They are more likely to invest a significant amount in Product Research and Development than later entrants. They observe the outcome of pioneer's innovations and find weaknesses in products served to customers before, which leads to improvements and modifications in the aforesaid products. Therefore, it could also lead to attracting

customers who were searching alternatives to the previous products, which is essential in market success. As early followers invest in research later than Market Pioneers, different development strategies are used against those in practice, and the same is done by the Late Followers in the market. With different strategies, followers are able to build their own unique selling proposition and perhaps target a different segment in comparison to that of the Market Pioneers.

**Late Entrants:** The businesses who move in after the Close Followers and are referred to as the Late Entrants. It seems very daunting; however, there are some advantages of being a late follower. They have a lot to learn from those who have already been playing in the market. They have the opportunity to improve their offerings and reduce their costs. In this way they can grab a significant market share and most importantly, sustain in the market. As markets evolve, consumers always seek improvements and advancements in products. Late Followers can take the benefit of shifts in customer preferences. On the other hand, if there is a slight change in their preferences, Late Followers can enjoy cost advantage over early entrants through product imitation. Late Entry does not necessarily mean disadvantage in terms of market share, it depends on how the businesses adopt strategies related to marketing mix and overall growth. Therefore the decision concerning entry time must be coupled with a suitable marketing mix to take the advantage of a significant opportunity.

### **1.3.5 Warfare Strategies**

Similar to military strategies, these strategies can help a business to win the market. There are various types of marketing warfare strategies; they can be categorized as;

- **Offensive Marketing Strategy**

This strategy is used by challengers to secure competitive advantages; they usually attack on the leader's strength, with this strategy like, offering sharp price cuts, repositioning of products, introducing special offers etc.

- **Defensive Marketing Strategy**

This strategy is generally used by market leaders to defend competitive advantages, protect market share, reduce threat of being attacked, lessen impact of attacks, strengthen position.

- **Flanking Marketing Strategy**

This strategy is used by firms having relatively small market share. It is an indirect attack on the areas which are of little importance to the competitors.

- **Guerrilla Marketing Strategy**

This strategy is used by firms which are relatively too small to implement offensive or flanking moves. Attack, retreat, hide, then do it again, and again, until the competitor moves on to other markets.

Large companies typically use many strategies simultaneously. Different companies or brands will have different motives to use any of these strategies. Timing and circumstances need to be considered while choosing the best option.

### **1.3.6 Marketing - Mix Strategy**

In 1964 McCarthy introduced the concept which is commonly known as the “4Ps”, as a means of converting marketing planning into practice (Bennett, 1997) Marketing mix has originated from the single P (price) of microeconomic theory (Chong, 2003). It is not a scientific theory, but simply a conceptual framework which identifies the key decision strategists take while designing their offerings to match consumers’ needs. This tool can be used to determine both long -term strategies and short-term tactical decisions (Palmer, 2004).

There are mainly four components of marketing mix. These are- Product, Place, Price, Promotion. These components can be varied in their proportion and it can differ from the product to product. It can change a firm’s competitive position. Marketing Mix strategy can be framed in two ways depending upon the suitability with a firm’s objectives:

- Standardized marketing strategy: Where a firm develops and implements standardized marketing mix i.e. the same product, price, distribution, and promotion strategies for every market.
- Customized marketing strategy: Where a firm develops and implements a different marketing mix for each target market i.e. different combination of 4ps for different markets.

### **Marketing Mix Decisions of Company (4 P's)**

Marketing mix is the overall marketing offer to appeal to the target market. It consists of decision in four basic areas:

#### **1. Product Strategies-** Product strategy consists of the following elements-

- Differentiation and positioning new products- highlighting differentiating features and aesthetics of existing products, repositioning them, altering packaging , adding new services
- Product Mix strategies including Line Filling, Line Pruning, Line Balancing etc.
- Type and range of goods and services to offer (product lines)
- Product line width and depth
- Timing for product introduction and deletion
- Packaging
- Product safety
- Product liability
- Warranties and post-sale service

#### **2. Pricing Strategies**

- Describing the value of the product to the customer and price the product in terms of value instead of cost
- Implementing suitable pricing strategy (skimming, penetration, comparable pricing, affordable pricing etc.)
- Offering additional benefits (discounting, premium pricing, extra quantity, free services, gifts etc.)

### **3. Promotional Strategies**

- Selecting the most effective marketing strategies (emotional, rational, creative, experiential, credibility, offering membership, marketing to the subconscious, etc.) and/or designing absolutely new creative marketing approaches.
- Branding, creating customer value proposition, unique selling proposition (USP), core marketing message (CMM), and the public relations brief
- Choosing the advertising techniques (celebrity endorsement, product placement, and using appropriate verbal and/or visual effects) and suitable media mix; and designing right branding decisions.

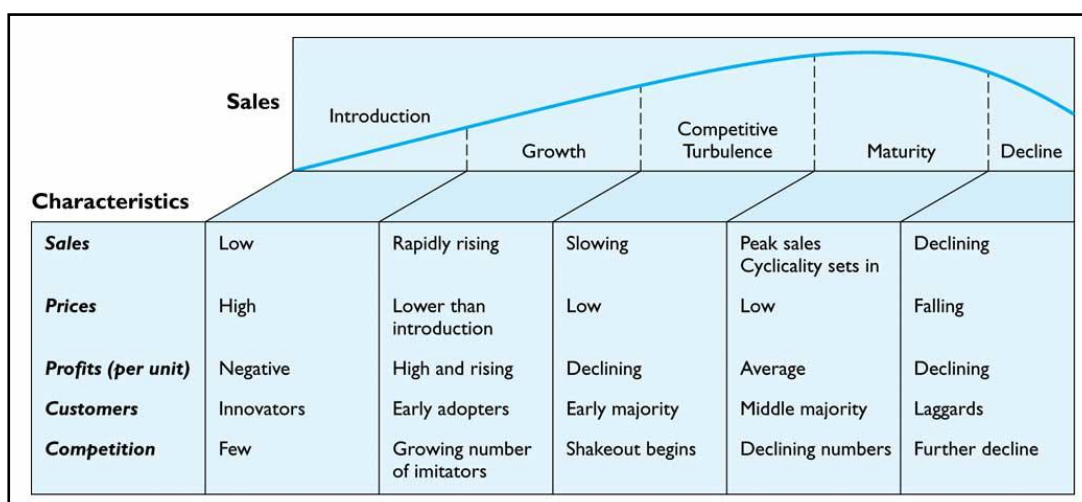
### **4. Distribution Strategies**

- Studying environmental effects on sales before specifying geographic region or industry.
- Specifying the segment to be served (kids, educated, families, service class, etc.).
- Choosing the distribution channels (point-of-sale placement, wholesaling retailing, online selling, etc.) and deciding the levels of customer service.

#### **1.3.7 Product Life Cycle Strategies**

The product life cycle contains four distinct stages: introduction, growth, maturity and decline. Each stage is associated with changes in a product's marketing position and faces different challenges; opportunities and problems to the seller. The following chart shows different stages and their characteristics which help in deciding strategies to be used.

**Chart 1.3**  
**PLC stages and their characteristics**



Source: *Analysis for Strategic Market Decisions* by G. Day (1986)

Various marketing strategies can be used in each stage to extend the life cycle of any product.

### **Product Introduction Strategies**

Marketing strategies used in introduction stages include:

- Product- offer a basic product
- Price- use cost plus formula
- Distribution- build selective distribution
- Promotion- any of the below mentioned strategies-
  - Rapid Skimming - launching the product at high price and high promotional level
  - Slow Skimming - launching the product at high price and low promotional level
  - Rapid Penetration - launching the product at low price with significant promotion
  - Slow Penetration - launching the product at a low price and minimal promotion
- Create a unique brand identity
- Join hands with the right associates for product promotion

- Conduct consumer tests, surveys
- Distribute free samples or trials to key target markets
- Price the product or service high to reflect the level of quality level
- Offer the product or service to a specific type of consumer only - being selective can boost demand.

### **Product Growth Strategies**

Marketing strategies used in the growth stage mainly aim to increase market share and profits. The strategies which are generally used are:

- Product- offer product extension, differentiated product, support services, warranty
- Price- low price to attract a large no. of customers
- Distribution- build intensive distribution
- Promotion- can be reduced to take advantage of demand
- Enter new markets segments
- Pricing can be kept high to raise demand and profits
- Increase distribution channels to serve rising demand
- Shifting promotional messages from product awareness to product preference.

### **Product Maturity Strategies**

In this stage sales are at peak. This is generally followed by saturated market and alternative marketing tactics are needed to retain the product in this stage of its life cycle. The strategies which are commonly used are:

- Product- Diversify brand and models
- Price- Match the best competitors
- Distribution- Build more intensive distribution
- Promotion- Increase to encourage brand switching
- Market modification – can be done through entering new segments, redefining target markets, attracting competitor's customers, converting non-users

- Product modification - enhancing or improving product's features, aesthetic, quality, pricing and differentiating it from other products
- Repositioning of product

### **Product Decline Strategies**

Product maturity is generally followed by declining sales and profits. In this stage shifts in consumer preferences, technological advances and alternatives of product can support to regain the market. To save money, following tactics can be adopted:

- Product- delete weak items from the product category
- Price- Cut price
- Distribution- Selective: shut down unprofitable stores
- Promotion- Reduce to minimum level
- Find and suggest another use of the product
- Maintain the product and wait for competitors to withdraw from the market first
- Harvest the product or service before discontinuing it

If nothing seems good discontinue the product from the product line. Following alternatives are available:

- Sell the brand
- Significantly reduce the price to clear the stock

The best strategy is to modify the product in the maturity stage to avoid entering the decline stage.

### **1.3.8 Service Marketing Strategies**

Service marketing is done for delivering processes, experiences, and intangibles to customers rather than tangible goods. To plan an effective service marketing strategy four Ps of marketing mix (product, price, promotion, and place) are inadequate. Other 3Ps- people, process, and physical evidence are also required to support those 4Ps. Because services are usually produced and consumed at the same time, customers are required to be a part of the service production process.



Therefore 'people' play a significant part in service delivery and thus affects customer's perceptions. Here people include the firm's human resource, the customer himself, and other customers present at service station; they all serve as decisive elements regarding the image of the service itself. Service providers' appearance, attitudes, and behaviors affect customer perceptions. 'Physical evidence' refers to the setting in which the service is delivered; all tangible components that assist service performance also affect customer perception. This includes components such as ambience of service station, brochures, letterheads, business cards, report formats, signage, and service equipments, and the physical facility offered. Finally, 'process' includes the operating systems, procedures, mechanisms, and flow of activities involved in service delivery. This P may be perceived as an important factor while deciding the quality of service.

Parasuraman, Zeithaml, and Berry (1985) explored some gaps in customer expectations of service and service quality delivered by the provider. To fill these gaps, they suggested few strategies which are still relevant to service industry.

#### Gap 1: The listening gap

It shows the difference between customer expectations of service and providers understanding of those expectations. It arises due to lack of accurate understanding of customer expectations by the company.

#### Gap 2: The service design and standards gap

This gap is concerned with translating customer expectations into actual service designs and developing standards to measure service operations against customer expectations.

#### Gap 3: The performance gap

The service performance gap arises due to discrepancy between customer-driven service design and standards and actual service delivery.

#### Gap 4: The communication gap

This gap shows the difference between service delivery and what is communicated externally to customers through advertising, pricing, and other forms of communications.

#### **Strategies for filling the listening gap**

- Listen to customers in various ways through customer surveys and employee communication.
- Build relationships by understanding and meeting customer needs over time.
- Know and act on what customers expect when they experience a service failure.

#### **Strategies for filling the design and standards gap**

- Employ well-defined new service development and innovation practices-
- Understand the total customer experience through service blueprinting.
- Measure service operations via customer -defined rather than company defined standards.
- Incorporate physical evidence in service design.

#### **Strategies for filling the service performance gap**

- Align human resource practices (hiring, training, support systems, and rewards) around delivering service excellence.
- Define customers' roles and help them to understand and perform effectively.
- Integrate technology effectively and appropriately to aid service performance.
- Motivate and incentivize intermediaries to perform service according to firm standards.
- Manage fluctuations in supply and demand.

#### **Strategies for filling the communication gap**

- Employ integrated services marketing communication strategies around everything and everyone sending a message or signal to the customer.

- Manage customer expectations effectively throughout the experience.
- Develop mechanisms for internal communication to avoid overpromising and ensure successful delivery.
- Manage the service brand.
- Price services appropriately.

Marketing a service is quite different from promoting a physical product because the features of a service cannot be displayed to consumers. They are needed to be taught about a service. To sell a service, it is required to explain the need of the service, its procedure to serve and reasons behind the superiority of an entity to deliver the service. If an entity is having a unique skill, it has lot to do to convince customers about its offerings. Service marketing is most commonly used by firms that deliver services to individuals. They study consumer behavior to design their promotional strategies to appeal to certain demographics. Specifying certain segments allow them to put concentrated efforts to win over the competitors. The strategies which are commonly used to market a service are:

### **Word of Mouth**

Word of Mouth is one of the promising methods to market an intangible product or service. A satisfied customer will be eager to share her experiences about the service with her friends and relatives even if she is not being asked and tell them why she prefers that particular provider. Using referral program as an integral part of marketing can give desired outcomes. Service providers offer cash bonus, free service or a reduced rate on service to each referral to increase their customer base.

### **Education**

Another proven method is to educate customers about the service and the way it is delivered. Service providers organize free seminars, educational meetings or offer free trials, membership to the people. Articles for magazines and newspapers and talks at trade shows and conferences can be proved as successful tools to promote a service. An educational marketing strategy does not emphasize features of a service or prices rather it explains the benefits of using the service.

**Demonstrations**

People are generally hesitant or afraid while trying a service provided by a new provider for them. Offering free demonstrations can help those providers to convince and convert them into customers and achieve desired results. For example, offering free yoga sessions for a large company can help the service provider to promote its services and in this way a lot of people can be made convinced about their service quality and benefits of their services. If a company runs advertising agency, it can suggest some good alternatives to a business owner, and outline the cost to do so.

**Social Media**

In the era of information exposure through social media, it is very hard to avoid or escape interesting items shared by others on mails, social networking sites or messenger apps. It is a cheaper way to reach people to bring them closer and make an impact. A social media marketing strategy allows service providers to educate people and get them to spread the word to their network of contacts through various tools. With Facebook, for example, you can create a free business page to detail about your service. Testimonials and case histories posted by satisfied customers displayed on your page might create a positive image of your offerings or organizing contests and offering a cash prize or a free session or visit. The number of Likes on your business or web page might encourage visitors to share their experience with their friends. Free tips to interested people can be given through Twitter messages to educate them about your services.

**1.4 MARKETING STRATEGIES OF TELECOM PROVIDERS**

For achieving growth and success, every firm needs to frame its marketing strategies by combining the seven Ps, i.e. product, price, place, promotion, people, physical evidence and process in the right proportion. Hence, strategies pertaining to overall service marketing mix are planned and designed by telecom service providers to compete and sustain in the market. As per the observation, common marketing strategies of telecom service providers covering services marketing mix are as follows-

**Product Strategies**

The basic product in mobile telecom service is core functional benefits that are desired by customers. It may include voice clarity, physical network coverage and easy connectivity to the network by majority of the customers. Roaming facility is essential for those who regularly visit interstate as well as international tours, while for internet savvy customers easiness in activation of internet services is also considered a part of the basic product. In the present era where most of the customers are having 3G and/or 4G mobile services, the core benefits also include compatibility of handset settings with mobile internet facility and data accessing speed. At the augmented level the basic product is associated with superior customer support and customer care activities and high level of quality of service. The customer support activities include: easy availability of a new mobile connection - the SIM card with user friendly procedures, recharge facility at convenient locations (for prepaid customers), guiding assistance from retailers, and convenient bill payment facilities (for post-paid customers). The customer care activities are: easy activation of value added services, easy deactivation of services availed as and when asked, accessible customer care helpline, freedom to choose a right customer care person at service online to get immediate help or information, and quick solutions of problems. The quality of service and brand value of telecom service providers are also reflected in product related strategies. The five distinct dimensions of quality of service suggested by Parasuraman A. et al. (1988) are tangibility, reliability, responsiveness, assurance and empathy. The tangibility is reflected through physical facilities, equipments, and appearance of staff. The reliability is ensured by promise to perform required services accurately and up to the mark. The responsiveness denotes willingness to support customers and to deliver service without delay. The assurance is concerned with the knowledge and courtesy of employees and their ability to develop confidence and trust in customers. The empathy deals with personal attention and caring, the firm provides to its customers. The features, benefits, quality, and the identity of the product constitute the corporate image and it is reflected through the brand name. Telecom service providers segment the market mainly on the basis of demographic profiles such as age, gender, locality (Urban or Rural), educational levels, employment status and income. Customers' expectations

of core benefits vary according to the segment they belong to; therefore, companies position their products to target the specific segments. As youth is considered internet savvy, companies target them and position their products to meet their requirements of free data with high speed.

### **Pricing Strategies**

Revenue and Profit of any organization are significantly affected by its Pricing strategies. Even though pricing is merely the exchange value of a product or service, pricing strategies are framed considering the objectives of pricing. Different service providers have different objectives of pricing. It may be to earn reasonable profit, profiteering, price leadership or to attract large number of customers, make superior image of the brand or to strategically counter the competitors. Due to presence of several telecom operators the competition in the mobile market has stepped up and it has resulted into price wars.

Every telecom operator has been pricing its products very strategically since Pricing became the major strategy in this industry. A wide range of tariff plans are made available by telecom service providers to attract customers of various segments. Special Tariff Vouchers (STV) for voice, data and SMS allow customers to call, SMS and access internet at comparatively low rates, at times on unlimited basis. When one operator introduces an STV, immediately others react and offer cheaper plans. Since a telecom service provider cannot get patent of a marketing strategy introduced by him and intellectual property rights also do not apply here, copability (copying + ability) is a widely utilized strategy among the telecom service providers.

Due to intense price war, companies introduced top-up recharge cards, electronic recharge facility, credit recharge facility, validity extenders, separate and combo tariff plans for voice, data and SMS, in addition to STVs. Exclusive tariff plans have been launched for closed user groups such as friends, lovers, family, official groups, or business groups. Few telecom service providers offered customized special tariff packages for individuals in addition to standard plans.

### Distribution Strategies

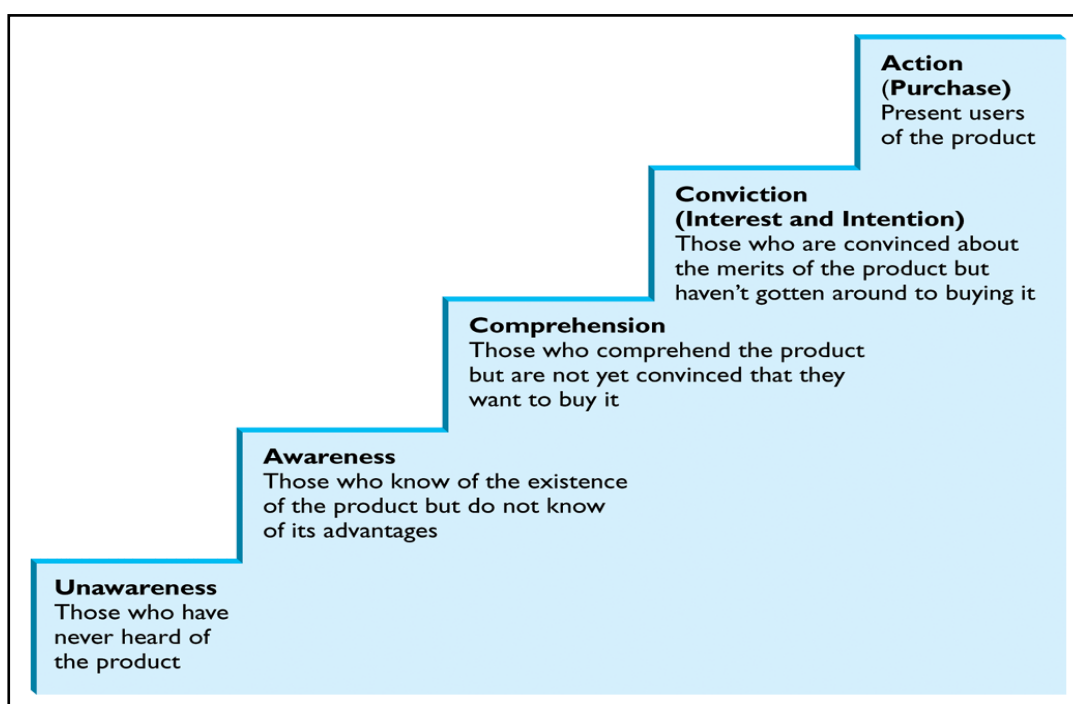
It is designed to provide easy availability of products and services to customers and offer them place convenience. It covers channel management including distributors and retailers, distribution settings and overall network of their service. Initially public sector provider BSNL adopted exclusive distribution strategy, in which exclusive outlets were made to deal BSNL products only. Today every company has adopted intensive distribution strategy, where all possible outlets are used to ensure easy availability to everyone.

### Promotion Strategies

Integrated marketing communication tools are used to inform, persuade and influence people about a product or service. There are several ways to promote a product. Telecom companies use a mix of various promotional tools such as: advertisements, sales promotion, personal selling, events, publicity and public relations. The below mentioned model depicts the hierarchy of effects of promotion.

Chart 1.4

#### Hierarchy of Effects Model



Source: R. H. Colley, *Defining Advertising Goals for Measured Advertising Results*. Association of National Advertisers, New York, p. 55

Telecom service providers also follow this model and use it in designing their promotion strategies. They also use various sales promotion tools. Some common tools among them are: promotional calls and messages to the customers, attractive price offers, extra talk time, value package, internet package, free trial of newly launched services, free add-on SIM card, facility to make calls on credit basis even at zero balance for prepaid customers, extending continued services in special cases even at non-payment of bills for post-paid customers, demonstrations and displays at point of sales, and specialized pricing offers exclusively for individual customers. These offers create immediate buyer responses that help in increasing customer base. Different companies in telecom sector use different types of sales promotion tools to make their offer distinctive. Consistency in providing attractive offers create positive image of the company. A right combination of various tools of promotion mix can be extremely effective for telecom service marketers.

**Service Marketing Strategies** – related to additional 3Ps -people, physical evidence and process.

**People:** All human elements involved in service delivery or service assurance influence buyer's perceptions. The customer care team, maintenance staff, individuals representing the organisation, the customers, and other customers present at the service center play very important roles in marketing a service. The private telecom companies tactically manage this P primarily through outsourcing. The customer care and call centre personnel are professionally trained employees provided by external agencies. Telecom companies provide exceptional backend support for the outsourced customer touch points. They utilise IT expertise for extending service to these touch points which is in turn reflected in their customer service.

Although the private telecom companies seem avoiding direct contact with the customers, they have few experience centers or relationship centers or customer care centers at main towns and cities which are managed by the franchisees. They explain the terms to their franchisee with respect to code of conduct, dress code, personal grooming, telephone etiquettes, attitude and behaviour to be displayed by



the employees hired by franchisees while dealing with customers. Franchisee also gets benefits from the win-win business relationships. They hire employees with excellent inter personal skills and impart them adequate knowledge along with IT support to deal with customers.

**Physical Evidence:** The physical evidence is the environment in which the service is delivered and where the firm and customer interact, and any tangible component that facilitate performance or communication of the service. The private telecom service providers are keen in proving their presence through employee dresses, uniforms, brochures, tariff booklets, business cards, and glow sign boards etc. The ever-changing tariff is immediately updated and made available to retailers and customers. Their physical presence is evident even in the remote corners of the country. As part of creating the tangibility, the telecom service providers seem to offer newly introduced value added services to customers for free trail for a limited period. This is followed by various sales promotion techniques to enthuse the customers to become the subscribers of the services. The advertisements, hoardings, events, and public relations also help building the physical evidence.

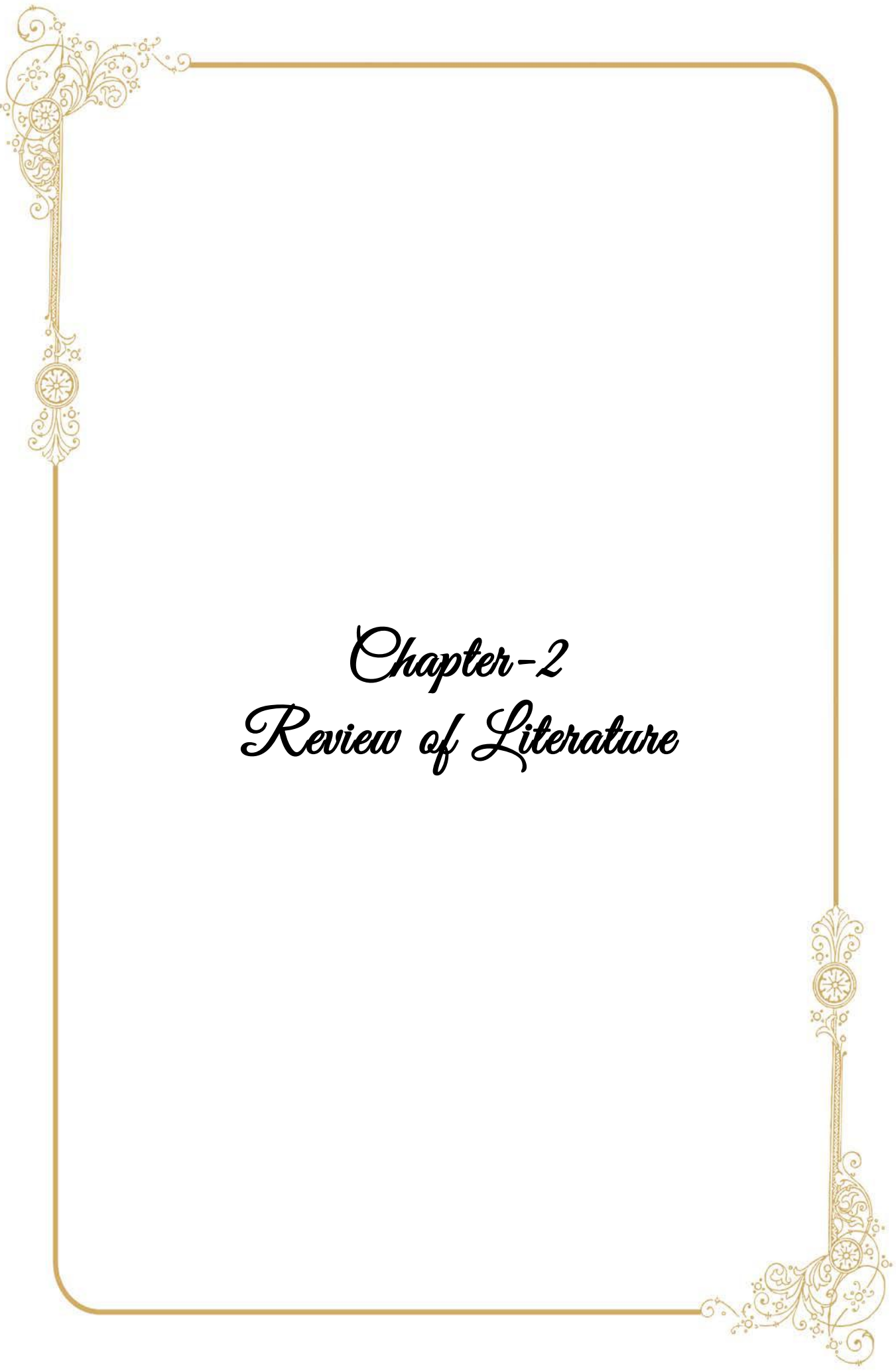
**Process:** The actual procedures, mechanisms, and flow of activities by which the service is delivered are termed as process. The private sector providers widely utilise the retailer network to distribute their products and services. The process and procedures to avail mobile connections and associated services from private sector providers are very simple as compared to BSNL. Their retailers are motivated by trade schemes, incentives and proper back end support to push their products.

**REFERENCES**

- Aaker A. David. (2005), Strategic Market Management, (7<sup>th</sup> ed.), Wiley India (P.) Ltd., New Delhi.
- David L. Kurtz and Louis E. Boone. (2007), Principles of Marketing, (12<sup>th</sup> ed.).South-Western, Thomson Learning Inc., New Delhi.
- David W. Cravens and Nigel F. Piercy (2009), Strategic Marketing, (8<sup>th</sup> ed.), Tata McGraw-Hill, New Delhi.
- Jha S. M. (2000). Services Marketing. Himalaya Publishing House, Mumbai, India.
- Kevin Lane Keller (2008), Strategic Brand Management - Building, Measuring and Managing Brand Equity, Pearson Education Inc., New Delhi.
- Mathur U.C. (2006), Strategic Marketing Management - Text and Cases, Macmillan India Ltd., New Delhi.
- McGrath, M. E. (2001), Product Strategy for High Technology Companies, New York: McGraw-Hill.
- Nag A. (2008), Strategic Marketing, (2<sup>nd</sup> ed.). Macmillan Publishers India Ltd., New Delhi.
- Parasuraman A., Valarie A. Zeithaml, and Leonard L. Berry (1998), SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, Journal of Retailing, Volume 64, Number 1, Elsevier Science Publishing Company Inc., pp. 12-40.
- Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha. (2009), Marketing Management-A South Asian Perspective (13<sup>th</sup> ed.), Pearson Education, India, New Delhi.
- Porter, Michael E., "Competitive Advantage". 1985, Ch. 1, pp 11-15, The Free Press, New York.
- Ramaswamy V. S. and Namakumari S. (2002), Marketing Management - Planning, Implementation and Control. Macmillan India Ltd., New Delhi.
- SABU. V. G. (2013), "A Study on Marketing Strategies of BSNL in Telecommunication Services - A Comparative Study with Private Sector

Telecommunication Service Providers in Kerala” Retrieved from [http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/1/01\\_title.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/1/01_title.pdf)

- Thomson, B. (2004), Creating a Strategic Product Plan, Retrieved June 30, 2010 from <http://www.pragmaticmarketing.com/publications/topics/08/how-to-make-product-management-strategic>
- <https://studentnet.cs.manchester.ac.uk/resources/library/thesis.../Goni-Mahwash.pdf>
- [onlinelibrary.wiley.com](http://onlinelibrary.wiley.com)
- [https://en.wikipedia.org/wiki/Marketing\\_strategies](https://en.wikipedia.org/wiki/Marketing_strategies)
- <http://www.netmba.com/marketing/product/lifecycle/>
- [http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/11/11\\_chapter3.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/11/11_chapter3.pdf)



*Chapter-2*  
*Review of Literature*

## **CHAPTER-2**

### **REVIEW OF LITERATURE**

---

In the severely competitive environment, a carefully planned strategy is the key to success for the entire top performing telecom players. There is a need of effective research to identify what attracts customers and what is feasible for a service provider. The best suitable strategy for a specific product can be formulated upon the proper understanding of various factors that have impact on decision making. The effective research cannot be accomplished without critically studying what already exists in the form of general literature and specific studies. An extensive search has been conducted gather the existing literature in the area of study. Previously published studies related to growth and development of telecommunication services, the practice of marketing management in telecommunication services, different marketing strategies and their applications by telecommunication service providers are being comprehensively studied in this chapter. It facilitated to develop a theoretical back ground for the study. The review of literature brought clarity and more focus on the research problem. It helped in identifying the research gap. The literature review has been classified into two parts:

- I. Studies Related to Indian Telecom Industry and Marketing Strategies
- II. Studies Related to International Telecom Industry and Marketing Strategies

#### **STUDIES RELATED TO INDIAN TELECOM INDUSTRY AND MARKETING STRATEGIES**

Jha S. M. (2000) in his study asserted that sky is the limit for marketing of services and innovation is the key element in services marketing. If strategies of a company are innovative, its services tend to be more productive. According to him, communication services are due for their changes. He added that telecommunication services play an incremental role in the multi dimensional development of other activities. A properly functioning telecom network is an essential component of economic infrastructure in any country. The telecom players must ensure to fill the gap between the services they promised and services they actually offer. He appropriately points out that the Department of Telecommunications needs to

improve the quality of personal behaviour of employees and overall atmosphere of the service. The authors approved the Danish applications of the ECSI model to be very good. The model fits well in Denmark and appeared to be sufficiently flexible for multiple industries.

Jaishri Jethwaney and Shruti Jain (2006) in their book 'Advertising Management' elaborated advertising, sales promotion and public relations and their effects on brand building. According to them, an average customer is mentally bombarded with various messages every day, every hour. Due to media penetration, customers are more exposed to commercial messages. The customers experience a sort of media fatigue due to the overloading of information. The human mind has wonderful mechanism to perceive selectively. The process of selective perception enables an individual of seeing, hearing, and reading the messages that resonates with his own personal value system. This makes the job of advertisers more difficult because it is not sufficient to just position a product against products. They must also ensure that consumer is able to retain the message about the concerned product. The positioning of the brand is the perception it creates in the mind of a target customer.

Kokil and Sharma (2006) in their research paper compared Bharti Tele-Ventures Limited (BTVL), Airtel and Bharat Sanchar Nigam Limited (BSNL). They observed that introduction of new technology every now and then is creating a pressure and challenging telecom industry with each passing day. Customers are becoming more aware and educated also raises the additional challenge bar to withstand the competition. This requires Indian telecom companies to be more flexible. The authors concluded that when it comes to being flexible according to market trend, Airtel successfully beats BSNL. When Tariffs plans compared, Airtel offers more customer oriented plans and packages in comparison to BSNL. The Airtel tariff plans are very flexible according to the customer requirements. Airtel provide recharge coupons and top-up recharge schemes which were not even implemented by BSNL at that time. The Airtel keeps coming with new schemes and attractive offers of ring tones, games, VAS services, etc. When a telecom company keep its customers satisfied and intrigued by introducing prompt services, new

schemes, quality products and cost effective solutions, it can smoothly survive the competition in the market. BSNL outshines Airtel at one stance, that it offers low cost tariff. But it's poor network quality and inferior service and customer support reduces its ARPU and keeps low market share. Whereas, Airtel manages to meet its cost and quality fundamentals by being flexible as per the trend enhances its competitiveness. The study refers to the report on quality of service and customer satisfaction survey (2006) by Telecom Regulatory Authority of India and assessed the quality of service and customer satisfaction of basic land line telephone services and cellular mobile telephone services in India. The parameters for assessment of mobile services were satisfaction in provision of service, billing, help services, network performance, maintainability, satisfaction with supplementary services, and overall customer satisfaction. The parameters for wired landline services were provision of telephone after registration of demand, fault incidences, fault repair by next working day, mean time for repair, metering and billing credibility, customer care promptness in dealing with request for telephone shift, request for closure, request for additional facility activation, answering of customer calls and time taken for refund of deposit after the closure.

Mathur U. C. (2006) in his study concluded that marketing success is derived from Innovation, Quality and Service altogether. According to him the product acceptance requires following four steps. Product knowledge comes from advertisements and promotions. Interest in the product gets generated that enables potential customers obtain more information about the product. Next, judging the value of a product by the customers. Last comes the the trial stage where the customer tries out the product before finally making it their own. Not just everyday products, top quality premium product also require strategic communications with the customers through creatively crafted advertisements, sales promotion and publicity.

Vishal Sethi (2006) presented his own edited work on 'Communication Services in India 1947 to 2007'. He observed that development of communication infrastructure is extremely significant for growth of vital sectors of any nation like agriculture, industry etc. The demand for telecommunication facilities continuously

thereby surpassing growth aspects and creates a condition of shortage and congestion. Due to high cost of facilities and poor quality of services he identified that capacities should expand more rapidly than demand generation. At the same time competition should also be introduced so that quality of services can improve and encourage induction of new technology. Communications has become gained importance because its potential has direct impact on rest of the economy.

Rao U. S. and Sai Sangeet (2007) in their study titled “Strategies for succeeding at the Bottom of Pyramid (BOP) market in Telecom Services Sector” discuss the opportunities of marketing in telecom services among the poor ones who actually represents the bottom of the economic pyramid. The authors cited C. K. Prahalad and Allen L. Hammond (2002); denotes that around 4 billion people in the world at the bottom of the economic pyramid with a purchasing power of USD 1500 per year or less. The bottom of pyramid holds the untapped market with humongous opportunity waiting to be churned. Researchers propagate that BOP consumers may fit into the role of intermediaries. The main challenge is to identify and accept the uniqueness of these markets. Only than a suitable strategy can be developed which could cater this segments’ needs. They suggested that these consumers should be pushed higher up the value chain by a process of co-creation so that it can benefit both the company as well as the BOP community. By working closely with their customers, service providers can co-create value and deliver innovation that will form the basis for a competitive advantage and mutual success.

Sridhar Varadharajan (2007) studied the factors affecting growth of mobile telecom services in India in his study. He observed that quick deployment, competition, advancement in technologies, and reduced prices have propelled the growth of mobile services in India. As per his findings, traditional factors such as income, population and fixed line penetration do not have any significant impact on the growth of mobile subscription.

Chirag V. Erda (2008) in his paper based on comparative study between rural and urban mobile consumers indicated that the rural customers are lesser conscious about quality, functions and brand in comparison to urban customers. For



rural consumer, their sources of information are mostly friends, TV, and mobile phone retailers. Therefore, the author strongly argues to utilise the immense potential of rural market in India by developing specific marketing strategies and action plans addressing the complex set of factors influencing consumer behaviour. As per the author, rural marketing may never become successful if it merely represents modifications in the urban marketing strategy and plans.

Nag A. (2008) in his book on Strategic Management asserted that marketing strategy is a part of business or corporate strategy. Corporate strategy gives broad directions on how company should be looking for business opportunities and investment. Marketing strategy focuses on effectively competing in a market place. Corporate strategy relates with organisational and operational areas such as manufacturing, marketing, finance, human resource, etc. On the other hand, marketing strategy is more consistent with overall company's objectives and goals in terms of growth, market share, product-market diversifications and profitability. The internal competences furnish the companies to face the external environment part from other factors for formulating and implementing marketing strategies. The author also quoted Peter F. Drucker- 'Business has only two basic functions - Marketing and Innovation'. The environmental factors to be considered by a business strategist are factors- political, economic, sociological, government policies, technology, competition, intermediaries and suppliers. As per author, a basic marketing plan should consist of key targets, situation review, SWOT analysis (Strength, Weakness, Opportunities and Threat) to achieve targets and marketing mix to achieve the final strategy and action plan. He described five key factors that influence consumer buying process. These key factors are, product/brand, buying situation, customer motivation, role agents in decision making, social and personal factors. He described segmentation and its importance in detail. Segmentation is the first step in developing strategy and key to position a product and determining the domain or boundaries of competition. On differentiation, he asserted that is a base strategy in marketing. Every company must project its marketing package differently from its challengers or competitors to be acknowledges ad different from the rest. It can be done in many ways using technology, raw material, product,

quality, packaging and services etc. Assembling and managing the marketing mix is the basic task of marketing while blending the marketing mix into a winning combination is a clear matter of strategy. In services marketing, certain specific strategies are must be dealt with intangibility, heterogeneity, inseparability and perishability. In a comprehensive marketing strategy for services the role of 'people factor' is highly significant.

Khanna and Gupta (2009) in their article 'Uptake of 3G Services in India' observed the significant potential of 3G technology in India-rural and urban areas. The beginning of 2009 was marked by a momentous roll out of third-generation (3G) networks in Indian telecom market. They forecasted that if the availability of 3G is coupled with reasonable price plans, affordable handsets and attractive services, it could revolutionise the Indian telecom market. The techno- savvy urban telecom subscribers will adopt 3G services in no time. There is immense potential in rural india due to inadequate fixed line infrastructure for mobile broadband services. It can be applied in areas such as agriculture, healthcare, education and governance. They included an Evalueserve estimate in their study that the total mobile subscriber base in India will reach nearly one billion by end of 2013; about 275 million Indian subscribers will use 3G-enabled services while the total number of 3G-enabled handsets will reach close to 395 million by the end of the year 2013.

Raja B. Shekhar and Udaya Bhaskar N. (2009) studied the impact of celebrity promotion on consumer behaviour in relation to prepaid mobile service providers, particularly Airtel, Reliance, BSNL, Vodafone and Idea in selected urban and semi urban areas of Andhra Pradesh, India. The study highlighted most important five factors that influence consumers to purchase a telecom subscription. These five factors are call rates, clarity of voice, good signals, network coverage, and value added services. Their study concluded that celebrity endorsements generate more purchase intentions and maintain positive attitudes toward the advertisements in urban areas in comparison to the semi urban area.

Sidharth Sinha (2009) in his study on Corporate Governance of State-Owned Enterprises: The Case of BSNL observed that Economic reforms and liberalisation

have converted BSNL and MTNL from state-owned monopolies to the telecom players in a highly competitive market without any social and non-commercial objectives. This means they will be run like other private sector telecom companies if they have to survive and prosper in the growing competition. He observed that the government's Navaratna policy is not appropriate for State Owned Enterprises competing fiercely with the private sector because of limited autonomy granted on the basis of size, profitability and a nominal listing. These firms need autonomy because they have to compete on an equal footing with the private sector. All parts of the government, starting from the prime minister and extending to various government committees, recognise the need for autonomy with appropriate corporate governance. The key necessity here is a competent board vested with adequate powers. The role of the board would be more crucial than that of private companies. Considering the historical legacy this needs a complete break from the current system of SOEs being controlled by sector ministries. This control needs to be passed on to an independent agency or to the finance ministry. In the absence of specific corporate governance changes privatisation will remain as only alternative.

A.Vijayendra., Dr.Bhargav. , S.V.Ramachandra (2013) - A study of repositioning strategy for BSNL brand In Indian telecom market. BSNL shall have to reposition their brand image of the whole "company and products, services" as whole and a single popular unchallenged and incomparable entity in the minds of Indian telecomm customers to regain their monopoly position in telecomm sector. The research paper speaks that the aspirations and expectations of present young generation has to be met with the quality of the product and services of the company and at the same time have to satisfy their esteem, style, life-style, fashion, and prestige of possession "needs". Way back in 1980's HMT shifted its brand building activity from "slow and study, sturdy, strong durable costly manufacturing machine tools and machines" represented in its ads with elephant to "new brand image" with cheetah ( animal ) to represent "fast , dynamic, flexible, automated, computerized, competitively priced machines" and won the market from its Indian ( Coimbatore-Ludhiana ) and imported ( basically from Japan and Germany) competitors. So such an exercise needed to give a new life to BSNL brand.

Abhinanda Gautam (2013) pursued research on A study on (below the line) promotion strategies of telecom industry in western (Up) circle (India) with special reference to Reliance Communications. Study aimed to understand the promotion strategies practiced by Reliance Communications in Western (UP) region of India. The finding revealed that the promotion of Reliance Communication's products (goods and services) have a significant impact in increasing sales. Attractive Schemes, Special Season Offers, Group Schemes, and innovative advertisement are used by Reliance Communications as tools to throw back the competition and increase their own market share. One interesting finding related to the expenses meant for promotions incurred by Reliance Communications for the distributors participating in sales promotion activities through regular promotional schemes, road shows, event sponsoring, were only allowed if these activities were exclusively meant for the promotion of company's product and services. Not specifically for distributors. This strategy suggests aggressive and focussed approach of Reliance communications. Abhinanda Gautam in his another study on *The Impact Of Above The Line Promotion Tools Used In The Telecom Sector - A Case Study Of Reliance Communications In Western Uttar Pradesh Circle*, identified that 'above the line' promotional strategies adopted by Reliance Communications have an positive impact on their sales revenue. They chose RCom for this study because it had emerged as a market leader with maximum penetration in the telecom market of Western U.P. Circle. Reliance Communication applied the principles of cost leadership, differentiation and strategic focus, manufacturing economies of scale, and innovative marketing strategies to attain global competitiveness. The findings of survey suggested that aggressive marketing campaigns or strong above the line promotional activities majorly helped RCOM to lead the telecom market of Western (U.P) circle continuously. Study also pointed out that Internet advertisement would give a wider scope to promote telecom products and services in the future in Western (U.P) Circle.

Bhandari and Kaur (2013) attempted to explore the factors and marketing strategies of telecom companies in India in their study that influence the satisfaction levels of customers. Their study is based on telecom users in Chandigarh, Mohali

and Panchkula cities. They took service quality, price, brand image, value offered, switching cost, and customer loyalty as factors to predict satisfaction of customers. Results of their research reveal that customer satisfaction is enhanced by positive marketing strategies.

Jaimini. H Dave (2013) explains opportunities and limitations of Indian Telecommunication Industry. His research points out that expanding Indian economy, focus on service sector, young aged population mix, urbanization, increased incomes, Increase in telephones, wireless and broadband connections, FDI inflow etc account for opportunities. Low teledensity in rural areas, limited spectrum availability, falling Average Revenue Per User, availability of new user connections at almost no cost. India has great potential for tremendous growth in future.

Vijayendra and Ramchandra (2013) investigated the challenges of marketing of goods and services by BSNL, an Indian Government Corporate. They explain that despite of having large potential network and distribution of BSNL, the marketing skills and communication abilities are less equipped and needs to be drastically improved. It has an edge over private players due to the backing of Government. It can reach to remote village areas and capture landline, mobile and internet service market. However, private players are slowly but steadily penetrating this market to take away the piece of pie from BSNL. There is an urgent need of effective new brand building strategy and image to save its presence. Its monopoly in landline market is being threatened by entry of players like Airtel and Reliance.

B.K. Suthar, R. Lathangi, Dr. Shamal Pradhan (2014) in their study on Impacts of Marketing Mix and Customer Perception on Brand Loyalty examined the relationship between marketing mix and customer perception on brand loyalty in context to Bharat Sanchar Nigam Limited, Vadodara. The study concluded that brand loyalty and 4Ps are positively closed with each other from customer perception point of view. Study thoroughly examined each aspect of marketing mix and related it with brand loyalty.

Sabu V.G (2015) has done in depth study on advancements of telecommunication services in Kerala. His focus in the study was on BSNL as service provider in the region. He pointed out that basic essentials of a product are its core functional benefits and stressed on maintaining high quality in customer support and services in order to lift the product. Therefore, telecom companies should position their product as per the specific target segment. Referring to price strategy, he mentioned about price war during mid 2000 in Kerala when multiple telecom players were competing to attract customers. In that period a variety of tariff plans, Special Tariff Voucher (STV), free SMS & calls packages, low cost access to internet etc were launched by different players. Place (Distribution) strategy has its own impact on customer's buying decision. Private players intensively distributed their products at all outlet to reach target customers while public sector player BSNL had exclusive outlet only for its products. Promotion strategies include a mix of sales tools. Prominent amongst all methods were direct calling to the customers to promote offers and free trials of service. Utilising internet for effective marketing is a touch point for internet savvy customers.

Pawan Kalyani, (2016) An Empirical Study on Reliance JIO Effect, Competitor's Reaction and Customer Perception on the JIO'S Pre- Launch Offer, finds the effect and awareness about the Jio offer and what are the offerings made by the competitors like Vodafone, Airtel, BSNL etc. what is the marketing strategy opted by the Reliance Jio to capture the market and what could be the possible effect could be seen after the launch of Reliance Jio. The power of smart phones is the guiding light for the mobile revolution with the support of technology like 4G. Mobile has become a powerful tool for Communication, Data Store, Entertainment, Personal Digital Assistant, GPS Tracking, Internet, Games, Music, Video Streaming, Instant Messenger, Social Communication, E-Mail, Browsing, T.V. Channels etc.

R. Kulkarni, P. Angadi, S. Doddagoudrav (2016) emphasize on sentimental factors playing significant roles in making a buying-decision. According to their study on 'Anthropological Marketing Strategies by Indian Telecom Operators' the telecom market is characterized by relationship-oriented decision making. Thus, the

Indian telecom operators design their Products, packages and Promotional Campaigns, such that they influence the sentimental factors in decision making. In this study some of the most popular schemes strategically launched by telecom players is analysed. For instance, friends and family offers, Closed User Group (CUG) schemes, relationship based marketing communications offering free night calls, Free messaging services such as Whatsapp, other messenger services etc, if the subscriber is using their pre or post paid services.

### **STUDIES RELATED TO INTERNATIONAL TELECOM INDUSTRY AND MARKETING STRATEGIES**

Roland T. Rust et al. (2004) proposed that customer equity is made up of three components namely, Value equity, Brand equity and Relationship equity. Four key drivers of relationship equity are loyalty programs, special recognition and treatment programs, community – building programs and knowledge building programs.

Tomi T. Ahonen et al. (2004) explained in their book ‘3G Marketing – Communities and Strategic Partnerships’ how the telecom service providers in 1990s underutilised marketing. They only focused on rapid expansion of capacity and connecting new subscribers without being visionary of future. The success in third generation technology depends largely on successful strategic partnership right from market intelligence to sales channel support. The authors observed that when customers become more educated and aware about a product, they become very selective with choice of operators, When more players enter the mobile telecom markets, the marketing tools and processes required to be regularly refined and upgraded. Operators must refrain from offering everything to everybody under similar situations. To create profitability and right customer orientation, a focussed marketing efforts and strategic segmentation is required. According to the authors the next generation wireless will be all about marketing but technology.

Aaker A. David (2005) in his book ‘Strategic Market Management’ discusses that three things will specify strategic options. First is Value propositions which is not limited to functional benefits but can include social, emotional and self-

expressive benefits. Second is sustainable competitive advantage. Third is those Functional strategies and programs that support the value proposition and development for enhancement of the assets and competencies. The author further stated that segmentation is often the key to developing sustainable competitive advantage. In strategic context, segmentation means the identification of customer groups that respond differently from other groups to competitive offerings. The development of a successful segmentation strategy requires the conceptualisation, development and evaluation of a targeted competitive offering.

Dan Steinbock (2005) explains about the explosion of mobile communication services worldwide in his book. It explains about the growth of multimedia messaging services, location based services, mobile phone television and mobile value added services in 3G and 4G platform in the markets of Europe, United States and Asia Pacific. The author detailed the history about the evolution of wireless telephone. The author expects India to be a significant engine of global subscriber growth among South Asian Countries. He suggested that operational effectiveness and strategy are two fundamentals for any company to differentiate itself from the competition. With strategic positioning a company may use mobility, among other things to provide different array of services or different customer relationship arrangements.

John W. Mullins et al. (2005) stated that market orientation has significant positive effect on various dimensions of performance, including return on assets, sales growth and new product success. The guide lines for market oriented management includes creating customer focus, listening to the customer, defining and nurturing distinctive competence, defining marketing as market intelligence, targeting right customers, managing profitability making customer value high priority, let the customer define the quality, measure and manage customer expectations, build customer relationship and loyalty, define business as a service business, commit to continuous improvement and innovation, manage culture along with strategy and structure, grow with partners and alliances, and destroy marketing bureaucracy. The primary focus of marketing strategy is to allocate and coordinate resources and accomplish the firm's objectives within a specific product market.



Therefore the critical issue concerning the scope of marketing strategy is specifying the target markets for a particular product. Further, firms seek competitive advantage and marketing mix elements (the 4Ps of product, price, place, promotion) accustomed to the needs of potential customers in that target market. Author has also shredded light on The product life cycle (PLC) as a concept that holds a product's sales change over time in a predictable way and that products go through a series of five distinct stages of introduction, growth, shakeout, maturity and decline. The PLC concept is extremely helpful for management to look into the future and anticipate the changes for strategic marketing programs.

Jun Xue and Bin Liang (2005) studied the customer loyalty of Chinese telecommunication industry. They observed that the key factors of customer loyalty of Chinese telecommunication industry are service quality, trust, switching cost and staff loyalty. Authors have argued when customers are provided high quality of service it leads towards customer loyalty. In this process, trust of customer plays an important role. In general, cost of switching bears no obvious influence on long-term purchase. However, influence on loyalty brought by the switching cost should not be neglected. Staff loyalty is also an important reason that influences customers' loyalty indirectly.

Mark Daniel (2006) explained business strategy as the art and science of informed action to achieve a specific vision. The author has stated that the ability to drive customer relationships to a higher level is an essential element in strategic assessment and valuation. For a sound strategic evaluation, all the variables of product, brand and services have to be taken into consideration. Competitive differentiation in the fields that affect customers and the business system are a critical end point of any successful strategy. Those options which genuinely create *clear water* between a business and its competition will also yield both immediate and future value for that business.

Tanguturi and Harmantzis (2006) in their research paper titled "Migration to 3G wireless broadband internet and real options: The case of an operator in India" gave a detailed description of the different generations of mobile communications.

The paper primarily focuses on third generation telecommunication technology. The authors presented the evolutionary migration path from second to third generation systems. They also proposed technological, economic and behavioural factors related to decision-making towards this migration. This paper has presented the case of BSNL's service offerings to its customers, its strengths and its market position.

Chatura Ranaweera (2007) challenged in his research paper titled 'Are satisfied long-term customers more profitable? Evidence from the telecommunication sector' that the traditional dominant view that customer satisfaction ultimately leads to the customer loyalty and these loyal customers turn into profitable ones in future. Companies thus strive to establish long-term customer relationship building based on the belief that long-term customers with positive attitudinal dispositions better at giving profits than rest. Results of researcher's study indicate a different possibility. Above mentioned common belief may be dubious. While some effects of satisfaction and duration on behavioural intentions were found to support predominant beliefs in research, the final results obtained were mixed. Such that the long-term customers might not necessarily be more profitable than new customers. The researcher obtained data for this study through a large scale survey on 3,000 landline telephone customers located in South-Eastern England. These findings proves to be significant for businesses who formulate their marketing strategies with the fundamental aim of establishing and maintaining long-term customer relationships with a belief that long-term customers having a positive attitudinal disposition are going to be future profitable customers.

David L. Kurtz and Louis E. Boone (2007) described the strategic implications of marketing in the 21<sup>st</sup> century in their book 'Principles of Marketing'. Authors have discussed that unique and never seen before opportunities have emerged out of E-commerce and computer technologies in telecom markets and related businesses. Organisations are now able to reach new markets due to these innovative technologies. The cost of sale and marketing has also reduced and relationships with customers have enhanced drastically because customers can now reach whenever they aspire to. This has also refined their relationship with their suppliers. This essentially requires marketers to become more be creative and

critical about their electronic environment. They must be constantly searching ways and ideas to create and keep the customers loyal customers more so over on a individual direct basis. The marketers should perform this faster and better than the competition maintain ethical standards at the same time.

Hugh Burkitt and John Zealley (2007) observed in their study that in a comparatively bigger globalised organisation marketing function faces enormous challenges. Competition is more intense as such in every industry. However, current marketing landscape is most complex that it has ever been. They recommend that due to the media fragmentation and consumers' segmentation a more sophisticated and differentiated strategies would work better. The characteristics of a great marketing involve clever research and insight, innovative product development, internal marketing, informative and attractive marketing communications and a new approach towards distribution. They also assured in their study that, it is possible to translate a niche positioning with the right strategy into a mainstream proposition.

Samantan S. K. et al. (2007) empirically proved that there exists a strong negative correlation between access price and penetration of subscription for mobile telecom services in developing and developed countries. The call charge has less of an impact on the penetration. This access price or fixed monthly fee for mobile services is the major factor that governs the percentage of people subscribing (penetration) to the services.

Xavier M. J. (2007) in his book, 'Strategic Marketing: A guide for developing sustainable competitive advantage' described various ways to evolve an appropriate business strategy. These methods are; Long term planning for the firm, Capability /opportunity fit, Planning to gain competitive advantage and *Copability* (copying + ability) in a turbulent environment. The author suggested that the marketing mix elements offered by the competitors may be useful to analyse the relative strengths and weakness of own offerings. He observed that advances in telecommunication and IT (Information Technology) have reduced the barriers of time and place for business. He also described various models to fight the competition.

Abdolreza Eshghi et al. (2008) in their study identified the intrinsic service related factors and their impact on repurchase intention, customer satisfaction and recommendation of services to others in mobile telecommunications market of India. According to their study, the underlying dimensions by which Indian telecom customers assess the quality of their service are relational quality, competitiveness, reliability, reputation, support features and transmission quality. They examined the impact of these six factors on repurchase intention, customer satisfaction, and recommendation of services to others. They found that relational quality, competitiveness, reliability, reputation and transmission quality factors appear to be crucial predictors of customer satisfaction whereas repurchase intention is influenced by relational quality, competitiveness, reliability and transmission quality. On the other hand relational quality, competitiveness, reliability, reputation and transmission quality appeared to be key predictors of recommendation of services to others.

Aithal and Mukhopadhyay (2008) analyse marketing issues in India and experiences gained from other countries in their study. It attempts to understand why telecom players have not been able to make effective entry in rural market. A major challenge faced by telecom players in rural markets is low and spread out population. In addition, rural people have low purchasing power making it a difficult market to be captured. Study creates a base with Bottom of pyramid marketing strategies and 4A's Model to tackle the marketing issues in rural areas and overcome the barriers. Various studies quoted in this research have revealed that rural income is affected by agricultural growth rate. When crops yield well, purchasing power and disposable income for that period increase. When yield is low, consequently disposable income is also low. Therefore, marketing strategies should be in sync with agricultural growth and monsoon. Besides, needs of rural consumer may be different from urban user. Gap between urban and rural masses can be addressed by following 4A's Model of Availability, Affordability, Acceptability & Awareness. Study has mentioned experiences from other countries such as in Bangladesh, Grameen Phone captured 63% of the mobile market, Smart Communications Inc in

Philippines penetrated 30% of mobile market using air payment system. Similarly, Rural Communications, Chile showed effective govt. Leadership.

Dong-Hee Shin and Won-Yong Kim (2008) investigated switching barriers under the mobile number portability (MNP) in the U.S. mobile market. The findings indicate that subscribers' intent to switch are significantly affected by level of satisfaction, switching barriers and demographics. Among these three, switching barriers influenced most significantly, which raises question on the effectiveness of MNP. The MNP in the U.S. telecom market is going to be a game in bringing down the switching costs which can increase the level competition among providers.

Kevin Lane Keller (2008) explained in his book 'Strategic Brand Management' about brand building, brand measuring and managing brand equity. To define Brand, he cited American Marketing Association (AMA) definition; A brand is a 'name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition. The strategic brand management process involves four stages, namely, identifying and establishing brand positioning, planning and implementing brand marketing programs, measuring and interpreting brand performance and lastly, growing and sustaining brand equity. Author has also discussed about Young and Rubicam's development of its Brand Asset Valuator (BAV). It evaluates brands on five fundamental components of equity value and in terms of a broad array of perceptual dimensions. These five fundamental components are as follows:- First, Differentiation, to measures the degree upto which a brand is seen different than others. Second is Energy which measures the brand's ability to meet future consumer needs and attracting new customers. Third is Relevance to measure primarily the breadth of a brands' appeal over its profitability. Fourth component is Esteem that measures the respect a given brand has earned and how well it is regarded. Basically how well it is liked. Last component is the Knowledge that measures level of familiarity and intimacy of consumers with a given brand.

Michael J.R. Butler (2008) determines the emerging field of neuro-marketing as a knowledge which has malleability. Researcher explains that having different perceptions of knowledge is not a new issue, but finding new interconnections between those perceptions is beneficial for creating knowledge and diffusion. The research–practice gap in neuro marketing was briefly discussed in this study and the proposal of a novel Neuromarketing Research Model was put forward. The Model interconnects basic research reporting, applied research reporting, media reporting and power processes.

Barrena and Sánchez (2009) in their research paper titled ‘Using Emotional Benefits as a Differentiation Strategy in Saturated Markets’ discerned that often the high level of product substitution in majority of consumer markets makes it rather difficult to match supply with demand. It happens especially in the mature and saturated markets where competition is intense with a high degree of product differentiation. The difficulty of using technical characteristics suggests that marketers could profit more if they could gain proper insight into the way which influenced consumers’ purchase decisions by their perceived emotions. The results reveal a certain degree of complexity where decision making process of consumers was assessed. The purchase decisions of each segment in study were found to involve different attributes, consequences and values. Thereby confirming the positive segmentation process based on the emotions perceived at the time of purchase. Their study also pointed out that psychological issues are gaining weight in the decision making process. It increases complexity in the process as the number of perceived emotions multiply.

Lifang Peng and Xiaoli Zhang (2009) in their study of service innovations model for Chinese telecom operators chose China Mobile Ltd. as an example. They analysed telecom operators’ environment in China and opinionated that service innovations determine success or failure of corporate operations. More and more customers can be retained by continuously promoting the service innovations, improving service quality, offering more value to customers and gain competitive advantage.

Philip Kotler et al. (2009) stated that it is the marketer's task to devise marketing activities and assemble fully integrated marketing programmes to create, communicate and deliver value for customers. The authors cited McCarthy's (2002) classification of these activities as marketing - mix tools which he called the four Ps of marketing; Product, Price, Place and Promotion. The book asserts that the formulation of marketing strategy is primarily based on these four elements of marketing mix.

Udechukwu Ojiako and Stuart Maguire (2009) in their case study based on principles originating from a customer experience program conducted at British Telecommunications (BT) defined that the customer experience as an articulation of the personal interaction, experiences, memories and opportunities that an organization provides to its existing and potential customers. It substantially exceeds their expectation to a degree that a lifelong relationship is established between the customer and the service provider. In general, these experiences may be assessed from various perspectives such as products, services, care, functionality, applicability and the ease of use, reliability, advertising and packaging. According to the researchers only an amalgamation of improved processes, products, services, and systems combined with a change of culture, behaviour, and business outlook, any company can deliver the improved services to its customers. In order to understand best practices this study investigates how customer-oriented strategies are able to facilitate the enhancement of service experience. This paper has implications for all the organizations that are related with the retention of existing customers and the acquisition of new customers in their business environment. The case study revolves around the need for organizations to realise and recognize that change strategy needs to be systematically designed, planned and implemented in order to produce a desirable and predictable outcome. The key part of this strategy formation is to get inside the minds of their customers.

Jarmo Harno (2010) investigates the challenges diffused with 3G Telecom systems where large-scale mobile data service usage has not yet broken through. The paper initially observes the incumbent mobile operator business prospects in a large Western-European country. Their results suggested that rollout of the

advanced third generation technologies pay back by increasing data service usage when voice revenues are declining. The study discusses different pricing models and demonstrates that the flat rate pricing of data services, supplemented with certain conditions, supports the large-scale take-up of mobile data services. Advanced third generation technology will increase usage of mobile data services and provide a competitive business model for the operators and sustainability for other market factors simultaneously.

Philip Kotler et al. (2010) introduced Marketing 3.0, a value driven marketing concept of new generation. The concept of marketing 1.0 adhered to the product; marketing 2.0 concept was customer centric. In marketing 3.0 concept, the objective of marketing is simply to make the world a better place. The companies are required to observe the entire market as their customers with whole mind heart and spirit because that's where value proposition would happen. It would evoke at emotional and spiritual level. The marketing 3.0 concept has concerns for consumers, employees, channel partners and shareholders. The doctrine of Marketing 3.0 rests on basic essence of values, such as; love your customers and respect your competitors; deliver great value to customers by touching their emotions and spirit rightly. They have quoted Donald Calneas: "The essential difference between emotion and reason is that emotion leads to actions while reasons lead to conclusions". The new value based marketing concept demands from companies to respect competitors essentially because due to them the whole market spreads and magnifies. In absence of competitors any industry will face a sluggish growth. New concept recommends to be sensitive to change and always be ready to transform because underneath lies the secret of ongoing success. The organization should first recognise their value proposition. Then they must make them values very clear and should never surrender them. Customers tend to purchase the a product that has a stronger brand reputation. Another understanding demanded under new concept is that customers come with complex diversity. Next, package need not only to be good but it should also be offered at a fair price because where product and price just match, true marketing happens. Marketing 3.0 concepts expects companies to embrace the digital presence in market and save them from



getting divided into digital companies and non digital companies. If they accept the digital way, it will grow their customer base. Their digital/electronic presence will always make make the company available for the customers. Attracting the Customers is the key. To achieve this, its important to understand customers for life by ensuring the delivery of deep rational and emotional satisfaction to them. Another significant aspect is of Service. Customers deserve to be served with complete empathy, so that they always possess good and positive memories from the company. Refining the business process in terms of quality, cost and delivery should be ongoing never ending process. Even if it causes any loss, company should never engage in deceit or dishonesty when it comes to quality, quantity, delivery time or price. Lastly, wisdom goes the long way.

Potluri and Hawariat (2010) studied Ethioian Telecom by assessing and reviewing their services offered to fixed-line telecom customers' perception of the quality of after-sales services. The found out that major reasons of customer dissatisfaction were lack of clarities in invoices and bills, delayed resolving of complaints, telephone interruptions due to various factors such as weather conditions, old cables and networks, damaged and stolen cables, frequency of faults and interruptions. In their study, almost 40 per cent of respondents had negative assessments of the role of employees in delivering good quality after-sales service.

Tripathi and Siddiqui (2010) conducted an empirical investigation of customer preferences in mobile services. Their study explains how consumers reason with available attributes at the time of selecting a mobile service package. The researchers have identified six specific attributes namely connectivity of network, customer service, tariff of mobile services, variety of plans, value added services and technology deployed by network. The customers agreed with great importance to the connectivity of network attribute, followed by customer service and tariff of mobile services. Variety of plans, value added services and technology deployed by network held low priority for customers in the study.

Victor Danciu (2010) in the research paper 'The Gravity Law of Marketing - A Major Reason for Change to a Better Performance' explained that companies develop marketing strategies for mere cause of success. However, no strategy stands

fruitful forever. Even the most successful strategies wear out with time and lose their impact on the performances of the company. He described this phenomenon is known as strategic drift or wear-out. There is a mutual attraction between the marketing strategy and the performance of the company. This phenomena is known as the law of marketing gravity. When a marketing strategy begins to lose its impact on the marketing performance, a fundamental change is required as a result of law of marketing gravity. His study point out that companies must recognize the limited viability of their marketing strategies, identify the causes of the strategic wear out and implications of the law of the marketing gravity. Once a marketing strategy loses its impact, a fundamental change to recapture the lost position is needed in order to avoid the risk of lowering the loyalty of customers and of competitive oblivion. The starting point of such a change generally involves a new marketing thinking.

Ho Kyun Shin et al. (2011) studied the relationship between consumer's preference and service attributes in mobile telecommunication service in Uzbekistan. The study investigated the telecom subscribers' behaviour and perception towards company's loyalty, call and service quality, mobile phone expenses, and pricing. The pricing recorded high importance in almost all demographic groups. In a country, where prices are relatively high compared to salaries, pricing will always play the main role when selecting a mobile service provider. The service quality has significant impact on customer satisfaction. The authors suggested that offering discounts can concretely compensate customers; mobile carriers can grow their subscribers' base and maintain current subscribers.

Robert Wollan (2011) observed the importance of word of mouth across social media in his study. It is the source that customers use the most when deciding whether to do any transaction with a service provider or not. Therefore, he suggested that service providers should consider following principles when devising differentiated offers for customers. Firstly, company should know the customer like never before. It is important to understand the demographic variables within each segment, including income, age, education, job status, as well as the behavioural profiles. Secondly, they must make the offer clear and easily understandable. It

should be presented to the customer in his own language to avoid customer confusion and frustration. Lastly, keep track of the offers to determine which of them is effective to encourage regular customers to spend more. Always examine social media platforms to keep a track of what positive and negative things customers are saying to their friends and acquaintances about the offer.

Skip Rizzo A, Lange B, Suma EA, Bolas M., (2011) Virtual reality and interactive digital, game technology: new tools to address obesity and diabetes. The convergence of the exponential advances in virtual reality (VR)-enabling technologies with a growing body of clinical research and experience has fuelled the evolution of the discipline of clinical VR. This article begins with a brief overview of methods for producing and delivering VR environments that can be accessed by users for a range of clinical health conditions. Interactive digital games and new forms of natural movement-based interface devices are also discussed in the context of the emerging area of exergaming, along with some of the early results from studies of energy expenditure during the use of these systems. This may change in the future as new advances in novel full-body interaction systems for providing vigorous interaction with digital games are expected to drive the creation of engaging, low-cost interactive game-based applications designed to increase exercise participation in persons at risk for obesity.

Carol Chelimo (2012), in the research project titled Positioning Strategies Used by Firms in the Telecommunications Industry in Kenya attempted to determine the positioning strategies applied used by Telecommunication firms in Kenya in highly competitive environment. From the research, it was established that most telecommunication firms are preferred by customers because of their competitive prices, product characteristics, technological advancement and superior product characteristics as this affects positioning to a greater extent. Formulating competitive brand strategy is an important problem for marketing managers but how these strategies are positioned is more important because strategies can always be replicated by competitors. When a firm or provider establishes and maintains a distinctive place for itself and its offerings in the market, it is said to be successfully

positioned. Success of a company will depend on its ability to quickly modify strategies and position themselves in the minds of the customer.

Rahul Venkatram , Xue Zhu (2012) in their case study on India and China titled *An analysis of Factors Influencing the Telecommunication Industry Growth* researched the most influencing factors affecting the Telecommunication industry growth, by analyzing data for both Chinese and Indian Telecom industries. China and India are among the largest and fastest growing economies in the world today, which share some key common elements. For example: geographically they share the same continent and are separated by a common border, demographically they are “giants”, with populations exceeding one billion, and historically the two countries have a rich and long history, making them world leaders until the 19th Century. Their development is also somewhat similar in economic terms although their economic growth differs in timing, intensity and key characteristics of development processes. Both China and India, in their own terms have different combinations and flavours of influencing their industries. In general, it can be observed that, while the Chinese government is concentrating on developing their domestic telecom firms and helping them expand globally, the Indian government is focusing on the reach of this industry to rural and remote areas within the country to help improve the connectivity and basic infrastructure.

Animashaun Rilwan, (2013) in the Case study of MTN Nigeria titled ‘*Marketing Activities And Its Implications On Telecommunication Industry In Nigeria*’ studied about telecom industry in Nigeria. The telecommunication in Nigeria came into more light and frame after many years of military rule which made ways to the democracy in the country, on the 29<sup>th</sup> of May, 1999. This brought about many changes in the country, the history and economic growth as well. This study emphasized the basic needs of the market or marketing in the telecommunication industry in Nigeria and the challenges facing this company (MTN Nigeria) regarding the decision of their marketing activities in the country. The study concluded that MTN Nigeria is more innovative in their idea and product than its competitors in the market and making MTN Nigeria number one in the sector. Advertising is the tool used by MTN Nigeria in its promotion strategy,

which is more preferable than another means of promotion strategy. Finally marketing activities enable companies like MTN Nigeria to reach its final objectives and goals, which enable the MTN Nigeria to satisfy its customers.

Yin, Jiarong, Bingqian (2013) they presented a case study of differences between broadband price and area in China titled -Marketing and Price strategies for China Telecom Company and explored the relationship between the cities' GDP and prices. This refers to the use of China Telecom Company's broadband prices and the information from three different areas. Study concludes that the cities' GDP is one of the reasons for setting prices. This thesis focuses on prices, so we suggest that China Telecom Company after implementing Network three in one's new business plan, they formulate prices based on customer values, costs, competitors' prices, customer behaviors and cities' GDP. China Telecom Company service prices should not be beyond 180 RMB in the new business plan. Focusing on the new business plans, we suggest that China Telecom Company need to take more into account the company Mobile Telephone online (3G) and Broadband serve in new business plans.

Wang and Kishore based their research on Porter's five forces theory and compared China and India's telecommunication market strategies. They compared basic strategies as well as corporate strategies. Their study revealed that Indian telecommunication market took niche market very seriously in comparison to China. A major reason for difference in marketing strategies of both countries is the different government policies. Comparison of micro environment reveals that Indian telecom industry is more competitive and dependent on foreign suppliers. Both industries have same types of customers but China has an edge of international customers. Chinese telecom Industry has only few players. Therefore, they handle their marketing and sales on their own. Whereas Indian industry has large number of private players so the focus is on growth and marketing and sales are dependent on intermediaries. Macro environment comparison reveals that China is ahead of Indian industry due to faster technological advancements and stable political system along with suitable culture for economic growth.

Dr. Jitender Kumar Sharma and Dr. Shahid Husain (2015) in their study on *Marketing Expenses & Profitability: Evidence from Telecom Sector in Kingdom of Saudi Arabia* (2015) focussed on statistical significance of the relationship of Selling & Marketing Expenses with profitability of all the listed Telecom companies in Kingdom of Saudi Arabia for a period of 4 years (2011 - 2014), with a total of 16 firm years. The study concluded that Selling and Marketing expenses hold great significance in companies' profitability. Companies deliberate hard before arriving at selling and marketing expense, as the stakes are high. An effective Selling and Marketing expenses can contribute immensely towards Profitability. It can be concluded that there is a positive correlation among all the independent variables i.e. the selling and marketing expense, dealers' commission, advertising expenses and salary, wages, employee benefits paid to the selling and marketing staff of these Telecom companies.

Oloko, Anene, Kiara, Kathambi, Mutulu (2015) highlighted that no channel is irrelevant when it comes to customer and market. They discussed marketing strategies of Safaricom Ltd. which gave it a remarkable growth in market share and profit in Kenya and East African Region. They studied strategies ranging from Product creation, Price, brand alliance etc to auditory marketing, content localisation and content and structure. Their study deduced that Safaricom uses different methods to promote its services and products to its customers. To enhance a company's performance, capturing new markets and retaining existing ones marketing plays a crucial role.

Abdullah M Hersh and Khalil S Abusaleem, (2016) in their research paper on *Blue Ocean Strategy in Saudi Arabia Telecommunication Companies and Its Impact on the Competitive Advantage*: studied the application of Blue Ocean Strategy at Saudi Telecom companies, its role in achieving a competitive advantage, and the extent of adoption of this strategy by the Saudi telecommunications companies. Blue ocean strategy represents a modern marketing thought which conveys the organization from traditional competition to compete in the region which has been dominated by this organization without conflicts. Telecommunications sector in the Kingdom is considered one of the main and

important services in the national economy, so the competition between telecommunications companies is great and intense. Thus, this study created to find out the ability of these companies to adopt a pioneering and innovative marketing strategy in order to reduce the intensity of the competition and gain market share greater than its competitors, so the problem of study focused on identifying the impact of application blue ocean strategy in the telecommunications companies operating in Saudi Arabia on their competition superiority.

Danijela Kovačević, Aleksandra Krajnović, Dijana Čičin-Šain (2017) in their research on Market Analysis of the Telecommunications Market – The Case of Croatia determine the characteristics and specifics of the telecommunication market in Croatia. Furthermore, by conducting an in-depth analysis of the telecommunication services in Croatia, conclusions will be drawn about the current market competitors, the marketing aspect as well as the legal regulations within this field. The structure of the telecommunications market was considered a natural monopoly in almost all transition countries, including the Republic of Croatia. By liberalizing the market, the monopoly market turns into an oligopolistic one and then into a monopolistic competition. However, by privatizing the state telecom a so-called “quasi-liberalized market” was formed, where an “independent regulator” protects the interests of a privatized telecommunications operator, with a monopoly on fixed telephony services, all of this allowed by the state itself. The “semi-liberalized” market allows for the ability to control the entry of any new entities that are not verified by existing operators. In that way the dominant operators want to secure themselves from potentially.

## **CONCLUSION**

Review of literature of studies published in India and abroad gave the researcher a detailed insight on the subject. It helped in getting clarity on topic and identifying gap in research studies. This chapter provided better direction to the research and designing research for the topic.

**REFERENCES**

- Roland T. Rust, Valarie A. Zeithaml, and Katherine Lemon. (2004). Customer - Centered Brand Management. *Harvard Business Review*, September 2004, pp. 110-118.
- Jha S. M. (2000). *Services Marketing*. Himalaya Publishing House, Mumbai, India.
- Jaishri Jethwaney and Shruti Jain. (2006). *Advertising Management*. Oxford University Press, New Delhi, India.
- Kokil and Sharma (2006), Strategic Flexibility: Study of Selected Telecom Companies in India, *Global Journal of Flexible Systems Management*, Vol. 7, Nos. 3 & 4, pp 59- 66.
- Mathur U. C. (2006). *Strategic Marketing Management - Text and Cases*. Macmillan India Ltd., New Delhi.
- Vishal Sethi. (2006). *Communication Services in India 1947 to 2007*. New Century Publications, New Delhi, pp. 1-14.
- Rao U. S. and Sai Sangeet. (2007). Strategies for succeeding at the Bottom of Pyramid (BOP) market in Telecom Services Sector. Conference on Global Competition & Competitiveness of Indian Corporate, IIM Kozhikode, pp. 1-12.
- Sridhar Varadharajan. (2007). Analysis of Inter-Regional Mobile Services Growth in India. Proceeding of 6th Conf. Telecomm Techno-Economics, Vol. 1, IEEE., pp. 1-6.
- Chirag V. Erda. (2008). A comparative study on buying behaviour of Rural and Urban consumer on mobile phone in Jamnagar District. Marketing to Rural consumers – Understanding and tapping the rural market potential. Conference Proceedings, IIM Kozhikode, pp. 1-14.
- Nag A. (2008). *Strategic Marketing*, (2nd ed.). Macmillan Publishers India Ltd., New Delhi, pp. 7-11, 140-141, 200-201.
- Abhishek Khanna and Nitin Navish Gupta. (2009). Uptake of 3G Services in India. *Evalueserve White Papers*, Evalueserve, Ltd., pp. 1-8.
- Raja Shekhar B. and Udaya Bhaskar N. (2009). A Comparative Study of Celebrity Impact on Consumer Behavior with Reference to Prepaid Mobile



- Service Providers in Select Urban and Semi Urban Areas. *International Journal of Business Research*, Volume 9, Number 1, pp. 103-107.
- Sidharth Sinha. (2009). Corporate Governance of State-Owned Enterprises: The Case of BSNL. *Economic & Political Weekly* Vol. XLIV No 41, October 2009, pp. 47 - 54.
  - A. Vijayendra, Dr. Bhargav, S.V. Ramachandra (2013) A study of repositioning strategy for BSNL brand In Indian telecom market *IJEMR* – May 2013-Vol 3 Issue 5.
  - Abhinanda Gautam (2014) The Impact Of Above The Line Promotion Tools Used In The Telecom Sector - A Case Study Of Reliance Communications In Western Uttar Pradesh Circle, India, *European Journal of Business and Social Sciences*, Vol. 3, No. 4 , pp 29-38.
  - Anuradha Bhandari, Prabhjot Kaur(2013), ‘The Impact of Telecom Marketing Strategies on Customer Satisfaction’, *IRC’s International Journal of Multidisciplinary Research in Social & Management Sciences*, Volume I, Issue -3 (2013), pp.78-82.
  - Jaimini H. Dave, (2013) ‘Strategic Marketing in Global Perspective: Opportunities and Limitation of Indian Telecommunication Industry’, *Paripex, Indian Journal of Research*, Volume 2, Issue: 2, pp. 197-199.
  - A. Vijayendra, Dr. Bhargav .S.V. Ramachandra , (2013) ‘A study of marketing strategies for government corporate to face the challenges of new millennium’ with a special reference to BSNL – Indian Telecom’ (February 2013), *Journal of Exclusive Management Science* –February 2013- Vol 2 Issue 2, pp. 1-10.
  - B.K. Suthar, R. Lathangi, Dr. Shamal Pradhan (2014), Impacts of Marketing Mix and Customer Perception on Brand Loyalty, *Global Journal of Finance and Management*. ISSN 0975-6477 Volume 6, Number 7 (2014), *Research India Publications* , pp. 619-636.
  - Sabu V.G., (2015), ‘A Study on Marketing Strategies of BSNL in Telecommunication Services - A Comparative Study with Private Sector Telecommunication Service Providers in Kerala’, pp. 92-109.

- 
- Pawan Kalyani, (2016), An Empirical Study on Reliance JIO Effect, Competitor's Reaction and Customer Perception on the JIO'S Pre- Launch Offer, *Journal of Management Engineering and Information Technology (JMEIT)* Volume -3, Issue- 5.
  - R. Kulkarni, P.Angadi, S.Doddahoudra, 'Anthropological Marketing Strategies by Indian Telecom Operators', *IJSSHR*, Volume 2, Issue 3, pp. 234-239.
  - Roland T. Rust, Christine Moorman and Gaurav Bhalla. (2010). Rethinking Marketing. *Harvard Business Review South Asia*, January-February 2010, pp. 86-93.
  - Tomi T. Ahonen, Timo Kasper and Sara Melkko. (2004). *3G Marketing - Communities and Strategic Partnerships*. John Wiley & Sons, Ltd., England
  - Aaker A. David. (2005). *Strategic Market Management*, (7th ed.). Wiley India (P.) Ltd., New Delhi, pp. 33, 44-45.
  - Dan Steinbock. (2005). *The Mobile Revolution – The Making of Mobile Service Worldwide*. Kogan Page, London, pp.16-25, 36-38.
  - John W. Mullins, Orville C. Walker Jr., Harper W. Boyd Jr. and Jean-Claude Larreche. (2005). *Marketing Management - A Strategic Decision-Making Approach*, (5th ed.), McGraw-Hill Irwin, New York, pp. 21-30.
  - Jun Xue Bin Liang. (2005). An Empirical Study of Customer Loyalty of the Telecommunication Industry in China. *ICEC'05*, Xi'an, China, pp. 335-342.
  - Mark Daniel. (2006). *The Elements of Strategy: A pocket guide to the essence of successful business strategy*. Palgrave Macmillan, New York, pp. 1-2, 53-54.
  - Venkata Praveen Tanguturi and Fotios C. Harmantzis. (2006). Migration to 3G wireless broadband internet and real options: The case of an operator in India. *Telecommunications Policy*, 30, Elsevier Ltd., pp. 400-419.
  - Chatura Ranaweera. (2007). Are satisfied long-term customers more profitable? Evidence from the telecommunication sector. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 15, 2, Palgrave Macmillan Ltd., pp. 113-120.

- 
- David L. Kurtz and Louis E. Boone. (2007). Principles of Marketing, (12th ed.). South-Western, Thomson Learning Inc., New Delhi, p. 32.
  - Hugh Burkitt and John Zealley. (2007). Marketing Excellence – Winning companies reveal the secrets of their success. Wiley India Pvt. Ltd., New Delhi, pp. 1-7, 52.
  - Samantan S. K., Woods J. and Ghanbari M. (2007). Impact of price on mobile subscription and Revenue. Journal of Revenue and Pricing Management, Vol. 7, 4, Palgrave Macmillan, pp. 370- 383.
  - Xavier M. J. (2007). Strategic Marketing: A guide for developing sustainable competitive advantage. Response Books, New Delhi, pp. 12, 207-214, 254-255.
  - Abdolreza Eshghi, Sanjit Kumar Roy and Shirshendu Ganguli. (2008). Service Quality and Customer Satisfaction: An Empirical Investigation in Indian Mobile Telecommunications Services. The Marketing Management Journal, Volume 18, Issue 2, pp. 119-144.
  - Aithal, R.K. and Mukhopadhyay, A. 'Rural Telecom in India: Marketing Issues and Experiences from Other Countries', Adopting EGovernance, (2008) pp. 271-276.
  - Dong-Hee Shin and Won-Yong Kim. (2008). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. Technological Forecasting & Social Change 75, Elsevier Inc., pp. 854–874.
  - Kevin Lane Keller. (2008). Strategic Brand Management - Building, Measuring and Managing Brand Equity. Pearson Education Inc., New Delhi, pp. 24, 60, 415-416.
  - Michael J. R. Butler, (2008) Neuromarketing and the Perception of Knowledge, Journal of Consumer Behaviour, Vol. 7, pp. 415-419.
  - Ramo Barrena , Mercedes Sánchez, (2009) Using emotional benefits as a differentiation strategy in saturated markets, [www.onlinelibrary.wiley.com](http://www.onlinelibrary.wiley.com)
  - Lifang Peng and Xiaoli Zhang. (2009). The study of service innovations model for Chinese telecom operators - China Mobile Ltd. as an example. IEEE., pp. 669-675.

- 
- Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha. (2009). *Marketing Management-A South Asian Perspective*, (13th ed.). Pearson Education, India, New Delhi, pp. 24-25.
  - Udechukwu Ojiako and Stuart Maguire. (2009). Seeking the perfect customer experience: a case study of British Telecom. *Strategic Change*, 18, Wiley Inter Science, John Wiley & Sons, Ltd., pp. 179 -193.
  - Jarmo Harno. (2010). Impact of 3G and beyond technology development and pricing on mobile data service provisioning, usage and diffusion. *Telematics and Informatics*, 27, Elsevier Ltd., pp. 269-282.
  - Philip Kotler, Hermawan Kartajaya and Iwan Setiawan. (2010). *Marketing 3.0 from Products to Customers to Human Spirit*. Wiley India Pvt. Ltd., New Delhi, pp. 3-7, 169-178.
  - Rajasekhara Mouly Potluri, Mangnale V. S (2010), An Assessment Of Ethiopian Telecom Customer Satisfaction, *Global Journal of Management and Business Research*, Vol. 10 Issue 4 (Ver 1.0).
  - Shalini N Tripathi , Masood H Siddiqui, (2010), An empirical investigation of customer preferences in mobile services, *Journal of Targeting, Measurement and Analysis for Marketing*, Volume 18, Issue 1, pp 49–63.
  - Victor Danciu. (2010). The Gravity Law of Marketing - A Major Reason for Change to a Better Performance. *Theoretical and Applied Economics*, Volume XVII, No. 4(545), Romania, pp. 7-18.
  - Ho Kyun Shin, Andrey Kim, and Chang Won Lee. (2011). Relationship between consumer's preference and service attributes in mobile telecommunication service. *Expert Systems with Applications*, 38, Elsevier Ltd., pp. 3522–3527.
  - Robert Wollan. (2011). The Service Provider - Customer Paradox. *Customer Relationship Management*, March 2011, Information Today Inc., pp. 10-11.
  - Skip Rizzo A, Lange B, Suma EA, Bolas M., (2011), Virtual reality and interactive digital game technology: new tools to address obesity and diabetes. [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)
  - Carol Chelimo, (2012), Positioning Strategies Used By Firms In The Telecommunications Industry In Kenya, <http://erepository.uonbi.ac.ke/>

- 
- Animashaun Rilwan (2013), Marketing Activities And Its Implications On Telecommunication Industry In Nigeria, [www.theseus.fi](http://www.theseus.fi)
  - Xu Yin ,Lu Jiarong .Zhou Bingqian, (2013), Marketing and Price strategies for China Telecom Company and explored the relationship between the cities, <http://www.diva-portal.org>
  - Rahul Venkatram , Xue Zhu , (2012), An analysis of Factors Influencing the Telecommunication Industry Growth, A Case Study Of India and China, [www.diva-portal.org](http://www.diva-portal.org)
  - Chengchang Wang, Abhinav Kishore, Comparative Research On The Marketing Strategies Of Telecommunication Industry In China And India, [www.pdf.semanticscholar.org](http://www.pdf.semanticscholar.org)
  - Jitender Kumar Sharma, Shahid Husain (2015), Marketing Expenses & Profitability: Evidence from Telecom Sector in Kingdom of Saudi Arabia, [www.researchgate.net](http://www.researchgate.net)
  - Margaret Oloko , Enos Bernabas Anene, Patrick Gitonga Kiara, Irene Kathambi, Japhet Mutulu(2014), Marketing Strategies for Profitability: A Case of Safaricom Ltd in Kenya Telecommunication Industry, IJSRP, Volume 4, Issue 5.
  - Abdullah M Hersh and Khalil S Abusaleem, (2016), Blue Ocean Strategy in Saudi Arabia Telecommunication Companies and Its Impact on the Competitive Advantage, [ww.omicsonline.org](http://ww.omicsonline.org)
  - Danijela Kovačević, Aleksandra Krajnović, Dijana Čičin-Šain,( 2017), Market Analysis of the Telecommunications Market – The Case of Croatia, <https://hrcak.srce.hr/file/276264>.



*Chapter-3*  
*Indian Telecom Industry*

## **CHAPTER-3**

### **INDIAN TELECOM INDUSTRY**

---

---

#### **INTRODUCTION**

Indian telecom market is amongst the biggest and fastest growing markets in the world. Telecom has enormous potential for growth in India because still a huge proportion of total population does not have wireless connections. It has attracted a lot of corporate players to enter into telecom industry and avail benefits by serving these untapped segments. This has resulted into intense competition in the industry. To remain competitive, telecom players have been adopting new, innovative marketing strategies and planning strategically for a larger share. This chapter covers the details of major telecom players like BSNL, Reliance Jio, Airtel and Vodafone including history, their relative strength and marketing strategies adopted by them.

#### **3.1 THE INDIAN TELECOM MARKET**

In terms of highest number of telecom subscribers, India scores second position in telecommunications market after China, with over 1.179 billion subscribers including wired and wireless as per the data published by TRAI on 31 July 2018. During FY17-18, wireless subscriptions witnessed a CAGR of 19.62 per cent to reach 1,183.41 million subscribers. India also holds the second place in terms of internet subscribers with 493.96 million internet subscribers, as of March 2018. It is now the second largest smartphone market in the world and projected to touch one billion unique mobile subscribers by 2020. It is expected that revenues from telecom equipment sector will increase to US\$ 26.38 billion by 2020. India's telecommunications market expects further growth, stimulated by more non-voice revenues and increased penetration in rural market. Telecom penetration in rural India reached 56.68 per cent in April 2018. The emergence of a well off middle class is shooting demand for the mobile and internet segments.

Government's strong policies supported a lot for the sector's development. Foreign Direct Investment (FDI) limit has been raised from previous 74 per cent to

100 per cent in telecom sector. National Telecom Policy 2018 projects FDI worth US\$ 100 billion in telecommunications sector by 2022. Also, with a new National Telecom Policy 2018 rapid technological advancements will give a new shape to Indian telecom market.

### **3.1.1 Historical Backdrop**

The telecom revolution in India started gaining momentum after private players were allowed to enter in the industry through privatization in 1990's. The TRAI (Telecom Regulatory Authority of India) was setup after 1995 to deal with regulatory issues and increasing competition. Foreign investment was encouraged. All this paved way for the telecom revolution in India.

Indian Telecom Industry got its birth in India in the year 1850 when the only medium of communication was postal in the country. In the same year the first experimental electric telegraph line was established between Calcutta (now Kolkata) and Diamond Harbour. In 1851, British East India Company started using this line. Afterwards the telegraph lines were made available all over India.

The Oriental Telephone Company Ltd. of England introduced telephone services in India in 1881 by establishing telephone exchanges at Calcutta, Bombay, Madras and Ahmadabad. In 1883 telephone services were merged with postal system. The capital of India got shifted to New Delhi in 1911 up till when Calcutta remained the Indian capital. At that time Public Works Department was responsible for administering the telecom operations in India. During 1902- 1930, a lot of developments took place in Indian Telecom Industry in the form of cable telegraph, wireless telegraph, radio telegraph and radio telephone system. In 1927 one more development took shape in the form of Radio Broadcasting which was renamed as All India Radio in 1937.

After independence Ministry of Communication came into force and it nationalized all foreign telecommunication companies to deal in Posts, Telephone and Telegraph (PTT). Till 1984, Indian Telecom Industry was fully owned by the



Government, private sector was allowed only to manufacture and supply telecom equipments.

Department of Telecommunications (DoT) got separated after 1985 from Department of Posts and Telegraph and it led to actual progression of telecom sector in India. DoT managed the planning, engineering, installation, maintenance, management and operations of telecom services for the whole of India. In order to ease the operations of DoT, two new Public Sector corporations, namely Mahanagar Telephone Nigam Limited (MTNL) and Videsh Sanchar Nigam Limited (VSNL) were established under DoT in 1986. MTNL was set up to deal with the operation of basic telephone service in Delhi and Mumbai whereas VSNL was providing international telecom service to subscribers in India. Areas other than Delhi and Mumbai were served with basic telephone service by DoT itself. The demand for telephones was burgeoning during 1990s and the Government faced the intense pressure to allow private sector companies to enter and invest in Indian Telecom Industry as a part of Liberalization – Privatization - Globalization Policies. In this way private sector came into seen and was allowed to invest in the sector of Value Added Services (VAS) by the Government and thus they entered in cellular telecom sector.

In 1994, Government announced National Telecommunications Policy (NTP) which declared certain objectives viz., ensuring availability of telephones, delivering world class services at reasonable rates, improving India's competitiveness in world market and boosting exports, attracting FDI and stimulating domestic investments, ensuring India's image as a major manufacturer of telecom equipments and universal availability of basic telecom services including rural areas too. The entry of private sector companies in telecom industry demanded an urgent need for self-regulating body. Then Telecom Regulatory Authority of India (TRAI) came into force on 20th Feb 1997 to regulate telecom services of the country including controlling of tariffs which were earlier regulated by the Central Govt. It was established with a mission to give pace to the growth of telecommunication services in the country so that it can play an important role in the global information society. In order to fulfill these objectives, TRAI has been

issuing a large number of regulations, orders and directives since its inception to deal with matters concerning its involvement and has enabled Indian Telecom Industry to evolve from a Govt. owned sector to a multi-operator multi- service open competitive market.

Further in 1998, the Government declared the procedure for Internet Service Provision (ISP) by private operators and issued license for the same. As a result, private operators were now allowed to enter a new service segment named Global Mobile Personal Communications by Satellite (GMPCS). Although they participated in many telecom service segments, the result of privatization was not up to the mark. Thus, a New Telecom Policy (NTP-99) was framed and released on 1<sup>st</sup> Apr 1999. It focused on opening of all segments of telecom services for private sector involvement. A serious need was felt for restoring operators' confidence by resolving their problems and improving the climate for investment. This policy supported private players a lot who were earlier troubled with paying heavy license fee.

Afterward, Department of Telecommunication (DoT) was bifurcated into Department of Telecom Services (DTS) and the Department of Telecom Operations to divide the service provision and operational functions between these two departments. In the year 2000, DTS was corporatized and reformed as Bharat Sanchar Nigam Limited (BSNL). DoT was now responsible for policy - making, licensing and promoting private investments in both telecom equipment manufacturing and in telecom services. Later on in 2002, even VSNL was privatized and its monopoly in International Long Distance (ILD) services was terminated from 31st March, 2002.

### **3.1.2 Market Size**

As per the report published by TRAI, India's wireless subscriber base increased to 1,146.49 million in June 2018. In urban areas it rose to 633.60 million and in rural areas it reached to 512.89 million.

Wireless tele-density in India touched 88 % in June 2018 while, urban wireless tele-density was 153.52 % and rural wireless tele-density was 57.63% as per the published data.

A snapshot of telecom subscription data released by TRAI on 20<sup>th</sup> August 2018 has been presented here to understand the present scenario of telecom subscription in India. Table 3.1 presents the aforementioned data-

**Table 3.1**  
**Highlights of Telecom Subscription Data as on 30th June, 2018**

Particulars	Wireless	Wireline	Total (Wireless + Wireline)
<b>Total Telephone Subscribers</b> (Million)	1146.49	22.40	1168.89
Net Addition in June, 2018 (Million)	15.49	-0.11	15.37
Monthly Growth Rate	1.37%	-0.50%	1.33%
<b>Urban Telephone Subscribers</b> (Million)	633.60	19.16	652.76
Net Addition in June, 2018 (Million)	7.94	-0.08	7.85
Monthly Growth Rate	1.27%	-0.43%	1.22%
<b>Rural Telephone Subscribers</b> (Million)	512.89	3.24	516.13
Net Addition in June, 2018 (Million)	7.55	-0.03	7.52
Monthly Growth Rate	1.49%	-0.93%	1.48%
<b>Overall Tele-density*(%)</b>	88.00	1.72	89.72
Urban Tele-density*(%)	153.52	4.64	158.16
Rural Tele-density*(%)	57.63	0.36	57.99
Share of Urban Subscribers	55.26%	85.55%	55.84%
Share of Rural Subscribers	44.74%	14.45%	44.16%
<b>Broadband Subscribers</b> (Million)	429.22	17.90	447.12

Source: [www.traai.gov.in](http://www.traai.gov.in)

\* Based on the population projections from census data published by the office of Registrar General and census Commissioner of India

TRAI reported the number of broadband subscribers increased to 447.12 million in June 2018. Reliance Jio with 215.26 million users, Bharti Airtel with 95.31 million, Vodafone India with 62.86 million, Idea Cellular with 42.95 million and BSNL with 20.34 million user are the top broadband operators in India.

The mobile industry is expected to create a total economic value of Rs 14 trillion (US\$ 217.37 billion) by the year 2020. It would create nearly 3 million direct job opportunities and 2 million indirect jobs in that period. As per report India's smartphone market showed 14 per cent growth over last year to a total of 124 million shipments in 2017. It is projected that due to rapid penetration in mobile-phone market and reduced data costs 500 million new internet users will be added in India over the next five years, resulting greater opportunities for new businesses. The monthly data usage per smartphone in India is expected to grow from 3.9 GB in 2017 to 18 GB by 2023.

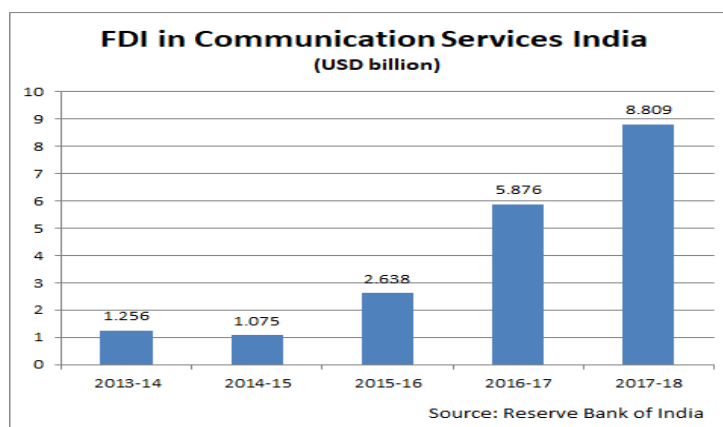
### 3.1.3 Major Developments

Indian Telecom Industry has witnessed a lot of investments and developments due to ever increasing subscriber base. Some of the recent developments are:

- According to the data released by Department of Industrial Policy and Promotion (DIPP), the industry has attracted FDI worth US\$ 30.08 billion during the period April 2000 to December 2017.
- Reserve Bank of India (RBI) has recently revealed the latest information on the foreign direct Investment (FDI) in the Indian communication services sector in the recent years. The following chart shows a significant growth in FDI in communication services from the year 2013-14 to the year 2017-18.

**Chart 3.1**

#### **FDI in Communication Services India (USD billion)**



Source: [www.telecomlead.com](http://www.telecomlead.com)

- During the first quarter of 2018, India became the world's fastest-growing market for mobile applications.
- Finnish telecommunication company Nokia, is collaborating with Indian telecom companies Bharti Airtel and BSNL to prepare the roadmap for development of 5G technology and build a favorable ecosystem for 5G in India. Moreover, these companies will be investing US\$ 20 billion over the next two years for expansion of network and operations.

### **3.1.4 Role of Government**

The government has done significant reforms in the telecom sector and still providing full fledged support for growth to telecom companies. Some of the other major initiatives taken by the government are as follows:

- The Government of India is soon bringing a new National Telecom Policy 2018 in lieu of rapid technological advancement in the sector over the past few years. The policy has envisaged attracting investments worth US\$ 100 billion in the sector by 2022.
- The Government of India aspires to digitally connect the rural and remote areas in the country and has framed a new affordable tariff structure which works on the principle of more you use, less you pay. The changes will soon be reflected in tariff charged by service providers in the country.

### **3.1.5 Future Prospects**

India will appear as a leading player in the virtual world by having 700 million internet users of the 4.7 billion global users by 2025, as per a report published by Microsoft. Internet economy is expected to touch Rs 10 trillion (US\$ 155 billion) by 2018, contributing around 5 per cent to the country's GDP. With the government's favourable regulation policies and 4G services hitting the market, the Indian telecommunication sector is expected to witness fast growth in the next few years. The Government of India also plans to auction the 5G spectrum in bands like 3,300 MHz and 3,400 MHz to promote initiatives like Internet of Things (IoT), machine-to-machine communications, instant high definition video transfer as well as its Smart Cities initiative. The Indian mobile phone industry expects that the

Government of India's boost to production of battery chargers will result in setting up of 365 factories, thereby generating 800,000 jobs by 2025.

### 3.2 Major Players in Indian Telecom Market

Telecom players in India comprise a large and ever-expanding industry in the country with huge revenues generated annually and massive base of customers. According to the recent publication India is the second largest country across the world in terms of number of telephone users (both landline and mobile phone) with 1.179 billion subscribers as on 31 July 2018. As handsets and call rates continue becoming lower, the market share of telecom companies in India is likely to keep growing owing to growing population and globalization.

In Landline segment, in total there are 22.27 million subscribers in India as on 31 July 2018. Out of total wired service providers, the private access service providers held 32.23% market share whereas BSNL and MTNL, the two PSU access service providers, had a market share of 67.77%. The tabular representation of access service provider-wise market share in terms of wired subscribers is given below:

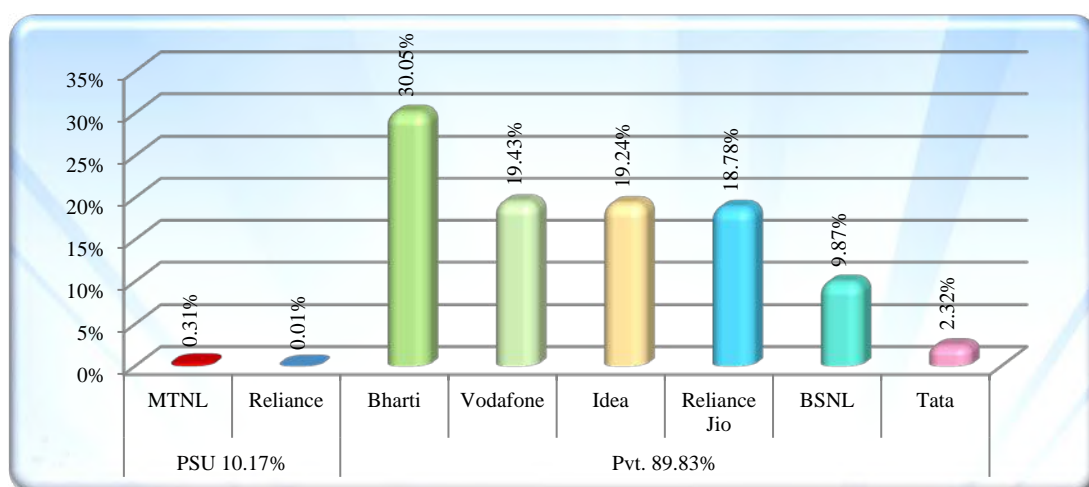
**Table 3.2**  
**Access Service Provider-wise Market Shares in term of Wired**  
**Subscribers as on 30th June, 2018**

Rank	Operator	Subscribers (millions)	Market Share	Ownership
1	BSNL	11.78	52.92%	State-owned
2	Airtel	3.95	17.80%	Private
3	MTNL	3.30	14.85%	State-owned
4	Tata	1.86	8.39%	Private
5	Vodafone	0.24	1.09%	Private
6	Quadrant	0.23	1.07%	Private

Source: [www.wikipedia.com](http://www.wikipedia.com)

India is considered one of the largest telecom markets in the world and there are many large mobile network companies in India. In addition, the competition between the best telecom companies in India is expected to keep growing as call prices get lower and most of the telecom sector companies in India offer high bandwidth data to attract more customers and expand the market share of telecom companies in India. The telecom sector companies in India are thriving since the past decade since the emergence of many upcoming telecom companies in India. The top 10 mobile networks in India collectively provide telecommunication service to more than 1,000 million subscribers across the country. Furthermore, the telecommunication industry in India has a mix of Indian and international mobile network companies in India with Airtel being regarded the no 1 telecom company in India. The best telecom brands have invested heavily in expanding their market share by broadening their coverage areas and using highly effective marketing strategies. Also, since the introduction of 4G network in India, the consumers of the best telecom companies in India can access hi-speed connectivity and connect faster to the virtual world across the globe. The upcoming telecom companies in India will further add more competitiveness to one of the largest telecom markets in the world. As on 30th June, 2018, the private access service providers held 89.83% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.17%. The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below:

**Chart 3.2**  
**Access Service Provider-wise Market Shares in term of Wireless**  
**Subscribers as on 30th June, 2018**



Source: [www.trai.gov.in](http://www.trai.gov.in)

The Indian telecom sector is becoming more competitive each year. With the launch of new Reliance Jio, Vodafone-Idea partnership, Bharti Airtel buying Telenor India, and Aircel filing for bankruptcy, the game is now only for big players in the market. The merger between Vodafone India and Idea cellular is most awaited deal in the Indian telecom sector, which may come into place before 2019. The changing consumer base and increase the use of the internet will also play an important role in the Indian market. The following table throws light upon top five telecom players, their respective subscriber base and market share held by them.

**Table 3.3**  
**Top Telecom Providers**

Rank	Operator	Subscribers (in millions)	Market Share	Ownership
1	Vodafone Idea Limited	408	32.3%	Vodafone Group (45.1%) Aditya Birla Group (26%) Axiata Group Berhad Providence Equity (28.9%)
2	Airtel, Tata DoCoMo	Airtel - 344.56 DoCoMo 26.62	Airtel - 30.05% DoCoMo - 2.32%	Bharti Enterprises (64%) SingTel (36%)
3	Jio RCom	Jio - 215.25 RCom - 0.07	Jio - 18.78% RCom - 0.01%	Reliance Industries
4	BSNL	113.11	9.87%	State-Owned
5	MTNL	3.52	0.31%	State-Owned

Source: [www.wikipedia.com](http://www.wikipedia.com)

### 3.2.1 Airtel

Bharti Airtel Limited is a leading global telecommunications company and presently operating in 16 countries across Asia and Africa. It's headquarter is situated in New Delhi. It holds amongst the top 3 positions globally in terms of number of subscribers. In India, the company offers 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed home broadband, DTH, and enterprise services including national & international long distance services to



carriers. In rest of the locations, it offers 2G, 3G, 4G wireless services and mobile commerce. As per the recent publication by TRAI it occupies nearly 30.05% market share which is the maximum in the whole industry.

### **3.2.2 Idea**

Idea Cellular was established by Aditya Birla Group Company which is India's first truly MNC. It is a pan-India integrated wireless broadband operator offering 2G, 3G and 4G services, and has its own NLD and ILD operations, and ISP license. Idea claims to be one of the top three mobile operators in India, with market share of nearly 19%. With nearly 200 million subscribers in single country, Idea scores sixth rank in the global rankings of operators in terms of number of subscribers.

The company has been continuously expanding network infrastructure to provide high speed mobile broadband services to a large number of people in the country. Idea has been rapidly rolling out 4G network across the country, adding over 1 lakh broadband sites in the last 2 years, taking its broadband coverage to over 1.2 lakh towns and villages across the country. Idea has also set up a fibre network of over 1.50 lakh kms.

### **3.2.3 Vodafone India**

Vodafone India Ltd, is a part of the Vodafone Group and started operations in 1994 when its predecessor Hutchison Telecom acquired the cellular license for Mumbai. It is headquartered in Mumbai and holds the second largest position in mobile network operators in India. It has a presence in all telecom circles and recognized as a strong player within the Vodafone Group too, and claims having the largest subscriber base globally.

Vodafone Business Solutions are designed to fulfill the requirements of an enterprise. It caters to all their needs including voice and data, wireless and fixed-line requirements. Having global expertise, experience and the knowledge of local markets, the business is conducted through the following vertical divisions – Vodafone Global Enterprise, SME, National Corporate and Key Accounts.

To complement the government's objective to improve rural penetration of telecom services, the company has been continuously working to ascertain a strong rural presence. Vodafone has marked a significant growth in its rural subscriber base in last few years to become the second largest rural wireless operator in the country.

#### **3.2.4 BSNL**

BSNL is the one of the only two telecom service providers running as public sector undertaking. It is a technology-oriented company and provides all types of telecom services namely telephone services on wireline, wireless local loop (WLL) and mobile, broadband, internet, leased circuits and long distance telecom service. The company has been in the forefront of technology with 100 per cent digital technology switching network. BSNL's nation-wide telecommunications network covers all district headquarters, sub-divisional headquarters, Tehsil headquarters and almost all the block headquarters.

#### **3.2.5 Reliance Communications**

Reliance Communications Limited was established by late Shri. Dhirubhai H Ambani in 2002 and is the flagship company of Reliance Anil Dhirubhai Ambani Group. Reliance Communications is one of the India's largest private sector information and communication companies, with over 150 million subscribers. It has established a pan-India, high-capacity, integrated (wireless and wireline), convergent (voice, data and video) digital network, to offer services spanning the entire info-communication value chain covering over 7500 towns and 300,000 villages.

Reliance Communications owns and operates the world's largest next generation, IP enabled connectivity infrastructure, comprising over 150,000 kilometers of fibre optic cable systems in India, USA, Europe, Middle East and the Asia Pacific region. Presently its corporate clientele includes about 600 Indian and 250 multinational corporations, and over 200 global carriers.

### **3.2.6 Aircel**

Aircel is one of India's fastest growing GSM mobile service providers with a subscriber base of 65.1 million. It started off as a regional company in Chennai in 1999. In 2006, Aircel was acquired by Malaysia's biggest integrated communications service provider Maxis (Maxis Communication Berhard) and is a joint venture (JV) with Sindya Securities and Investments Pvt Ltd. Maxis holds 74 per cent equity in the company.

Presently, it is a pan-India operator with a presence across 23 circles. The company offers voice and data services ranging from postpaid and prepaid plans, 2G and 3G services, Broadband Wireless Access (BWA), and Long Term Evolution (LTE) to Value-Added-Services (VAS). In addition to providing premium internet access solutions to facilitate data intensive live streaming applications, the company has also paved the way to be among the first to offer 3G and 4G LTE services to customers.

### **3.2.7 Reliance-Jio**

Jio is regarded as one of newest entrants to the largest telecom market in the world. This upcoming telecom company in India was founded in 2010 by Mukesh Ambani and the head office is located at Navi Mumbai, India. This best telecom companies in India has around 140 million subscribers and offers one of the lowest call rates among the top telecom companies in India. Jio holds more than 10% market share of telecom companies in India and has annual revenue of around \$800 million.

Reliance Jio is an entire ecosystem that allows Indians to live the digital life to the fullest. This ecosystem consists of powerful broadband networks, useful applications, best-in-class services and smart devices distributed to every doorstep in India. Jio's media offerings include the most comprehensive libraries and programmes of recorded and live music, sports, live and catch up television, movies and events. Jio is about creating connected intelligence for 6 billion global minds to unleash the power of a young nation. The combination of three aspects -focus on broadband networks, affordable smartphones and the availability of rich content and

applications has enabled Jio to create an integrated business strategy from the very beginning, and today, Jio is capable of offering a unique combination of telecom, high speed data, digital commerce, media and payment services.

### **3.2.8 Tata Teleservices**

Tata Teleservices Ltd, incorporated in 1996, was the pioneer of the CDMA 1x technology platform in India, embarking on a growth path after the acquisition of Hughes Tele.com (India) Ltd [renamed Tata Teleservices (Maharashtra) Ltd] by the Tata Group in 2002. Over the last few years, the company has launched significant services CDMA mobile operations in January 2005 under the brand name Tata Indicom, market-defining wireless mobile broadband services under the brand name Tata Photon in 2008 and 2G GSM services under the brand name Tata DOCOMO in 2009. Tata Teleservices Ltd also has a significant presence in the 2G GSM space, through its joint venture with NTT DOCOMO of Japan, and offers differentiated products and services. Tata Teleservices has annual revenue of around \$490 million and has more than 2,000 retail outlets across the country.

### **3.2.9 Telenor India**

Telenor India is one of the leading telecom companies in India and is a major upcoming telecom company in India. This top telecom company in India was previously known as Uninor when it was launched in 2009 and is headquartered at New Delhi, India. The founder of this telecom brand in India is Sharad Mehrotra and has over 40 million subscribers with more than 4,000 employees. This leading mobile network companies in India has recently been acquired by the Bharti Airtel group in September 2017 and has discontinued services in 7 mobile circles across the country.

### **3.2.10 MTNL**

MTNL is a 100% government owned and stands among top 10 telecom companies in India. The company was founded in 1986 in New Delhi and is currently chaired by Pravin Kumar Purwar. It has around 4 million subscribers and offers IPTV, landline, and broadband services besides mobile network. Its annual revenue is around \$2 billion.

The top 10 telecom companies in India offer one of the lowest call rates in the world owing to high competition in terms of pricing and quality of network services. The telecom sector companies in India are estimated to be contributing almost 7% to the GDP of the country which amounts to almost \$180 billion and the telecommunication industry in India is believed to directly employ more than 2 million professionals across the country. The growing population in the country, rising disposable income, and lower voice call tariffs are likely to augment the revenue of the top 10 telecom companies in India for the next five years. Furthermore, the telecom brands in India are forecasted to contribute around \$240 billion to the economy of India by the end of 2022.

### **3.3 RECENT TRENDS IN INDIAN TELECOM MARKET**

The fixed line business continues to remain muted despite the low penetration levels in the country. The increasing demand for data based services such as the Internet is the major catalyst in the growth of the sector. The scale of the mobile opportunity in India is therefore immense.

Increasing choice and one of the lowest tariffs in the world have made the cellular services in India attractive for the average consumer. The teledensity in urban areas is about 171.1%. Therefore, the main driver for future growth would be the rural areas where wireless tele-density is around 56.9%.

India's growth momentum is likely to accelerate in FY18, with continued focus on infrastructure creation and manufacturing, and trickle-down impact of past policy reforms. In addition, long-term economic growth will be driven by major factors: low interest rates; benign inflation; favourable demographics (half of the population is below the age of 35); and greater focus on formalisation and digitisation of the economy.

### **3.3.1 Initiatives taken by Telecom Companies**

#### **Vodafone India 4G launch, Reliance Jio 4G launch**

- In January 2016, Vodafone India launched its 4G network services in Kolkata and Kozhikode (Kerala) following its successful implementation in other parts of Kerala such as Kochi and Thiruvananthapuram.
- In September 2016, Reliance Jio launched 4G services across India, at comparatively cheaper rates. The company had targeted to acquire 100 million customers by March 2017. In addition to the existing plan India 2300 MHz spectrum and 1800 MHz in 14 circles, during the auction in 2016, Jio invested over US\$1,527.7million to acquire 1800 MHz spectrum in 6 circles and 800 MHz spectrum in 10 circles

#### **Green Telecom**

- The green telecom concept has been brought to protect environment and is aimed at reducing carbon footprint of the telecom industry through lower energy consumption.
- Tata has invested around US\$16.38 million to convert its 10,000 base stations from indoor to outdoor to reduce energy consumption and carbon footprint across its 20 telecom circles in India so far.

#### **Approaching Rural Markets**

- There are over 62,443 uncovered villages in India; these would be provided with village telephone facility with subsidy support from the government's Universal Service Obligation Fund (thereby increasing rural tele-density).
- In October 2017, the rural subscriber base accounted for 41.96 per cent of the total subscriber base, thereby fuelling growth across the sector.

#### **Emergence of BWA**

- The most significant recent developments in wireless communication include BWA technologies such as WiMAX and LTE.
- In 2015, Airtel launched its 4G services in 296 cities across the India Technologies.

- In 2015, BSNL started its 1st 4G Wireless Broadband Internet Service-WiMax.
- Reliance Jio, launched 4G services across pan- India in December 2015.

**Internet of Things (IoT)**

- IoT is the concept of electronically interconnected and integrated machines, which can help in gathering and sharing data. The Indian Government is planning to develop 100 smart city projects, where IoT would play a vital role in development of those cities.

**Consolidation**

- Vodafone and Idea, India's second and third largest operators have decided to merge.
- Airtel's acquisition of Tata Teleservices' mobile business was given approval in November 2017.

**Rising Investments**

- In 2017, Vodafone disclosed its plans to invest US\$1,310 million to upgrade and expand Vodafone India network coverage and US\$655 million to upgrade its technology centre.
- In February 2017, Japanese Telecom company - Docomo, re-invested US\$ 1.18 billion in Tata Telecom, to gather a stake of 26.5 per cent in the company.

**Outsourcing Non-Core Activities**

- As part of the recent outsourcing trend, operators have outsourced functions such as network maintenance, IT operations and customer service.

**Mobile Banking**

- In December 2017, 37.6 million mobile banking transactions were made, and NPCI achieved a record volume of 1 billion transactions in July 2017.
- In March 2017, the government set a target of achieving 25 billion digital transactions for banks with the help of PoS machines, transactions enabled and merchants, which have been added in firms.

- In March 2017, Samsung launched its mobile payment service, Samsung Pay, to facilitate smooth payment at retail outlets, instead of using mobile wallets, credit or debit cards.

### **3.3.2 Strategies Undertaken**

#### **Promotional Strategies**

- Innovative marketing strategies are being used by companies to win over in this sector. For example,
- In August 2015, Idea Cellular launched new campaign “Get idea and dance”
- Airtel launched new ad campaign “Airtel myPlan Family”

#### **Differentiation**

- Differentiating by offering different services to customers. For example,
- In 2015, Airtel India launched a mobile app “Wynk Movies”, a library that includes videos and movies
- In November 2015, Vodafone launched “Choose Your Number” facility where prepaid and post paid customers get numbers of their own choice.

#### **Pricing Strategy**

- Players price their products very carefully due to the price sensitive nature of customers and high competition in the sector. Players generally go for price war. For example,
- In December 2016, Micromax launched low cost 4G Volte Smartphones, with a pre-activated Reliance Jio Sim offer of free voice calls and data. These smartphones are launched in the range of US\$67.21 to US\$114.57
- In September 2016, Reliance Jio 4G network plans have been launched. Free domestic voice calls have been offered by Jio. No charge or deduction of data would be done for making voice calls to any network across the country. Also, the company has offered cheaper data plans and tariff plans ranging from US\$2.28 to US\$76.37 per month. As of October 2016, the company’s subscriber base had crossed 16 million customers.



- In March 2017, CAT S60 smartphone was launched in India for US\$ 966.81. The phone is loaded with a thermal camera that can see through smoke and can be used in extreme temperatures.

### 3.3.3 Mergers and Acquisitions in Telecom Sector

This section presents mergers and acquisition took place in telecom sector during 2015-2018.

- **Bharti Airtel and Tikona Digital Networks**

Bharti Airtel Ltd, India's largest telecom operator, has decided to buy Tikona Digital Networks Pvt Ltd's 4G business for approximately Rs 1,600 crore (US\$ 248.43 million), which includes its broadband wireless access spectrum as well as 350 cellular sites in five telecom circles.

- **Mobile Wallet by Vodafone**

Vodafone India has entered into an agreement with Walmart India to make payments using M-Pesa mobile wallet services. Under this agreement, Vodafone M-Pesa will offer safe, secure and convenient transactions and on placing an order with Walmart India, Vodafone M-Pesa agent will reach out to customer and cash in into his M-Pesa account

- **New Entrant in the Smartphone Market**

In January 2017, gaming accessories and console manufacturer - Razer acquired Nextbit, to foray into the smartphone market of India. China based companies such as Xiaomi, One Plus, OPPO, Huawei, etc. have also launched their smartphones in India.

Domestic Players such as Micromax, Karbonn and Lava are the top 3 budget smartphone companies in India.

### 3.3.4 Mobile Number Portability: A Paradigm Shift in Indian Telecom Industry

- Mobile Number Portability (MNP) in India was introduced in November 2010.

- MNP allows subscribers to change their mobile service provider while retaining their old mobile number.
- The portability service was made available for both postpaid and prepaid customers as well as on both GSM and CDMA platforms.
- The implementation of MNP has brought a slew of benefits for customers in terms of better plans and offers.
- MNP requests in India increased to 314.99 million at the end of October 2017.

### **3.4 REGULATORY BODIES AND RULES**

#### **3.4.1 The Beginning**

After the liberalisation of economy in 1991, telecom sectors reforms were initiated in 1994, there were three incumbents in the fixed service sector, namely DoT (Department of Telecom), MTNL and VSNL. Of these, DoT operated in all parts of the country except Delhi and Mumbai. MTNL operated in Delhi and Mumbai and VSNL provided international telephony.

Given its all-India presence and policy-making powers, the DoT enjoyed a monopoly in the telecom sector prior to the major telecom reforms. However, subsequent to the second phase of reforms in 1999, which included restructuring the DoT to ensure a level playing field among private operators and the incumbent, the service-providing sector of DoT was split up and called Department of Telecom Services (DTS). DTS was later corporatized and renamed Bharat Sanchar Nigam Limited (BSNL). This meant separation of the incumbent service provider from the policy-maker. Broadly, DoT is now responsible for policy-making, licensing and promotion of private investments in both telecom equipment and manufacture and provision of telecom services. BSNL, a corporate body, is responsible for the provision of services.

#### **3.4.2 TRAI- Governing Body**

With the entry of private sector companies in telecom sector due to privatization, the need for separate regulating body became intense. An independent body named Telecom Regulatory Authority of India (TRAI) was set up with effect

from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs which were earlier vested in the Central Government.

TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI. TDSAT was set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI. TRAI's mission is to create and nurture conditions for growth of telecommunications in the country in a manner and at a pace which will enable India to play a leading role in emerging global information society.

One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition. To achieve this objective TRAI has been constantly issuing a large number of regulations, orders and advice to deal with issues coming before it and provided the required direction to the evolution of Indian telecom market from a Government owned monopoly to a multi operator multi service open competitive market.

The directions, orders and regulations issued cover a wide range of subjects including tariff, interconnection, quality of service and Direct To Home (DTH) services and Mobile Number Portability as well as governance of the Authority.

#### **3.4.2.1 Secretariat**

The Secretariat is responsible to govern TRAI which is headed by a secretary. The secretary processes all proposals, organizes agendas for Authority meetings (consulting with the Chairman), and prepares the minutes and issues regulations in accordance to the meetings. He is assisted by advisors. The issues that come under his jurisdiction include Mobile Network, Interconnection and Fixed Network, BroadBand and Policy Analysis, Quality of Service, Broadcasting &

Cable Services, Economic Regulation, Financial Analysis & IFA, Legal, Consumer Affairs & International Relation and Administration & Personnel. Officers are selected from the premier Indian Telecommunication Service and also from the Indian Administrative Service.

#### **3.4.2.2 TRAI Mobile Apps**

TRAI launched three new apps and a web portal on 06 June 2017 to make sure that users in the country are fully aware of telecom services offered to them. Mycall app, MySpeed app and 'Do not disturb (DND 2.0)' apps have been launched to ensure transparency between telecom operators and consumers that consumers are getting the services that they are actually paying for.

#### **3.4.2.3 New Policies to support the Sector Development**

- **To compensate the consumers in case of call drop**

TRAI introduced a breakthrough in telecom industry in January 2016 that is beneficial for all consumers. Now consumers can get compensation for call drops. However, there is a catch, per the rule, mobile users will get a compensation of Re 1 for every dropped call but it will be limited to a maximum three dropped calls in a day. This regulation has been quashed by Supreme Court on the ground of being "unreasonable, arbitrary and unconstitutional".

- **Revised standards for wireline and wireless services**

In 2015, Telecom Regulatory Authority of India made regulations to amend the Standards of quality of wireline (telephone service) and cellular mobile telephone services. These regulations has been laid down to ensure better and effective compliance with the quality of service regulations and to protect the interest of the customers.

- **No Bar on FDI**

FDI limit in telecom sector has been raised to 100 per cent from the previous 74 per cent; out of 100 per cent, 49 per cent is allowed through automatic route and the rest will be done through the FIPB approval route.

100 per cent FDI is permitted for infrastructure companies offering dark fibre, electronic mail and voice mail.

- **Skill Development**

In May 2017, Microsoft India signed a Memorandum of Understanding with Telecom Sector Skill Council (TSSC) to encourage skill development through “Project Sangam”.

To support 'Skill India' mission, Microsoft launched a Cloud hosted platform named as "Project Sangam" to assist government not only to train but to help people get jobs via professional networking website LinkedIn, which was acquired by the company last year.

- **Amended Tariff order**

In 2015, TRAI passed the telecommunication tariff (16th amendment) order, according to which, every service provider should offer a special roaming tariff plan to its prepaid and post-paid customers and on payment of fixed charge for special roaming tariff plan national roaming should be free.

- **Set up internet connections**

The Department of Information Technology intends to set up over 1 million internet-enabled common service centres across India as per the National e-Governance Plan.

On 8th August 2016, the Telecom Regulatory Authority of India (TRAI) made the 10th amendment to the TCPR (Telecom Consumers Protection Regulations) permitting telecom companies to offer data packs having maximum validity of 365 days.

- **Reduced license fees**

In January 2015, the Government of India recommended reduction in license fees of telecom operators by 6 per cent, telecom operators currently pay 8 per cent of adjusted gross revenue as license fee.

The issuance of several international and national long-distance licenses has created opportunities and attracted new companies into the market.

- **Make in India**

In May 2017, the central government announced the Phased Manufacturing Programme (PMP) to promote domestic production of mobile handsets. This initiative will help in building a robust indigenous mobile manufacturing ecosystem in India, and incentivize large scale manufacturing.

- **Financial assistance**

The USOF is expected to extend financial support to operators providing services in rural areas and encourage active infrastructure sharing among operators TRAI has recommended that USO levy component to be reduced from 5 per cent to 3 per cent of annual revenues for all the licenses from April 2015

- **Enhanced spectrum limit**

The prescribed limit on spectrum would be increased from 6.2MHz to 2x8 MHz (paired spectrum) for GSM technology in all areas other than Delhi and Mumbai, where it will be 2x10MHz (paired spectrum)

Telecom players can, however, obtain additional frequency; there will be an auction of spectrum subject to the limits prescribed for the merger of licenses.

As of October 2016, telecom operators like Vodafone and Tata Teleservices purchased spectrum worth US\$1.51 billion and US\$ 0.34 billion, respectively, from the government

- **Telecommunication amendment order for broadcasting and cable services**

In 2015, telecom authority issued this order mandating every DTH operator to specify the tariff for supply and installation of the customer premises equipment. DTH operator should specify the refundable security deposit, installation charges, monthly rental charge and activation

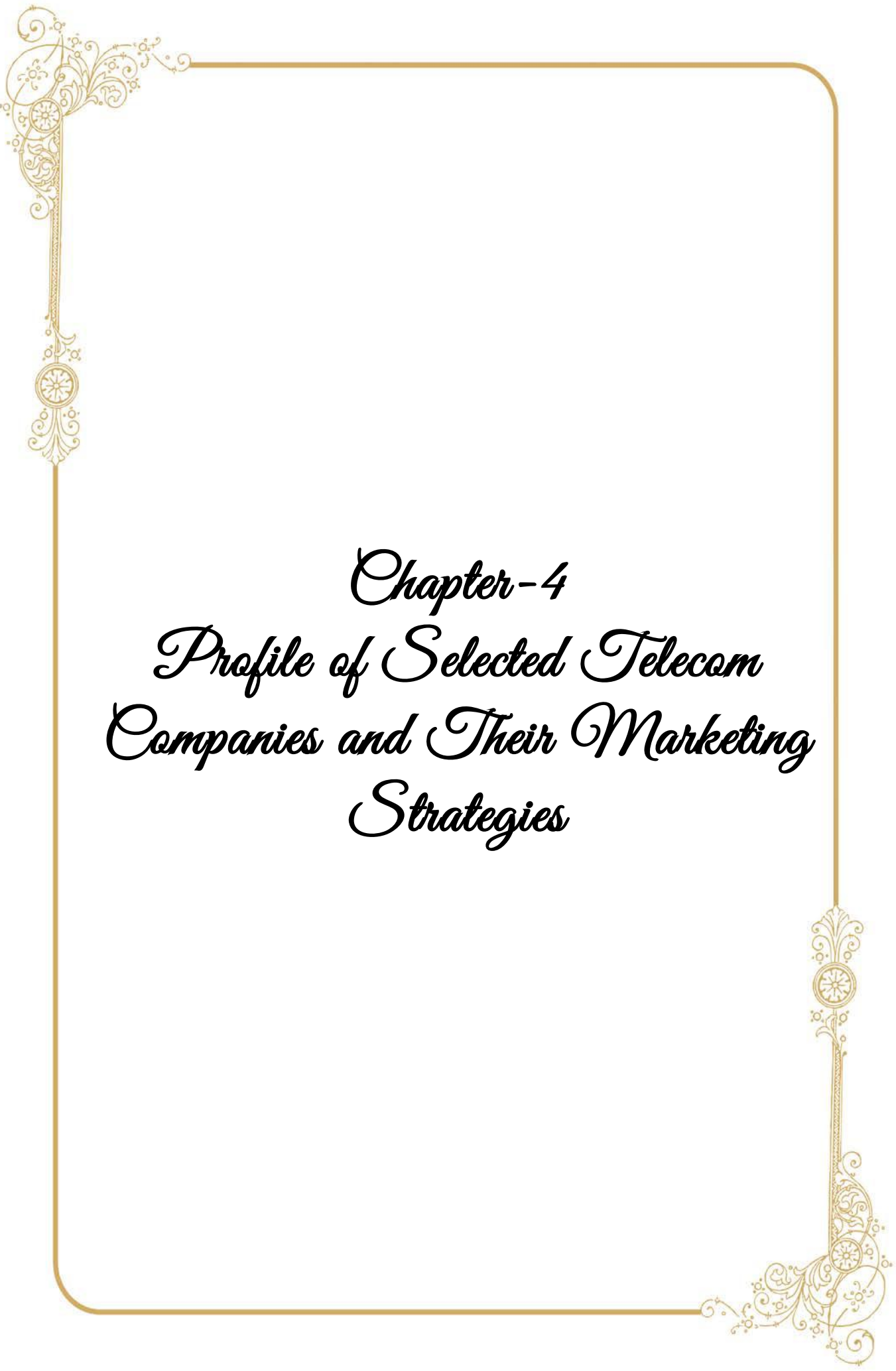
- **Indian Mobile Congress**

In May 2017, the Ministry of Telecommunication launched the Indian Mobile Congress 2017 (IMC 2017), the first and biggest platform in the country to bring all the stakeholders together from Telecom, Internet and Mobility ecosystem along with ICT players, app developers, innovators and start-ups.

**REFERENCES**

- Athreya M.B. (1996), India's telecommunications policy: A paradigm shift, Telecommunications Policy, Vol. 20, No. 1, Elsevier Science Ltd., pp. 11-22.
- Vishal Sethi (2006), Communication Services in India 1947 to 2007, New Century Publications, New Delhi.
- <http://dot.gov.in>
- [http://shodhganga.inflibnet.ac.in/bitstream/10603/22899/8/08\\_chapter3.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/22899/8/08_chapter3.pdf)
- [http://shodhganga.inflibnet.ac.in/jspui/bitstream/10603/127477/8/08\\_chapter1.pdf](http://shodhganga.inflibnet.ac.in/jspui/bitstream/10603/127477/8/08_chapter1.pdf)
- [https://en.wikipedia.org/wiki/Telecommunications\\_in\\_India](https://en.wikipedia.org/wiki/Telecommunications_in_India)
- [www.iosrjournals.org/iosr-jbm/papers/Vol16-issue9/Version-1/D016912536.pdf](http://www.iosrjournals.org/iosr-jbm/papers/Vol16-issue9/Version-1/D016912536.pdf)
- [www.bizvibe.com](http://www.bizvibe.com)
- [www.datareign.com](http://www.datareign.com)
- [www.frost.com](http://www.frost.com)
- [www.ibef.org](http://www.ibef.org)
- [www.telecomlead.com](http://www.telecomlead.com)
- [www.trai.gov.in](http://www.trai.gov.in)





*Chapter-4*  
*Profile of Selected Telecom*  
*Companies and Their Marketing*  
*Strategies*

# **CHAPTER-4**

## **PROFILE OF SELECTED TELECOM COMPANIES AND THEIR MARKETING STRATEGIES**

---

---

### **INTRODUCTION**

This chapter presents a brief description of the selected leading telecom sector companies in India. The profile covers introduction of covered undertakings, their growth and development, area of operations, and most importantly marketing strategies practiced by them. It will display a detailed account of all 7Ps covering product, price, place, promotion, people, process and physical evidence related strategies. The covered undertakings for the purpose of the study are:

- 4.1 Bharat Sanchar Nigam Ltd. (BSNL)
- 4.2 Reliance Jio
- 4.3 Airtel
- 4.4 Vodafone

#### **4.1 BHARAT SANCHAR NIGAM LIMITED (BSNL)**

##### **4.1.1 INTRODUCTION**

Bharat Sanchar Nigam Limited (abbreviated BSNL) is public sector Telecom Company headquartered in New Delhi. It was incorporated on 15 September 2000 and assumed the business of providing telecom services and network management from the former Departments of Telecom Services (DTS) and Telecom Operations (DTO) as of 1 October 2000 on a going-concern basis. It has maximum number of subscribers in wire-line and broadband services with more than 60% market share, and it also scores fifth position in mobile wireless telephony provider in India. It is India's first communication service provider and its history can be traced back to the British era. During the British era, the first telegraph line, though only experimental was established between Calcutta and Diamond Harbour. The British East India Company started using the telegraph in 1851 and till 1854 telegraph lines were laid across the country. In 1854, the telegraph service was opened to the public and the first telegram was sent from Mumbai to Pune. In 1885, The Indian Telegraph Act

was passed by the British Imperial Legislative Council. After the bifurcation of post and Telegraph department in 1980s, and with the creation of Department of Telecom by 1990s, eventually led to the emergence of the State owned telegraph and telephone company BSNL. BSNL then continued the telegraph services in India until it shut down telegraph services completely in July 15, 2013.

BSNL is currently focusing in improvement of its telecom network in order to reach out wider audience especially in rural areas which are still not connected with the urban areas. Major competitors of BSNL are Airtel, Vodafone, Idea, Reliance Jio etc. Among these competitors BSNL stands out as the only service provider who is looking forward or putting up efforts to bridge up the gap between rural-urban areas with the help of telecom and internet facility. With its mission to led the telecom industry and establish itself globally BSNL delivers its telecom and internet service in different business groups, corporate offices, small retailers or offices along with individuals. BSNL has also a unique feature of no roaming service throughout the country.

#### **4.1.2 GROWTH AND DEVELOPMENT**

BSNL (then known as Department of Telecom) was dominating telecom market during the socialist period of Indian economy. That time BSNL was the only telecom service provider in the country (MTNL had presence only in Mumbai and New Delhi). It operated as a typical state-run organization, ineffective, bureaucratic, inept and heavily unionized. As a result subscribers had to stay in queue for months to years to own a telephone connection.

Post liberalization in 1991 the department faced competition for the first time. Due to tough competition from private telecom service providers, BSNL started putting efforts for increasing efficiency. However, the performance level is nowhere near the private players. Though it offers services at lowest tariffs, the private players continue to put better deals in all areas.

BSNL has presence in both urban and rural areas. Pre-activated wireless connections are available at many places across India. BSNL has also started cost-

effective broadband internet access plans (Data One) targeted at homes and small businesses.

In terms of providing comprehensive range of telecom services in India including Wireline, CDMA mobile, GSM Mobile, Internet, Broadband, Carrier service, MPLS-VPN, VSAT, VoIP services, IN Services etc, BSNL holds 7<sup>th</sup> position among Telecommunication Companies in the world. BSNL is the only service provider, making focused efforts and planned initiatives to bridge the Rural-Urban Digital Divide ICT sector. In fact no telecom operator in the country can compete with its services viz., wide network serving in every area of country and operating all over except Delhi & Mumbai.

The company offers wide ranging & most transparent tariff schemes designed to suit every customer. BSNL has 94.36 million cellular & 1.02 million WLL customers as on 31.10.2016. 3G Facility has been given to all 2G connections of BSNL. In basic services, BSNL is miles ahead of its rivals, with 13.88 million wireline phone subscribers i.e. 56.96% share of the wireline subscriber base.

#### **4.1.3 AREA OF OPERATION**

The world class services offered by the BSNL: The Plain old, Countrywide telephone Service through a large number of electronic exchanges. BSNL launched Data One broadband service in January 2005. It set up a world class multi-gigabit, multi-protocol convergent IP infrastructure that provides convergent services like voice, data & video through the same Backbone & Broadband Access Network. At present there are 21.86 million broadband customers including both wireline & wireless broadband.

BSNL has installed Quality Telecom Network in the country and now focusing on improving it, expanding the network, introducing new telecom services with ICT applications in rural areas and attracting customers. Today, it has about 46 million line basic telephone capacity, 8 million WLL capacity, 52 Million GSM Capacity, more than 38302 fixed exchanges, 46565 BTS, 3895 Node B ( 3G BTS),

287 Satellite Stations, 614755 Rkm of OFC Cable, 50430 Rkm of Microwave Network connecting 602 Districts, 7330 cities/towns and 5.6 Lakhs villages.

BSNL introduced linguistic email service using the DATAMAIL app in eight Indian languages. On 8 June 2017, BSNL signed a memorandum of understanding (MoU) with the Universal Service Obligation Fund (USOF) to have 25,000 Wi-Fi hotspots in rural exchanges within the next six months.

Recently, in September 2018, The Department of Telecommunication (DoT) approved BSNL's proposal to begin nation-wide 4G LTE services via the allocation of the 2100 Mhz band. Thus, the company would soon launch pan-India 4G services except for Mumbai and Delhi circles.

#### **4.1.4 MARKETING STRATEGIES OF BSNL**

##### **Product**

Some of the product offerings in its marketing mix are –

- *DWDM and Optical Infrastructure* – The OFC is the biggest network in India and the DWDM is the world's biggest networks and both of them owned by BSNL.
- *Managed Network Services* – To its Enterprise customers, the company is giving telecom services like the Leased Internet Lines, Leased Point-Point Lines and MPLS Connectivity.
- *Cellular Mobile Telephone Services* – BSNL has 9.87% market share in wireless segment providing mobile services with the help of GSM platform.
- *Wireline Telecom Services* – It has 52.92 % market share in wire-line segment providing fixed landline.
- *WLL-CDMA Telephone Services* – It provides wireless services in mobile and fixed lines.
- *Broadband* – BSNL owns nearly 64% of the market share providing broadband services through the dial-up-connection. It is also a provider of online games.

- *Intelligent network* – A range of Value-added services are also being provided like free phones, prepaid card, private network, a number that has universal accessibility and ACC services.
- *3G* – This service include video calling, live television, mobile broadband and video portal etc.
- *IPTV* –It enables watching television using internet.
- *FTTH* – It includes transferring data through higher bandwidth. It also provides fiber plans for the home, which are generally known as BSNL FTTH broadband service. This is the fastest broadband service provided by BSNL, offering speeds up to 100Mbit/s to home-based Internet users.
- *Helpdesk* – It provides the necessary help to the customer.
- *VvoiP* – It provides video and audio calls on any mobile, landline or IP phone anywhere in the world subject to the required equipments at both ends.
- *WiMax* – This includes the introduction of 4G Wireless Technologies through broadband access.
- *DATAMAIL* - It offers linguistic email service app in eight Indian languages.

BSNL also offers additional services viz., Free Phone Service (FPH), India Telephone Card (Prepaid card), Account Card Calling (ACC), Virtual Private Network (VPN), Tele-voting, Premium Rate Service (PRM) and Universal Access Number (UAN). For the voice call, video call and internet facility that too from the broadband network access, BSNL has set up a world class infrastructure which is currently serving more than 20 million customers who are using all types of landline and broadband services made available to them. BSNL is currently focusing in improving its internet service by increasing its range and providing a bigger bandwidth to its users. This will help BSNL in maintaining the loyalty of customers with its premium services. BSNL product strategy mainly aims to keep up with the touch of the growing hardware technology which is continuously coming up with innovation so as to sustain and satisfy the needs of its users BSNL needs to keep improvising its services.

**Price**

BSNL sets prices of its products on the basis of competitive pricing as a part of its marketing mix. Being a State-Owned company, BSNL provides services at very affordable prices so that every section of the society could easily avail them. It has been providing calling service at a very cheap rate in comparison to its competitors and it depends on the installation charges. BSNL service price also varies with usage of customers. It provides specific discount or special offers to the users whose usage is very high in comparison to others. In such cases, where usage is higher than normal, then discounts are provided to lure customers to lower down the prices. Special timing slots are offered when the cost is kept marginally less. The revenue earned from this segment is higher and hence the different pricing policy is adopted. BSNL also offers its consumers lifetime cards and this policy helps in maintaining customers and ensuring future revenue flows.

**Place**

BSNL has established a wide and intricate network spread in every part of India and has been continuously upgrading its IP infrastructure in order to reach every corner of the country except New Delhi and Mumbai and connect them with urban areas. In order to enhance the service capacity and network coverage there is a channel management team. For easy accessibility, there are twenty-four telecom circles, four specialized units, six project circles, four maintenance regions, three training institutions, five telecom sectors and two metro districts.

The company has established a network system for management and for surveillance throughout the country so that an uninterrupted and systematic telecom traffic flow could continue. It has network alliances with companies like Cisco and Ericson and IT alliances with companies like Compaq and HP. Moreover, to provide solutions to customer problems BSNL has opened call centers in each and every city along with its circle.

**Promotion**

BSNL use various media like TV, print, online, hoardings etc for advertising. Initially BSNL used to spend very limited effort and money on promotion because

of its dominance in telecom market in India. But due to competition getting intense it has started promotion by introducing new logo, catchy slogans like connecting India, new and different brand names for different services provided by the company. Various social media sites have also been used for promotion with growing digital era. It promotes its new services, schemes and discount offers both through traditional way like banners etc. at retail shops, newspaper etc. and on social media sites.

To differentiate the brand it has introduced various schemes like – installing machines for depositing cheques for easy payment, daily opening of service centers from 8.00 AM – 8.00 PM, 24 hours help is available on helpline numbers, payments are possible through both demand draft and cheque and multiple connections can be applied for on single application.

BSNL has decided to carry uniform identity hence it has created a marketing strategy that is applicable for its brand and all its products under a single window. The world-class shooter *Abhinav Bindra*, actors *Preity Zinta* and recently *Deepika Padukone* also have been associated with BSNL as its brand ambassador.

### **People**

Being a service provider people needs to play a strong role but for BSNL it turns out to be a weak element as other than an secured job there are no rewards and recognitions for motivating the workforce to put their maximum capabilities. Moreover, BSNL has a lack of young and energetic workforce to a certain extent and because of this resistance to change in employees' attitude (as a monopoly provider) is becoming a serious problem even in such a high level of competition in market.

The BSNL manages their customer contact points largely through their own resources and employees. It has been observed that employees at help desk lack soft skills and knowledge to deal with customers in comparison to private sector providers. The IT support is also not adequate to deal with customers. Employees at BSNL especially in landline segment, seems highly unprofessional in appearance,



skill sets, and knowledge level and even their rough attitude and behavior towards customers. The government employee attitude is predominant in BSNL.

### **Process**

Generally physical processes need to be simple and easily accessible to customers but BSNL does not have smooth processes as solution to customer's problems is provided after a long delay by passing through different officials. Hence, the current procedure is not effective for quick resolution of issues that is pushing loyal customers to switch.

Even though the BSNL has improved and made its procedures and processes simpler as compared to that of highly bureaucratic DoT era, it is still not touching the benchmarks set by the competitors. The single window concept is not yet a reality in BSNL especially with respect to landline segment.

### **Physical Evidence**

BSNL has a strong presence which also shows its physical presence. The physical evidences are like Sim card, recharge vouchers, mobile phones, landlines which are all available with the front end force on all the mini stores opened by telecom operators. As this seems to be B2C service, BSNL is also aiming to come up with B2B service in order to provide these physical products on a large scale. Hence this completes the BSNL marketing mix.

The BSNL mainly rely upon their customer care centre and telephone exchange network for proving the physical presence.

**BSNL GETS IN THE GAME:** Bharat Sanchar Nigam Limited (BSNL) announced that from January 1st, their customers will be able to make unlimited calls and get unhindered access to data at just Rs. 149 a month. ▣ While JIO has a Rs 149 plan includes unlimited voice calls, 300 MB data and 100 local and national SMS for a 28-day period. ▣ Also, BSNL plans to use its underutilized 7 lakh kilometers of fibre network and to reduce Interconnectivity usage charge.

## **4.2 RELIANCE- JIO**

### **4.2.1 INTRODUCTION**

Infotel Broadband Services Limited was incorporated 2007 and renamed Reliance Jio Infocomm Limited in January 2013. It is a wholly owned subsidiary of Reliance Industries and has headquarter in Navi Mumbai, Maharashtra. It is the only 100% VoLTE (Voice over LTE) operator in the country, with coverage across all 22 telecom circles in India. Jio does not offer 2G or 3G service, and instead utilizes voice over LTE to provide voice service on its network.

Jio soft launched on 27 December 2015 (the eve of what would have been the 83rd birthday of Reliance Industries founder Dhirubhai Ambani), with a beta for partners and employees and became publicly available on 5 September 2016.

With the entrance of Reliance Jio in telecom market, market shares of other major telecom companies like Airtel, Vodafone, Idea have been falling abruptly. With unlimited free voice call, 4G data, Messaging, and much more, Reliance Jio has turned out to be a real phenomenon for the world. While the craze of people for acquiring a Jio SIM all over the country is mounting over time, other telecom operators are dragging into the edge of competition more and more. The unlimited offers of Jio and its boosting trend have made other major telecom service providers to re-think about their tariffs. JIO has set a new record and has acquired 6 Lakh customers per day which made 1000 customers per minute.

Bharti Airtel, Vodafone and Idea Cellular petitioned a plea to TRAI regarding the tariff rates set by JIO. Airtel issued a petition of 25 pages stating a demand that JIO should not exceed promotional offer beyond 90 days. Result was TRAI dismissed the motion and the promotional offer was extended to 31st March 2017 in place of 31<sup>st</sup> December 2016.

The New Year offer of free voice and data provision to the customers till 31st March 2017 was a violation to the 90 day promotional deal which was allowed by TRAI. The company was supposed to revert to this problem. They put a cap on the Fair Usage Policy (FUP) to 1 GB of data per day. Post 1 GB, the speed drops

down to 128 kbps. Now, the customers need to recharge their data plans to revive the desired speed.

Now the company is third largest telecom-operator in India with more than 215 million subscribers. It added 83 million subscribers in 2017-18 and regarded as offering lowest call drops in the country.

#### **4.2.2 GROWTH & DEVELOPMENT**

In the year 2010 Reliance acquired 96% stake in Infotel Broadband Services for Rs. 4800 crores, immediately after Infotel won spectrum auction. Afterwards, in 2013 Infotel Broadband Services were renamed as Reliance Jio Infocomm Limited. In December 2013, Reliance Jio inked a deal for its 4G roll out with Bharti Airtel for sharing undersea cable capacity, optic fibre network, wireless towers and Internet broadband services.

Reliance Jio has also laid more than 2.5 lakh kilometres of fibre-optic cables, covering 18,000 cities and over one lakh villages. The service claims to have an initial end-to-end capacity to serve in excess of 100 million wireless broadband and 20 million Fibre-to-Home customers. In 2015, The company tried 4G services amongst its employees. After its successful trial, Mukesh Ambani announced the launch of JIO in the 41st Annual General Meeting held on 1st September 2015 effective from 5th September 2015.

On 5 July 2018, the company launched fixed line broadband service named Gigafiber.

JIO has collaborated with the Mobile and E- commerce companies to provide free SIM and an extended data packs. It also introduced Pokémon GO IN INDIA in collaboration with Niantic Labs, the creator of the game. They also promoted their company by using Reliance Digital stores as Pokéstops.

#### **4.2.3 AREA OF OPERATION**

Reliance Jio is a network operator of mobiles and offers 4G LTE wireless services. It does not offer 2G or 3G services and is the only operator to provide

VoLTE-only services. For the first time Reliance Jio launched beta services to its employees and partners on 27 December 2015. Reliance Jio Infocomm Limited provides broadband services to customers using WI-MAX as access technology pan India. It deals in mobile-telephonic communications, broadband services and digital services.

The company launched commercial services in september 2016. It had a fiber-optic cable network of 250,000 km that partners with local cable operators to receive broader connectivity for getting broadband services. On 25<sup>th</sup> January 2016 LYF smartphones were introduced including Water 1 and later Water 2, Flame 1 and Earth 1. In May 2016, several multimedia apps were launched by Reliance Jio on Google Play and it includes

Wireless router – Jiofi

Transfer content – JioSwitch

Wallet app – JioMoney Wallet

Backup tool that is Cloud-based – JioDrive

Magazine and news aggregator – JioXpressNews

Magazine e-reader – JioMags

VoLTE phone-stimulator – Jio4GVoice

Music player – JioMusic

Instant-Messaging app – JioChat Messenger

HD online video library – JioCinema

TV channel live service – JioTV

Manage digital services and Jio account – MyJio

### **Future Strategies**

FOCUS ON WI-FI Jio aims to deploy 1 million Wi-Fi hotspots by middle of the next year. The hotspots will help reduce network congestion. Its data plans come with access to JioNet Wi-Fi hotspots, making the service available to its users across the country.

FTTH The company is planning to foray into fiber segment to provide ultra high-speed broadband connections to users. It plans to bring 1Gbps broadband to

100 cities in India. Cheap 1Gbps fibre all over India will mean cheaper and faster Internet for everyone as a whole.

**SET UP BOX** Reliance Jio has partnered with Nvidia in order to devise the Shield Android Box, which would redefine Indian homes' entertainment. Users will be able to enjoy seamless streaming of 4k content from various digital platforms. Service will be offered along with a voice-enabled remote.

**JIO MONEY** Already accepting payments in all Reliance outlets, Jio Money has tied up with several local kirana stores across India. The company also plans to roll out location-based offers soon, so that, if you have Jio Money, you might get to know of particular offers at a nearby mall. It is also hoping to target public transport such as the metro at some point in the future.

#### **JIO APPS**

JioHealth- to store medical reports.

JioEducation- for education content in rural areas.

JioData Transfer- to send and receive data between an old phone and a new phone.

**JIO CAR CONNECT** Jio has plans to connect a staggering 90% of the cars in India to the internet by 2020 with the rumored Car Connect OBD (On-Board Diagnostics) service. With this, one can access various subsystem of the car such as fuel injection, oxygen sensors and more. This helps in tuning performance as well as diagnosing any faults that the vehicle might have. Other features are such as turning on the AC, driving styles, speed alerts and panic braking details.

**CABLE TV** Plans to spend around \$2 billion over three years to capture India's TV sets. The television unit has been aggressively wrapping up deals with hundreds of small players and also snaps up rival operators like Hathway Cable, Siti Cable, etc.

#### **4.2.4 MARKETING STRATEGIES OF JIO**

##### **Product**

**4G BROADBAND-** It offers data and voice services with peripheral services like instant messaging, live T.V, movies on demand, news, streaming music, and a digital payments platform.

**JIO-FI** - free Wi-Fi hotspot services in cities throughout India. In March 2016, Jio started providing free Wi-Fi internet to spectators at six cricket stadiums hosting the 2016 ICC World Twenty20 matches.

**LYF SMARTPHONES** - In June 2015, Jio tied up with domestic handset maker Intex to supply 4G handsets enabled with VoLTE feature. Through this, it planned to offer 4G voice calling besides rolling out high-speed Internet services using a fiber network, in addition to the 4G wireless network. However, On 25 January 2016, the company launched its LYF smartphone series starting with Water 1, through its chain of electronic retail outlets, Reliance Retail. Three more handset models have been released so far, namely Water 2, Earth 1, and Flame 1.

**JIO APPS** - In May 2016, Jio launched a bundle of multimedia apps on Google Play as part of its upcoming 4G services. While the apps are available to download for everyone, a user will require a Jio SIM card to use them. Additionally, most of the apps are in beta phase. Common among these are:

MyJio - Manage Jio Account and Digital Services associated with it.

JioTV - A live TV channel service.

JioCinema - An online HD video library.

JioChat Messenger - An instant messaging app.

JioMusic - A music player.

Jio4GVoice (earlier JioJoin) - A VoLTE phone simulator.

JioMags - E-reader for magazines.

JioXpressNews - A news and magazine aggregator.

JioSecurity - Security app.

JioDrive - Cloud-based backup tool.

JioMoney Wallet - An online payments/wallet app. JioSwitch - Transfer content.

**Place**

Reliance Jio has a strong and widespread distribution channel. It has a well-built presence in the Indian subcontinent because of its extremely well developed infrastructure. It is the owner of 1,800 MHz and 800 MHz bands in 6 and 10 circles respectively amongst the total 22 circles prevalent in India. The network is available across all these 22 circles which include regions across the country. All states and major cities are covered. It has a reach in about 18000 cities and across more than two lakh villages within the country. It is also the owner of 2,300 MHz spectrum licensed for Pan-India usage till the year 2035.

**Price**

Jio brought a breakthrough in Indian telecom market with its innovative pricing policies. In order to promote Internet usage within the country and to make the availability of Internet to people belonging to every class, Reliance Jio offered SIMs free of cost to every individual against their Aadhar number and unique mobile number identity. It was estimated that Jio was successful in selling up to 14 lakh SIM cards to individuals within the first few days of its launch. Following the stint of rolling out services free of charge for the users, Jio has rolled out reasonable pricing plans wherein consumers are charged reasonably for the data consumption that they undertake. Voice calling however, is still free for its users who mainly pay for the data usage. Reliance Jio Phones including the LYF series were priced affordably with a security deposit of Rs 1500 that could be withdrawn by the user after usage of the phone for three years. LYF devices start at prices as low as Rs.2999 and JioFi is priced at ranges as low as Rs1999.

**Promotion**

Jio has adopted aggressive marketing strategy to create positive brand image. It has launched ad campaigns on television, radio, newspapers, magazines, and billboards and social media platforms including Instagram, Facebook, Twitter and YouTube. In order to take the advantage of brand endorsement by celebrities it engaged several celebrities to act in its commercials and become associated with its brand.

As part of promotional activities Reliance, Jio offered free internet Wi-Fi services at six cricket stadiums during ICC World Twenty20 and each and every one of its services free till the end of the financial year 2016.

### **People**

Jio believes in providing its employees and customers an entire ecosystem which lets them leverage the digital life to the fullest. A vast majority of employees who work at Reliance Jio come from a socio-economic environment that is extremely dynamic and diverse. Employees are treated with respect and given enough autonomy to lead processes the way they wish to. It has 30000 plus permanent employees. They are focused, dedicated and passionate towards their work.

### **Process**

Jio provides a number of mobile applications that are available for free download from the Google Play store, which even though free to download require the presence of a Jio sim that the user should own. Some of the most popular examples of Jio apps include JioTV, JioCinema, JioChat Messenger, JioMusic, JioMags and so on. Jio-Fi has also been launched in select part of the countries which is Jio based Wi-Fi services at homes and offices.

### **Physical Evidence**

Reliance Jio promotes itself with the Jio Digital Life campaign in order to attract the youth of the country with the broader vision that the leadership of the country has in terms of Digitizing the Indian Society. The company mainly appeals to the youth in the age groups of 18-35 years who are looking actively for internet services at affordable prices.

## **4.3 BHARTI AIRTEL LIMITED**

### **4.3.1 INTRODUCTION**

Bharti Airtel Limited is a leading global telecommunications company with operations in 16 countries across Asia and Africa. Mr. Sunil Bharti Mittal is the Founder, and has been the Chairman and Managing Director at Bharti Airtel since



2001, and a Director since 1995. The company is headquartered in New Delhi and ranks amongst the top 3 mobile service providers globally in terms of subscribers. In India, the company's product offerings include 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed home broadband, DTH, enterprise services including national & international long distance services to carriers. In the rest of the geographies, it offers 2G, 3G, 4G wireless services and mobile commerce. Bharti Airtel had over 456 million customers across its operations at the end of June 2018.

Basically, the company is tasked with the work of operating telecommunication services in the larger Indian subcontinent. The company's business services include mobile services, enterprise services and Telemedia services. The mobile services comprise of fixed wireless services and mobile services which use GSM network technology across major telecommunication circles in the country.

With a Pan-India presence, Airtel an established player in providing 3G services is now planning aggressively to roll out its 4G services in a phased manner. The businesses at Bharti Airtel have been structured into three individual strategic business units (SBU's) - mobile services, broadband & telephone services (B&T) & enterprise services. The company's mobile services include pre-paid and post-paid tariffs, value-added services, roaming services, Blackberry services, and business solutions. These services are provided under the 'Airtel brand. The company's broadband and telephone services include those for both residential and business customers. Services comprise DSL Internet access and fixed line telephony. These services are provided under the Airtel Broadband brand. The company's enterprise services include voice services, mobile services, satellite services, managed data and Internet services, managed e-Business services, and managed customized integrated solutions. The company serves over 37 million mobile customers and around one million broadband and telephony customers.

### **4.3.2 GROWTH AND DEVELOPMENT**

Bharti Airtel was established as Bharti Tele-Ventures, in 1995. The company offered its initial public offering in 2002. During 2004, the company delisted its shares from the Delhi Stock Exchange. It continued to trade on the National Stock Exchange and the Mumbai Stock Exchange. Vodafone acquired a 10% stake in Bharti Tele-Ventures for around \$1.5 billion, in 2005. Bharti Tele-Ventures renamed itself to Bharti Airtel Limited, in 2006. In September 2007, the company signed a managed networks deal for its Sri Lanka operations with Huawei Technologies Company, a leader in providing next generation telecommunications network solutions for operators around the world. In October 2007, Bharti Airtel and Indian Institute of Technology (IIT) Delhi announced their plans to establish the Bharti-IIT Delhi Telecom Centre of Excellence. Bharti Infratel, a subsidiary of the company announced plans to partner with Vodafone Essar and Idea Cellular to form Indus Towers, an independent tower company to provide passive infrastructure services in India, in December 2007. The company and the All India Football Federation (AIFF), the official governing body in India for football, signed an MoU to create a comprehensive programme for the development and globalization of Indian football, in January 2008. Bharti Airtel along with eight companies of the global telecommunications industry signed a formal Construction and Maintenance Agreement in Rome today to build a high-capacity fiber-optic submarine cable that stretches from India to France via the Middle East, in February 2008. In the same month, the company along with five international companies executed an agreement to build a high-bandwidth undersea fiber-optic cable linking Asia and the US. In March 2008, the company launched Airtel Call Home service for calls made from US to India. In the same month, Guernsey Airtel, a subsidiary of the Bharti Group, launched its mobile services in Guernsey (Channel Islands, Europe). The company offered products and services under the Airtel-Vodafone brand to customers on the Island. Also in the same month, Airtel Telemedia Services, a private broadband and telephone service provider, launched airtellive.com, an all-in-one internet portal for Airtel Customers.

Airtel's India wireless business is expected to be 50 percent of FY18E revenues. Airtel spent 58 percent of the Capex for buying / renewing spectrum during the past 5 years. While Airtel's spending was for new spectrum, a significant chunk has been towards renewing existing

Airtel's strategy is to focus on other businesses which contributed 45 percent of revenues. Jio is an operator with focus on 4G data markets. Airtel's other businesses deliver robust profit growth which is not yet fully factored in by the market.

### **4.3.3 AREA OF OPERATION**

The businesses at Bharti Airtel have been structured into three individual strategic business units (SBU's) - mobile services, broadband & telephone services (B&T) & enterprise services. The mobile services group provides GSM mobile services across India in 23 telecom circles, while the B&T business group provides broadband & telephone services in 90 cities. The Enterprise services group has two sub-units - carriers (long distance services) and services to corporate. All these services are provided under the Airtel brand. It includes-

Voice Services

Mobile Services

Satellite Services

Managed Data & Internet Services

Managed e-Business Services

Voice Services

Bharti Airtel became the first private fixed-line service provider in India. It is now promoted under the Airtel brand. Recently, the Government opened the fixed-line industry to unlimited competition. Airtel has subsequently started providing fixed-line services in the four circles of Delhi, Haryana, Madhya Pradesh, Karnataka, Tamil Nadu & UP (West). Airtel Enterprise Services believes that these circles have high telecommunications potential, especially for carrying Voice & Data traffic. These circles were strategically selected so as to provide synergies with Airtel's long distance network and Airtel's extensive mobile network. Airtel

Enterprise Services provides integrated telephone services and user-friendly plans for Broadband Internet Services (DSL) for Enterprises and small business enterprises. It offers innovative, cost-effective, comprehensive and multi-product solutions to cater to all telecom and data needs.

Airtel Enterprise Services also offers lots of Value Added Services as well as premium add-ons. Each telephone connection from Airtel Enterprise Services is backed by a superior fiber-optic backbone for enhanced reliability and quality telephony. Few of the Value Added Services offered are Calling Line Identification, Three Party Conferencing, Dynamic Lock, Hunting Numbers, and Parallel Ringing etc. It also provides Free Dial-up Internet access that is bundled along with Telephone connection from Airtel.

Managed Data & Internet Services include: MPLS, ATM, FR, Internet, IPLC Leased Lines, Customised Solutions, International Managed Services Metro Ethernet. In addition, Managed e-Business Services offers an internationally benchmarked, Carrier class hosting, storage and business continuity services.

#### **4.3.4 MARKETING STRATEGY OF AIRTEL**

##### **Main Strategies**

As per the report given by Goldman Sachs following are the trends that will support the growth of Airtel ([www.telecomlead.com](http://www.telecomlead.com))-

- There will be increase in cellular tariffs in early FY19E. ARPUs will bottom out over the next couple of quarters. EBITDA for Bharti in 4QFY19 will be 26 percent higher vs that in 4QFY18E, led largely by tariff increases. The report indicates Reliance Jio will not be able to continue to offer low tariffs.
- Airtel has divested non-core assets in Africa, as well as stakes in its India tower and DTH business. Airtel will improve its balance sheet by selling more such assets. Airtel's 53.51 percent stake in Infratel is worth \$5 billion, about one-third its 3QFY18 net debt. Airtel may exit tower operations in the few remaining African countries. Airtel may list its Africa operations on a stock exchange.

- Africa business contributes about 20 percent to Airtel's top line and EBITDA. Africa margins have headroom to expand, due to operational efficiency and topline growth. There will be 200-300 bp EBITDA margin expansion over next 3 years for Airtel Africa, reaching 38 percent by FY21E. For comparison, there will be 41 percent EBITDA margin for Vodacom, a Vodafone company in Africa, in CY20E.
- Smaller telcos account for 13 percent of revenue as of Dec 2017. Airtel, which filed for bankruptcy, has 4 percent industry revenue market share and 52 million active subs. Since Airtel is largely a 2G operator, Airtel and others will benefit. Reliance Jio will not gain from the collapse of Airtel because Jio is a 4G operator. Since about 75 percent of Airtel's revenues comes from Tamil Nadu and category C service areas, Airtel, the market leader in these areas, could garner a large chunk of Airtel's subs vs other telcos.
- Airtel could potentially gain market share from telcos like Idea Cellular. This is because Idea Cellular is spending less on Capex in recent years. This lower Capex – one third of Airtel — will reflect in divergence in revenue growth from FY19, and Airtel will grow 400-500bp faster vs Idea Cellular.

## **Marketing Mix**

### **Product**

The company provides a wide array of products and services. In order to retain the maximum number of customers, Airtel has tried to provide as many products and services as possible in order to keep the customers. The following is a list of its products:

Airtel Pre-paid services

Blackberry Wireless Handheld

Airtel Post-paid services

Value added services like instant balance inquiry, caller line identification, 24 hour recharge facility, multimedia messaging service, call wait & call Hold, Caller divert, Airtel Live portal  
SMS based information services

Voice mail services

Hello tunes, Ring tones,

Ringtones and hello tunes offers

Easy post-pay bill payment solutions

Enterprise Solutions

Airtel provides a wide variety of services in the field of telecom. The summary of the products in the marketing mix of Airtel are described as below:

- **Mobile Services:** Airtel provides both voice and data service to its customers. Currently Airtel has got the largest customer base in India crossing over 358 million. Airtel was the first one to provide 4G services in India. Also Airtel provides a variety of low cost plans for its voice and data services. Airtel mobile service can be classified into:
  - Prepaid service eg. Recharge offers, roaming packs, blackberry packs, Family share pack, Handset pack etc.
  - Postpaid service eg. Bill payment, My Plan, Roaming plans, other special offers etc.
  - Other value added service eg. SMS, MMS, Hello tunes, Airtel Money, Airtel Live, 2G 3G 4G internet, voice mail, DND services etc.
- **Telemedia Services:** Airtel provides broadband services across 87 cities in India. Some of the products offered are 4G homes internet service, broadband internet connection, Dongels and routers for 4G and 3G services.
- **Digital TV services:** Airtel TV provides over 540 HD channels with superior picture quality. Airtel Digital TV+ setup box also allows user to record TV programs that can be watched later.
- **Airtel business:** Airtel provides variety of Information and communication Technology services like data centre, network integration, tower infrastructure service to other business, government and carrier customers.

### **Price**

Airtel follows a competitive pricing strategy because of the huge competition in telecom segment in India from competitors like Reliance Jio, Vodafone etc. The pricing strategies of all telecom companies are monitored by Telecom Regulation

Authority of India to ensure fair prices are being charged to all customers. Hence, despite regulation, the most important aspect in the pricing strategy is based on competitive pricing strategy. Airtel provides flexibility to its customer to choose and customize their plan according to their preference and pay tariff according to chosen pack (eg. MyPlan service to customer to choose their plan and pay price accordingly). The aim of Airtel's pricing strategy is customer retention by providing them with combo offers to boost revenue. Airtel pricing strategies in broadband segment is also of very low cost and attracts huge customer base to avail affordable plans.

### **Place**

Airtel's has presence even in India's remotest regions. It sells its service through distributors and retailers, which form the basis of place strategy in the marketing mix of Airtel. The company has got a wide distribution network which spans across 20 countries. It uses retail stores, convenient stores, roadside stalls etc to make its service available to customers. Airtel also launched 'Project leap' in the year 2015 to expand its coverage to over 5 lakh villages. Airtel also provides a dedicated 24 hours customer support service team which can be reached online or through telephone to report any issue or solve customer queries.

### **Promotion**

Airtel engages in aggressive marketing strategy ranging from traditional print media to social network marketing. Hence its promotion strategy is extremely comprehensive i.e. it involves 360 branding. Almost every big celebrity has endorsed its services like Shahrukh Khan, AR Rehman, Sachin Tendulkar, Vidya Balan etc. Airtel has also organized some famous marketing campaigns to target youth audience and build its brand like 'Har Ek friend Zaroori hota he' and 'Jo Tera Hain Wo Mera Hain'. Airtel also sponsors various events like Cricket matches, Grand Prix etc and organized events like Airtel Delhi Half Marathon etc under their community development programme and brand promotion. Airtel has also got a good presence on social media like Facebook, Twitter etc. for its service promotion and solve queries of customers. Airtel also engages in public relations like education campaigns, girls child awareness campaigns etc.

However, the company's recent rebranding efforts bombed in the market and were not received positively. The company also engages in large scale TV and print advertising. The company also managed to create its signature tune from Oscar winning musician A.R.Rahman which has become one of the most downloaded tunes in India.

Apart from these, providing wallpapers and screensavers to computer users has proved a very effective marketing strategy. The company also offers special discounts and offers to its subscribers.

### **People**

Airtel focuses on 'Win with people' approach for its effective business strategy. Airtel has got an employee base of 18179 with a commendable employee engagement score of 79%. Airtel invests heavily in the training and development of the skills of its employees. In 2016, Airtel invested 168 million to nurture talent within its organization and build high performance culture. Airtel also focuses on developing a healthy work culture and efficient functioning of its cross functional teams. Airtel's Talent First Strategy focuses on building entrepreneurship and leadership skills in employees. The people strategy in the marketing mix of Airtel focuses on hiring the right talent, training them and rewarding them. Airtel also promotes gender diversity in its organization by promoting women friendly working policies. Airtel promotes itself as a learning organization where all employees follow a learning development plan based on their career aspiration. Airtel also gives rewards and recognition to identify and retain talent within organization.

### **Process**

Airtel process for providing service to its customer is very easy and streamlined. Airtel process focuses on providing a reliable and responsive service to its customers. To get a plan or new connection the customers can directly go to any Airtel's service centres or contact the support service to activate/deactivate a plan. Airtel's customer can get their queries resolved 24\*7 by contacting the customer support number from anywhere across India. Airtel also opened India's first Open network initiative under Project Leap that displays network strength across India.



This transparent policy allows customer to check network strength and coverage and report any issue easily. Airtel also allow its customer easily to identify various plans and pick the most suitable plan. Airtel customers are free to evaluate the services and then can carry on or switch to a different brand using number portability. It also focuses on delivering optimal services without loss of quality through their commitment towards its customers.

### **Physical Evidence**

Airtel retail outlets and relationship centers serve as a service point to its customers. The Company-Owned-Company-Operated Airtel stores try to serve its customer in the best possible way by providing a one stop solution for all customer needs like instant connection, dongle and broadband connection etc. These stores provide a superior customer experience with excellent look and feel of all the outlets and convenient location within any city. Airtel products like sim card cover and recharge vouchers are beautifully designed to appeal to the customer. Airtel provides its digital TV services through its set top boxes which are easy to configure and use. All these products acts as a differentiating factor for Airtel service marketing. Hence, all these help in summarizing the marketing mix of Airtel.

## **4.4 VODAFONE LIMITED**

### **4.4.1 Introduction**

Vodafone Group Plc is the world's leading mobile telecommunications company, with a significant presence in Europe, the Middle East, Africa, Asia Pacific and the United States through the Company's subsidiary undertakings, joint ventures, associated undertakings and investments. The Group's mobile subsidiaries operate under the brand name 'Vodafone'.

### **VODAFONE – INDIA**

Vodafone India is a member of the Vodafone Group and commenced operations in 1994 when its predecessor Hutchison Telecom acquired the cellular license for Mumbai. The company has become one of the leading companies in the telecom sector in India due to its high standard of services that it provides to its customers. The company has operations across the country serving over 153 million

customers. Vodafone India has firmly established a strong position within the Vodafone Group too, making it the largest subscriber base globally. The company has its operations in 16 telecom circles of the country, which covers around 86% of the customer mobile base in India. The company offers both postpaid and prepaid GSM cellular mobile coverage all across India and its hold is especially strong in the metropolitan cities. The company provides services like 2G, which are based on 1800Mhz and 900Mhz GSM digital technology. The company Vodafone Essar also offers voice and data services.

Vodafone India in its long-term commitment to India has been providing innovative, customer friendly and reliable products and services by continuously differentiating itself with a strong brand, best quality network, unique distribution and great customer service.

At Vodafone, sustainability is an integral part of the company's mission and strategy, shaping the conduct of business every day. In 2011, in line with its Group philosophy, Vodafone India became the first telecom operator in India to release a Corporate Sustainability Report for India – Footprints. Vodafone India has also been awarded the prestigious “Golden Peacock Award” for corporate social responsibility for 2012.

#### **4.4.2 Growth and Development**

Vodafone Group (British) is one of the rare groups that have significant world coverage in the telecommunications field. It principally specializes in the mobile telephony and telephonic transmission network sectors. It has subsidiaries in numerous countries: In North and South America, Asia, Oceania and Africa. Better known by its former name, Vodafone Air Touch, it has become the leading mobile phone operator in Germany, Britain and the USA (Verizon Wireless). And there are a whole series of holdings: SFR, Swiss Mobile, Vodafone K.K. (Japan), 100% of Vodafone Ireland, 100% of Vodafone Spain and 99 of Vodafone Netherlands etc. The group offers services from mobile phones to customized communication services (call management, message services) and supplies data management equipment: Internet, Modems, fax, directories and telemetric servers.

Vodafone Group Plc (Vodafone) is engaged in providing service, such as voice, messaging, data and fixed line and others. Voice services include provision of mobile voice communications. Messaging include text, picture and video messaging using mobile devices. Data services provide e-mail, mobile connectivity and Internet on Your mobile. Fixed lines provide customers with fixed broadband and fixed voice and data solutions. Other services include mobile advertising and business managed services, as well as incoming roaming and wholesale mobile virtual network operators.

Vodafone Group is a mobile tele-communications company. The company has a significant presence in Europe, the Middle East, Africa, Asia Pacific and the United States. In the United States the Group's associated undertaking operates as Verizon Wireless. On the basis of number of subscribers it is the second largest mobile telecom group in the world behind China Mobile.

Global Enterprise is a business set up by Vodafone with the sole purpose of handling Vodafone's multinational clients. It is the high end business to business section of Vodafone group, and acts like an operating country (such as for example Vodafone UK). Devices and services available in any operating country, are available to Global Enterprise customers in the same country, and so Vodafone Global Enterprise are able to offer a wide range of products.

Over the years Vodafone has diversified its businesses from being merely a mobile telephony company to emerging as a major player in communication services industry which deals in broadband services, internet of things, Cloud services and mobile telephony.

It operates in Europe, Asia Pacific, and the Middle East where Asia Pacific & Africa are the emerging markets for Vodafone which contributes 32% of the total revenue. It has partnership agreements with local mobile operators in 58 markets and is operating through a joint venture or associates in mobile networks market in 26 countries.

### **Merger with Idea Cellular**

On 20 March 2017, Idea Cellular and Vodafone India announced that their respective boards had approved a merger of the two companies.

The merger got approval from Department Of Telecommunications in July 2018. On August 30, 2018, National Company Law Tribunal gave the final nod to the Vodafone-Idea merger. The merger was completed on 31 August 2018, and the newly merged entity was named Vodafone Idea Limited. However, the merger did not include Vodafone's 42% stake in Indus Towers Ltd. The merger created the largest telecom company in India by subscribers and by revenue. Under the terms of the deal, the Vodafone Group holds a 45.2% stake in the combined entity, the Aditya Birla Group holds 26% and the remaining shares will be held by the public.

#### **4.4.3 Area of Operation**

Vodafone India Limited provides cellular telecommunication services in India. The company offers prepaid and postpaid services, including number portability, roaming, and calling cards; mobile Internet and 4G; and phones for consumers. It provides voice and messaging, data, wireless, audio conferencing, hosted business solutions, enterprise Website solutions, and machine to machine solutions; and devices and phones to businesses. The company also provides downloading services in the areas of entertainment and lifestyle; games, and downloads and applications; social networking; mail and messaging; devotional; health; news and finance; travel and transportation; caller management; and M-Pesa Pay, a digital payment service to enable merchants and retailers to receive payments from their customers without exchanging cash. It offers its services and products through its stores and online.

The company employs over 65,000 staff worldwide and enjoys a generous customer base of 130 million. The business is in operation in 31 countries worldwide. Despite the competition from similar companies, Vodafone, in India is growing tremendously as a company like in other parts of the world as it tries to roll out its identity into new markets. In fact, the company is already listed in the New York Stock Exchanges, thus, this has helped it in gaining global recognition.

#### **4.4.4 Marketing Strategies of Vodafone**

##### **Product**

Vodafone offers a variety of products including voice, messaging, data and fixed line products. In order to provide solutions to customers' communication needs the company has been constantly striving for. The company offers a wide range of tariffs targeted at different customer segments to satisfy their specific needs.

With data usage and the need of sophisticated handsets becoming a necessity, customers are looking for the best product quality and that is what Vodafone continues to do. Therefore, Vodafone branded devices and services are designed to meet a wide range of customer preferences and needs.

The products include the following:

Vodafone branded phones

Smartphones

Voice and messaging services

Handsets

Internet services

Value added services include Vodafone Portrait, Vodacom, M-Pesa, Vodafone One and Vodafone Speechmark etc.

##### **Place**

Vodafone reaches to its customer through a variety of channels such as retail outlets, Vodafone exclusive stores, distribution partners, third-party retailers, and through online medium. Currently, there are 16000+ Vodafone exclusive branded stores globally.

Although most of the products are sold through the company's customer care centers and shops, it also sells its products through independent retailers. The company has a very friendly and experienced team of customer care staff to ensure that the customer's needs, queries and complaints are attended to. Vodafone stores are the major service providers to customers and there are large numbers of these stores in all corners of the country. It has an amazing network and has one of the

most powerful cell phone ranges amongst all its competitors. Thus the presence and distribution of the company is wide spread in India.

### **Promotion**

Vodafone frequently uses local name recognitions to reach and maintain trusts of its local customers. Recently, in July 2018 Vodafone announced that it has roped in chess grandmaster Vishwanathan Anand as its new brand ambassador. Mary Kom, the famous boxer and Olympian has been its global brand ambassador. In addition, in order to help promote its global appeal and to communicate its brand value, the telecommunication giant often uses famous sports stars like David Beckham, Michael Schumacher and others.

In order to attract a large number of people, the company communicates its brand value and offers through Out-of-home advertising, TV commercials and other social media channels. The most prominent move by Vodafone group was the use of zoo zoos in India during the Indian premier league. Promotion strategies have been the most powerful tool in the marketing mix of Vodafone due to Vodafone Zoo Zoos. Vodafone zoo zoos have been the most famous brand ambassadors and are recognized across the world. Further, the company passes frequent press releases to inform customers about new products and offers. The company also undertakes market research to find out whether its services and products have positive value for the consumers.

### **Price**

Vodafone's products and services are competitively priced and easily accessible to as many people as possible. In order to beat the competition, the company has ensured that it provides high quality services such as providing high speed data and good network range as compared to what the competition is offering. Because it sells different services and products, it offers various price structures to suit different customer needs. Mini as well as jumbo prepaid and postpaid plans are available. Recently, Vodafone has doubled its 2G and 3G internet rates.

For instance, it offers post paid and prepaid options as well as different tariffs. Another important pricing strategy is that the company offers reward points for specified sum of money spent on purchasing airtime vouchers or data bundles.

### **People**

Vodafone India always keeps its customers on the highest priority. It has more than 223 million subscribers as of march 2018. It has strong workforce of over 10,000 employees in India. People including customers as well as employees, are essential elements in the growth of Vodafone.

### **Process**

Vodafone emphasizes deeply on processes as a vital part of its service marketing mix. In order to ensure smooth delivery of its services, the company strives to make the processes effective and efficient. Easy availability of top-ups is of utmost importance and having fully functional towers with good signal strengths for the customers. Customer service is also of high value for the processes to be good, which is always looked after at the company. Apart from CRM, the internal processes of Vodafone in ensuring good network, sim card availability etc are all well thought out.

### **Physical Evidence**

As far as the physical evidence of Vodafone is concerned, it is their Sim cards which are issued to every customer. Apart from that recharge vouchers, stores, service outlets, digital TV services etc all are a part of the physical evidence of the brand.


### **CONCLUSION**

The details of company profile mentioned in preceding pages of the chapter reveals issues which enable readers of the thesis a bird's eye view about the historical back drop, area of operation, growth and development of the company and their marketing strategies pertaining to their marketing mix, etc. The researcher attempted to describe the parameters across the companies be identical, homogeneous and comparable.

## **REFERENCES**

- [www.airtel.in](http://www.airtel.in)
- [www.bsnl.co.in](http://www.bsnl.co.in)
- [www.jio.com](http://www.jio.com)
- [www.moneycontrol.com](http://www.moneycontrol.com)
- [www.vodafone.com](http://www.vodafone.com)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.icsi.edu](http://www.icsi.edu)





*Chapter-5*  
*Research Methodology &*  
*Design*

## **CHAPTER-5**

### **RESEARCH METHODOLOGY & DESIGN**

---

---

#### **INTRODUCTION**

Research is a course of action to develop knowledge about reality. The word *research* is composed of two syllables, *re* and *search*. 'Re' refers to again, anew, or over again and 'search' means to examine closely and carefully, or to test and try. Together they denote a noun describing a careful, systematic, efficient study and enquiry in some field of knowledge, undertaken to establish facts or principles. According to Grinnel Richard Jr. (1993), Research is a structured inquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge that is generally applicable.

Research methodology is the systematic process of initiation, execution and completion of a research study. Research methodology covers formulation of a research problem; conceptualize a research design, construction of valid and reliable instruments for data collection, designing sampling process, and collecting, processing, analyzing and interpreting data, drawing conclusions and writing the research report.

The main reasons behind any research study are to explore and investigate existing unrecognized problems of any field, finding suitable answers for those issues and suggesting scope of further researches. Among the various fields of study, effectiveness of marketing strategies in Indian Telecom Sector has come up as a very important and attractive field of research which needs to study deeply and to search various issues related to it since a lot of companies had to leave the market due to various complexities. The comparative market performance of telecom service providers in multiple planes illustrated in the study would help them to introspect so that remedial measures may be formulated and resolve the associated problems. An attempt has been made to help in exploring successful strategies in marketing of telecommunication products and services.

The present chapter describes the research design framed for the study including research objectives and a suitable methodology to fulfil those objectives. An intensive survey was conducted during the year 2017-18 seeking responses of the consumers using telecom services. The methodology used for the research has been presented under following sub headings:

- 5.1 Research Problem
- 5.2 Brief overview of the Research Objectives
- 5.3 Hypothesis of the study
- 5.4 Research Design
- 5.5 Operational definition of variables
- 5.6 Sampling Design
- 5.7 Data collection
- 5.8 Statistical techniques
- 5.9 Limitations of the methodology
- 5.10 Presentation of Research Report

## **5.1 RESEARCH PROBLEM**

In Indian telecommunication service industry, margin is extremely low. It is primarily due to the fact that overall costs of bandwidth licensing are too high. On the other hand Indian customer is highly sensitive towards price. Therefore, telecom players in India rely more on the higher market share in order to sail through hyper competition and earn decent revenues. This leads telecom companies to formulate such strategies that appeal to their existing subscribers, attract more customers, influencing users of other companies to switch from their telecom service providers. Telecom players are in a perpetual devoir of innovative marketing strategies for performance excellence in market and maintaining their existence, especially in the saturated market and high paced technology breakthroughs. Thus telecom service providers have been venturing into many strategic marketing initiatives. These marketing strategies significantly vary from public sector to private sector and from one operator to another.

To determine the marketing strategies of public and private telecom service providers in India that influence customers more, the topic of the study was identified and titled as “*An Analytical Study of Marketing Strategies of Indian Telecom Industry*”.

## **5.2 BRIEF OVERVIEW OF THE RESEARCH OBJECTIVES**

### **Main Objective:**

The overall objective of this research is to analyse the marketing strategies of major telecom service providers in India.

### **Specific Objectives:**

- To study the changing scenario with respect to marketing strategies of telecom service providers in India to gain large subscriber base.
- To understand product, price, promotion, distribution (place), people, process and physical evidence strategies of Airtel, Reliance Jio, Vodafone and BSNL, especially after the advent of fourth generation mobile communication technology.
- To compare the marketing strategies of Airtel, Reliance Jio, Vodafone and BSNL related to the fourth generation (4G) mobile telecommunication services in India.
- To determine the key marketing strategies of telecom service providers in India and their impact on customer satisfaction and loyalty of telecom consumers.
- To understand buying behaviour of Indian telecom consumers in relation to marketing strategies practiced by the service providers.

## **5.3 HYPOTHESES OF THE STUDY**

The researcher has identified following hypotheses on the basis of 7 Ps of Service Marketing Mix:

H01: There is no significant difference among the product strategies adopted by different service providers.

H11: There is a significant difference among the product strategies adopted by different service providers.

- H02: There is no significant difference among the pricing strategies adopted by different service providers.
- H12: There is a significant difference among the pricing strategies adopted by different service providers.
- H03: There is no significant difference among the distribution strategies adopted by different service providers.
- H13: There is a significant difference among the distribution strategies adopted by different service providers.
- H04: There is no significant difference among the promotion strategies adopted by different service providers.
- H14: There is a significant difference among the promotion strategies adopted by different service providers.
- H05: There is no significant difference among the people strategies adopted by different service providers.
- H15: There is a significant difference among the people strategies adopted by different service providers.
- H06: There is no significant difference among the process strategies adopted by different service providers.
- H16: There is a significant difference among the process strategies adopted by different service providers.
- H07: There is no significant difference among the physical evidence strategies adopted by different service providers.
- H17: There is a significant difference among the physical evidence strategies adopted by different service providers.

## **5.4 RESEARCH DESIGN**

The research design used by the researcher is in accordance with the empirical study requirements. As such, it covers the following sub-sections-

### **5.4.1 Population of the Study**

The population of the study covers all telecom service users belonging to Tier-I and Tier- II cities of India.

### **5.4.2 Type of the Study**

This research work is in the form of 'ex-post facto' study in which the researcher tried to study the existing perceptions of users of telecom service providers viz. Airtel, Reliance Jio, Vodafone and BSNL regarding marketing strategies adopted by them and their impact on consumer behaviour; without manipulating in anyway the scenario as it stands presently. Thus the study is largely empirical in approach.

### **5.4.3 Nature of the Study**

Though the population of the study is finite but it is very large sized, the researcher has used sampling method in place of census method of enquiry and this is considered appropriate keeping in view the limitations of efforts, money and time. Still, every effort has been made to ensure that this sampling study largely proves representatives of the population of the study.

Pilot study was conducted to understand on-field situation. Pilot study was conducted on 50 respondents, 10 each from Kota, Jaipur, New Delhi, Gurugram and Mumbai. The pilot study helped in identifying shortcomings of the questionnaire. After the deficiencies were identified, the irrelevant questions were replaced by more relevant questions. The information provided by the respondents helped to identify and replace confusing words, improving language of certain questions. Minor arrangement in maintaining the proper logical sequence of questionnaires was also done. The realistic environment provided on ground experience and helped to revise the questionnaire for primary data collection.

## **5.5 OPERATIONAL DEFINITION OF VARIABLES**

The main objective of this study is to analyse marketing strategies and activities of Indian telecom industry and the consumer response to those strategies. This study attempts to identify and illustrate key marketing strategies of the public sector player BSNL and major private sector telecom service providers, Bharti Airtel, Vodafone and recent game changer Reliance Jio. The strategies are sought primarily in the areas of product differentiation, pricing, advertisement and distribution (place) and promotion. The study evaluates various elements of telecom

services such as customer care services, quality of service, brand value, promotional offers and schemes, competitiveness in pricing, price war strategies, customization etc. An attempt is also made to identify the important factors and its effects related to customer satisfaction and customer loyalty of mobile telecom consumers in India. The variables which have been identified in the study include Marketing mix strategies viz., product, pricing, promotion and people, customer satisfaction, and customer loyalty. The operational definitions of the study variables are given below:

### **5.5.1 Product Strategies**

These strategies are related to designing the key product and its attributes that are desired by customers or can delight customers, in order to achieve success.

### **5.5.2 Promotion Strategies**

These strategies cover integrated marketing communication tools that are used to inform, persuade and influence people about a product or service.

### **5.5.3 Pricing Strategies**

Since pricing is merely the exchange value of a product or service, pricing strategies are framed considering the objectives of pricing.

### **5.5.4 Distribution Strategies**

These strategies are formulated to provide easy availability of products and services to customers and offer them place convenience.

### **5.5.5 Customer Satisfaction**

It is a measure of how products and services offered by a company meet or exceed customer expectation.

### **5.5.6 Customer Loyalty**

Customer Loyalty is the measure of success of the product or service in retaining customer for a long time. It is the ultimate reward of marketing efforts in interacting with its customer.

## **5.6 SAMPLING DESIGN**

Sampling is an elementary tool to gather information about a given problem from a definite portion of an entire population instead of measuring every member of the population. A proper sampling technique can have great effects on the authenticity of outcome of a research.

The technique of purposive random sampling was used to collect data pertaining to the study. Questionnaires were mailed to 1500 people belonged to Tier-I and Tier-II cities namely, Mumbai, Delhi, Kolkata, Chennai, Gurugram, Chandigarh, Jaipur, Indore, Hyderabad, Ahmedabad, Bangalore, Lucknow, Kota etc., who were using telecom services in India. In the second phase Stratified Sampling Method was used and strata were made on the basis of different telecom players. The final sample consisted of the customers of the chosen companies for the purpose of the study: Airtel, Reliance Jio and BSNL. Thus, duly filled in questionnaires of 1009 customers were identified randomly and their responses were edited in accordance with the requirements of the objectives and hypotheses.

## **5.7 DATA COLLECTION**

Data was collected on the basis of objectives of the study. Being empirical study, it is completely based on primary data collected by the researcher through well designed, structured and comprehensive questionnaires developed by the researcher in view of the theoretical literature and existing research findings as also the objectives of the study. The questionnaire contains dichotomous questions, multiple choice questions, scaling questions and ranking questions too.

Since the respondents subscribing different telecom companies, had different experience about services provided by their provider, questionnaire was considered to be the most appropriate tool for data collection. Data was collected by sending a web based link to customers of participating organizations. Further, the data was supplemented by review of documents and conducting participant's interview to gather additional information. The respondents were instructed in a well manner about the pattern of answering the questionnaire. They were given enough time to answer all the statements.



## 5.8 STATISTICAL TECHNIQUES

Various statistical techniques were employed to examine the data such as -

- Self administered questionnaire includes both scale and open-ended questions. The questionnaire contains three sections with different questions regarding .....
- Five-point Likert type numerical scales ranging from Highly Agree to No Idea and No influence to very significant influence were used.

The duly filled in questionnaires were edited by the researcher and in accordance with the requirements of the objectives and hypothesis, univariate and bivariate tables were prepared.

- A variety of statistical analyses has been applied to the data, including Percentage analysis, weighted Averages, Chi- square test (goodness of fit and test of independence) & Kruskal Wallis or H test.
- Online statistical software was used for data analysis. One of the benefits of using statistical software is the ease of computing statistics which allows for analysis of large sets of data over multiple variables in a short amount of time (Polit & Beck, 2008). It allows for separation of the data by variable or by item so that the researcher will be able to determine if there are items that have greater differences between groups. Statistical significance was set at .05. An additional benefit of utilizing statistical software is that if a result is significant at the .01 or .001 level the software generated results at these levels of significance with appropriate notations. A statistical consultant was referred to confirm statistical analysis procedures after the researcher ran the data analysis. It was necessary for the data to be examined to ensure that underlying assumptions were met.

As these techniques are appropriate to test the internal consistency, construct validity, average, percentage, determination of cut off scores, and relationship among different variables.

The brief description of the test is as follows:

### **Pearson's Chi-Square Test**

It compares two categorical variables in a contingency table to see if they are related. In a more general sense, it tests to see whether there is any significant association between set of qualitative variables. The association between different groups and distribution of parameter into set of responses is tested. The calculated value of  $\chi^2$  is compared with its critical value at a particular level of significance and degrees of freedom. A small chi-square statistic indicates that the null hypothesis is correct and that the two variables are independent of each other.

### **Kruskal Wallis Test (or *H* test)**

The Kruskal Wallis test is a non-parametric test of statistical significance used when testing more than two independent samples. It is one-way analysis of variance (ANOVA) for rank order data and is based on medians rather than means. It is an extension of the Mann-Whitney U test to three or more groups. When the Kruskal-Wallis test leads to significant results, then at least one of the samples is different from the other samples. The test does not identify where the differences occur or how many differences actually occur. Therefore the Mann-Whitney test is used to analyse post hoc procedures for Kruskal-Wallis test.

### **Mann-Whitney U test**

Mann-Whitney U test is a test of statistical significance of difference between two groups. It is used when the data for two samples are measured on an ordinal scale. It is a non-parametric equivalent of t-test. Although ordinal scales of measurements are used with the Mann-Whitney test, an underlying continuous distribution is assumed. This test is also used instead of the t-test with interval level data when researchers do not assume that the populations are normal.

## **5.9 LIMITATIONS OF THE STUDY**

The primary data is collected through a survey conducted on respondents who provided their inputs in the questionnaire exclusively designed for this study. It is beyond our control to prevent specific inherent shortcomings of such surveys where respondents are naturally biased in their responses. At times, respondents may

be under the influence of their mood and cognitive limitations. Sometimes individual respondents interpret the questions in a different manner which results in improper responses. In spite of paramount care taken to ensure the reliability and validity of the questionnaire, there may exist a possibility of certain errors that cannot be ruled out effectively.

The marketing strategies pertaining to wholesale business, Business to Business (B<sub>2</sub>B) solutions, Enterprise solutions, etc offered by the telecom service providers are not considered in this study.

Indian telecommunication market is highly dynamic and extremely competitive. Due to the recurrent changes in the marketing strategies of the service providers and brisk technology breakthrough, the latest trends after the primary data collection process could not be included in this study.

However, considering the specific objectives of the study, these limitations do not dispense any severe affect on the quality of the research work. An earnest attempt has been made by the researcher to arrive at meaningful conclusions through systematic analysis of data.

## **5.10 PRESENTATION OF THE RESEARCH REPORT**

The entire thesis has been prepared and presented under the sequentially arranged chapters with the following details:

- Chapter – I : Conceptual Framework

This chapter includes the concept of marketing strategy, types of strategies and their brief description etc.


- Chapter – II : Review of Literature

This chapter presents the excerpt of the findings drawn by various researchers on the topic being pursued and also on the related aspects.

- Chapter- III: Indian Telecom Industry  
This chapter gives an overview of Indian Telecom Industry covering brief historical development of telecom services, major players in the industry, their strategies, recent developments, opportunities and a brief description of regulatory bodies and regulations prevailing in the Industry.
  
- Chapter – IV: Profile of Selected Telecom Companies and their Marketing Strategies  
This chapter covers historical backdrop, growth and development, area of operations, and most importantly marketing strategies practiced by the selected undertakings, namely, Airtel, Reliance Jio, Vodafone and BSNL.
  
- Chapter – V : Research Methodology & Design  
This chapter discusses about the methodology adopted for the study including objectives and hypotheses of the study, type of research, sampling design, data collection tools, statistical tools used and lastly limitations of the study.
  
- Chapter-VI: Data Analysis and Interpretation  
This chapter is completely based on primary information collected through the questionnaires from the customers of selected undertakings, namely, Airtel, Reliance Jio and BSNL. The chapter covers data analysis and interpretation and the hypothesis testing also.
  
- Chapter VII: Major findings, Conclusion & Recommendations  
In this chapter, a brief summary of the research report, major findings of the study, recommendations together with overall conclusions have been given.

**REFERENCES**

- C. R. Kothari (2004), *Research Methodology: Methods & Techniques*, New Age International (P) Ltd.
- Crimp M. and Wright L. T. (1995). *The Marketing Research Process*, (4th ed.), Prentice Hall, London.
- Donald R. Cooper and Pamela S. Schindler. (2006). *Business Research Methods*, (9<sup>th</sup> ed.). Tata McGraw-Hill, New Delhi.
- Kerlinger Fred N. (1986). *Foundations of Behavioural Research*, (3rd ed.). Holt, Rinehart and Winston, New York.
- Ranjit Kumar. (2009). *Research Methodology – A step by step guide for beginners*, (2<sup>nd</sup> ed.). Dorling Kindersley India Pvt. Ltd., New Delhi.



*Chapter-6*  
*Data Analysis & Interpretation*

# **CHAPTER-6**

## **DATA ANALYSIS & INTERPRETATION**

---

---

### **INTRODUCTION**

The main objective of the present chapter is to display the outcomes of data analysis conducted to examine the stated hypotheses as per the empirical research undertaken. The data analysis was completely based on survey information collected from the employees of selected companies according to the sampling design mentioned in the previous chapter. The chapter covers the following sections-

1. **Profile of the Respondents**

This section comprises personal information such as gender, age, occupation, location, name of the service provider, secondary service provider etc. These variables may help in finding association with other variables for further studies. However, for the purpose of the study only the associations between the variables considered for testing of hypotheses and the chosen telecom companies were established.

2. **Data Analysis and Hypotheses Testing**

In this section associations were established between chosen service providers and the variables pertaining to stated hypotheses. Further, the associations were tested to accept or reject the hypotheses using various statistical tools including Percentile analysis, averages, Pearson's Chi- square test, Mann-Whitney U test and Kruskal Wallis H test.

3. **Hypothesis viewed as per the Analysis**

This section summarizes the result of the analysis and concludes whether the stated hypotheses have been accepted or rejected.

### **6.1 PROFILE OF THE RESPONDENTS**

In this section the researcher presented the collected data pertaining to the profile of respondents in tabular manner with respective percentages and displayed them through suitable graphs.

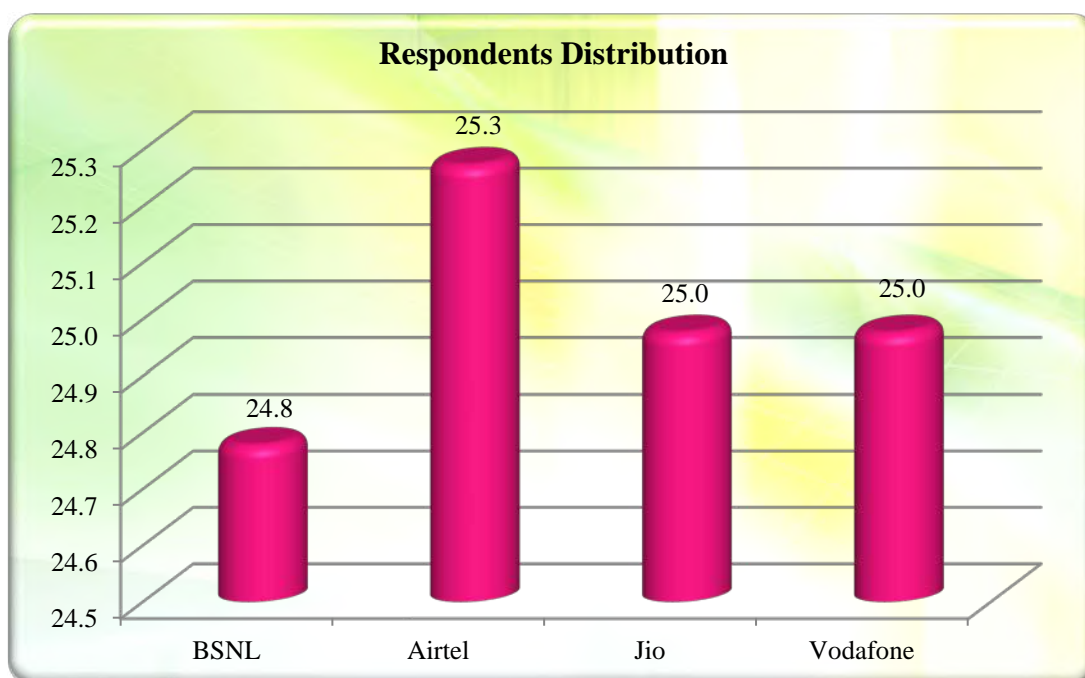
### 6.1.1 Distribution According to Service Provider

The respondents reported their primary telecom service provider as mentioned in the table and graph shown below. As per the sampling design described in the research methodology of this study, almost equal number of respondents belonged to the chosen service providers. However, the maximum numbers of respondents were using Airtel while minimum number of respondents was having BSNL as primary telecom service provider

**Table 6.1**  
**Distribution According to Service Provider**

Service Provider	Frequency	Percent
BSNL	250	24.8
Airtel	255	25.3
Jio	252	25.0
Vodafone	252	25.0
Total	1009	100.0

**Chart 6.1**  
**Distribution According to Service Provider**





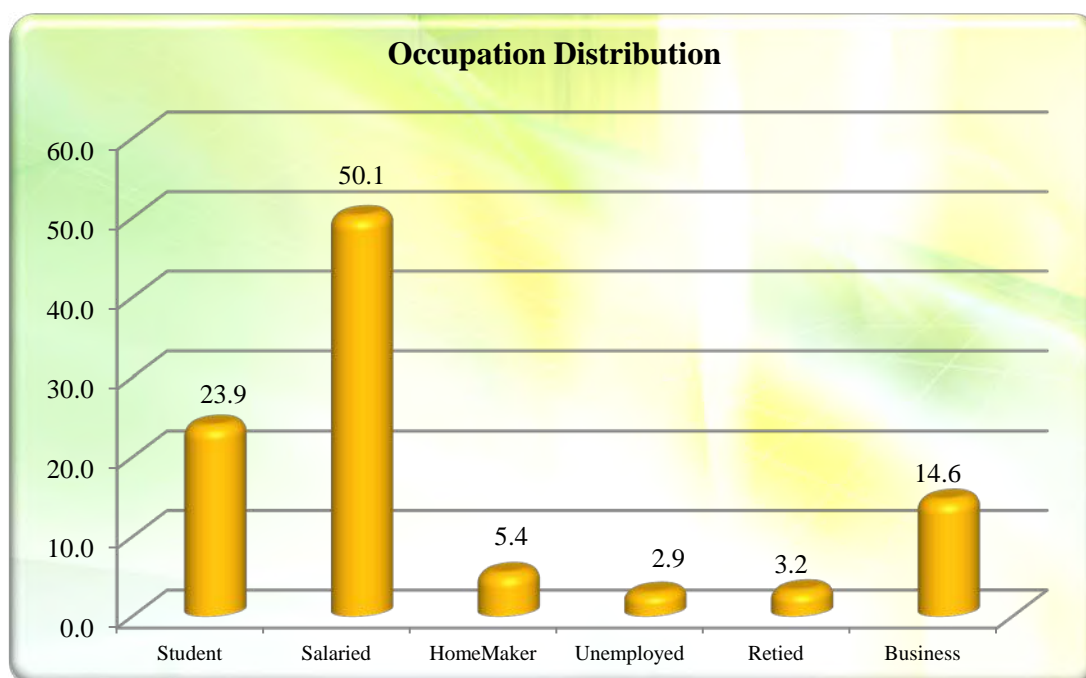
### 6.1.2 Distribution According to Occupation

The respondents indicated their occupation as mentioned in the table and graph shown below. Maximum number of employees i.e. 50.1 per cent was salaried. About 24 per cent accounted for students whilst 14.6 per cent were involved in business and only 5.4 per cent was of home makers.

**Table 6.2**  
**Distribution According to Occupation**

Occupation	Frequency	Percent
Student	241	23.9
Salaried	506	50.1
Home Maker	54	5.4
Unemployed	29	2.9
Retied	32	3.2
Business	147	14.6
Total	1009	100.0

**Chart 6.2**  
**Distribution According to Occupation**



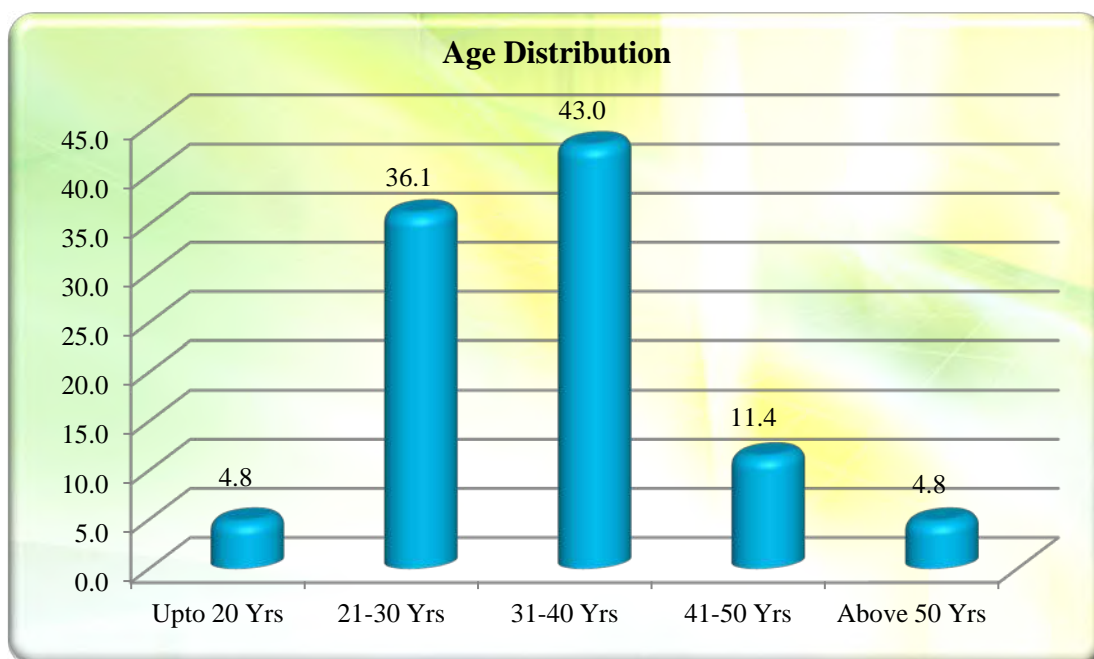
### 6.1.3 Distribution According to Age

The total data of 1009 respondents was distributed according to their age as per the table shown below. The table and graph show the distribution of respondents according to their Age Group. Maximum number of employees i.e. nearly 43 per cent falls under age group 31-40 years. About 36 per cent belonged to 21-30 years age group whilst nearly 11 per cent were between ages 41-50 years and remaining amount was equally divided between the age groups up to 20 years and above 50 years of age.

**Table 6.3**  
**Distribution According to Age**

Age Groups	Frequency	Percent
Upto 20 Yrs	48	4.8
21-30 Yrs	364	36.1
31-40 Yrs	434	43.0
41-50 Yrs	115	11.4
Above 50 Yrs	48	4.8
Total	1009	100.0

**Chart 6.3**  
**Distribution According to Age**



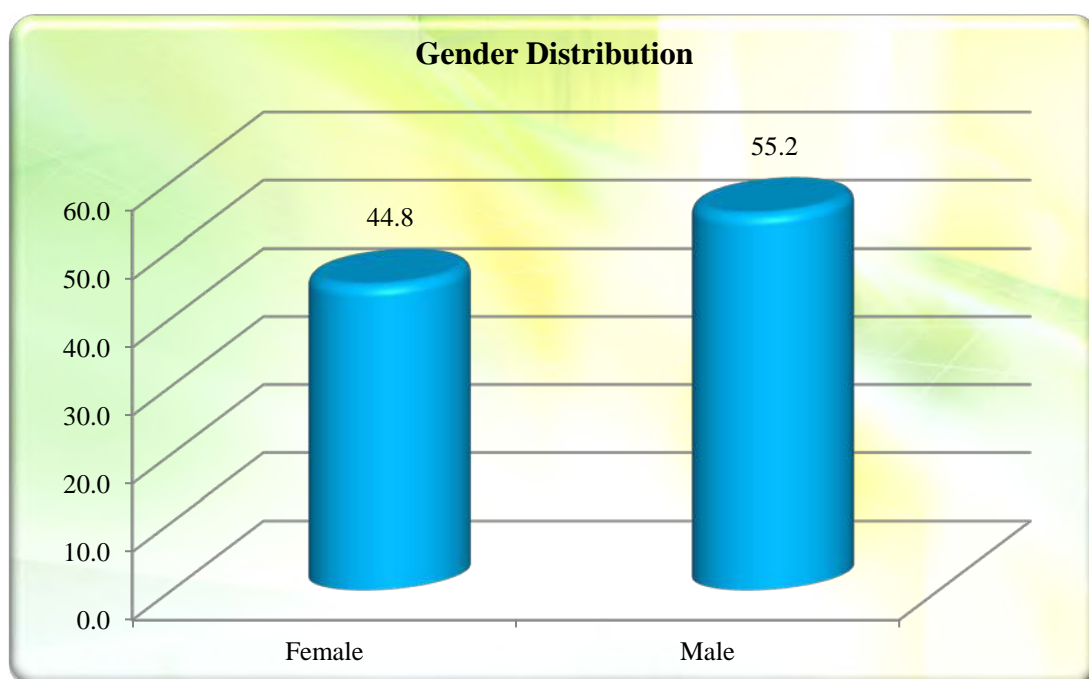
## 6.4 Gender

The respondents indicated their gender as shown in the table and graph below. The table and graph show the distribution of respondents according to their gender. Majority of respondents i.e. 55.2 per cent were male while 44.8 per cent were female.

**Table 6.4**  
**Distribution According to Gender**

Gender	Frequency	Percent
Female	452	44.8
Male	557	55.2
Total	1009	100.0

**Chart 6.4**  
**Distribution According to Gender**



## 6.2 DATA ANALYSIS AND HYPOTHESES TESTING

In the present section, the researcher has applied statistical tools to examine whether the responses vary or not on the basis of the service provider and to test stated hypotheses. For this Pearson's Chi-Square Test and Kruskal Wallis H test were applied and the values of p were calculated under experimental method. After that the values were compared to justify whether the difference was significant or not.

### 6.2.1 Hypothesis-1

H01: There is no significant difference among the product strategies adopted by different service providers.

H11: There is a significant difference among the product strategies adopted by different service providers.

The above mentioned hypothesis has been proved with the help of following variables-

#### 6.2.1.1 Wi-Fi & Broad Band Services

**Table 6.5**

**Association between Respondents opinion regarding Wi-Fi & Broad Band Services and Service Provider**

Services Offered		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Best Deal	Count	44	148	115	71	378
	%	17.6%	58.0%	45.6%	28.2%	37.5%
Best Price	Count	114	71	94	87	366
	%	45.6%	27.8%	37.3%	34.5%	36.3%
Best Service	Count	65	18	16	72	171
	%	26.0%	7.1%	6.3%	28.6%	16.9%
Best Network	Count	27	18	27	22	94
	%	10.8%	7.1%	10.7%	8.7%	9.3%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 142.92, df = 9, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Wi-Fi & Broad Band Services and Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the opinion of respondents with respect to the Smart Phone device Offer and Service Provider, in other words their opinion about Wi-Fi & Broad Band Services was dependent on the company they belonged to. Most of the respondents believed that the service providers offer best deal in terms of Wi-Fi and Broad Band Services.

Analysis results as indicated in the table reflects that the highest 58.0 per cent of Airtel followed by Jio (45.6) and Vodafone (28.2) and the least (17.6 per cent) belonged to BSNL said that the service provider offers best deals in relation to Wi-Fi & Broad Band Services to their customers.

In case of best price, the highest percentage was of BSNL with 45.6 percent BSNL, followed by 37.3 percent of Jio, 34.5 percent of Vodafone and least 27.8 percent of Airtel.

For best service, Only 28.6 per cent of Vodafone opined that the service provider offers best service to their customers while the 26.0 per cent belonged to BSNL in this regard, followed by BSNL and Jio.

Regarding Best Network, results were mostly similar to compare with little difference in percentage. BSNL (10.8), Jio (10.7), Vodafone (8.7) and Airtel (7.1 percent).

## 6.2.1.2 Best Combination of Services

Table 6.6

## Comparison of Mean Rank for Best Combination of Services

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	638.56	146.41 DF = 3	0.000*
Airtel	255	366.74		
Jio	252	457.16		
Vodafone	252	560.24		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Best Combination of services by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found between the Best Combination of Services provided by different service providers. The analysis shows that the combination of Services offered by Airtel was found to be the best one when compared with other service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.1.3 Free of Cost 4G Services

Table 6.7

Association between Respondents opinion regarding providing 4G Services free of cost and Service Provider

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	48	169	119	83	419
	%	19.2%	66.3%	47.2%	32.9%	41.5%
No	Count	144	60	116	107	427
	%	57.6%	23.5%	46.0%	42.5%	42.3%
Can't Say	Count	58	26	17	62	163
	%	23.2%	10.2%	6.7%	24.6%	16.2%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 185.18, df = 6, P value = 0.000*

The above table shows the association between opinion of respondents regarding the fact that providing 4G services free of cost can affect the choice of Service provider and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the providing 4G services free of cost by their service providers can affect the choice of Service provider. In other words respondents' opinion about the above mentioned fact is dependent on the company they belonged to. Most of the respondents do not have a positive opinion about the fact that providing 4G services free of cost can affect the choice of Service provider by their service providers.

Analysis results as indicated in the table reflects that the highest 66.3 percent of Airtel followed by Jio (47.2) and Vodafone (32.9) and the least 19.2 percent belonged to BSNL said yes to such offers.

In case of neutral opinion the highest percentage was of Vodafone subscribers (24.6) followed by BSNL and Airtel.

Only 42.3 percent of respondents have a negative opinion about the deal and the highest 57.6 percent belonged to BSNL in this regard.

#### 6.2.1.4 Extra Services

**Table 6.8**

**Association between Extra Services Offered and Service Provider**

Extra Services Offered		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Free Calls. SMS. Internet	Count	39	102	113	81	335
	%	15.6%	40.0%	44.8%	32.1%	33.2%
Wi-Fi Services	Count	43	57	126	104	330
	%	17.2%	22.4%	50.0%	41.3%	32.7%
Broadband Services	Count	150	86	3	58	297
	%	60.0%	33.7%	1.2%	23.0%	29.4%
Smart Phone & Devices	Count	18	10	10	9	47
	%	7.2%	3.9%	4.0%	3.6%	4.7%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 250.105, df = 9, P value = 0.000*

The above table shows the association between Extra Services Offered and Service Provider. The P value obtained was ( $P < 0.05$ ).

A significant association was found in the overall opinion of respondents with respect to the different service providers. The results of the analysis show that in terms of providing Broadband services, BSNL scored the highest percentage i.e. 60 per cent. Majority of the respondents (40%) using Airtel favored its Free Calls, SMS, Internet facilities. On the other hand, in case of Jio and Vodafone, majority of the respondents favored its Wi-Fi services i.e. 50 per cent and 41.3 per cent respectively.



### 6.2.1.5 Personalized Services (family recharges, pay as you use etc.)

**Table 6.9**

**Association between Respondents opinion regarding Personalized Services Offered and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	46	218	114	88	466
	%	18.4%	85.5%	45.2%	34.9%	46.2%
No	Count	151	34	135	113	433
	%	60.4%	13.3%	53.6%	44.8%	42.9%
Can't Say	Count	53	3	3	51	110
	%	21.2%	1.2%	1.2%	20.2%	10.9%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 299.148, df = 6, P value = 0.000*

The above table shows the association between opinion of respondents regarding Personalized Services (family recharges, pay as you use) Offered and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Personalized Services offered by their service providers. In other words respondents' opinion about Personalised Services is dependent on the company they belonged to. Most of the respondents have a positive opinion about the Personalized Services offered by their service providers.

Analysis results as indicated in the table reflects that the highest 85.5 percent of Airtel followed by Jio (45.2) and Vodafone (34.9) and the least 18.4 percent belonged to BSNL reacted positively which means that personalized services do effect their respondents positively.

In case of neutral opinion, again the highest percentage was of BSNL (21.2) followed by Vodafone and Airtel.

Only 42.9 percent of respondents have a negative opinion in this regard while the highest 60.4 percent belonged to BSNL followed by other service providers.

#### 6.2.1.6 People Oriented Service

**Table 6.10**

**Comparison of Mean Rank for Most People Oriented Service Provider**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	578.06	123.64 DF = 3	0.000*
Airtel	255	371.94		
Jio	252	456.14		
Vodafone	252	616.02		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Most People Oriented Service Provider by applying Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the People Oriented Services being provided by their service providers. It was witnessed that Airtel was found to be the most people oriented service provider followed by Jio and BSNL.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.1.7 Innovation of 4G made Price Affordable

Table 6.11

**Association between Respondents opinion regarding Innovation of 4G made Price Affordable and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	140	143	149	124	556
	%	56.0%	56.1%	59.1%	49.2%	55.1%
No	Count	91	69	67	81	308
	%	36.4%	27.1%	26.6%	32.1%	30.5%
Can't Say	Count	19	43	36	47	145
	%	7.6%	16.9%	14.3%	18.7%	14.4%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 20.03, df = 6, P value = 0.003\*, Significant Association*

The above table shows the association between opinion of respondents regarding Innovation of 4G made prices affordable and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Innovation of 4G made prices affordable and Service Provider, in other words respondents' opinion about Innovation of 4G made prices affordable is dependent on the company they belonged to. Most of the respondents have a positive opinion about the Innovation of 4G made prices affordable and their service providers.

Analysis results as indicated in the table reflect that the highest 59.1 percent of Jio followed by Airtel (56.1) and BSNL (56.0) and the least 49.2 per cent belonged to Vodafone said yes to in the above matter.

In case of neutral opinion, again the highest percentage was of Vodafone (18.7) followed by Airtel and JIO

Around 30.5 per cent of do not have a positive opinion about the Innovation of 4G made prices affordable used by them. Highest among them were BSNL Users (36.4) followed by others.

### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the product strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to product strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the product strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to product strategies being adopted by their service providers, the alternate hypothesis is accepted.

### **Hypothesis 2**

H02: There is no significant difference among the pricing strategies adopted by different service providers.

H12: There is a significant difference among the pricing strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-

## 6.2.2.1 Pricing

Table 6.12

## Comparison of Mean Rank for Pricing offered by Service Providers

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	500.65	50.433 DF = 3	0.000*
Airtel	255	414.70		
Jio	252	520.28		
Vodafone	252	585.41		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Pricing offered by Service Providers by applying Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found in the price offered by the different service providers. The price offered by the Airtel was the lowest as compared to BSNL and other networking service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

### 6.2.2.2 Good Pricing as Reason for being Loyal Customer

**Table 6.13**

**Comparison of Mean Rank for Good Pricing as Reason for being Loyal Customer**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	558.82	73.91 DF = 3	0.000*
Airtel	255	396.18		
Jio	252	486.18		
Vodafone	252	580.54		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Good Pricing as Reason for Loyal Customer by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the respondents' opinion regarding good pricing as reason for being loyal customer. The result shows that majority of Airtel subscribers opined positively about this fact.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

### 6.2.2.3 Winning Price War for Best Pricing Offers

**Table 6.14**

**Comparison of Mean Rank for Winning Price War for Best Pricing Offers**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	635.25	158.00 DF = 3	0.000*
Airtel	255	352.13		
Jio	252	467.53		
Vodafone	252	567.95		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for the Price War Winner for Great Pricing Offers by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers on account of Price War Winner for Great Pricing Offers. Airtel offered Great Pricing deals to their customers as compared to the other network providers followed by Jio and Vodafone.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

#### 6.2.2.4 Best Pricing for Pre-Paid Offers

**Table 6.15**

**Comparison of Mean Rank for Best Pricing for Pre-Paid Offers**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	638.25	149.05 DF = 3	0.000*
Airtel	255	361.38		
Jio	252	460.14		
Vodafone	252	563.00		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for the Best Pricing for Pre-Paid Offers by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers about best pricing for Pre-Paid offers. The Pre-Paid offer in terms of pricing offered by Airtel was found to be far better than other service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.



## 6.2.2.5 Best Pricing for Post-Paid Offers

Table 6.16

## Comparison of Mean Rank for Best Pricing for Post-Paid Offers

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	455.59	124.96 DF = 2	0.000*
Airtel	255	262.10		
Vodafone	252	421.32		
Total	757			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for the Post Paid offers in terms of best pricing as promotional scheme by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers with regard to Best Post Paid pricing offer. The best post paid pricing offer provided by Airtel was found to be far better than other service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

### 6.2.2.6 Best Pricing for Internet and Wi-Fi Plans

**Table 6.17**

**Comparison of Mean Rank for Best Pricing for Internet and Wi-Fi Plans**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	614.80	128.71 DF = 3	0.000*
Airtel	255	364.14		
Jio	252	464.46		
Vodafone	252	579.14		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for the Best pricing for Internet and Wi-Fi Plans offer as promotional scheme by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers for Best pricing of Internet and Wi-Fi Plans. The Internet and Wi-Fi plan in terms of Pricing offered by Airtel was far better than other network service providers followed by Jio and Vodafone respectively.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

### 6.2.2.7 Charging Maximum Taxes and Hidden Cost

**Table 6.18**

**Comparison of Mean Rank for Charging Maximum Taxes and Hidden Cost**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	649.09	115.35 DF = 3	0.000*
Airtel	255	512.38		
Jio	252	466.33		
Vodafone	252	393.26		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for the Charging Maximum Taxes and Hidden Cost by applying Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among Charging Maximum Taxes and Hidden Cost by telecom service providers. The taxes and hidden costs were found to be charged maximum by VODAFONE as compared to other service providers. BSNL charges minimum in terms of taxes and other hidden costs.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Vodafone's mean rank with other service provider's mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Vodafone and all other service provider.

Vodafone mean rank was found to be significantly more than mean rank of all other service providers.

## 6.2.2.8 Offer of Good Services at Higher Price

Table 6.19

**Association between Respondents opinion regarding Offer of Good Services at Higher Price and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	100	20	188	60	368
	%	40.0%	7.8%	74.6%	23.8%	36.5%
No	Count	51	208	40	47	346
	%	20.4%	81.6%	15.9%	18.7%	34.3%
Can't Say	Count	99	27	24	145	295
	%	39.6%	10.6%	9.5%	57.5%	29.2%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 534.94, df = 6, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding offer of good services at higher price and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the offer of good services at higher price by their service providers. In other words respondents' opinion about offering good services at higher prices is dependent on the company they belonged to. Most of the respondents have a positive opinion about the fact that offer of good services at higher price can affect their choice of service provider.

Analysis results as indicated in the table reflects that the highest 74.6 percent of JIO followed by BSNL (40.0) and Vodafone (23.8) and the least 7.8 percent belonged to Airtel reacted positively which means that customers do get affected by the good services being offered at higher prices..

In case of neutral opinion, again the highest percentage was of Vodafone (57.5) followed by BSNL and Airtel.

Only 34.3 percent of respondents have a negative opinion about the deal while the highest 81.6 percent belonged to Airtel in this regard.

### 6.2.2.9 Effect of Pricing of Add-On Services on Customers' Choice

**Table 6.20**

**Association between Respondents opinion on Effect of Pricing of Add-On Services on Customers' Choice and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Affect	Count	106	33	123	102	364
	%	42.4%	12.9%	48.8%	40.5%	36.1%
Do not Affect	Count	123	186	96	106	511
	%	49.2%	72.9%	38.1%	42.1%	50.6%
May Affect	Count	21	36	33	44	134
	%	8.4%	14.1%	13.1%	17.5%	13.3%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 97.86, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Effect of Pricing on Add On Services on Customer's choice and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the effect of Pricing of add-on services on Customer's choice by their service providers. In other words respondents' opinion about effect of Pricing of add-on services on Customer's choice is dependent on the company they belonged to. Most of the respondents believed that effect of Pricing of add-on services did not affect their choice of service provider.

Analysis results as indicated in the table reflects that the highest 48.8 percent of JIO followed by Vodafone (40.5) and BSNL (42.4) and the least 12.9 percent belonged to Airtel that Effect of Pricing of add-on services on Customer's choice affect their choice

In case of neutral opinion, again the highest percentage was of Vodafone (17.5) followed by Airtel and JIO.

50.6 percent of respondents believed that effect of Pricing of add-on services on Customer's choice do not affect their choice while the highest 72.9 percent belonged to Airtel in this regard.

#### 6.2.2.10 Understanding Price Break up of Plan used

**Table 6.21**

**Association between Respondents opinion on Understanding Price Break up of Plan used and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	104	60	123	99	386
	%	41.6%	23.5%	48.8%	39.3%	38.3%
No	Count	118	192	126	113	549
	%	47.2%	75.3%	50.0%	44.8%	54.4%
Just Pay	Count	28	3	3	40	74
	%	11.2%	1.2%	1.2%	15.9%	7.3%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 106.86, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Price Break Up of Plan used and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the price break up of plan used offered by their service providers. In other words respondents' opinion about price break up of plan used is dependent on the company they belonged to. Most of the respondents do not pay any heed towards the price break up of plan used by them.

Analysis results as indicated in the table reflects that the highest 48.8 percent of JIO followed by Vodafone (39.3) and BSNL (41.6) and the least 23.5 percent belonged to Airtel pays attention while choosing their plans with respect to the price break up of plan used by them.

In case of neutral opinion, again the highest percentage was of Vodafone (15.9) followed by BSNL and JIO.

54.4 percent of respondents do not pay any heed towards the price break up of plan used by them. Highest among them were Airtel Users (75.3) followed by others.

### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the pricing strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to pricing strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the pricing strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to pricing strategies being adopted by their service providers, the alternate hypothesis is accepted.

### Hypothesis 3

H03: There is no significant difference among the distribution strategies adopted by different service providers.

H13: There is a significant difference among the distribution strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-

#### 6.2.3.1 Bad Network Signals during Travelling

**Table 6.22**

**Association between Respondents opinion regarding Bad Network Signals during Travelling and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Change My Provider	Count	49	156	132	88	425
	%	19.6%	61.2%	52.4%	34.9%	42.1%
Don't Change Provider	Count	201	99	120	164	584
	%	80.4%	38.8%	47.6%	65.1%	57.9%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 106.23, df = 3, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondent regarding Bad network signals during travelling and Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Bad network signals during travelling and Service Provider. In other words respondents' opinion about bad network signals during travelling is dependent on the company they belonged to. Most of the respondents believed that they didn't prefer to change their service provider in case of Bad Network signals during travelling.



Analysis results as indicated in the table reflects that the highest 61.2 percent of Airtel followed by Jio (52.4) and Vodafone (34.9) and the least 19.6 percent belonged to BSNL thought that they could change their service provider.

80.4 percent of BSNL opined that they didn't want to change their service provider and 65.1 percent belonged to Vodafone in this regard.

### 6.2.3.2 Providing Best Network

**Table 6.23**

**Association between Respondents opinion regarding Providing Best Network and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Helpful	Count	50	156	80	84	370
	%	20.0%	61.2%	31.7%	33.3%	36.7%
May be Helpful	Count	175	25	109	130	439
	%	70.0%	9.8%	43.3%	51.6%	43.5%
Not Helpful	Count	25	74	63	38	200
	%	10.0%	29.0%	25.0%	15.1%	19.8%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 203.15, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding providing best network and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the providing best network and Service Provider. In other words respondents' opinion about providing best network is dependent on the company they belonged to. Most of the respondents believed that providing best network may sometimes prove to be helpful to their respondents.

Analysis results as indicated in the table reflects that the highest 61.2 percent of Airtel followed by Jio (31.7) and Vodafone (33.3) and the least 20.0 percent belonged to BSNL said providing best network is helpful.

In case of may be helpful opinion, the highest percentage was of BSNL (70.0) followed by Vodafone and Jio.

### 6.2.3.3 Networking Facility

**Table 6.24**

**Comparison of Mean Rank for Networking Facility of Service Providers**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	447.63	38.06 DF = 3	0.000*
Airtel	255	463.35		
Jio	252	542.16		
Vodafone	252	566.89		
Total	1009			

*Kruskal-Wallis Test Applied, P <0.05, Significant difference observed\**

The above table shows the comparison of the Mean score for the Networking facility given by service providers by using Kruskal Wallis Test. The P value obtained was (P <0.05), hence a statistical significant difference was found among the service providers on account of networking facility.

Most of the respondents agreed that they prefer BSNL because of its better wider network. Next to it is Airtel, while Jio and Vodafone who got almost the same rank at the least preference in terms of network quality.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel's mean rank with other service provider's mean ranks, a statistically significant difference (p<.05) was found between the mean rank value of BSNL and JIO, BSNL and Vodafone, however a non significant difference was observed between BSNL and Airtel mean ranks.

The mean rank of BSNL for Good networking services was found to be significantly better.

#### 6.2.3.4 Networking Facility as Reason for being Loyal Customer

**Table 6.25**

**Comparison of Mean Rank for Networking Facility as Reason for being Loyal Customer**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	455.91	21.61 DF = 3	0.000*
Airtel	255	482.91		
Jio	252	533.17		
Vodafone	252	547.89		
Total	1009			

*Kruskal-Wallis Test Applied, P < 0.05, Significant difference observed\**

The above table shows the comparison of the Mean score for the Networking facility as Reason for being loyal customer by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the opinion of subscribers regarding networking facility as reason for being loyal customer. The result shows that majority of BSNL's subscribers believed that best networking facility can attract and build more loyal customers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of BSNL's mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of BSNL and JIO, BSNL and Vodafone, however a non significant difference was observed between BSNL and Airtel mean ranks.

The mean rank of BSNL for Good networking services was found to be significantly better.

## 6.2.3.5 Convenience of Bill Payment/Recharge

Table 6.26

**Association between Respondents' Opinion regarding Convenience of Bill Payment/Recharge and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Very Convenient	Count	111	129	88	72	400
	%	44.4%	50.6%	34.9%	28.6%	39.6%
Convenient	Count	113	108	132	107	460
	%	45.2%	42.4%	52.4%	42.5%	45.6%
Not Convenient	Count	26	18	32	73	149
	%	10.4%	7.1%	12.7%	29.0%	14.8%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 70.662, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Convenience of Bill Payment or Recharge Facilities and their service providers. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Convenience of Bill Payment or Recharge Facilities by their service providers. In other words respondents' opinion about Convenience of Bill Payment or Recharge Facilities is dependent on the company they belonged to. Most of the respondents felt that their company provides convenient bill payment and recharge facilities.

Analysis results as indicated in the table reflects that the highest 50.6 percent of JIO followed by BSNL (44.4) and JIO (34.9) and the least 28.6 percent belonged to Vodafone said that they felt very convenient to pay bill and recharge their plans.

## 6.2.3.6 Availability of Bill Payment/Recharge options

Table 6.27

**Association between Respondents' Opinion regarding Availability of Bill Payment/Recharge options and Service Provider**

Available Options		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Company Store	Count	162	30	163	13	368
	%	64.8%	11.8%	64.7%	5.2%	36.5%
Portal	Count	58	179	50	34	321
	%	23.2%	70.2%	19.8%	13.5%	31.8%
Payment Gateway	Count	30	46	39	205	320
	%	12.0%	18.0%	15.5%	81.3%	31.7%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 644.66, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Availability of Bill Payment/Recharge Option and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Availability of Bill Payment/Recharge Option by their service providers. In other words respondents' opinion about Availability of Bill Payment/Recharge Option is dependent on the company they belonged to. Most of the respondents believed that Availability of Bill Payment/Recharge Option is available at their company's store.

Analysis results as indicated in the table reflects that the highest 64.8 percent of BSNL followed by JIO (64.7) and Airtel (11.8) and the last 5.2 percent belonged to Vodafone believed that Availability of Bill Payment/Recharge Option may be available at the company store

In case of respondents having opinion that payment option should be available at portal, again the highest percentage was of Airtel (70.2) followed by BSNL and JIO

Only 31.7 percent of respondents said believed that opinion that payment option should be available at payment gateway while the highest 81.3 percent belonged to Vodafone followed by Airtel (18.0), Jio (15.5) and BSNL (12.0) in this regard.

### 6.2.3.7 Location of Customer Care Centre

**Table 6.28**

#### Association between Location of Customer Care Centre and Service Provider

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Very Near	Count	49	60	108	52	269
	%	19.6%	23.5%	42.9%	20.6%	26.7%
Near	Count	63	133	98	85	379
	%	25.2%	52.2%	38.9%	33.7%	37.6%
Far	Count	138	62	46	115	361
	%	55.2%	24.3%	18.3%	45.6%	35.8%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 123.77, df = 6, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding location of Customer Care Centre and their service providers. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the location of Customer Care Centre. In other words respondents' opinion about location of Customer Care Centre is dependent on the company they belonged to. Most of the respondents said that its convenient to have location of customer care centre close to their place.

Analysis results as indicated in the table reflects that the highest 42.9 percent of Jio followed by Airtel (23.5) and Vodafone (20.6) and the last 19.6 percent

belonged to BSNL believed that customer care centre was very near to the their place.

In case of respondents having 'near' response, again the highest percentage was of Airtel (52.2) followed by Jio and Vodafone.

Only 35.8 percent of respondents believed that customer care centre are located at far location from respondents place while the highest 55.2 percent belonged to BSNL followed by Vodafone (45.6), Jio (18.3) and Airtel (24.3) in this regard.

### 6.2.3.8 Availability of Services at Single Store

**Table 6.29**

**Association between Respondents opinion regarding Availability of Services at Single Store and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Always	Count	114	72	91	24	301
	%	45.6%	28.2%	36.1%	9.5%	29.8%
Sometimes	Count	112	128	123	27	390
	%	44.8%	50.2%	48.8%	10.7%	38.7%
Very Less	Count	24	55	38	201	318
	%	9.6%	21.6%	15.1%	79.8%	31.5%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 381.90, df = 6, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Availability of Services at Single Store and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Availability of Services at Single Store by their service providers.

In other words respondents' opinion about Availability of Services at Single Store is dependent on the company they belonged to. Most of the respondents said that services were sometimes made available at a Single Store by their service providers. Analysis results as indicated in the table reflects that the highest 45.6 percent of BSNL followed by Jio (36.1) and Vodafone (9.5) and the last 28.2 percent belonged to Airtel said always to such services.

In case of sometimes, again the highest percentage was of Airtel (50.2) followed by Jio and BSNL.

Only 31.5 percent of respondents said very less about the availability of services while the highest 79.8 percent belonged to Vodafone followed by Airtel (21.6), Jio (15.1) and BSNL (9.6) in this regard.

### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the distribution strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to distribution strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the distribution strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to distribution strategies being adopted by their service providers, the alternate hypothesis is accepted.

### **Hypothesis 4**

H04: There is no significant difference among the promotion strategies adopted by different service providers.

H14: There is a significant difference among the promotion strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-



#### 6.2.4.1 Smart Phone Device offer as Promotional scheme

**Table 6.30**

**Comparison of Mean Rank for Smart Phone Device offer as Promotional scheme**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	618.51	125.10 DF = 3	0.000*
Airtel	255	355.85		
Jio	252	508.38		
Vodafone	252	539.94		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Smart Phone Device offer as promotional scheme by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found between the Smart Phone device offer as promotional scheme and their service providers. This promotional scheme offered by Airtel was found to be far better than other service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.4.2 Effect of Brand of Smart Phone Offered on Customer's Choice

Table 6.31

**Association between Respondents opinion regarding Effect of Brand of Smart Phone Offered and Service Provider**

Respondents opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	40	103	101	80	324
	%	16.0%	40.4%	40.1%	31.7%	32.1%
No	Count	112	70	93	82	357
	%	44.8%	27.5%	36.9%	32.5%	35.4%
Can't Say	Count	50	69	39	52	210
	%	20.0%	27.1%	15.5%	20.6%	20.8%
Depend on Deal	Count	48	13	19	38	118
	%	19.2%	5.1%	7.5%	15.1%	11.7%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 78.22, df = 9, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding effect of brand of Smart Phone Offered on their choice and Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the effect of brand of Smart Phone Offered on their choice, in other words respondents' opinion about smart phone device Offer is dependent on the company they belonged to. Most of the respondents opined that the brand of the Smart phone offered would not affect their choice of service provider.

Analysis results as indicated in the table reflects that the highest 40.4 percent of Airtel followed by jio (40.1) and Vodafone (31.7) and the least 16 percent belonged to BSNL said yes about such offers.

In case of neutral opinion, again the highest percentage was of Airtel (27.1) followed by Vodafone and BSNL. However, majority of BSNL subscribers said no about any effect of such offer.

Only 5.1 percent of Airtel opined that their opinion depends on the deal while the highest 19.2 percent belonged to BSNL in this regard.

#### 6.2.4.3 Effect of Smart Phone with Value Added Services Offer

**Table 6.32**

**Association between Respondents opinion regarding Effect of Smart Phone with Value Added Services Offer and Service Provider**

Respondents opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	40	108	88	79	315
	%	16.0%	42.4%	34.9%	31.3%	31.2%
No	Count	103	60	87	74	324
	%	41.2%	23.5%	34.5%	29.4%	32.1%
Can't Say	Count	57	70	48	57	232
	%	22.8%	27.5%	19.0%	22.6%	23.0%
Depend on Deal	Count	50	17	29	42	138
	%	20.0%	6.7%	11.5%	16.7%	13.7%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 66.02, df = 9, P value = 0.000\*, Significant Association*

The above table shows the association between opinions of respondents regarding effect of smart phone with value added services offer and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the effect of smart phone with value added services offer, in other words respondents' opinion about above stated fact is dependent on the company they belonged to. Most of the respondents did not have a positive opinion about the effect of smart phone with value added services offer on their choice of service provider.

Analysis results as indicated in the table reflects that the highest 42.4 percent of Airtel followed by jio (34.9) and Vodafone (31.3) and the least 16 percent belonged to BSNL said yes about such effect.

In case of neutral opinion, again the highest percentage was of Airtel (27.5) followed by BSNL and Vodafone.

Only 6.7 percent of Airtel opined that their opinion depends on the deal while the highest 20.0 percent belonged to BSNL in this regard.

#### 6.2.4.4 Best Jingle

**Table 6.33**

**Comparison of Mean Rank for Best Jingle**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	640.89	160.11 DF = 3	0.000*
Airtel	255	375.18		
Jio	252	426.41		
Vodafone	252	580.14		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for Best Jingle Served by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the Best Jingle played by telecom service providers. Airtel plays the best jingle as compared to the BSNL, Jio and Vodafone.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.4.5 Influence of Advertisement

Table 6.34

**Association between Respondents opinion regarding Influence of Advertisement and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	58	119	128	70	375
	%	23.2%	46.7%	50.8%	27.8%	37.2%
No	Count	93	98	94	71	356
	%	37.2%	38.4%	37.3%	28.2%	35.3%
Can't Say	Count	99	38	30	111	278
	%	39.6%	14.9%	11.9%	44.0%	27.6%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 118.02, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Influence of Advertisement and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Influence of Advertisement and Service Provider, in other words respondents' opinion about influence of advertisement is dependent on the company they belonged to. Most of the respondents had a positive opinion about the influence of advertisement made by service providers on their customers.

Analysis results as indicated in the table reflects that the highest 50.8 percent of Jio followed by Airtel (46.7) and Vodafone (27.8) and the least 23.2 percent belonged to BSNL said yes to the above mentioned fact.

In case of neutral opinion, again the highest percentage was of Vodafone (44.0) followed by BSNL and Airtel.

Only 38.4 percent of Airtel have a negative opinion about the influence of advertisement on their customer followed by Jio and BSNL in this regard.

#### 6.2.4.6 Best Tag Line

**Table 6.35**

**Comparison of Mean Rank for Best Tag Line used by Service Provider**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	632.98	142.156 DF = 3	0.000*
Airtel	255	456.86		
Jio	252	561.53		
Vodafone	252	363.20		
Total	1009			

*Kruskal-Wallis Test Applied, P <0.05, Significant difference observed*

The above table shows the comparison of the Mean score for Best Tag Line used by the different service providers through Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the Best Tag line used by service providers. The analysis shows that Vodafone has the best tag line as compared to other network service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Vodafone mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Vodafone and all other service providers.

The mean rank of Vodafone was found to be significantly better than those of all other service providers.

#### 6.2.4.7 Best Promised Incentive and Extra services

**Table 6.36**

**Comparison of Mean Rank for Best Promised Incentive and Extra services offered**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	622.11	152.80 DF = 3	0.000*
Airtel	255	383.39		
Jio	252	412.72		
Vodafone	252	604.16		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for Best Promised Incentive and Extra services offered by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found between the Best Promised Incentive and Extra services offered and their service providers. Airtel promise best incentives and extra services as compared to the other service providers.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and BSNL, Airtel and Vodafone, however non significant difference was observed between mean ranks of Airtel and JIO service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.4.8 Best Deals and Offers

Table 6.37

## Comparison of Mean Rank for Deals and Offers of Service Providers

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	601.69	75.847 DF = 3	0.000*
Airtel	255	403.58		
Jio	252	461.49		
Vodafone	252	555.21		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Deals and Offers provided by the different Service Providers by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers for offering various deals and offers to attract their customers. The results shows that the deals and offers served by Airtel was found to be the most attractive one when compared with the deals and offers provided by the other service providers subsequently followed by Jio.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.



#### 6.2.4.9 Deals and Offers as Reason for Loyal Customer

**Table 6.38**

#### Comparison of Mean Rank for Deals and Offers as Reason for Loyal Customer

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	614.58	94.37 DF = 3	0.000*
Airtel	255	385.00		
Jio	252	478.61		
Vodafone	252	544.11		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for Deals and Offers as Reason for Loyal Customer by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers for deals and offers, to be regarded as a reason for loyal customer. The results proved that deals and offers offered by different service providers help in building good relationship with their customers. The deals and offers provided by Airtel were considered the best.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.4.10 Effectiveness of Promotional Campaigns

Table 6.39

**Association between Respondents opinion regarding Effectiveness of Promotional Campaigns and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	43	140	135	69	387
	%	17.2%	54.9%	53.6%	27.4%	38.4%
No	Count	67	79	82	49	277
	%	26.8%	31.0%	32.5%	19.4%	27.5%
Can't Say	Count	140	36	35	134	345
	%	56.0%	14.1%	13.9%	53.2%	34.2%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 201.72, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Effectiveness of Promotional Campaigns and their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Effectiveness of Promotional Campaign by their service providers. In other words respondents' opinion about Effectiveness of Promotional Campaign is dependent on the company they belonged to. Most of the respondents had a positive opinion about the Effectiveness of Promotional Campaigns run by their service providers.

Analysis results as indicated in the table reflects that the highest 54.9 percent of Airtel followed by Jio (53.6) and Vodafone (27.4) and the least 17.2 percent belonged to BSNL reacted positively which means that campaign do affect their respondents positively.

In case of neutral opinion, again the highest percentage was of BSNL (56.0) followed by Vodafone and Airtel.

Only 27.5 percent of respondents have a negative opinion in this regard while the highest 32.5 percent belonged to Jio followed by other service providers.

#### 6.2.4.11 Effectiveness of Emotional and Social Message Oriented advertisement

**Table 6.40**

**Association between Respondents opinion regarding Effectiveness of Emotional and Social Message Oriented advertisement and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	106	53	133	92	384
	%	42.4%	20.8%	52.8%	36.5%	38.1%
No	Count	108	196	114	100	518
	%	43.2%	76.9%	45.2%	39.7%	51.3%
Can't Say	Count	36	6	5	60	107
	%	14.4%	2.4%	2.0%	23.8%	10.6%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 158.68, df = 6, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Effectiveness of Emotional and Social Message Oriented Advertisement and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Effectiveness of Emotional and Social Message Oriented Advertisement and Service Provider, in other words respondents' opinion about this fact is dependent on the company they belonged to. Most of the respondents did not have a positive opinion about the Effectiveness of Emotional and Social Message Oriented Advertisement.

Analysis results as indicated in the table reflects that the highest 52.8 per cent of Jio followed by BSNL (42.4) and Vodafone (36.5) and the least 20.8 per cent belonged to Airtel said yes to in the above matter.

In case of neutral opinion, again the highest percentage was of Vodafone (23.8) followed by BSNL and Airtel.

Around 51.3 per cent of do not have a positive opinion about the Emotional and Social Message Oriented Advertisement. Highest among them were Airtel Users (76.9) followed by others.

#### 6.2.4.12 Role of Peers in Choice of Brand

**Table 6.41**

**Association between Respondents opinion regarding Role of Peers in Choice of Brand and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	114	75	71	111	371
	%	45.6%	29.4%	28.2%	44.0%	36.8%
No	Count	90	129	146	98	463
	%	36.0%	50.6%	57.9%	38.9%	45.9%
Just Pay	Count	46	51	35	43	175
	%	18.4%	20.0%	13.9%	17.1%	17.3%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 37.91, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Peers in choice of Brand and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the Peers in Choice of brand and Service Provider, in other words respondents' opinion about Peers in Choice of brand is dependent on the company they belonged to. Most of the respondents did not have a positive opinion about Peers in Choice of brand.

Analysis results as indicated in the table reflects that the highest 45.6 per cent of BSNL followed by Vodafone (44.0) and Airtel (29.4) and the least 28.2 per cent belonged to JIO said yes about the Peers in Choice of brand

In case of neutral opinion, again the highest percentage was of Airtel (20.0) followed by BSNL and Vodafone

Around 45.9 percent do not have a positive opinion about the Peers in Choice of brand and their service providers. Among them the highest were Jio Users (57.9) followed by others.

### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the promotion strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to promotion strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the promotion strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to promotion strategies being adopted by their service providers, the alternate hypothesis is accepted.

### **Hypothesis 5**

H05: There is no significant difference among the people strategies adopted by different service providers.

H15: There is a significant difference among the people strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-

### 6.2.5.1 Customer Services facility

**Table 6.42**

**Comparison of Mean Rank for Customer Services facility of Service Providers**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	608.54	102.54 DF = 3	0.000*
Airtel	255	397.93		
Jio	252	438.46		
Vodafone	252	577.16		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Customer Services facility of different Service Providers. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the customer services facility offered by different service providers. The customer service facility offered by Airtel was far better as compared to BSNL, Jio and Vodafone.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

### 6.2.5.2 Customer Service Facility as Reason for being Loyal Customer

**Table 6.43**

**Comparison of Mean Rank for Customer Service Facility as Reason for being Loyal Customer**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	611.24	116.30 DF = 3	0.000*
Airtel	255	379.41		
Jio	252	451.48		
Vodafone	252	580.21		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed\**

The above table shows the comparison of the Mean score for the Customer Service Facility as Reason for Loyal Customer by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the service providers on the fact that the Customer Service Facility as a reason for being a loyal customer. The analysis depicts that customers were more loyal towards Airtel due to numerous facilities offered to them and the company does let customers think of switching to other brands.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.5.3 Neat, Tidy and Professional Appearance of Staff

Table 6.44

**Association between Respondents opinion regarding Neat, Tidy and Professional Appearance of Staff and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Strongly Agree	Count	52	155	121	20	348
	%	20.8%	60.8%	48.0%	7.9%	34.5%
Agree	Count	36	89	91	160	376
	%	14.4%	34.9%	36.1%	63.5%	37.3%
Neutral	Count	20	3	2	11	36
	%	8.0%	1.2%	0.8%	4.4%	3.6%
Disagree	Count	91	6	23	45	165
	%	36.4%	2.4%	9.1%	17.9%	16.4%
Strongly Disagree	Count	51	2	15	16	84
	%	20.4%	0.8%	6.0%	6.3%	8.3%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 399.87, df = 12, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding neat and professional appearance of staff and their Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the neat and professional appearance of staff, in other words respondents' opinion about this fact is dependent on the company they belonged to. Most of the respondents strongly agreed with neat and professional appearance of staff of their service providers.



Analysis results as indicated in the table reflects that the highest 60.8 per cent of Airtel followed by Jio (48) and BSNL (20.8) and the least 7.9 per cent belonged to Vodafone strongly agreed to the above mentioned fact.

The highest percentage of Vodafone (63.5%) followed by Jio, Airtel and BSNL were agreed with fact. On the other hand, those who disagreed with the fact were highest of BSNL (36.4%).

### **Hypothesis Conclusion:**

The null hypothesis that there is no significant difference among the people strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to people strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the people strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to people strategies being adopted by their service providers, the alternate hypothesis is accepted.

### **Hypothesis 6**

H06: There is no significant difference among the process strategies adopted by different service providers.

H16: There is a significant difference among the process strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-

## 6.2.6.1 Knowledge of Services Offered

Table 6.45

**Association between Respondents opinion regarding Knowledge of Services Offered and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	73	88	115	71	347
	%	29.2%	34.5%	45.6%	28.2%	34.4%
No	Count	64	87	72	47	270
	%	25.6%	34.1%	28.6%	18.7%	26.8%
Can't Say	Count	113	80	65	134	392
	%	45.2%	31.4%	25.8%	53.2%	38.9%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 56.473, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding knowledge of services offered and the service providers. The P value obtained was ( $P < 0.005$ ).

A significant association was found in the overall opinion of respondents with respect to the different service providers. Most of the respondents had neutral opinion about the knowledge of type of services offered by their service providers.

A majority of Jio subscribers (45.6%) opined positively about the fact that their company provided adequate knowledge of services offered, followed by Airtel, BSNL and Vodafone.

However, a majority of BSNL (45.2%) and Vodafone (53.2) subscribers were neutral in this regard.

## 6.2.6.2 Friendly Procedures of Connection

Table 6.46

**Association between Respondents opinion regarding Friendly Procedures of Connection and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Strongly Agree	Count	88	185	125	13	411
	%	35.2%	72.5%	49.6%	5.2%	40.7%
Agree	Count	45	57	99	154	355
	%	18.0%	22.4%	39.3%	61.1%	35.2%
Neutral	Count	5	3	7	8	23
	%	2.0%	1.2%	2.8%	3.2%	2.3%
Disagree	Count	67	8	11	59	145
	%	26.8%	3.1%	4.4%	23.4%	14.4%
Strongly Disagree	Count	45	2	10	18	75
	%	18.0%	0.8%	4.0%	7.1%	7.4%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 371.26, df = 12, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding friendly procedures of connection and their Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the friendly procedures of connection and their Service Provider, in other words respondents' opinion about this fact is dependent on the company they belonged to. Most of the respondents strongly agreed with friendly procedures of connection of their service providers.

Analysis results as indicated in the table reflects that the highest 72.5 per cent of Airtel followed by Jio (49.6) and BSNL (39.2) and the least 5.2 per cent belonged to Vodafone strongly agreed to the above mentioned fact.

The highest percentage of Vodafone (61.1%) followed by Jio, Airtel and BSNL were agreed with fact. On the other hand, those who disagreed with the fact were highest of BSNL (26.8%).

## 6.2.6.3 Easy Activation of Additional Services

Table 6.47

**Association between Respondents opinion regarding Easy Activation of Additional Services and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Strongly Agree	Count	70	185	114	16	385
	%	28.0%	72.5%	45.2%	6.3%	38.2%
Agree	Count	42	57	103	173	375
	%	16.8%	22.4%	40.9%	68.7%	37.2%
Neutral	Count	9	3	13	8	33
	%	3.6%	1.2%	5.2%	3.2%	3.3%
Disagree	Count	78	8	13	38	137
	%	31.2%	3.1%	5.2%	15.1%	13.6%
Strongly Disagree	Count	51	2	9	17	79
	%	20.4%	0.8%	3.6%	6.7%	7.8%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 437.35, df = 12, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding easy activation of additional services and their Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the easy activation of additional services and their Service Provider, in other words respondents' opinion about this fact is dependent on the company they belonged to. Most of the respondents strongly agreed with the easy activation of additional services by their service providers.

Analysis results as indicated in the table reflects that the highest 72.5 per cent of Airtel followed by Jio (45.2) and BSNL (28) and the least 6.3 per cent belonged to Vodafone strongly agreed to the above mentioned fact.

The highest percentage of Vodafone (68.7%) followed by Jio, Airtel and BSNL agreed with fact. On the other hand, the majority of BSNL subscribers (31.2%) disagreed with fact.

#### 6.2.6.4 Updating Promotional Offers

**Table 6.48**

**Association between Respondents opinion regarding Updating Promotional Offers and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	20	123	177	28	348
	%	8.0%	48.2%	70.2%	11.1%	34.5%
No	Count	230	132	75	224	661
	%	92.0%	51.8%	29.8%	88.9%	65.5%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 302.46, df = 3, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding Updating Promotional offer their service providers. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the updating promotional offer offered by their service providers, in other words respondents' opinion about updating promotional offer is dependent on the company they belonged to. Most of the respondents had a negative opinion about Updating Promotional Services by their service providers.

Analysis results as indicated in the table reflects that the highest 70.2 percent of Jio followed by Airtel (45.2) and Vodafone (11.1) and the least 8.0 percent belonged to BSNL reacted positively which means updating promotional offers do effect their respondents positively.

Almost 65.5 percent of respondents have a negative opinion in this regard while the highest 92.0 percent belonged to BSNL followed by Vodafone, Airtel etc.

### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the process strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to process strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the process strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to process strategies being adopted by their service providers, the alternate hypothesis is accepted.

### **Hypothesis 7**

H07: There is no significant difference among the physical evidence strategies adopted by different service providers.

H17: There is a significant difference among the physical evidence strategies adopted by different service providers.

The above stated hypothesis has been proved with the help of following variables-

### 6.2.7.1 Visibility of Service Provider in Sponsorships, Events and Promotions

**Table 6.49**

**Comparison of Mean Rank for Visibility of Service Provider in Sponsorships, Events and Promotions**

Service Provider	N	Mean Rank	Test Value	P Value
BSNL	250	635.26	157.38 DF = 3	0.000*
Airtel	255	353.62		
Jio	252	464.91		
Vodafone	252	569.05		
Total	1009			

*Kruskal-Wallis Test Applied,  $P < 0.05$ , Significant difference observed*

The above table shows the comparison of the Mean score for visibility of Service Provider in Sponsorships, Events and Promotions by using Kruskal Wallis Test. The P value obtained was ( $P < 0.05$ ), hence there was a significant difference found among the visibility of Service Provider in Sponsorships, Events and Promotions. Airtel offered good visibility in Sponsorship, Events and Promotions.

Individual pair wise comparison of mean rank of service providers was done by Mann-Whitney U test.

In pair wise comparison of Airtel mean rank with other service providers' mean ranks, a statistically significant difference ( $p < .05$ ) was found between the mean rank value of Airtel and all other service providers.

The mean rank of Airtel was found to be significantly better than those of all other service providers.

## 6.2.7.2 CSR activities

Table 6.50

**Association between Respondents Awareness regarding CSR activities and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Yes	Count	132	195	105	173	605
	%	52.8%	76.5%	41.7%	68.7%	60.0%
No	Count	103	37	103	55	298
	%	41.2%	14.5%	40.9%	21.8%	29.5%
Can't Say	Count	15	23	44	24	106
	%	6.0%	9.0%	17.5%	9.5%	10.5%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 95.22, df = 6, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding CSR activities run and their Service Provider. The P value obtained was ( $P < 0.005$ ) so, the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the CSR activities and their Service Provider, in other words respondents' opinion about CSR activities is dependent on the company they belonged to. Most of the respondents had a positive opinion about awareness regarding their companies' CSR activities.

Analysis results as indicated in the table reflects that the highest 76.5 percent of Airtel followed by Vodafone (68.7) and BSNL (52.8) and the least 41.7 percent belonged to JIO said yes to the fact that they were aware about the CSR activities run by their companies.

In case of neutral opinion, the highest percentage was of JIO (17.5) followed by Vodafone and Airtel



Around 41.2 percent of BSNL and 40.9 percent of JIO subscribers were not aware about CSR activities run by their service providers followed by Airtel and Vodafone in this regard.

### 6.2.7.3 Appealing Physical Facilities

**Table 6.51**

**Association between Respondents opinion regarding Appealing Physical Facilities and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Strongly Agree	Count	58	179	113	29	379
	%	23.2%	70.2%	44.8%	11.5%	37.6%
Agree	Count	35	59	101	140	335
	%	14.0%	23.1%	40.1%	55.6%	33.2%
Neutral	Count	22	7	8	3	40
	%	8.8%	2.7%	3.2%	1.2%	4.0%
Disagree	Count	94	8	15	60	177
	%	37.6%	3.1%	6.0%	23.8%	17.5%
Strongly Disagree	Count	41	2	15	20	78
	%	16.4%	0.8%	6.0%	7.9%	7.7%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 386.88, df =12, P value =0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding appealing physical facilities and their Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the appealing physical facilities and their Service Provider, in other words respondents' opinion about appealing physical facilities is dependent on the company they belonged to. Most of the respondents strongly agreed with appealing physical facilities of their service providers.

Analysis results as indicated in the table reflects that the highest 70.2 per cent of Airtel followed by Jio (44.8) and BSNL (23.2) and the least 11.5 per cent belonged to Vodafone strongly agreed to the above mentioned fact.

The highest percentage of Vodafone (55.6%) followed by Jio, Airtel and BSNL were agreed with fact.

Only 0.8 per cent of Airtel were strongly disagreed followed by Jio, Vodafone and BSNL in this regard.

#### 6.2.7.4 Appealing Promotion Material

**Table 6.52**

**Association between Respondents opinion regarding Appealing Promotion Material and Service Provider**

Respondents Opinion		Service Provider				Total
		BSNL	Airtel	Jio	Vodafone	
Strongly Agree	Count	121	180	124	19	444
	%	48.4%	70.6%	49.2%	7.5%	44.0%
Agree	Count	54	59	113	138	364
	%	21.6%	23.1%	44.8%	54.8%	36.1%
Neutral	Count	9	6	3	11	29
	%	3.6%	2.4%	1.2%	4.4%	2.9%
Disagree	Count	44	8	5	54	111
	%	17.6%	3.1%	2.0%	21.4%	11.0%
Strongly Disagree	Count	22	2	7	30	61
	%	8.8%	0.8%	2.8%	11.9%	6.0%
Total	Count	250	255	252	252	1009
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*Chi Square Test = 282.33, df = 12, P value = 0.000\*, Significant Association*

The above table shows the association between opinion of respondents regarding appealing promotion material and their Service Provider. The P value obtained was ( $P < 0.005$ ), the result is statistically significant at  $p > 0.05$  levels.

A significant association was found in the overall opinion of respondents with respect to the appealing promotion material and their Service Provider, in other

words respondents' opinion about appealing promotion material is dependent on the company they belonged to. Most of the respondents strongly agreed with appealing promotion material of their service providers.

Analysis results as indicated in the table reflects that the highest 70.6 per cent of Airtel followed by Jio (49.2) and BSNL (48.4) and the least 7.5 per cent belonged to Vodafone strongly agreed to the above mentioned fact.

The highest percentage of Vodafone (54.8%) followed by Jio, Airtel and BSNL were agreed with fact.

Only 0.8 per cent of Airtel were strongly disagreed followed by Jio, BSNL and Vodafone in this regard.

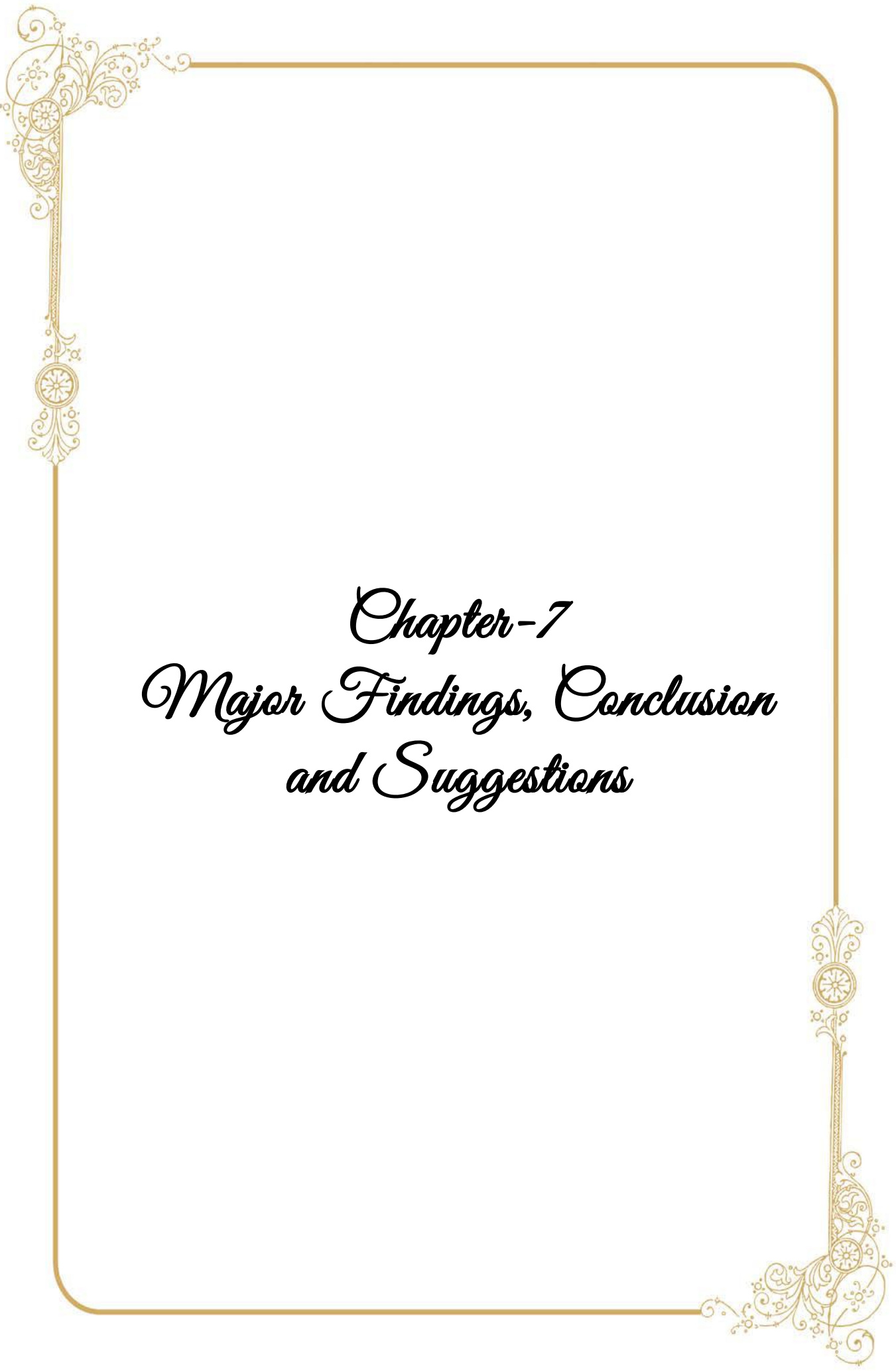
### **Hypothesis Conclusion**

The null hypothesis that there is no significant difference among the physical evidence strategies adopted by different service providers is rejected as the analyses of above mentioned variables pertaining to physical evidence strategies of telecom service providers revealed that subscribers of different companies had significant difference in their opinions.

Some of the respondents opined positively about that the physical evidence strategies being adopted by their service provider, others were having negative opinion. Therefore, due to having significant differences in opinion with regard to physical evidence strategies being adopted by their service providers, the alternate hypothesis is accepted.

## **6.3 HYPOTHESES VIEWED AS PER THE ANALYSIS**

After the analysis of all the data of survey, it can be concluded that out of all the seven hypotheses framed to conduct research, all the null hypotheses gets rejected. Therefore, alternate hypotheses can be accepted that there was a significant difference among the strategies; product, price, place, promotion, people, physical evidence and process, adopted by different telecom service provider.



*Chapter-7*  
*Major Findings, Conclusion*  
*and Suggestions*

# **CHAPTER-7**

## **MAJOR FINDINGS, CONCLUSION AND SUGGESTIONS**

---

---

### **INTRODUCTION**

In chapter VI data analysis was performed using statistical techniques to get the outcome of the present research. Results derived from the previous chapter leads to draw a better discussion on findings and conclusion of the study. This chapter highlights the effectiveness of marketing strategies adopted by the chosen telecom service providers and suggests which telecom company has been providing better deals in respect to 7Ps i.e. product, price, place, promotion, people, process and physical evidence. Moreover, this chapter also presents the conclusion drawn followed by the recommendations and scope for future researches.

#### **7.1 Major Findings of the Study**

Marketing strategies prevalent in Indian telecom sector are diverse as a result the competition has been getting fierce. Breakthrough marketing strategies initiated by different service providers has transformed the overall scenario. The companies which are able to identify and fill the gap can capture the major market share of telecom sector.

A comparative study was done on the marketing strategies practiced by the major telecom companies namely BSNL, Jio, Vodafone and Airtel. The strategies were segregated among 7Ps of service marketing mix and comparisons were made on each P of the mix. The analysis of collected data reveals that there was a significant difference in the marketing strategies adopted by chosen service providers. This section summarizes the findings of the study on the basis of the data analysis.

The following section presents the findings in the following sub-sections-

### **7.1.1 Product Strategies**

#### **7.1.1.1 Wi-Fi & Broad Band Services**

The effectiveness of these services was examined on the basis of dimensions like, Best Deal, Best Price, Best Service and Best Network. Majority of subscribers of BSNL and Vodafone opined that it offers best price. On the other hand, majority of subscribers of Airtel and Jio opined that it offers best deal.

In all, most of the total respondents believed that the Airtel offers best deal in terms of Wi-Fi and Broad Band Services.

#### **7.1.1.2 Best Combination of Services**

A statistical significant difference was found among the Combination of Services provided by different service providers. The analysis shows that the combination of Services offered by Airtel was found to be the best one when compared with other service providers.

#### **7.1.1.3 Free of Cost 4G Service facilities can affect the choice of Service provider**

Majority of the subscribers of BSNL and Vodafone said no to the fact that providing 4G services free of cost can affect the choice of Service provider. On the other hand, majority of the subscribers of Airtel opined positively about the fact, while almost equal number of Jio subscribers gave positive and negative opinion about the fact. This means that free of cost 4G service played an important role in affecting the choice of service provider.

#### **7.1.1.4 Extra Services**

The offer of extra services includes, Free Calls, SMS and Internet, Wi-Fi Services, Broadband Services and Smart Phone & Devices.

Majority of BSNL subscribers opined in favour of Broadband Services. On the other hand, majority of Airtel subscribers opined in favour of Free Calls, SMS and Internet facilities, while majority of subscribers of Jio and Vodafone opined in favour of Wi-Fi Services.

In all, most of the respondents opined in favour of Free Calls, SMS and Internet facilities provided by their service providers. However, majority of Jio subscribers favoured its Wi-Fi Services among all. Therefore, it can be said that free calls, SMS, Internet/data services are appreciated by customers, especially when network services and price are not satisfying.

#### **7.1.1.5 Personalized Services (family recharges, pay as you use etc.)**

Majority of subscribers of BSNL, Jio and Vodafone opined against Personalized Services offered by their service providers, while majority of subscribers of Airtel opined positively about Personalized Services offered by their service providers.

In all, most of the respondents had a positive opinion about Personalized Services offered by their service providers and among them Airtel subscribers were the highest in number.

#### **7.1.1.6 People Oriented Service**

A statistical significant difference was found among the People Oriented Services being provided by different service providers. The analysis shows Airtel was found to be the best one in this regard when compared to other service providers.

#### **7.1.1.7 Introduction of 4G made Price Affordable**

In all, most of the respondents had a positive opinion about the fact that introduction of 4G made price affordable and among them Jio subscribers were the highest in number.

The assessment of above variables clearly indicates that Airtel came out as the best in terms of adopting superior product strategies. However, Jio's strategies in terms of Wi-Fi services were also found better in comparison to the other service providers.

## **7.1.2 Pricing Strategies**

### **7.1.2.1 Pricing**

There was a significant difference found in the price offered by the different service providers. The price offered by the Airtel was the lowest as compared to BSNL and other networking service providers.

### **7.1.2.2 Good Pricing as Reason for being Loyal Customer**

There was a significant difference found among the respondents' opinion regarding good pricing as reason for being loyal customer. The result shows that majority of Airtel subscribers opined positively about this fact.

### **7.1.2.3 Winning Price War for Best Pricing Offers**

There was a significant difference found among the Price War Winner for Great Pricing Offers and their service providers. Airtel offers the best pricing deals to their customers as compared to the other service providers followed by Jio, Vodafone and BSNL respectively.

### **7.1.2.4 Best Pricing for Pre-Paid Offers**

There was a significant difference found among the best pricing for Pre-Paid offers provided by their service providers. The Pre-Paid offer in terms of pricing offered by Airtel was found to be far better than other service providers.

### **7.1.2.5 Best Pricing for Post-Paid Offers**

There was a significant difference found among the best pricing for Post-Paid offers provided by their service providers. The Post-Paid offer in terms of pricing offered by Airtel was found to be the best among all.

### **7.1.2.6 Best Pricing for Internet and Wi-Fi Plans**

There was a significant difference found among the best pricing for Internet and Wi-Fi Plans offered by their service providers. The Internet and Wi-Fi Plans offered in terms of pricing by Airtel was found to be far better than other service providers.



**7.1.2.7 Charging Maximum Taxes and Hidden Cost**

The taxes and hidden costs were found to be charged maximum by Jio as compared to other service providers. Airtel charges minimum in terms of taxes and other hidden costs.

**7.1.2.8 Offer of Good Services at Higher Price**

Most of the respondents had a positive opinion about the fact that offer of good services at higher price can affect their choice of service provider. However, majority of Airtel subscribers denied that their company charges high for good services.

**7.1.2.9 Effect of Pricing of Add-On Services on Customers' Choice**

Most of the respondents believed that effect of pricing on add-on services did not affect their choice service provider and majority of Airtel subscribers denied that they get affected by attractive pricing of add-on services of other service providers.

**7.1.2.10 Understanding Price Break up of Plan used**

Most of the respondents do pay any attention towards the price break up of plan used by them. However, maximum respondents belonged to Airtel who admitted that they do not check the price break up. This means that Airtel subscribers are satisfied with the transparency of Airtel regarding prices they put and they do not feel the need to check. There is also an interesting inference regarding Jio that its respondents also do not feel the need to check for the price break up. It is because, Jio only deals in package system unlike other service providers offering base package and than additional features. Thus, package system is more convenient than conventional methods.

Therefore, from the above discussion it can be concluded that on pricing front Airtel's strategies has been successful in winning the larger market share in the Indian Telecom Sector. Moreover, Airtel has more number of loyal customers and they do not get easily attracted by competitors' offers.

### **7.1.3 Distribution Strategies**

#### **7.1.3.1 Bad Network Signals during Travelling**

Most of the respondents believed that they didn't prefer to change their service provider in case of Bad Network signals during travelling. Maximum subscribers of BSNL opined that they didn't want to change their service provider because of better availability of network facility with a wider coverage. Thus people find that BSNL network is better when they are travelling.

#### **7.1.3.2 Providing Best Network**

Most of the respondents believed that providing best network may sometimes prove to be helpful to their respondents. However, majority of Airtel subscribers opined that providing best network is helpful.

#### **7.1.3.3 Networking Facility**

A statistical significant difference was found between the service provided in terms of networking facility and their service providers. Most of the respondents agreed that they prefer BSNL because of its better wider network. Therefore, in this regard BSNL has better distribution strategy as its network is available at almost all the places.

#### **7.1.3.4 Networking Facility as Reason for being Loyal Customer**

A significant difference was found among the respondents' opinion regarding networking facility as reason for being loyal customer. The result shows that majority of Airtel's subscribers believed that best networking facility can attract and build more loyal customers.

#### **7.1.3.5 Convenience of Bill Payment/Recharge**

Most of the respondents felt that their company provided convenient bill payment and recharge facilities of them majority belonged to Airtel. On the other hand most of the Jio subscribers said their company offered very convenient bill payment and recharge facilities. Therefore, in this regard Jio has better distribution strategy.

### **7.1.3.6 Availability of Bill Payment/Recharge options**

Most of the respondents believed that availability of bill payment/recharge option is available at their company's store. However, in all a majority of Airtel subscribers said that it is available at the company's portal. Therefore, in this regard Airtel's subscribers can pay and recharge from their own place.

### **7.1.3.7 Location of Customer Care Centre**

Most of the respondents said that the location of customer care centre was near to their place. However a majority of Jio subscribers agreed that the location of customer care centre was very near to their place. Therefore, in this regard Jio has better distribution strategy.

### **7.1.3.8 Availability of Services at Single Store**

Most of the respondents said that services were sometimes made available at a Single Store by their service providers. However, a majority of BSNL subscribers favoured better availability of services at a single store.

## **7.1.4 Promotion Strategies**

### **7.1.4.1 Smart Phone Device offer as Promotional scheme**

A significant difference was found between the Smart Phone device offer as promotional scheme and their service providers. This promotional scheme offered by Airtel was found to be far better than other service providers.

### **7.1.4.2 Effect of Brand of Smart Phone Offered on Customer's Choice**

Most of the respondents opined that the brand of the Smart phone offered would not affect their choice of service provider. A majority of BSNL subscribers said no about any effect of such offer on their choice of service provider. This finding is in reference to the deals made by service providers with smartphones companies. For example, Airtel-Nokia, Vodafone- Samsung, Jio-Xiaomi, etc.

### **7.1.4.3 Effect of Smart Phone with Value Added Services Offer**

Most of the respondents did not have a positive opinion about the effect of smart phone with value added service offer on their choice of service provider. A majority of Airtel subscribers said yes about the effect of such offer on their choice of service provider.

#### **7.1.4.4 Best Jingle**

There was a significant difference found among the Best Jingle played by telecom service providers. It was found that Airtel plays the best jingle as compared to the BSNL, Jio and Vodafone.

#### **7.1.4.5 Influence of Advertisement**

Most of the respondents had a positive opinion about the influence of advertisement on customers. In this regard, Jio subscribers were the highest in number favouring the effect of advertisement on customers. Thus, creative advertisements do play an important role in attracting customers. BSNL may come up with more creative and influencing advertising strategy to gain advantage.

#### **7.1.4.6 Best Tag Line**

There was a significant difference found among the Best Tag line used by service providers. The analysis shows that Vodafone has the best tag line as compared to other network service providers.

#### **7.1.4.7 Best Promised Incentive and Extra services**

There was a significant difference found among the service providers for providing Incentive and Extra services. It was observed that Airtel promises the best incentives and extra services as compared to the other service providers.

#### **7.1.4.8 Best Deals and Offers**

There was a significant difference found among the service providers for offering various deals and offers to attract their customers. The results shows that the deals and offers served by Airtel was found to be the most attractive one when compared with those of the other service providers, Jio got the second rank in this regard.

#### **7.1.4.9 Deals and Offers as Reason for Loyal Customer**

There was a significant difference found among the service providers for deals and offers, to be regarded as a reason for loyal customer. The results proved that deals and offers offered by different service providers help in building good relationship with their customers. The deals and offers provided by Airtel were considered the best.

#### **7.1.4.10 Effectiveness of Promotional Campaigns**

Most of the respondents had a positive opinion about the Effectiveness of Promotional Campaigns run by their service providers. In all, a majority of Airtel subscribers favoured that Promotional Campaigns run by their service provider is very effective.

#### **7.1.4.11 Effectiveness of Emotional and Social Message Oriented advertisement**

Most of the respondents do not have a positive opinion about the Effectiveness of Emotional and Social Message Oriented Advertisement. In all, a majority of Airtel subscribers had negative opinion regarding the above mentioned fact because it didn't make any difference in their choice of service provider.

#### **7.1.4.12 Role of Peers in Choice of Brand**

Most of the respondents did not have a positive opinion about the role of peers in choice of brand. In all, a majority of Jio subscribers had negative opinion regarding the above mentioned fact because they believed that peers' opinion did not make any difference in their choice of service provider.

As per the assessment of these variables, Airtel's promotional strategies have been influential in attracting new subscribers as well as maintain the existing once. Jio has also been putting strong efforts in challenging the market leader.

### **7.1.5 People Strategies**

#### **7.1.5.1 Customer Services facility**

There was a significant difference found among the customer services facility offered by different service providers. The customer service facility offered by Airtel was far better as compared to BSNL, Jio and Vodafone.

#### **7.1.5.2 Customer Service Facility as Reason for being Loyal Customer**

There was a significant difference found among the service providers on the fact that the Customer Service Facility is regarded as a reason for being a loyal customer. The analysis depicts that customers were more loyal towards Airtel due to numerous facilities offered to them and the company does not allow them to switch to other brands.

### **7.1.5.3 Neat, Tidy and Professional Appearance of Staff**

Most of the respondents strongly agreed with neat and professional appearance of staff of their service providers. In all, a majority of Airtel subscribers were strongly agreed with the above mentioned fact.

On people strategies front, again Airtel has been able to win the hearts of customers. Airtel has a strong and experienced team to care for its customers.

## **7.1.6 Process Strategies**

### **7.1.6.1 Knowledge of Services Offered**

Most of the respondents had neutral opinion about having the knowledge of type of services offered by their service providers. However, a majority of Jio subscribers opined positively about the fact that their company provided adequate knowledge of services offered. It shows that Jio processed the required information effectively.

### **7.1.6.2 Friendly Procedures of Connection**

Most of the respondents strongly agreed with friendly procedures of connection of their service providers. In all, a majority of Airtel subscribers favoured that the company had friendly connection procedures.

### **7.1.6.3 Easy Activation of Additional Services**

Most of the respondents strongly agreed with the easy activation of additional services by their service providers. In all, a majority of Airtel subscribers favoured that their company had easy activation of additional services.

### **7.1.6.4 Updating Promotional Offers**

Most of the respondents had a negative opinion about Updating Promotional Services by their service providers. In all, a majority of BSNL subscribers favoured that their company did not update its promotional services.

Similarly, in case of process strategies Airtel has been doing well. It has better procedures regarding connection and activation of service facilities. However,

for processing information and updating the customers, Jio has proper system comparatively.

### **7.1.7 Physical Evidence Strategies**

#### **7.1.7.1 Visibility of Service Provider in Sponsorships, Events and Promotions**

There was a significant difference found among the visibility of Service Provider in Sponsorships, Events and Promotions. Airtel offered the best visibility in Sponsorship, Events and Promotions.

#### **7.1.7.2 CSR activities**

Most of the respondents had a neutral opinion about awareness regarding their companies' CSR activities. However, a majority of Jio subscribers responded positively about the up-dation of CSR activities run by their company.

#### **7.1.7.3 Appealing Physical Facilities**

Most of the respondents strongly agreed with appealing physical facilities of their service providers. In all, a majority of Airtel subscribers favoured that their company had appealing physical facilities.

From the analysis of above mentioned variables, it has been observed that Airtel has been successful in visualizing superiority of its services in the market. However, Jio has been able to conveying its social image through CSR activities.

## **7.2 CONCLUSION**

The Indian Telecom Sector has been experiencing a complete transformation in terms of the infrastructure, its composition, innovation of products and services, major strategies adopted by telecom players and customers' expectations. The substitution of landline telephones by cheaper and more valuable mobile telecom services has created a lot of potential for the telecom players. Moreover, the advent of 4G technology and Jio's strategies of market penetration has raised the customers' expectations from service providers. Recent mergers and acquisitions are the outcome of these strategies and have made the competition more brutal than ever. The companies which were capable in analyzing the gap and listening to the

pulse of the customers have been successful in winning the larger market share. Some of the service providers are offering better products with value added services while others are providing better network facilities. Some are attracting customers by offering various plans free of cost or on very nominal rates. Some have better customer care strategies while others are performing well in portraying their better image. In the present study, the researcher has attempted to compare the strategies of the major players of the sector on the basis of their service marketing mix. It has come out from the study that Airtel has been doing the best in terms of designing aggressive marketing strategies consist of 7Ps.

The results of stated hypotheses also support the above mentioned discussion.

**Table 7.1**  
**Hypothesis Testing Results**

<b>Hypothesis</b>			<b>Result</b>
H1	Null	There is no significant difference among the product strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the product strategies adopted by different service providers.	Accept
H2	Null	There is no significant difference among the pricing strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the pricing strategies adopted by different service providers.	Accept
H3	Null	There is no significant difference among the distribution strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the distribution strategies adopted by different service providers.	Accept
H4	Null	There is no significant difference among the promotion strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the promotion strategies adopted by different service providers.	Accept
H5	Null	There is no significant difference among the people	Reject



		strategies adopted by different service providers.	
	Alternate	There is a significant difference among the people strategies adopted by different service providers.	Accept
H6	Null	There is no significant difference among the process strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the process strategies adopted by different service providers.	Accept
H7	Null	There is no significant difference among the physical evidence strategies adopted by different service providers.	Reject
	Alternate	There is a significant difference among the physical evidence strategies adopted by different service providers.	Accept

After the analysis of all the data of survey, it can be concluded that out of all the seven hypotheses framed to conduct research, all the null hypotheses gets rejected. Therefore, alternate hypotheses can be accepted that there was a significant difference among the strategies; product, price, place, promotion, people, physical evidence and process, adopted by different telecom service provider.

### 7.3 SUGGESTIONS

Basic core services such as clarity in voice at the time of making calls, network coverage, uninterrupted connectivity, congestion free networks plays, etc play a primary role in making or breaking any telecom service provider. Thus, they should ensure superior delivery of these basic services.

Place and People strategy of private telecom players are more successful than BSNL. Results have shown that subscribers find it easier to get a new SIM issued, complaints resolved, getting recharged etc with private players more often than BSNL. The private service providers extend adequate support for their subscribers through retailers and this reflects back as more cooperative and helpful gesture. For BSNL, a subscriber has to visit its customer care center whereas most of the solutions are provided by dealers /retailers of the private players.

Hence BSNL should develop, empower, nurture its retail network, and make its presence felt at multi brand SIM retail outlet.

Vodafone has been perceived really well by its subscribers. Its creative advertising and jingles help the brand to stay on top of the minds and instantly relate to its name. However, if it can resolve its customer complaints regarding unresolved billing queries and complaints, it can cross barriers and become most favoured service providers. After its merger with idea, it is expected to witness an increase in various services where Vodafone had gaps.

An experience is always good and memorable when it is smooth and simplified. BSNL should make its grievance handling and customer interface more simplified. Customers also expect consistency in service across all channels of communication so make sure that all customer data is synchronized for better customer support.

The pricing strategies of Airtel and Jio have been preferred most by the subscribers. However, when it comes to the transparency BSNL has more clear and transparent billing system. Vodafone subscribers have most issues with the billing and activation of unwanted services. Thus, Vodafone and other private players should create a more transparent tariff and billing system to prevent customers feeling cheated and confused.

Regarding Tariff and packages, Jio has been offering only packages. There is no base price associated with the package. Unlike other telecom companies, its VAS services are totally free and there is no SIM validity option as such. Thus, it becomes easier to subscribers to pick a pack and be less worried about getting amount deducted from main balance for the services used after the package gets over.

Telecom Practices should always be ethical. There should not be any hidden cost and confusing terms and condition while promoting a package. So that subscriber can decide with clarity about what service he is about to select and is

going to pay for. All service providers primarily the private sector providers should abstain from the dishonest business practices.

It is generally observed that some VAS services are automatically made active on the subscribers' connection, of which he is mostly not aware and doesn't also want that service at all. Further, deactivation of unwanted services as and when required by the customers become difficult with all service providers. This is an unethical practice because by doing so the service provider is charging unnecessary money from the customer for the services which not require by the subscriber. Telecom Companies should take the consumers consent before starting a service

Advertising plays an important role in informing customers about new products and services. It is also important to keep the same product on top of the mind of the existing customer. Among all the players BSNL at lowest rank in coming up with attractive advertisement and catchy promotional offers. Therefore, it is recommended that BSNL must come up with interesting and creative advertisement to stay longer in the memory of subscribers and decide in its favour at the time of transaction and sharing personal experiences with peer group.

Advertisement may be creative and interesting, but if ends with a touching social message leaves a great impact on the minds of customers. Social messages also enable customers to talk about something with their acquaintances thereby spreading word of mouth too.

The customer satisfaction is directly proportional to customer loyalty. A loyal customer base is generated only when the service providers consistently deliver superior and quality service at competitive pricing. A network coverage issue can be adjusted with attractive low pricing and lucrative promotional offers. To elevate customer service, companies must acquire the capability to respond effectively.

All the demographic segments of the study are showing more inclination towards private sector service providers for various reasons. It is recommended that

BSNL must formulate a segment specific strategy to attract at least one whole segment to use its services and become loyal.

Telecom Industry is the largest depository of contacts and personal details of every individual. It would be unethical if personal details of the subscribers are used for the purpose other than providing them connection. However, telecom players can create a system to provide Quality of Experience (QoE) for each of its subscribers. It can measure how customers feel about their entire experience with their company, products, services, and customer interactions.

To ensure subscriber loyalty and satisfaction making sincere progress, telecom companies may consider creating a more customer centric solution apart from traditional customer care service centre. It can create a profile of a Chief Customer Officer (CCO) or Customer Experience Officer (CXO). These executives may be empowered to oversee all customer experience efforts throughout their lines of business. Thus, they can find a meaningful solution for repeated queries and generate a workable solution for recurring matters. They must be provided full visibility across all departments of the telecom company so that they can reach the root cause of problem.

Being customer centricity has more aspects than mere providing customer service. It is gaining comprehensive view of customers so that they can be served better. Telecom companies have data of all their subscribers. Based on that, customers may be classified into different groups such as Price sensitive, high maintenance, freebie- lovers. With such insights, telecom service providers can offer custom made incentives, discounts, and cross-sell and upsell opportunities that resonate because they're based on the customers' specific history and preferences.

Telecom players can establish independent agencies to deal with telecom consumer complaints. Thereby reducing effort at own end and focus more on enhancing other strategies. Independent agency can focus on only resolving the complaints. TRAI itself had suggested setting up such an agency in 2004, but did not implement it because the Department of Telecom found it unfeasible. Since then

time, scenario and technologies, everything has changed. They can bring that proposal back and implement it strategically.

Price is not the only factor that is attracting the customers, but the whole experience that is delivered to them. The reputation of the company is slowly earned but it can be damaged easope added. However, to accomplish this customer care executives must be empowered to take decisions on the spot instead of waiting for approvals.

Service providers must have their customer care centres and priority stores located in each area of the city making it very convenient for subscribers to walk down and have face to face interaction with customer care executive for any support. It is suggested that BSNL should open more and more help centres so that its subscriber do not find it easier to switch to another player rather than visiting a distantly located customer care centre to resolve his issues. Same is applicable to other service providers also who have fewer contact points for their subscribers.

At customer care centre, waiting customers watch executives' behaviour with other customers. It is critically important to maintain a good atmosphere in the store. Executives must be trained to smile and look empathetic towards customer, even though the last situation might have been unpleasant. Customers leaving the customer care centre with a smile on their face can be the biggest achievement for any organisation. Conducting good customer service not only requires good communicational skills and human behavioural skills but also the willingness to serve the customer and help with the issue

For any telecom service provider, providing good network coverage is the key of its identity. If a service provider is able to provide a good network constantly and evenly in all locations, its subscribers may never leave it even if prices tend to go higher in comparison to other service e providers.



# *Summary*

# SUMMARY

---

## INTRODUCTION

Telecommunication is imperative for holistic development of India. It is one exclusive industry that holds utmost significance in development of all other industries as basic need to grow is the exchange information. Where ever this exchange happens, communication lays the foundation. Telecom sector was completely revamped after Liberalization and privatization in India. At present, Indian telecom market is the hyper competitive play field for both public and private companies. Regular and frequent advancement in technology has also brought change in customer needs and ways by which they perceive products and services. Third generation technology has raised expectations of customers from fourth and subsequently fifth generation network, leading to the sky high demands from telecommunication by individuals and corporate. This has in turn increased the pressure on telecom service providers to enhance their performance, survive the deep neck competition and outshine in the telecom market.

## OBJECTIVE

The overall objective of this research is to analyse the marketing strategies of major telecom service providers in India.

### **Specific Objectives:**

- To study the changing scenario with respect to marketing strategies of telecom service providers in India to gain large subscriber base.
- To understand product, price, promotion, distribution (place), people, process and physical evidence strategies of Airtel, Reliance Jio, Vodafone and BSNL, especially after the advent of fourth generation mobile communication technology.
- To compare the marketing strategies of Airtel, Reliance Jio, Vodafone and BSNL related to the fourth generation (4G) mobile telecommunication services in India.

- To determine the key marketing strategies of telecom service providers in India and their impact on customer satisfaction and loyalty of telecom consumers.
- To understand purchase and spending behaviour of Indian telecom consumers in relation to the price wars among telecom players.

## HYPOTHESES

On the basis of above specified objectives and seven P's of Marketing Mix, following hypotheses have been identified to carry out the research:

<b>H1</b>	<b>Null</b>	There is no significant difference among the product strategies adopted by different service providers
	<b>Alternate</b>	There is a significant difference among the product strategies adopted by different service providers
<b>H2</b>	<b>Null</b>	There is no significant difference among the pricing strategies adopted by different service providers
	<b>Alternate</b>	There is no significant difference among the pricing strategies adopted by different service providers.
<b>H3</b>	<b>Null</b>	There is no significant difference among the distribution strategies adopted by different service providers
	<b>Alternate</b>	There is a significant difference among the distribution strategies adopted by different service providers
<b>H4</b>	<b>Null</b>	There is no significant difference among the promotion strategies adopted by different service providers
	<b>Alternate</b>	There is a significant difference among the promotion strategies adopted by different service providers
<b>H5</b>	<b>Null</b>	There is no significant difference among the people strategies adopted by different service providers.
	<b>Alternate</b>	There is a significant difference among the people strategies adopted by different service providers.
<b>H6</b>	<b>Null</b>	There is no significant difference among the process strategies adopted by different service providers
	<b>Alternate</b>	There is no significant difference among the process strategies adopted by different service providers
<b>H7</b>	<b>Null</b>	There is no significant difference among the physical evidence strategies adopted by different service providers.
	<b>Alternate</b>	There is a significant difference among the physical evidence strategies adopted by different service providers



## **METHOD OF STUDY**

This research work is in the form of 'ex-post facto' study in which the researcher attempted to study the existing perceptions of users regarding telecom service providers viz. Airtel, Reliance Jio, Vodafone and BSNL in relation to individual marketing strategies adopted by them and their impact on consumer behaviour; without manipulating in anyway the scenario as it stands presently. Thus the study is largely empirical in approach

### **Sampling Design**

Sampling is an elementary tool to gather information about a given problem from a definite portion of an entire population instead of measuring every member of the population. A proper sampling technique can have great effects on the authenticity of outcome of a research.

The technique of purposive random sampling was used to collect data pertaining to the study. Questionnaires were mailed to 1500 people belonged to Tier-I and Tier-II cities namely, Mumbai, Delhi, Kolkata, Chennai. Gurugram, Chandigarh, Jaipur, Indore, Haiderabad, Ahmedabad, Banglore, Lucknow. Kota etc., who were using telecom services in India. In thesecond phase Stratified Sampling Method was used and strata were made on the basis of different telecom players. The final sample consisted of the customers of the chosen companies for the purpose of the study: Airtel, Reliance Jio and BSNL. Thus, duly filled in questionnaires of 1009 customers were identified randomly and their responses were edited in accordance with the requirements of the objectives and hypotheses.

### **Data Collection:**

Data was collected on the basis of objectives of the study. Being empirical study, it is completely based on primary data collected by the researcher through well designed, structured and comprehensive questionnaires developed by the researcher in view of the theoretical literature and existing research findings as also the objectives of the study. The questionnaire contains dichotomous questions, multiple choice questions, scaling questions and ranking questions too.

Since the respondents subscribing different telecom companies, had different experience about services provided by their provider, questionnaire was considered to be the most appropriate tool for data collection. Data was collected by sending a web based link to customers of participating organizations. Further, the data was supplemented by review of documents and conducting participant's interview to gather additional information. The respondents were instructed in a well manner about the pattern of answering the questionnaire. They were given enough time to answer all the statements.

### **STATISTICAL TOOLS AND TECHNIQUES:**

Various statistical techniques were employed to examine the data such as:-

- Self administered questionnaire includes both scale and open-ended questions. The questionnaire contains three sections with different questions regarding
- Five-point Likert type numerical scales ranging from Highly Agree to No Idea and No influence to very significant influence were used.
- The duly filled in questionnaires were edited by the researcher and in accordance with the requirements of the objectives and hypothesis, univariate and bivariate tables were prepared.
- A variety of statistical analyses has been applied to the data, including Percentage analysis, weighted Averages, Man Whitney U test, Chi- square test (goodness of fit and test of independence) & Kruskal Wallis or H test.

### **RESULT OF HYPOTHESES**

After the analysis of collected data and testing stated hypotheses, it can be concluded that out of all the seven hypotheses framed to conduct research, all the null hypotheses gets rejected. Therefore, alternate hypotheses can be accepted that there was a significant difference among the service marketing mix strategies; product, price, place, promotion, people, physical evidence and process, adopted by different telecom service provider.

## **MAJOR FINDINGS OF THE STUDY**

A comparative study was done on the marketing strategies practiced by the major telecom companies namely BSNL, Jio, Vodafone and Airtel. The strategies were segregated among 7Ps of service marketing mix and comparisons were made on each P of the mix (Product, Place, Price, Promotion, People, Physical Evidence and Process). The analysis of collected data reveals that there was a significant difference in the marketing strategies adopted by chosen service providers.

### **Product**

In telecom industry, basic product is same for all telecom service providers is the same. However, the way it is being offered and being utilised by customers, referred to as subscribers in telecom sector, major affects the performance of an individual telecom service provider. While making a call, network plays an important role. Telecom player essentially needs to provide better network and coverage to make a consistent calling experience. While calling, voice clarity and continuity of call is important. This gets affected by various reasons. Service provider is required to minimise these reasons. Besides, calling, data services and add on services make the quality of product holistic. Study concludes that BSNL has most wide spread and largest network but people prefer Airtel and Jio due to their fast 4G network which is consistent most of the times followed by Vodafone. BSNL has not yet launched 4G services therefore its subscribers are unable to enjoy benefits of fastest technology which is offered by other players.

### **Pricing**

Right pricing plays the key role in retaining customers and new ones with time. It also leads gain customer loyalty if good services are offered at good prices. The analysis shows that overall best combination of services is offered by Airtel in comparison to its other competitors. Introduction of Reliance Jio with solely 4G technology at free of cost strategy stirred the market and began the price war in offering cheapest telecom services. Prices came down so low that subscribers are actually paying for data only and getting free voice and SMS services. Thus, it can be concluded that 4G network brought down the prices at lowest point and encouraged more and more subscriber to use free of cost telecom services.

Respondents also agreed that free of cost services affect their choice of service providers however in longer run, overall services and experience are more important.

Respondents agreed that hidden charges and cost affect their over all experience. There should be transparency in billing and customer issues must get resolved clearly to satisfy the customers. In this, Airtel and Jio remained on top. Jio specially earned the preference for its no base price offering. It only gives away packages and service discontinues after package get over. Impact of discontinuation of services has different feedback from different users.

Network loss and congestion are faced by customers when they are travelling or there is change in their location. At this time, customers expect consistent connectivity. BSNL having wide coverage keeps its subscribers satisfied as users get signals most of the times. If a service provider fails to provided consistent network, its subscribers may decide to switch, however, if they are offered free additional services, they may decide to continue.

**Educating subscribers** about latest products and services is very important. They get information by creative advertisements and push notifications from service providers. Majority of Airtel and Jio subscribers were satisfied with their knowledge of products, followed by Vodafone and BSNL subsequently.

**Easy activation and friendly procedure** Most of the respondents strongly agreed with friendly procedures of connection and easy activation of subscription by their service providers. Telecom providers must ensure easy and simple process of subscription. Airtel appears to provide satisfying experience, followed by Jio, Vodafone and BSNL.

#### **Updating Promotional Offers:**

In case of process strategies, Airtel has scored well as compared to other players. It has better procedures regarding connection and activation of service facilities. However, for processing information and updating the customers, Jio has proper system comparatively.

### **Visibility of Service Provider in Sponsorships, Events and Promotions**

There was a significant difference found among the visibility of Service Provider in Sponsorships, Events and Promotions. Airtel and Vodafone offered the best visibility in Sponsorship, Events and Promotions.

### **Corporate Social Responsibilities (CSR) activities**

Most of the respondents had a neutral opinion about awareness regarding their companies' CSR activities. However, Airtel and Vodafone subscribers appreciated CSR activities if their service providers respectively. Although CSR activities do have much effect on choice of their service providers

### **Appealing Physical Facilities**

Most of the respondents strongly agreed with appealing physical facilities of their service providers do make an effect on them. In all, a majority of Airtel subscribers favoured that their company had appealing physical facilities.

### **CONCLUSION**

The Indian Telecom Sector has been experiencing a complete transformation in terms of the infrastructure, its composition, innovation of products and services, major strategies adopted by telecom players and customers' expectations. The substitution of landline telephones by cheaper and more valuable mobile telecom services has created a lot of potential for the telecom players. Moreover, the advent of 4G technology and Jio's strategies of market penetration has raised the customers' expectations from service providers. Recent mergers and acquisitions are the outcome of these strategies and have made the competition more brutal than ever. The companies which were capable in analyzing the gap and listening to the pulse of the customers have been successful in winning the larger market share. Some of the service providers are offering better products with value added services while others are providing better network facilities. Some are attracting customers by offering various plans free of cost or on very nominal rates. Some have better customer care strategies while others are performing well in portraying their better image. In the present study, the researcher has attempted to compare the strategies of the major players of the sector on the basis of their service marketing mix. It has come out

from the study that Airtel has been doing the best in terms of designing aggressive marketing strategies consist of 7Ps.

### **RECOMMENDATION**

Basic core services such as clarity in voice at the time of making calls, network coverage, uninterrupted connectivity, congestion free networks plays, etc play a primary role in making or breaking any telecom service provider. Thus, they should ensure superior delivery of these basic services.

Place and People strategy of private telecom players are more successful than BSNL. Results have shown that subscribers find it easier to get a new SIM issued, complaints resolved, getting recharged etc with private players more often than BSNL. For BSNL, a subscriber has to visit its customer care centre whereas most of the solutions are provided by dealers /retailers of the private players. Hence BSNL should develop, empower, nurture its retail network, make its presence felt at multi brand SIM retail outlet.

An experience is always good and memorable when it is smooth and simplified. BSNL should make its grievance handling and customer interface more simplified. Customers also expect consistency in service across all channels of communication so they must ensure that all customer data is synchronized for better customer support.

In practice, BSNL customer care centres are fewer in a city. Whereas other service providers have their customer care centres and priority stores located in each area of the city making it very convenient for subscribers to walk down and have face to face interaction with customer care executive for any support. BSNL should open more and more help centres so that its subscriber do not find it easier to switch to another player rather than visiting a distantly located customer care centre to resolve his issues.

The pricing strategies of Airtel and Jio have been preferred most by the subscribers. However, when it comes to the transparency BSNL has more clear and transparent billing system. Vodafone subscribers have most issues with the billing

and activation of unwanted services. Thus, Vodafone and other private players should create a more transparent tariff and billing system to prevent customers feeling cheated and confused.

Telecom Practices should always be ethical. There should not be any hidden cost and confusing terms and condition while promoting a package. So that subscriber can decide with clarity about what service he is about to select and is going to pay for. All service providers primarily the private sector providers should abstain from the dishonest business practices.

It is generally observed that some VAS services are automatically made active on the subscribers' connection, of which he is mostly not aware and doesn't also want that service at all. Further, deactivation of unwanted services as and when required by the customers become difficult with all service providers. This is an unethical practice because by doing so the service provider is charging unnecessary money from the customer for the services which not require by the subscriber. Telecom Companies should take the consumers consent before starting a service

Advertising plays an important role in informing customers about new products and services. It is also important to keep the same product on top of the mind of the existing customer. Among all the players BSNL at lowest rank in coming up with attractive advertisement and catchy promotional offers. Therefore, it is recommended that BSNL must come up with interesting and creative advertisement to stay longer in the memory of subscribers and decide in its favour at the time of transaction and sharing personal experiences with peer group.

Advertisement may be creative and interesting, but if ends with a touching social message leaves a great impact on the minds of customers. Social messages also enable customers to talk about something with their acquaintances thereby spreading word of mouth too.

The customer satisfaction is directly proportional to customer loyalty. A loyal customer base is generated only when the service providers consistently deliver superior and quality service at competitive pricing. A network coverage issue can be

adjusted with attractive low pricing and lucrative promotional offers. To elevate customer service, companies must acquire the capability to respond effectively

All the demographic segments of the study are showing more inclination towards private sector service providers for various reasons. It is recommended that BSNL must formulate a segment specific strategy to attract at least one whole segment to use its services and become loyal.

Telecom Industry is the largest depository of contacts and personal details of every individual. It would be unethical if personal details of the subscribers are used for the purpose other than providing them connection. However, telecom players can create a system to provide Quality of Experience (QoE) for each of its subscribers. It can measure how customers feel about their entire experience with their company, products, services, and customer interactions.

To ensure subscriber loyalty and satisfaction making sincere progress, telecom companies may consider creating a more customer centric solution apart from traditional customer care service centre. It can create a profile of a Chief Customer Officer (CCO) or Customer Experience Officer (CXO). These executives may be empowered to oversee all customer experience efforts throughout their lines of business. Thus, they can find a meaningful solution for repeated queries and generate a workable solution for recurring matters. They must be provided full visibility across all departments of the telecom company so that they can reach the root cause of problem.

Being customer centricity has more aspects than mere providing customer service. It is gaining comprehensive view of customers so that they can be served better. Telecom companies have data of all their subscribers. Based on that, customers may be classified into different groups such as Price sensitive, high maintenance, freebie- lovers. With such insights, telecom service providers can offer custom made incentives, discounts, and cross-sell and up sell opportunities that resonate because they're based on the customers' specific history and preferences.



Telecom players can establish independent agencies to deal with telecom consumer complaints. Thereby reducing effort at own end and focus more on enhancing other strategies. Independent agency can focus on only resolving the complaints. TRAI itself had suggested setting up such an agency in 2004, but did not implement it because the Department of Telecom found it unfeasible. Since then time, scenario and technologies, everything has changed. They can bring that proposal back and implement it strategically.

Price is not the only factor that is attracting the customers, but the whole experience that is delivered to them. The reputation of the company is slowly earned but it can be damaged easily. If the customers are experiencing bad service, the word is going to spread fast to friends and relatives, while positive service does not have the same effect. To win customers easily, they must be shown concern and to please them some incentives and rewards can be added. However, to accomplish this customer care executives must be empowered to take decisions on the spot instead of waiting for approvals.

At customer care centre, waiting customers watch executives' behaviour with other customers. It is critically important to maintain a good atmosphere in the store. Executives must be trained to smile and look empathetic towards customer, even though the last situation might have been unpleasant. Customers leaving the customer care centre with a smile on their face can be the biggest achievement for any organisation. Conducting good customer service not only requires good communicational skills and human behavioural skills but also the willingness to serve the customer and help with the issue

Conventional marketing strategies are always reliable as they are being tested from time to time. However, there is always some room for new trials. Neuro marketing is one such newer marketing concept. Big telecom companies may apply neuro marketing strategies in phases to understand more about their target customers. They can begin with corporate clients and subsequently develop a system for different demography of customers.

As more number of online applications require customers' data for identity verification, it is essential to develop strong network security system. It is important to have customer's faith in the data security services. It increases responsibility of telecom service providers to prevent cyber attacks, hacking of data and unethical selling or utilization of personal details of customers.

### **LIMITATIONS OF THE STUDY**

The primary data is collected through a survey conducted on respondents who provided their inputs in the questionnaire exclusively designed for this study. It is beyond our control to prevent specific inherent shortcomings of such surveys where respondents are naturally biased in their responses. At times, respondents may be under the influence of their mood and cognitive limitations. Sometimes individual respondents interpret the questions in a different manner which results in improper responses. In spite of paramount care taken to ensure the reliability and validity of the questionnaire, there may exist a possibility of certain errors that cannot be ruled out effectively.

The marketing strategies pertaining to wholesale business, Business to Business (B<sub>2</sub>B) solutions, Enterprise solutions, etc offered by the telecom service providers are not considered in this study.

Indian telecommunication market is highly dynamic and extremely competitive. Due to the recurrent changes in the marketing strategies of the service providers and brisk technology breakthrough, the latest trends after the primary data collection process could not be included in this study.

However, considering the specific objectives of the study, these limitations do not dispense any severe affect on the quality of the research work. An earnest attempt has been made by the researcher to arrive at meaningful conclusions through systematic analysis of data.

**FUTURE SCOPE**

- This study open gateways for interstate comparison of services by telecom service providers
- With 5<sup>th</sup> generation technology ready to enter the market in coming years, it makes an interesting ground to understand future strategies of telecom players.
- This study also can be extended to understand 8<sup>th</sup> P of modern marketing mix, which refers to productivity and quality.
- Reliance Jio is comparatively a new entrant in the market. Its long term effect is yet to be seen in the telecom market. Thus this study will be helpful in understanding its initial impact.
- With Vodafone and Idea merger, and speculated merger of RCom- MTS- Tata, this study will help in understanding customers' expectations and gaps in services.
- This research is helpful for fellow researching in understanding remaining parameters of marketing strategies adopted by telecom service providers in India and abroad.



*Bibliography*

# BIBLIOGRAPHY

---

## Reference Book

- Aaker A. David. (2005), Strategic Market Management, (7<sup>th</sup> ed.), Wiley India (P.) Ltd., New Delhi.
- Ajai S. Gaur and Sanjay S. Gaur. (2009). Statistical Methods for Practice and Research – A Guide to Data Analysis Using SPSS, (2<sup>nd</sup> ed.). Response Books, India, New Delhi.
- Andy Field. (2009). Discovering Statistics Using SPSS, (3rd ed.). Sage Publications India Pvt. Ltd., New Delhi.
- Badrinarayan Shankar Pawar. (2009). Theory Building for Hypothesis Specification in Organizational Studies. Response Business books from Sage, New Delhi.
- C. R. Kothari (2004), Research Methodology: Methods & Techniques, New Age International (P) Ltd.
- Crimp M. and Wright L. T. (1995). The Marketing Research Process, (4th ed.), Prentice Hall, London.
- Crimp M. and Wright L. T. (1995). The Marketing Research Process, (4th ed.), Prentice Hall, London.
- Dan Steinbock. (2005). The Mobile Revolution – The Making of Mobile Service Worldwide. Kogan Page, London.
- David L. Kurtz and Louis E. Boone. (2007), Principles of Marketing, (12th ed.).South-Western, Thomson Learning Inc., New Delhi.
- David L. Kurtz and Louis E. Boone. (2007). Principles of Marketing, (12th ed.).South-Western, Thomson Learning Inc., New Delhi.
- David L. Loudon and Albert J. Della Bitta. (1993). Consumer Behavior, (4th ed.).
- David P. Sorensen. (2004). Innovations – Key to Business Success . Viva Books Private Limited, New Delhi.
- David W. Cravens and Nigel F. Piercy (2009), Strategic Marketing, (8<sup>th</sup> ed.), Tata McGraw-Hill, New Delhi.

- 
- David W. Cravens and Nigel F. Piercy. (2009). *Strategic Marketing*, (8<sup>th</sup> ed.). Tata McGraw-Hill, New Delhi.
  - Donald R. Cooper and Pamela S. Schindler. (2006). *Business Research Methods*, (9<sup>th</sup> ed.). Tata McGraw-Hill, New Delhi.
  - Donald R. Cooper and Pamela S. Schindler. (2006). *Business Research Methods*, (9<sup>th</sup> ed.). Tata McGraw-Hill, New Delhi.
  - *Focused Approach* (7<sup>th</sup> ed.). McGraw-Hill International Irwin, New York.
  - Hugh Burkitt and John Zealley. (2007). *Marketing Excellence – Winning companies reveal the secrets of their success*. Wiley India Pvt. Ltd., New Delhi.
  - Jaishri Jethwaney and Shruti Jain. (2006). *Advertising Management*. Oxford University Press, New Delhi, India.
  - Jean-Jacques Lambin, Ruben Chumpitaz and Isabelle Schuiling. (2007). *Market - Driven Management: Strategic and Operational Marketing*, (2<sup>nd</sup> ed.). Palgrave Macmillan, New York.
  - Jha S. M. (2000). *Services Marketing*. Himalaya Publishing House, Mumbai, India.
  - Jha S. M. (2000). *Services Marketing*. Himalaya Publishing House, Mumbai, India.
  - John W. Mullins, Orville C. Walker Jr., Harper W. Boyd Jr. and Jean-Claude Larreche. (2005). *Marketing Management - A Strategic Decision-Making Approach*, (5<sup>th</sup> ed.). McGraw-Hill Irwin, New York.
  - Kevin Lane Keller (2008), *Strategic Brand Management - Building, Measuring and Managing Brand Equity*, Pearson Education Inc., New Delhi.
  - Mathur U.C. (2006), *Strategic Marketing Management - Text and Cases*, Macmillan India Ltd., New Delhi.
  - McGrath, M. E. (2001), *Product Strategy for High Technology Companies*, New York: McGraw-Hill.
  - Nag A. (2008), *Strategic Marketing*, (2<sup>nd</sup> ed.). Macmillan Publishers India Ltd., New Delhi.
  - Parasuraman A., Valarie A. Zeithaml, and Leonard L. Berry (1998), *SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions*

- of Service Quality, *Journal of Retailing*, Volume 64, Number 1, Elsevier Science Publishing Company Inc., pp. 12-40.
- Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha. (2009), *Marketing Management-A South Asian Perspective* (13<sup>th</sup> ed.), Pearson Education, India, New Delhi.
  - Porter, Michael E., "Competitive Advantage". 1985, Ch. 1, pp 11-15, The Free Press, New York.
  - Ramaswamy V. S. and Namakumari S. (2002), *Marketing Management - Planning, Implementation and Control*. Macmillan India Ltd., New Delhi.
  - SABU. V. G. (2013), "A Study on Marketing Strategies of BSNL in Telecommunication Services - A Comparative Study with Private Sector Telecommunication Service Providers in Kerala" Retrieved from [http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/1/01\\_title.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/46469/1/01_title.pdf)
  - Thomson, B. (2004), *Creating a Strategic Product Plan*, Retrieved June 30, 2010 from <http://www.pragmaticmarketing.com/publications/topics/08/how-to-make-product-management-strategic>
  - Udechukwu Ojiako and Stuart Maguire. (2009). *Seeking the perfect customer experience: a case study of British Telecom*. *Strategic Change*, 18, Wiley InterScience, John Wiley & Sons, Ltd., pp. 179 -193.
  - Joseph F. Hair Jr., Mary F. Wolfenbarger, David J. Ortinau, and Robert P. Bush. (2010). *Essentials of Marketing Research*, (2<sup>nd</sup> ed.). McGraw-Hill Irwin, New York.
  - Kerlinger Fred N. (1986). *Foundations of Behavioural Research*, (3rd ed.). Holt, Rinehart and Winston, New York.
  - Kerlinger Fred N. (1986). *Foundations of Behavioural Research*, (3rd ed.). Holt, Rinehart and Winston, New York.
  - Kevin Lane Keller. (2008). *Strategic Brand Management - Building, Measuring and Managing Brand Equity*. Pearson Education Inc., New Delhi.
  - Kiran Pandya, Smruti Bulsari, and Sanjay Sinha. (2012). *SPSS in Simple Steps*. Dreamtech Press, New Delhi.

- 
- Lawrence S. Meyers, Glenn Gamst, and A. J. Guarino. (2006). *Applied Multivariate Research - Design and Implementation*. Sage Publications, Inc., New Delhi.
  - Macmillan India Ltd., New Delhi.
  - Malra Treece. (1991). *Successful Communication for Business and Professions*, (5<sup>th</sup> ed.). Allyn and Bacon, USA.
  - Mark Daniel. (2006). *The Elements of Strategy: A pocket guide to the essence of successful business strategy*. Palgrave Macmillan, New York.
  - Mark Sirkin R. (1995). *Statistics for Social Sciences*. Sage Publications, Inc., New Delhi.
  - Mathur U. C. (2006). *Strategic Marketing Management -Text and Cases*.
  - Nag A. (2008). *Strategic Marketing*, (2<sup>nd</sup> ed.). Macmillan Publishers India Ltd., New Delhi.
  - Naresh K. Malhotra and Satyabhushan Dash. (2011). *Marketing Research – An Applied Orientation*, (6<sup>th</sup> ed.). Pearson Prentice Hall, India, New Delhi.
  - Orville C. Walker Jr. and John W. Mullins. (2008). *Marketing Strategy: A Decision*
  - Paul R. Timm. (2008). *Customers Service - Career Success through Customers Loyalty* (4th ed.). Pearson Education, Inc., New Delhi
  - Paul Vogt W. (2005). *Dictionary of Statistics and Methodology*. Sage Publications India Pvt. Ltd., New Delhi.
  - Paul Fifield and Colin Gilligan. (1995). *Strategic Marketing Management*. Butterworth-Heinemann Ltd., Oxford.
  - Philip Kotler, Hermawan Kartajaya and Iwan Setiawan. (2010). *Marketing 3.0 from Products to Customers to Human Spirit*. Wiley India Pvt. Ltd., New Delhi.
  - Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha. (2009). *Marketing Management-A South Asian Perspective* (13<sup>th</sup> ed.). Pearson Education, India. New Delhi.
  - Philip Kotler. (1995). *Marketing Management – Analysis, Planning, Implementation, and Control*, (8<sup>th</sup> ed.). Prentice Hall of India, New Delhi.



- 
- Rajan Nair N. and Sanjith R. Nair. (2013). *Marketing Management – The Value Perspective*. Sulthan Chand & Sons, New Delhi.
  - Ramaswamy V. S. and Namakumari S. (2002). *Marketing Management - Planning, Implementation and Control*. Macmillan India Ltd., New Delhi.
  - Ranjit Kumar. (1999). *Research Methodology – A step by step guide for beginners*. Sage publications Ltd., New Delhi.
  - Ranjit Kumar. (2009). *Research Methodology – A step by step guide for beginners, (2<sup>nd</sup> ed.)*. Dorling Kindersley India Pvt. Ltd., New Delhi.
  - Ranjit Kumar. (2009). *Research Methodology – A step by step guide for beginners, (2<sup>nd</sup> ed.)*. Dorling Kindersley India Pvt. Ltd., New Delhi
  - Richard I. Levin and David S. Rubin. (1996). *Statistics for Management, (6th ed.)*.
  - Rick C. Farr and Paul R. Timm. (2004). *Business Research: An Informal Guide*. Viva Books Private Limited, New Delhi.
  - Shajahan S. (2009). *Marketing Research – Concepts and Practices in India*. Macmillan Publishers India Ltd., New Delhi.
  - Tomi T. Ahonen, Timo Kasper and Sara Melkko. (2004). *3G Marketing - Communities and Strategic Partnerships*. John Wiley & Sons, Ltd., England.
  - Uma Sekaran and Roger Bougie. (2010). *Research Methods for Business – A Skill-Building Approach, (5<sup>th</sup> ed.)*. Wiley India (P.) Ltd., New Delhi.
  - Valarie A. Zeithaml and Mary Jo Bitner. (1996). *Services Marketing*. McGraw-Hill Companies, Inc., New York.
  - Vishal Sethi. (2006). *Communication Services in India 1947 to 2007*. New Century Publications, New Delhi.
  - William O. Bearden, Richard G. Netemeyer, and Kelly L. Haws. (2011). *Handbook of Marketing Scales*. Sage Publications, Inc., New Delhi.
  - Xavier M. J. (2007). *Strategic Marketing: A guide for developing sustainable competitive advantage*. Response Books, New Delhi.

**JOURNALS & RESEARCH PAPERS**

- Abdolreza Eshghi, Sanjit Kumar Roy and Shirshendu Ganguli. (2008). Service Quality and Customer Satisfaction: An Empirical Investigation in Indian Mobile Telecommunications Services. *The Marketing Management Journal*, Volume 18, Issue 2, pp. 119-144.
- Abhishek Khanna and Nitin Navish Gupta. (2009). Uptake of 3G Services in India. *Evalueserve White Papers*, Evalueserve, Ltd., pp. 1-8.
- Lifang Peng and Xiaoli Zhang. (2009). The study of service innovations model for Chinese telecom operators - China Mobile Ltd as an example. *IEEE.*, pp. 669-675.
- Chatura Ranaweera. (2007). Are satisfied long-term customers more profitable? Evidence from the telecommunication sector. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 15, 2, Palgrave Macmillan Ltd., pp. 113-120.
- Chirag V. Erda. (2008). A comparative study on buying behaviour of Rural and Urban consumer on mobile phone in Jamnagar District. *Marketing to Rural consumers – Understanding and tapping the rural market potential. Conference Proceedings*, IIM Kozhikode, pp. 1-14.
- Christine Bailey, Paul R. Baines, and Hugh Wilson. (2009). Segmentation and customer insight in contemporary services marketing practice: Why grouping customers is no longer enough. *Journal of Marketing Management*, Vol. 25, No. 3-4, Westburn Publishers Ltd., pp. 227-252.
- Das Gupta Devashish & Sharma Atul. (2009). Customer Loyalty and Approach of Service Providers: An Empirical Study of Mobile Airtime Service Industry in India. *Services Marketing Quarterly*, 30: 4, Routledge Informa Ltd., England, pp. 342-364.
- Dong-Hee Shin and Won-Yong Kim. (2008). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. *Technological Forecasting & Social Change* 75, Elsevier Inc., pp. 854–874.

- 
- Fornell C. Johnson M. D., Anderson E. W., Cha J. & Bryang B. E. (1996). The American customer satisfaction index: Nature, purpose, and finding. *Journal of Marketing*, 60, pp. 7-18.
  - Fre´de´ric Jallat and Fabio Ancarani. (2008). Yield management, dynamic pricing and CRM in telecommunications. *Journal of Services Marketing*, 22/6, Emerald Group Publishing Limited, pp. 465–478.
  - Fujun Lai, Mitch Griffin, and Barry J. Babin. (2008). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *Journal of Business Research*, 62, Elsevier Inc., pp. 980-986.
  - George P. Wioschis & Gilbert A. Churchill Jr. (1979). An Analysis of the Adolescent Consumer. *Journal of Marketing*, Summer 1979, American Marketing Association, pp. 40-48.
  - Gloria K. Q. Agyapong. (2011). The Effect of Service Quality on Customer Satisfaction in the Utility Industry – A Case of Vodafone (Ghana). *International Journal of Business and Management* Vol. 6, No. 5, Published by Canadian Center of Science and Education, pp. 203-210.
  - Ho Kyun Shin, Andrey Kim, and Chang Won Lee. (2011). Relationship between consumer’s preference and service attributes in mobile telecommunication service. *Expert Systems with Applications*, 38, Elsevier Ltd., pp. 3522–3527.
  - Robert Wollan. (2011). The Service Provider - Customer Paradox. *Customer Relationship Management*, March 2011, Information Today Inc., pp. 10-11
  - Ian N. Lings and Gordon E. Greenley. (2009). The impact of internal and external market orientations on firm performance. *Journal of Strategic Marketing*, Vol. 17, No. 1, Taylor & Francis, pp. 41-53.
  - Ingo Vogelsang. (2009). The relationship between mobile and fixed-line communications: A survey. *Information Economics and Policy* 22, Elsevier B. V., pp. 4-17.
  - James W. Peltier and John A. Schribrowsky. (1997). The use of need-based segmentation for developing segment-specific direct marketing strategies. John Wiley & Sons, Inc., and Direct Marketing Educational Foundation, Inc., Volume 11, Number 4, pp. 53-62.

- 
- Jarmo Harno. (2010). Impact of 3G and beyond technology development and pricing on mobile data service provisioning, usage and diffusion. *Telematics and Informatics*, 27, Elsevier Ltd., pp. 269-282.
  - Ken Kwong-Kay Wong. (2009). Potential moderators of the link between rate plan suitability and customer tenure: A case in the Canadian mobile telecommunications industry. *Journal of Database Marketing & Customer Strategy Management*, Vol. 16, 2, Palgrave Macmillan, pp. 64-75.
  - Lars Grønholdt, Anne Martensen and Kai Kristensen. (2000). The relationship between customer satisfaction and loyalty: cross-industry differences. *Total Quality Management*, Vol. 11, Nos. 4/5&6, pp. 509-514.
  - Lee J. and Feick L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: Mobile phone service in France. *Journal of Services Marketing*, 15(1), pp. 35-48.
  - Lifang Peng and Xiaoli Zhang. (2009). The study of service innovations model for Chinese telecom operators - China Mobile Ltd as an example. *IEEE.*, pp. 669-675.
  - Narayana M. R. (2010). Substitutability between Mobile and Fixed Telephones: Evidence and Implications for India. *The Applied Regional Science Conference (ARSC)*, Blackwell Publishing Asia Pvt. Ltd., pp. 1-21.
  - Nicoletta Corrocher and Lorenzo Zirulia. (2010). Demand and innovation in services: The case of mobile communications. *Research Policy*, 39. Elsevier B. V., pp. 945-955.
  - Pedro S. Coelho and Jörg Henseler. (2009). *Creating Customer Loyalty through Service Customization*. Emerald Group Publishing Limited, pp. 1-27.
  - Peter McBurney, Simon Parsons, and Jeremy Green. (2002). Forecasting market demand for new telecommunications services: an introduction. *Telematics and Informatics* 19, Elsevier Science Ltd., pp. 225-249.
  - Pinaki Das and Srinivasan P. V. (1999). Demand for telephone usage in India. *Information Economics and Policy* 11, Elsevier Science B. V., pp. 177-194.

- 
- Priyanka Kokil and Manoj Kumar Sharma. (2006). Strategic Flexibility: Study of Selected Telecom Companies in India. *Global Journal of Flexible Systems Management*, Vol. 7. Nos. 3 & 4, pp. 59-66.
  - Raja Shekhar B. and Udaya Bhaskar N. (2009). A Comparative Study of Celebrity Impact on Consumer Behavior with Reference to Prepaid Mobile Service Providers in Select Urban and Semi Urban Areas. *International Journal of Business Research*, Volume 9, Number 1, pp. 103-107.
  - Rajasekhara Mouly Potluri and Hailemichael W. Hawariat (2010). Assessment of after-sales service behaviors of Ethiopia Telecom customers. *African Journal of Economic and Management Studies*, Vol. 1 No. 1, Emerald Group Publishing Limited, pp. 75-90.
  - Ramo Barrena and Mercedes Sánchez. (2009). Using Emotional Benefits as a Differentiation Strategy in Saturated Markets. *Psychology & Marketing*, Vol. 26(11), Wiley Periodicals, Inc., pp. 1002-1030.
  - Sidharth Sinha. (2009). Corporate Governance of State-Owned Enterprises: The Case of BSNL. *Economic & Political Weekly* Vol. XLIV No 41, October 2009, pp. 47 - 54.
  - Rao U. S and Sai Sangeet. (2007). Strategies for succeeding at the Bottom of Pyramid (BOP) market in Telecom Services Sector. Conference on Global Competition & Competitiveness of Indian Corporate, IIM Kozhikode, pp. 1-12.
  - Rick Ferguson and Bill Brohaugh. (2008). Telecom's search for the ultimate customer loyalty platform. *Journal of Consumer Marketing* 25/5, Emerald Group Publishing Limited, pp. 314 -318.
  - Rob Markey, Fred Reichheld and Andreas Dullweber. (2009). Closing the Customer Feedback Loop. *Harvard Business Review South Asia*, December 2009, pp. 25-29.
  - Robert Wollan. (2011). The Service Provider - Customer Paradox. *Customer Relationship Management*, March 2011, Information Today Inc., pp. 10-11.
  - Roland T. Rust, Christine Moorman and Gaurav Bhalla. (2010). Rethinking Marketing. *Harvard Business Review South Asia*, January-February 2010, pp. 86-93.

- 
- Roland T. Rust, Valarie A. Zeithaml, and Katherine Lemon. (2004). Customer - Centered Brand Management. *Harvard Business Review*, (September 2004), pp. 110-118.
  - Sadia Jahanzeb and Sidrah Jabeen. (2007). Churn management in the telecom industry of Pakistan: A comparative study of Ufone and Telenor. *Database Marketing & Customer Strategy Management* Vol.14, 2, Palgrave Macmillan Ltd., pp. 120-129.
  - Samantan S. K., Woods J. and Ghanbari M. (2007). Impact of price on mobile subscription and Revenue. *Journal of Revenue and Pricing Management*, Vol. 7, 4, Palgrave Macmillan, pp. 370-383.
  - Sanjay Kumar Singh. (2008). The diffusion of mobile phones in India. *Telecommunications Policy* 32, Elsevier Ltd., pp. 642–651.
  - Shalini N. Tripathi and Masood H. Siddiqui. (2010). An empirical investigation of customer preferences in mobile services. *Journal of Targeting, Measurement and Analysis for Marketing* 18, Macmillan Publishers Ltd., pp. 49 - 63.
  - Shanthi Venkatesh. (2008). Analysis of gaps in telecommunication services - a study with respect to service gaps in fixed-line segment. *Innovative Marketing*, Volume 4, Issue 1, pp. 64-76.
  - Shu-Ling Liao, Yung-Cheng Shen, and Chia-Hsien Chu. (2009). The effects of sales promotion strategy, product appeal and consumer traits on reminder impulse buying behaviour. *International Journal of Consumer Studies*, 33, Journal compilation, Blackwell Publishing Ltd., pp. 274-284.
  - Sidharth Sinha. (2009). Corporate Governance of State-Owned Enterprises: The Case of BSNL. *Economic & Political Weekly* Vol. XLIV No 41, October 2009, pp. 47 - 54.
  - Sridhar Varadharajan. (2007). Analysis of Inter-Regional Mobile Services Growth in India. *Proceeding of 6<sup>th</sup> Conf. Telecomm Techno-Economics*, Vol. 1, IEEE., pp. 1-6.
  - Udechukwu Ojiako and Stuart Maguire. (2009). Seeking the perfect customer experience: a case study of British Telecom. *Strategic Change*, 18, Wiley InterScience, John Wiley & Sons, Ltd., pp. 179 -193.

- Vanniarajan T. and Gurunathan P. (2009). Service Quality and Customer Loyalty in Cellular Service Market: An Application of 'Sem'. *Journal of Marketing & Communication*, Vol. 5, Issue 2, pp. 45-54.
- Victor Danciu. (2010). The Gravity Law of Marketing - A Major Reason for Change to a Better Performance. *Theoretical and Applied Economics*, Volume XVII, No. 4(545), Romania, pp. 7-18.
- Zillur Rahman. (2006). Superior service quality in Indian Cellular Telecommunication Industry. *Services Marketing Quarterly*, 27:4, pp. 115-139.
- Harit kumar & Priyanka Singh (2015). Neuromarketing: An Emerging Tool of Market Research, *International Journal of Engineering and Business Management Research*, Volume-5, Issue-6 , Vandana Publications , pp 530-535 .
- Athreya M.B. (1996), India's telecommunications policy: A paradigm shift, *Telecommunications Policy*, Vol. 20, No. 1, Elsevier Science Ltd., pp. 11-22.
- Vishal Sethi (2006), *Communication Services in India 1947 to 2007*, New Century Publications, New Delhi.

## REPORTS

- The National Telecom Policy – 1994 (NTP 1994), Government of India.
- The National Telecom Policy – 1999 (NTP 1999), Government of India.
- The New Telecom Policy – 2012 (NTP 2012), Government of India.
- The Report on Telecom Sector in India: A Decadal Profile. (2012). Telecom Regulatory Authority of India.
- The Report on Indian Telecom Services Performance Indicators, January – March, 2013. Telecom Regulatory Authority of India.
- TRAI Annual Reports

**Magazines:**

- Telecom era
- Voice & Data
- Telecoms.Com
- Telecom Live
- Telecom Quest
- Telecom Review

**WEBLIOGRAPHY**

- [www.dot.gov.in](http://www.dot.gov.in)
- [www.trai.gov.in](http://www.trai.gov.in)
- [www.coai.com](http://www.coai.com)
- [www.aircel.com](http://www.aircel.com)
- [www.airtel.in](http://www.airtel.in)
- [www.bsnl.co.in](http://www.bsnl.co.in)
- [www.emeraldpublishers.com](http://www.emeraldpublishers.com)
- [www.frontline.in](http://www.frontline.in)
- [www.ideacellular.com](http://www.ideacellular.com)
- [www.inflibnet.com](http://www.inflibnet.com)
- [www.interscience.com](http://www.interscience.com)
- [www.itu.int](http://www.itu.int)
- [www.jstor.com](http://www.jstor.com)
- [www.mtsindia.in](http://www.mtsindia.in)
- [www.rcom.co.in](http://www.rcom.co.in)
- [www.sageresearch.com](http://www.sageresearch.com)
- [www.sciencedirect.com](http://www.sciencedirect.com)
- [www.tatadocomo.com](http://www.tatadocomo.com)
- [www.tataindicom.com](http://www.tataindicom.com)
- [www.vodafone.in](http://www.vodafone.in)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.thehindubusinessline.com](http://www.thehindubusinessline.com)



- 
- [www.researchgate.net](http://www.researchgate.net)
  - [www.ariasystems.com](http://www.ariasystems.com)
  - [www.airtel.in](http://www.airtel.in)
  - [www.bsnl.co.in](http://www.bsnl.co.in)
  - [www.jio.com](http://www.jio.com)
  - [www.moneycontrol.com](http://www.moneycontrol.com)
  - [www.vodafone.com](http://www.vodafone.com)
  - [http://shodhganga.inflibnet.ac.in/bitstream/10603/22899/8/08\\_chapter3.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/22899/8/08_chapter3.pdf)
  - [http://shodhganga.inflibnet.ac.in/jspui/bitstream/10603/127477/8/08\\_chapter1.pdf](http://shodhganga.inflibnet.ac.in/jspui/bitstream/10603/127477/8/08_chapter1.pdf)
  - [https://en.wikipedia.org/wiki/Telecommunications\\_in\\_India](https://en.wikipedia.org/wiki/Telecommunications_in_India)
  - [www.iosrjournals.org/iosr-jbm/papers/Vol16-issue9/Version-1/D016912536.pdf](http://www.iosrjournals.org/iosr-jbm/papers/Vol16-issue9/Version-1/D016912536.pdf)
  - [www.bizvibe.com](http://www.bizvibe.com)
  - [www.datareign.com](http://www.datareign.com)
  - [www.frost.com](http://www.frost.com)
  - [www.ibef.org](http://www.ibef.org)
  - [www.telecomlead.com](http://www.telecomlead.com)



*Research Paper*

# RESEARCH PAPER

## MARKETING STRATEGIES OF INDIAN TELECOM SERVICE PROVIDERS: A CONCISE LITERATURE REVIEW

KHUSHBOO NIYARTA

**Abstract:** *Beware of little expenses. A small leak will sink a great ship. - Benjamin Franklin.* A reasonably good strategy leads to the building of strong and profitable business. A business owner must spend his money wisely to create the highest return on investment. The quote above explains that a firm must strategise to prevent losses and maximise benefits by reaching its target market.

With this backdrop the paper intends to review the literature where researchers have studied marketing strategies adopted by Telecom Service Providers in different countries. A concise overview of literature relating to the successful marketing strategies of Indian TSPs such as Airtel, Vodafone, etc is undertaken. It digs into the marketing issues and experiences from other countries. Research reported at regional level is rather limited, but has significant contribution in this paper. An attempt has been made to understand the marketing strategies of telecom players by investigating various areas that have been covered in the published works. It has been observed that a wide range of work relates to this field. Some of those areas have been highlighted in this paper. It provides a literature summary for the aspiring researchers into Indian Telecom Sector and identifies opportunities for future research.

**Keywords:** Indian Telecom Industry, Marketing Strategies, Strategy, Telecom Service Providers.

**Introduction:** Telecommunications is the exchange of information over significant distances by electrical and electronic means. As commonly called Telecom, it includes all types of voice, data and video transmission through telephone, television, radio, wireless network, computer network or other means. Traditionally, the term Telecommunications indicated to telephone service only. Telecom has taken every part of the world into its storm of fastest communication, technological advancements and highest speed of data services ever. Customer demand for mobile data has reached new heights. Consequently, telecom players are looking up for further investment in network infrastructure in 2016. In Asia around 3.6 billion people use mobile phones. There is already rapid advancement in its exploiting of mobile data/wireless broadband services. India is currently the second-largest telecommunication market and has the third highest number of internet users in the world<sup>1</sup>

In the severely competitive environment, a carefully planned strategy is the key to success for the entire top performing telecom players. There is a need of effective research to identify what attracts customers and what is feasible for a service provider. The best suitable strategy for a specific product can be formulated upon the proper understanding of various

factors that have impact on decision making. The effective research cannot be accomplished without critically studying what already exists in the form of general literature and specific studies. In this paper, the literature survey has been classified into two parts - studies related to growth and developments in telecom sector in India and studies related to marketing strategies of telecom players.

**Studies Related to Growth and Developments in Indian Telecom Sector: National Telecom Policy (2012)**<sup>2</sup> projected a target of 175 million broadband connections by the year 2017 and achieve 600 million by the year 2020 with higher speeds of at least 100 Mbps on demand to these connections. It also targets to increase rural teledensity in India from 39% to 70% by the year 2017 and achieve 100% by the year 2020. NTP-2012 envisions achieving this target by providing 'Broadband on Demand'. The number of telephone connections at the end of February 2012 was 943 million, as compared to 41 million at the end of December 2001. This achievement has a major contribution from private sector accounting for 88 % of the total telephone connections.

According to the Press Release dated **January 26<sup>th</sup>, 2016 of TELECOM REGULATORY AUTHORITY OF INDIA (TRAI)**<sup>3</sup>, highlights of telecom subscription data are as follows:

PARTICULARS	Total (Wireless + Wireline) Subscribers
TOTAL TELEPHONE SUBSCRIBERS	1035.18 Million
Urban Telephone subscribers	598.92 Million
Rural Telephone subscribers	436.26 Million
Overall Teledensity	81.82%

Data source: TRAI Press Release No. 06/2016

TRAI also indicates an increase in Mobile Number Portability (MNP) requests. In the month of November 2015 alone there was request from a total of 5.19 million subscribers for MNP. Among all the requests received, maximum came from Rajasthan (about 16.98 million) in MNP Zone- I (North

&western India) and Karnataka (about 21.59 million) from MNP Zone-II (Southern and Eastern India). This report also shared statistics of broadband users at the end of November 2015. Top five telecom service providers held the market share of 83.59%. Individual Market share in the table below:

S.no	Telecom Service Provider	Subscriber base (Million)	Broadband Market share (%)
1.	BhartiAirtel	30.68	23.33
2.	Vodafone	25.53	19.42
3.	Idea Cellular	21.25	16.16
4.	BSNL	19.87	15.11
5.	Reliance Communications	12.59	9.57
6.	Others	21.57	16.41

Data from TRAI Press Release No. 06/2016

Launch of **Reliance JioInfocom** has showed its deep impact on other telecom service providers already. Market experts are foreseeing a cut in tariff of voice and data services by major TSP as a result of extremely low tariff offered by Reliance Jio on its 4<sup>th</sup> generation services<sup>1</sup>.

**Studies Related to Marketing Strategy in Telecom Sector: R. Kulkarni, P. Angadi, S. Doddagoudrav (2016)**<sup>2</sup>emphasize on sentimental factors playing significant roles in making a buying-decision. According to their study on 'Anthropological Marketing Strategies by Indian Telecom Operators' the telecom market is characterized by relationship-oriented decision making. Thus, the Indian telecom operators design their Products, packages and Promotional Campaigns, such that they influence the sentimental factors in decision making. In this study some of the most popular schemes strategically launched by telecom players is analysed. For instance, friends and family offers, Closed User Group (CUG) schemes, relationship based marketing communications offering free night calls, Free messaging services such as Whatsapp, other messenger services etc, if the subscriber is using their pre or post paid services.

**Sabu V.G (2015)**<sup>6</sup>emphasise on advancements of telecommunication services in Kerala. He pointed out that basic essentials of a product are its core functional benefits and stressed on maintaining high quality in customer support and services in order to lift the product. The study explains that core benefits requirement of a telecom product are different for different market segments. Therefore, telecom companies should position their product as per the specific target segment. Referring to price strategy, he mentioned about price war during mid 2000 in Kerala when multiple telecom players were competing to attract customers. In that period a variety of tariff plans, Special Tariff Voucher (STV), free SMS & calls packages, low cost access to internet etc were

launched by different players. Place (Distribution) strategy has its own impact on customer's buying decision. Private players intensively distributed their products at all outlet to reach target customers while public sector player BSNL had exclusive outlet only for its products. Promotion strategies include a mix of sales tools. Prominent amongst all methods were direct calling to the customers to promote offers and free trials of service. Utilising internet for effective marketing is a touch point for internet savvy customers.

**Oloko, Anene, Kiara, Kathambi, Mutulu (2015)**<sup>7</sup>highlighted that no channel is irrelevant when it comes to customer and market. They discussed marketing strategies of Safaricom Ltd. which gave it a remarkable growth in market share and profit in Kenya and East African Region.They studied strategies ranging from Product creation, Price, brand alliance etc to auditory marketing, content localisation and content and structure. Their study deduced that Safaricom uses different methods to promote its services and products to its customers. To enhance a company's performance, capturing new markets and retaining existing ones marketing plays a crucial role.

**Vijayendra and Ramchandra (2013)**<sup>8</sup>investigated the challenges of marketing of goods and services by BSNL, an Indian Government Corporate. They explain that despite of having large potential network and distribution of BSNL, the marketing skills and communication abilities are less equipped and needs to be drastically improved. It has an edge over private players due to the backing of Government. It can reach to remote village areas and capture landline, mobile and internet service market. However, private players are slowly but steadily penetrating this market to take away the piece of pie from BSNL. There is an urgent need of effective new brand building strategy and image to save its presence. Its monopoly in landline market is being threatened by entry of players like Airtel and Reliance.

**Wang and Kishore**<sup>9</sup> based their research on Porter's five forces theory and compared China and India's telecommunication market strategies. They compared basic strategies as well as corporate strategies. Their study revealed that Indian telecommunication market took niche market very seriously in comparison to China. A major reason for difference in marketing strategies of both countries is the different government policies. Comparison of micro environment reveals that Indian telecom industry is more competitive and dependent on foreign suppliers. Both industries have same types of customers but China has an edge of international customers. Chinese telecom Industry has only few players. Therefore, they handle their marketing and sales on their own. Whereas Indian industry has large number of private players so the focus is on growth and marketing and sales are dependent on intermediaries. Macro environment comparison reveals that China is ahead of Indian industry due to faster technological advancements and stable political system along with suitable culture for economic growth.

**Bhandari and Kaur (September 2013)**<sup>10</sup> attempted to explore the factors and marketing strategies of telecom companies in India in their study that influence the satisfaction levels of customers. Their study is based on telecom users in Chandigarh, Mohali and Panchkula cities. They took service quality, price, brand image, value offered, switching cost, and customer loyalty as factors to predict satisfaction of customers. Results of their research reveal that customer satisfaction is enhanced by positive marketing strategies.

**Aithal and Mukhopadhyay**<sup>11</sup> analyse marketing issues in India and experiences gained from other countries in their study. It attempts to understand why telecom players have not been able to make effective entry in rural market. A major challenge faced by telecom players in rural markets is low and spread out population. In addition, rural people have low purchasing power making it a difficult market to

be captured. Study creates a base with Bottom of pyramid marketing strategies and 4A's Model to tackle the marketing issues in rural areas and overcome the barriers. Various studies quoted in this research have revealed that rural income is affected by agricultural growth rate. When crops yield well, purchasing power and disposable income for that period increase. When yield is low, consequently disposable income is also low. Therefore, marketing strategies should be in sync with agricultural growth and monsoon. Besides, needs of rural consumer may be different from urban user. Gap between urban and rural masses can be addressed by following 4A's Model of Availability, Affordability, Acceptability & Awareness. Study has mentioned experiences from other countries such as in Bangladesh, Grameen Phone captured 63% of the mobile market, Smart Communications Inc in Philippines penetrated 30% of mobile market using air payment system. Similarly, Rural Communications, Chile showed effective gov. Leadership.

**Jaimini.HDave**<sup>12</sup> explains opportunities and limitations of Indian Telecommunication Industry. His research points out that expanding Indian economy, focus on service sector, young aged population mix, urbanization, increased incomes, Increase in telephones, wireless and broadband connections, FDI inflow etc account for opportunities. Low tele-density in rural areas, limited spectrum availability, falling Average Revenue PerUser, availability of new user connections at almost no cost. India has great potential for tremendous growth in future.

**Conclusion:** In the words of Steve Jobs, "Get closer than ever to your customers. So close that you tell them what they need, well before they realise it themselves". In order to maximize own profits and strengthen market position, one must focus on factors that affect customer's buying decision, purchase power and needs of customer in target segment.

#### References:

1. *Wanwarang Posakabutra*, Consumer's Purchasing intention of Luxury Women's Handbags: Comparative Study of online and in-Store Purchase in Bangkok; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 3 Issue 2 (2015), Pg 22-28
2. 'Telecom Sector in India' updated in July, 2016. - Retrieved from [www.ibef.org](http://www.ibef.org)
3. National telecom policy, 2012, Government of India. Retrieved from [www.trai.gov.in](http://www.trai.gov.in)
4. Press Release on Subscription data (no. 6/2016), January, 2016, Telecom Regulatory Authority of India, [www.trai.gov.in](http://www.trai.gov.in)
5. News Article, Business Standard, (September 1, 2016), Retrieved from: [http://www.business-standard.com/article/markets/jio-impact-nil-three-telecom-companies-lost-rs-22-522-crore-m-cap-116090100648\\_1.html](http://www.business-standard.com/article/markets/jio-impact-nil-three-telecom-companies-lost-rs-22-522-crore-m-cap-116090100648_1.html)
6. *S.P.Deepeka, Dr. M.K Badri Narayanan*, Emerging Destinations For Service Apartment In India; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 3 Issue 1 (2015), Pg 142-147

7. R. Kulkarni, P. Angadi, S. Doddahoudra, 'Anthropological Marketing Strategies by Indian Telecom Operators', IJSSHR, Volume 2, Issue 3, (2014), pp. 234-239
8. Sabu V.G., (2015), 'A Study on Marketing Strategies of BSNL in Telecommunication Services - A Comparative Study with Private Sector Telecommunication Service Providers in Kerala', pp. 92-109.
9. Shreyaarora, Dr. Pulkitmathur, Using Nutrient Profiling To Make Nutrition Information On Labels More Consumer Friendly; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 3 Issue 1 (2015), Pg 148-156
10. Margaret Oloko, Enos B. Anene, Patrick G. Kiara, Irene Kathambi, Japhet Mutulu (2014), 'Marketing Strategies for Profitability: A Case of Safaricom Ltd in Kenya Telecommunication Industry', IJSR Publications, Volume 4, Issue 5(2014), pp.1-4.
11. A. Vijayendra, Dr. Bhargav .S.V. Ramachandra, 'A study of marketing strategies for government corporate to face the challenges of new millennium' with a special reference to BSNL - Indian Telecom' (February 2013), Journal of Exclusive Management Science -February 2013- Vol 2 Issue 2, pp. 1-10.
12. Punkaj Gupta, Strategy for Strengthening Consumerism in; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 2 Issue 1 (2014), Pg 57-66
13. Chengchang Wang and Abhinav Kishore, 'Comparative Research on the Marketing Strategies of Telecommunication Industry in China and India'.
14. Anuradha Bhandari, Prabhjot Kaur(2013), ' The Impact of Telecom Marketing Strategies on Customer Satisfaction', IRC's International Journal of Multidisciplinary Research in Social & Management Sciences, Volume 1, Issue -3 (2013), pp.78-82.
15. Aithal, R.K. and Mukhopadhyay, A. 'Rural Telecom in India: Marketing Issues and Experiences from Other Countries', Adopting E-Governance, (2008) pp. 271-276.
16. Abdulkadir Aden, Factors influencing on Customer's Decision Making in Purchasing Chicken Meat Based on Countries of Origin in Malaysia; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 3 Issue 2 (2015), Pg 65-71
17. Jaimini H. Dave, 'Strategic Marketing in Global Perspective: Opportunities and Limitation of Indian Telecommunication Industry', Paripex, Indian Journal of Research, Volume 2, Issue: 2, (2013), pp. 197-199.
18. Dr. Asha Binu Raj, Internal Branding: An Employee Based Tool For Branding Beyond Marketing; Business Sciences International Research Journal ISSN 2321 - 3191 Vol 3 Issue 1 (2015), Pg 131-141

Khushboo Niyarta

*Assistant professor, Department of Business Administration  
Govt. (PG) Commerce College, Kota, Rajasthan, India.*

---

## **IMPACT OF TELECOM TECHNOLOGY REVOLUTION ON E-COMMERCE INDUSTRY IN INDIA**

**Khushboo Niyarta**

Assistant Professor, Dept. of Business Administration,  
Government (PG) Commerce College, Kota, Rajasthan  
kniyarta@gmail.com

---

**Abstract:** In today's competitive world, communication has become an integral part of the growth, success and efficiency of any business, nation or individual. One of the major impacts caused by telecommunication revolution is witnessed in the E-commerce industry. When telecommunication technologies are applied e-commerce, the business gets an opportunity of reducing its operational cost. With the advent of faster data availability through 4G network and a variety of smart phones in market, consumers are increasingly adapting to e-commerce. This paper makes an attempt to understand the relationship between telecom technology advancement and changes in electronic buying behaviour of customers. Paper dwells further to understand how the launch of 4G service of telecommunication has made it simpler for consumers to buy products and book services online. Paper also incorporates performance of major telecom players and how their subscribers engage into e-commerce activities. Research also includes futuristic approach of Telecom players in relation to E-Commerce. For the efficient research work, descriptive and exploratory research design has been used. Primary data has been collected by surveys and interactions with different subscribers, whereas secondary data has been collected through various published work, annual reports of service provider, etc. Paper concludes with the findings that consumers subscribed to 4G services have best experience while shopping online. There has been a change in their buying behaviour after advent of 4G technology. The future scope of this study is wide as it is important to understand change in buying behaviour of consumers for both telecom service providers and E-commerce players.

**Keywords:** E-Commerce, Telecommunication, 4G Network, Online Buying.

---

**Introduction:** Electronic commerce term is referred to any kind of business and commercial transaction which includes transfer of information across the Internet. It covers a range of businesses, such as consumer based retail sites, through auction or music sites, to business exchanges trading goods and services between corporations. At present, e-commerce is one of the most significant aspects emerging on the internet. India's growing e-commerce space has witnessed significant improvements through technology up gradation and the rapid pace of growth in the digital payments sector in recent years. In 2016, over 69 million Indians purchased their apparels and accessories, books, mobiles, laptops, gadgets and other electronic items online. By 2020, this number is expected to reach over 175 million – owing to the technology transformation led by the rise in the use of smart phones and tablets, and improved access to the low-cost internet.

**Research Objective:** To understand the relationship between telecom technology advancement and changes in electronic buying behaviour of customers  
How the launch of 4G service of telecommunication has made it simpler for consumers to buy products and book services taking advantage of E-commerce.

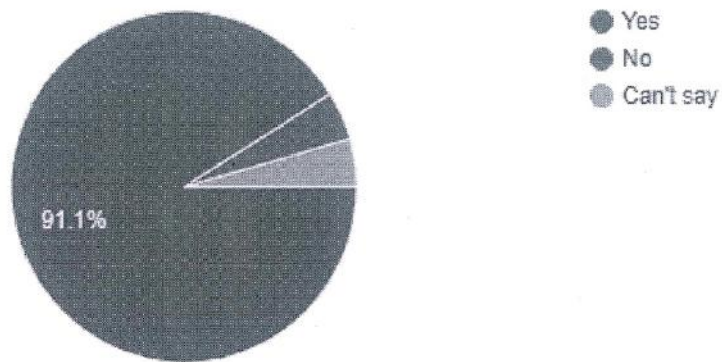
**Review of Literature:** Schierz and Schilke observed that there was lack of acceptance of mobile payment services among consumers. In order to understand the reasons, they developed a conceptual model to test factors that determine consumers' acceptance of mobile payment services. The empirical result of their study showed strong support for the effects of compatibility, individual mobility etc. Huang and Benyoucef in their study on E-commerce studied the adoption of Web 2.0 capabilities to enhance customer participation and achieve greater economic value. According to their study the social

commerce was not fully understood by the users. They proposed a new model to provide some guidance on social commerce design.

**Research Methodology:** Primary data was collected through observation, questionnaires and interviews. The primary data is the major base of data collection method. As, the study aims to analyse electronic buying behaviour of customers in relation to telecom services, perception of customers related to the customer satisfaction. The main focus therefore, remains the customer. The research methods were designed according the research objectives of this study.

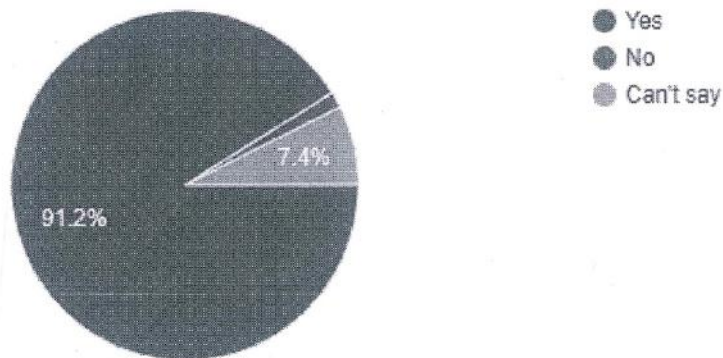
**Data Analysis:**

**1. Smartphone Digital Experience Has Improved Since The Advent Of 4G Services:**



Out of all the respondents, 91.1% agrees that their smart phone digital experience has improved after they started using 4G services.

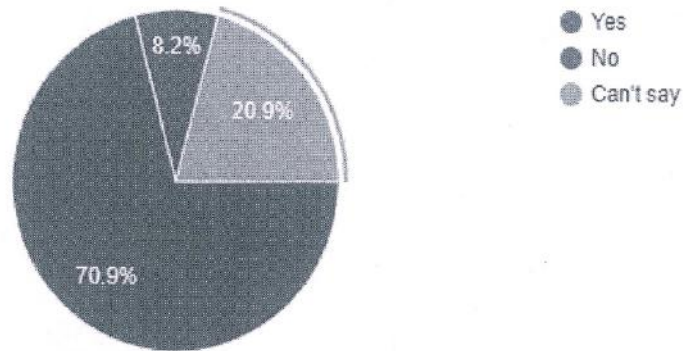
**2. 4G Services Have Increased The Screen Time of Average Indian:**



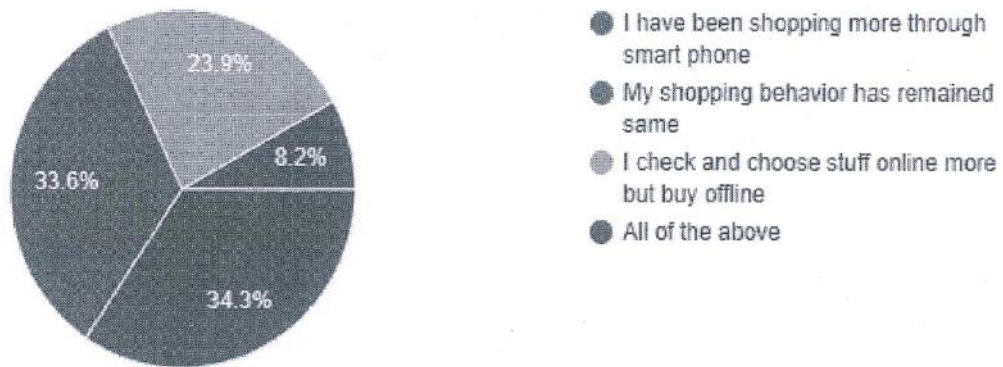
Out of all the respondents, 91.2% agrees that they have been spending more time on screen through mobile devices and smart phone because of increased use of 4G in various activities.



**3. In The Price War Between Telecom Players Indian Consumers Have A Win-Win Situation Because They Have Been Benefited From Every Aspect:**

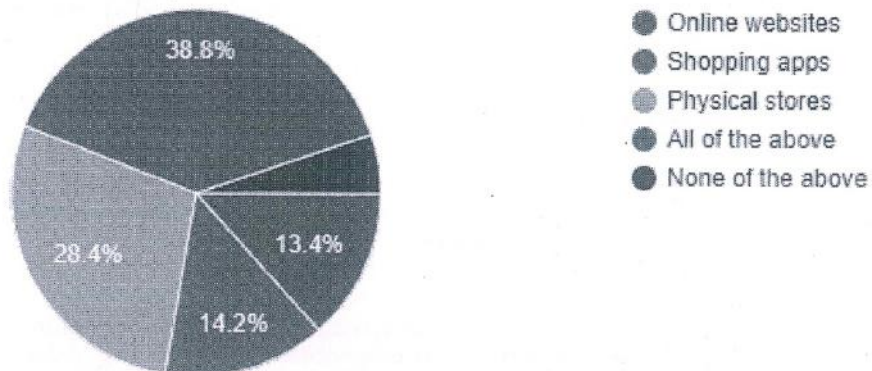


**4. With the Advent of 4G Network:**



With the advent of 4G network, 33.6% of respondents believe that their shopping behaviour has remain unchanged, however, 57.9% of the respondents agreed that 4G network has caused changed in their buying behaviour.

**5. Which One Of The Following Do You Use For Shopping?**



Due to the availability of a variety of smart phones in market and fastest network of 4G, customers' visit to physical stores has dropped down. Only 28.4% of the respondents still visit the store individually, whereas, 66.4% respondents use telecom services to make purchase.

**Conclusion:**Due to the rigorous advancement in telecommunication technology, there is a significant change in electronic buying behaviour of customers. The launch of 4G service of telecommunication has positively made it possible and simpler for consumers to buy products and book services taking advantage of E-commerce. There is an increase in time spent on screen instead of physical purchasing. For customers the price of telecom and e-commerce services has become extremely low because of growing competition in these sectors. Ultimately, customer is in win win situation getting benefits from all directions.

**References:**

1. [www.sciencedirect.com](http://www.sciencedirect.com)
2. [www.ecommerceguide.com](http://www.ecommerceguide.com)
3. [www.networksolutions.com](http://www.networksolutions.com)
4. [www.telecom.economictimes.indiatimes.com](http://www.telecom.economictimes.indiatimes.com)
5. [www.wikipedia.org](http://www.wikipedia.org)

\*\*\*

## Marketing Mix Strategies of Indian Telecom Service Providers: A Comparative Analysis

Khushboo Niyarta

**ABSTRACT:** This paper compares the marketing mix of prominent telecom service providers in India. There is a fierce competition among telecom giants to tap the market and top the position. One of these ultimately acquired the major market share, largest subscriber base and also takes lead in satisfying customers with overall performance. Whereas, other players are the followers who are struggling to survive the rapidly changing technical environment. To understand this concept Bharti Airtel, Reliance Jio and BSNL are selected for the analysis and comparison has been made. These telecom players may appear to similarity in products and service that they provide in first glance. However, they differ in their internal and competitive strategies. The differences are measured on business success by growth strategy, difference in organizational structure, service providing strategy, etc. The analysis is an attempt to make an understanding of how a slight variation in market strategy contributes to the prosperity or failure of a telecom service provider in this fast changing digital world. Paper concludes that Bharti Airtel is the overall leader in all the parameters that were taken into account for comparison.

**KEYWORDS:** Marketing strategies, Marketing Mix, Indian Telecom Service Providers.

Date of Submission: 24-01-2019

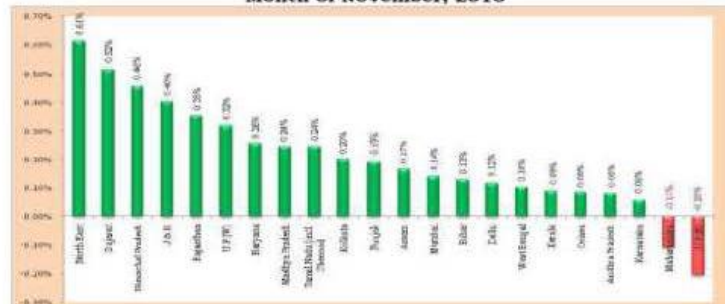
Date of acceptance: 08-02-2019

### I. INTRODUCTION

With smart communication devices reaching in hands of more and more number of users, digitalization is on its way to its golden era. It has had a transformational impact on the telecommunication service providers while taking both operational and strategic decisions. In present scenario, the entire telecommunication industry is struggling to keep up with the quickly transforming dynamic market environment and growing technological advancements. In their expedition to adopt digitalization, the telecom service providers have started taking small steps by undertaking infrastructural developments and integrating technology. There is an emerging need for telecos to transform their business processes in such a way that it maintains profit margins, retain market share, and expand their share of wallet in a digital economy.

- According to Telecom Regulatory Authority of India, total number of telephone (wired and wire-line combined) subscriber reached 1193.72 million by the end of November 2018.
- India's telephone subscriber base has also grown (CAGR) Cumulative Annual Growth Rate of 19.16 per cent, reaching 1188.5 million during current FY17-18
- India has become the second largest telecommunication market in world with third highest number of internet users in the world.

Service Area-wise Monthly Growth Rate of Wireless Subscribers in the Month of November, 2018



Source: Telecom Regulatory Authority of India

## II. TELECOM SCENARIO IN INDIA

According to a joint study conducted by Google India and A T Kearney (a global management consulting firm), with over 155 million mobile Internet users at present, India will see a major mobile explosion as the Internet user base will become more than double to 480 million by 2017. It was estimated that in next three years, smart phone penetration will grow six times to touch 385 million people and the number of users who transact online will grow to 160 million. This also implied that Lifestyle will be the largest online category by the year 2020. Testifying this study in current scenario, data released by Telecom Regulatory Authority of India becomes significant. According to its report published in October 2018, India had 512.26 million internet subscribers till the end of June. This indicates that a significant growth of 3.71% from a total of 493.96 million internet connections was recorded at the end of March 2018.

## III. MARKETING MIX OF AIRTEL, RELIANCE JIO, BSNL

**Airtel:** Bharti Airtel Limited is an Indian global telecommunications services company based in New Delhi, India. The company's business services include mobile services, data services and digital services. The mobile services uses GSM network technology, which is a fixed wireless technology, across major telecommunication circles in India. Airtel is an established player in providing 2G, 3G services and aggressively rolled out its 4G services.

**Product:** In order to retain the highest subscriber base, Airtel has tried to introduce large number of products and services in order to keep the customers intact. Some of its prominent products are Pre-paid and Post-paid services, Value Added Services (VAS) like instant balance inquiry, 24 hour recharge facility, Hello tunes, Ring tones, Ringtones and hello tunes offers, easy post-pay bill payment solutions, Enterprise Solutions multimedia messaging service, Airtel Live portal. It has recently launched Airtel Bank to cater to the growing need of e-commerce and digital transactions.

**Place:** It has wider distribution network as compared to competitors. Thus, it brings many customers daily to it. Its network of distributors includes even small businesses like groceries and chemist outlets. Its 3G service is present in 22 circles across India. It offers 4G services in all the 22 telecom circles, but when the 4G network is not available, the network will fall back to 3G and 2G. Airtel planned to launch VoLTE services in Jammu Kashmir by the end of 2018 to become pan-India VoLTE operator by the end of 2018.

**Promotion:** Airtel has always opted for aggressive marketing strategy. Its promotional strategy ranges from traditional print media to marketing at social network sites. It has engaged in large scale television and print advertising, uses big celebrities who endorse its services. The company also created its signature tune popular musician A.R. Rahman. The tune became one of the most downloaded tunes in India when it was launched. Airtel also goes regional with its advertisement efforts gaining advantage over players. Bharti Airtel had signed a network deployment deal with Nokia Networks in October to install and maintain 4G services in three new circles. Nokia's networking arm already serves 4G services for Bharti Airtel in 6 circles in India since September 2015. According to a press release of Airtel, May 2018, Nokia's premium smartphones – Nokia 8 Sirocco, Nokia 7 Plus, and Nokia 6.1 – were also available for purchase on the 'Online Store' of Airtel.

**Price:** Using competitive pricing strategy is important to stand the competition in this sector. However, Airtel provides flexible pricing mechanism depending on the prevailing market conditions. 'Make my plan' is a smart strategy as customers can modify their plan as they see fit.

**Reliance Jio:** Reliance Jio Infocomm limited is commonly popular as just Jio. It deals in mobile-telephonic communications, broadband services and digital services. Reliance Jio was founded in the year 2010. It has a fiber-optic cable network of 250,000 km that partners with local cable operators to receive broader connectivity for getting broadband services.

**Product:** Reliance Jio created a chaos on telecom market when it offers 4G LTE wireless services with its launch. It does not offer 2G or 3G services. It only provides VoLTE (Voice over Long Term Evolution)-only services. Some of its products are Wireless router – Jiofi, Transfer content – JioSwitch, Wallet app – JioMoney Wallet, Cloud-based back up tool – JioDrive, Magazine and news aggregator – JioXpressNews, Magazine e-reader – JioMags VoLTE phone-stimulator – Jio4GVoice, Music player – JioMusic, Instant-Messaging app – JioChat Messenger, HD online video library – JioCinema, TV channel live service – JioTV, Manage digital services and Jio account – MyJio

**Place:** It has pan-India presence. It has its headquarters base at Navi Mumbai in Maharashtra. Reliance Jio has a strong and widespread distribution channel. It is the owner of 1,800 MHz and 800 MHz bands in 6 and 10 circles respectively amongst the total 22 circles prevalent in India. It is also the owner of 2,300 MHz spectrum licensed for Pan-India usage till the year 2035.

**Promotion:** It has undertaken an aggressive marketing strategy to create positive brand awareness. It has launched ad campaigns on television, radio, newspapers, magazines, and billboards and social media platforms including Instagram, Twitter and YouTube. Reliance Jio has also roped in several celebrities to act in its

commercials and become associated with its brand. Jio offered 4G services along with its own handset. This was a unique strategy to capture not just telecom subscribers, but also hinted a knock at handset industry.

**Price:** The company has targeted users with smart phones who desire good services and high internet speed. Reliance Jio has made India a techno-savvy and digital nation. It has adopted a reasonable pricing policy for all its products. These rates were applicable from the beginning of the fiscal year 2016-17.

**Bharat Sanchar Nigam Limited (BSNL):** BSNL is India's oldest and largest communication service provider. It has a strong backing of the Government of India.

**Product:** its primary product is Landline. Apart from that it is also present into GSM Based Mobile services which have Prepaid and Postpaid Tariff plans, Value Added Services (VAS), Prepaid and postpaid data, international roaming, device building partners, Broadband, Wi-Fi, Wi-Max broadband, etc.

**Place:** BSNL is present across pan India with 24 circles. It has penetrated most of rural areas where private players have not yet reached. Its strength was landline connections who also took up data facility and eventually it gained from its primary role.

**Promotion:** TV, print, online, hoardings etc for advertising. BSNL promotes in a very limited way. However, due to the increase in so many competitors in telecom industry it has started promotion by coming up with new logo, catchy slogans like connecting India, new and unique names to identify different product and services provided by BSNL.

**Price:** It provides the calling service at a very cheap rate in comparison with its users and the other services depend on the installation charges. It provides specific discount or special offers to the users whose usage is very high in comparison to others. BSNL also comes up services like lifetime cards which help them be connected with the user and keep generating revenue.

**A Comparison Of Marketing Mix Of Selected Telecom Players**

Telecom Companies	Product	Place	Price	Promotion
Airtel	Pre-paid, Post-paid services, Value Added Services like instant balance inquiry, Ringtones, hello tunes, easy post-pay bill payment, MMS, Airtel Live portal, Airtel Bank	Present in all 22 circles. Highest subscribes in rural area.	Flexible pricing mechanism	Aggressive marketing using all platforms. Television, and print advertising, social media, celebrity endorsements, Catchy signature tune. Tie up with handset manufacturers to cross promote each other's products. For example, Airtel-Nokia deal.
BSNL	Landline, pre and post paid services, data services, broadband, 2G, 3G.	Present in 24 Circles.	Very cheap rate	Very less promotion in comparison to other players. Mostly Print and on-cal advertising for existing subscribers.
Reliance Jio	Only 4G, VOLTE, offers unique Jio services for active digitalisation.	Up to 10 circles.	Reasonable pricing policy	Aggressive marketing strategy to create positive brand awareness. Ad campaigns on television, radio, newspapers, magazines, and billboards and social media platforms. Offers connections with own handset. There by lowering total cost of communication for an average customer.

**IV. CONCLUSION**

After comparison of marketing mix of the three prominent telecom service providers in India, it was concluded that Airtel out performs its competitors in different parameters and emerges out as market leader, despite of tough competition given by Jio. Pricing strategy may attract customers at first, but to behold subscriber in a longer run, right balancing of all the elements of marketing mix is essential. This scope of this study can be widened to cover whole of India to get a nationwide picture and other parameters may be included to magnify the study.

**REFERENCES**

- [1]. Comparative Study of Major Telecom Providers in India, (Mishra, Singh, Mittal, ArchanaSoni), IOSR Journal, Volume 10, Issue 3.
- [2]. Gombeski, W. 1998. Better Marketing through A Principles-Based Model', Marketing Health Services, 18(3)
- [3]. Gronroos, C. 1991. The Marketing Strategy Continuum: Towards A Marketing Concept for the 1990s', Management Decision.
- [4]. Day, G. and Montgomery, D. 1999. Charting New Direction for Marketing', Journal of Marketing, 63 (Special Issue)
- [5]. Judd, V. 1987. Differentiate With the 5th P: People', Industrial Marketing Management.
- [6]. Kalavani, Bhanumathy.2006 Consumers attitude towards cell phone services. <http://www.emeraldinsight.com>
- [7]. Kotler, P. 1999. Kotler on Marketing: How to Create, Win and Dominate Markets', New York, Press Free.
- [8]. Gummesson, E. 1991. Marketing—Orientation Revisited: The Critical Role of the Part-Time Marketer', European Journal of Marketing.
- [9]. India Crosses 500 Mn Internet Connections As Rural Users Surge, Shreya Ganguly, [www. inc42.com](http://www.inc42.com).
- [10]. [www.iosrjournals.org](http://www.iosrjournals.org)

- [11]. [www.ibef.org/industry/telecommunications.aspx](http://www.ibef.org/industry/telecommunications.aspx)
- [12]. [www.thehindubusinessline.com](http://www.thehindubusinessline.com)
- [13]. [www.mbaskool.com/marketing-mix/services](http://www.mbaskool.com/marketing-mix/services)
- [14]. [www.livemint.com](http://www.livemint.com)
- [15]. [www.strandconsult.dk](http://www.strandconsult.dk)
- [16]. [www.infinite-research.com/thoughts/digitalization-telecommunication-industry-game-changer](http://www.infinite-research.com/thoughts/digitalization-telecommunication-industry-game-changer)
- [17]. [www.medianama.com/2016/12/223-airtel-4g-presence/](http://www.medianama.com/2016/12/223-airtel-4g-presence/)

Khushboo Niyarta" Marketing Mix Strategies of Indian Telecom Service Providers: A Comparative Analysis' International Journal of Business and Management Invention (IJBMI), vol. 08, no. 02, 2019, pp 12-15

# ANALYSING INDIAN TELECOM INDUSTRY POST 4G NETWORK: IMPACT, ADVANCEMENTS, CHALLENGES, FUTURE

Khushboo Niyarta

Assistant Professor, Department of Business Administration, Government Commerce College, Kota  
(Rajasthan)

**Abstract:** Telecommunications plays significant role in shaping and transforming any economy of world. It also directs life style and social presence of any individual. Progress in telecom industry represents revolutionary growth in all other sectors of any given country. Indian telecommunication industry has shown humongous growth after globalisation of Indian economy. In last two decades, telecommunication technology has transformed from landline phones to present 4G network and already eyeing on 5G for even faster services. In this backdrop, it becomes important to understand that as a nation with world's second highest number of telecom subscribers, where the world's seventh largest economy is heading towards? This study attempts to understand major turbulences in Indian telecom markets, visible and invisible impact on work mannerism and general trends in lifestyle of people after the shift from 2G/3G to 4G network. Study also scrutinizes its impact on Indian customers, economy, government decisions and present scenario of Indian telecom sector and the future aspects of telecom growth.

**Keywords:** 3G, 4G, 5G, Indian Telecom Service Providers.

## I. INTRODUCTION

Telecommunication industry is one of the fastest emerging industries in the world. After the globalization in 1991, telecommunication sector remained one of the most happening sectors in India. In recent period this industry has witnessed rapid, significant and dramatic changes. Many national and international telecom players ventured into cellular service, service market and offered a plethora of lucrative offers and services to the people of India who were fancying over landline connection. Currently India is the world's second largest telecommunication market and still going. Indian telecommunication market provides an excellent opportunity for network providers. With the technical advancements from second generation to fourth generation, there have been remarkable changes in all sectors touched by telecommunication industry. Likewise, when fifth generation technology is already knocking the doors to create another bigger perturbation, it is important to understand how far we have come as a nation, as an individual and progress in the field of telecom.

## II. OBJECTIVE

Following objectives are aimed to conduct study without deviating from the core:-

- To study impact on Indian Telecom Market after the launch of Fourth Generation Technology
- To understand present status of Indian telecom industry
- To analyse change in telecom practices of subscribers who shifted from 3G to 4G
- To identify future aspects beyond fourth generation technology

## III. RESEARCH METHODOLOGY

For any research to generate meaningful result, data collection plays a significant part. This study is majorly based on secondary data available at various platforms. Both published and unpublished data has been collected for the purpose. Published data are collected from various annual reports, statistical statements from government departments' web links, telecom companies' press releases, various research reports prepared by research scholars, universities, economists, from different fields, books on the subject by various authors, magazines, and newspapers, technical and trade journals available in libraries and online portals, websites, and public records and historical documents and other sources of published information. The unpublished data are collected from diaries of experts, scholars and research workers, public/private individuals and organizations.

#### IV. REVIEW OF LITERATURE

Bhatt (2008) studied mobile phone usage, duration of use, necessity, the spending on mobile phones, influencing factor for purchasing the mobile phone, awareness of medical side effects of the mobile phone usage through a survey. Sinhas and Wagh (2008) studied the growth and performance of cellular telecom sector. They measured consumer choices, preferences regarding mobile services and mobile usage. The study was based on primary data, collected from businessmen, employees, students, agriculturalists and others. Desai Ashok (2007) studied telecommunication industry by analysing its history, ownership pattern and financing of private communication pattern. Book includes the growth and emergence of digital electronic technologies in fix line and mobile technology. P. Vijay (2016) examined customer preferences towards telecom service. The study exposed that respondents gave top preferences to Airtel and lowest preferences to Aircel in preferring the network. Their study also revealed that their respondents gave top preferences to service quality, Value added services while selecting telecom service providers.

#### V. TELECOM INDUSTRY AT PRESENT

**National Digital Communications Policy** The National Digital Communications Policy, 2018 has been unveiled by Government of India. It is a newer nomenclature for National Telecom Policy, considering its significant objectives dedicated to digitisation.

##### Digital Communications Commission

The Telecom Commission was set up by the Government of India in 1989 with administrative and financial powers of the Government of India to deal with various aspects of Telecommunications. The Government, vide Resolution dated 22nd October 2018, has re-designated the 'Telecom Commission' as the 'Digital Communications Commission'.

**Full Mobile Number Portability (MNP):** Government has allowed One Nation Full Mobile Number Portability (MNP) recently. This has enabled the subscribers to change their licence service area and still retain their mobile number. MNP also allows subscribers to retain their existing mobile number when they switch from one telecom service provider to another irrespective of technology or service area limitation.

According to a report issued by the Department of Telecommunications, India following statistics represents telecom sector of India up to 30<sup>th</sup> September 2018

- India is currently the world's second-largest telecommunications market with a total subscriber base of 1.19 billion.
- Mobile telephone connections are 1169.50 million.
- Landline telephone connections are 22.11 million.
- The overall teledensity in the country is 91.22%.
- Rural teledensity is currently 58.89%,
- Urban teledensity is 160.57%

Following data is updated upto June 2018

- Total number of Internet subscribers (both broadband and narrowband put together) is 512.26 million
- The number of subscribers accessing internet via wireless phones etc. was 491.10 million,
- Number of Broadband subscribers was 447.12 million.

#### TOTAL INTERNET CONNECTIONS 2014-18

As on 31.03.2018	RURAL	URBAN	TOTAL
2014			251.58
2015	107.56	194.77	302.33
2016	111.95	230.71	342.66
2017	136.52	285.68	422.19
2018	145.83	348.13	493.96
2018 (April-June)	173.42	338.84	512.26

Source: Telecom Regulatory Authority of India



Department of Telecommunications, India has following Public Sector Undertakings (PSUs) under its administrative control:

- a) Bharat Sanchar Nigam Limited (BSNL)
- b) Mahanagar Telephone Nigam Limited (MTNL)
- c) ITI Limited
- d) Telecommunications Consultants India Limited (TCIL)
- e) Bharat Broadband Network Limited (BBNL)
- f) Hemisphere Properties India Limited (HPIL)

#### Market Share of Telecom Service Providers in India, as on 30<sup>th</sup> September 2019



Source: Telecom Regulatory Authority of India, Table: Telecom Lead

#### VI. FUTURE FOR BSNL

BSNL has already tied up with companies such as SoftBank, Coriant and Nokia for 5G readiness. Regarding 4G launch, it could not compete with other 4G service providers due to the lack of appropriate spectrum. It was allotted 2100 Mhz spectrum in October 2018. After that BSNL geared up process of testing and rolling out its own 4G services in different circles of Country. As of now, BSNL is spreading the word by upgrading old SIM to 4G enabled U-SIM (Universal SIM) free of cost in Chennai circle. After official launch of 4G, BSNL plans to charge Rs.20 for this U-SIM upgrade. It is also offering 2GB of free data on purchase of U-SIM. The latest development from BSNL is that finally launched its 4G services in Andhra Pradesh, in select places as of now. Subscribers may start availing services from March 2019 according to BSNL officials. Similarly, BSNL plans to launch 4G service in Hoshiarpur, Punjab February, 2019.

#### VII. UNDERSTANDING VoLTE

VoLTE is an abbreviation for Voice over Long Term Evolution. This technology enables a subscriber to make cellular voice calls over the LTE network. It also supports high definition (HD) voice calling. Telecom operators like, Vodafone and Airtel offer the high-speed mobile data using third generation or fourth generation (3G / 4G) network. When a subscriber makes a voice call, same network falls back to 2G. Reliance Jio, on the other hand, does not have 2G or 3G spectrum. It has been launched 4G directly, thus calls made through this telecom player goes through 4G VoLTE. 4G network is designed to provide faster internet speeds as compared to 2G, 3G. Besides calling, it improves downloading, streaming and web browsing, etc.

#### ADVANTAGES OF VoLTE:

- **Better coverage and connectivity**

VoLTE connects calls twice as fast as 2G and 3G networks. It will enable fine quality calls where 4G network is available. In places, where 4G is not available subscriber will still be able to call using 2G/3G network. Thus, there is a greater mobile coverage overall and constant connectivity. However, if a subscriber is using services of a telecom player who offers only 4G networks, may not be able to make and receive calls in places where 2G and 3G signals are not active.

- **Superior call quality**

VoLTE enabled call quality is superior to 3G and 2G connections as more data can be transferred over 4G than 2G or 3G. To be precise, as per techno experts, data up to three times than in 3G and up to six times than 2G can be transferred across 4G. Call quality is superior in such a way that caller can not only listen to the voice but can also understand the tone. That's the experience of HD calling.

- **Better battery life**

In general calls, network keeps switching from 2G to 3G and back and forth in search of a proper signal. This consumes a lot of batter power. When signal is stable on 4G, this switching of network will cease, enhancing the battery life.

- **Video Call and Streaming**

With developed technology and various modified apps, video call is not just the forte of applications like Skype. File transferring, real time language translation and video voicemail

#### VIII. FINDINGS OF THE STUDY:

- **Pay for data, get free voice calls and SMS:** If telecom market can be called a battlefield, the war has shifted from providing cheaper calls to cheaper data. The fight is now focussed over the internet data packs which providers free voice calls and SMS facilities to attract customers and luring them with faster connection at cheapest rates. Thus, in present scenario, an average telecom subscriber is paying for the data and enjoying free voice and SMS services, the cheapest package across world.

- **VoLTE Rules:** After introducing 4G technology, Indian telecom service providers who were earning a higher margin with traditional calls( a study shoes almost 500 per cent more than voice over LTE) and through the medium of internet telephony such as very popular whatsapp and Viber, are now looking for tectonic telecom shift. The major reason for this is Reliance- Jio's offer to calls over internet. Airtel has given Jio a stiff completion and secured its position as market leader in 4G services too. But the bottom line is VoLTE rules.

- **Merger of major players and Fall of various :**

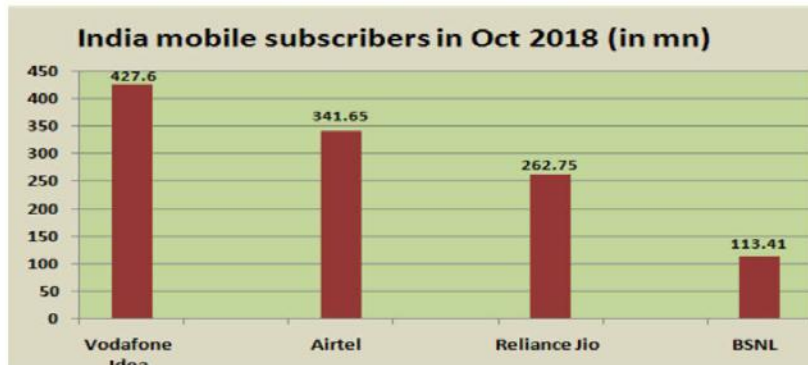
Famous scientists Charles Darwin quoted '*It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change*'. Rightly so, same theory is applicable to telecom industry too. Referring to the past jolt given by 3G technology, it swoop away players who were managing satisfactorily with 2G platform and were not ready to shift towards 3G. Many players had to shut their services as subscribers moved to faster network providing players. Similarly, 4G launch has wiped away weaker players when third generation technology was at its highest performance.

**RCom-Aircel-MTS** joining hands with Tata Teleservices. These are speculations, reality will be clearer in time to come. If this merger comes into existence, Reliance Communicaiton will create a strong telecom player at position number three after Vodafone-Idea and Airtel, giving tough competition to Reliance Jio.

**Airtel** has acquired Telenor to synergise its operations and expand its presence in at least 7 circles in India. This amalgamation has added 52 million subscribers of this Norway based telco.

**Vodafone- Idea** merger has stirred the entire telecom industry of India. When the merger will get over, Vodafone will be the biggest telecom company with consolidated revenues of Rs 80,000 cr.

As per the latest TRAI Reports, following is the position of Mobile subscribers in India:



Source: TRAI, Table: Telecom lead.

- **Impact on Employment in Telecom Sector:**  
 These mergers and consolidations affect telecom employees. Vodafone- Idea merger has left employees looking at uncertainty. According to GSMA report, telecom industry employees 2.2 million people directly and consolidation in the sector could lead to up to 30 percent job losses in the by the end of 2019. Automation is the the gift from fastest technologies given to the telecom sector. On one hand it cuts down costs and expenses of a company and reduces efforts from common lifestyle. While on the other, it takes away jobs from the employees and skilled workers.
- **Consumer remains the king and the winner:**  
 Consumer is the king and will always remain so. With the introduction of 4G services, initially subscriber shifted to use it as a premium service. With Reliance Jio's new pricing plan inviting customers to sign up till certain deadline and enjoy unlimited data and free voice service for a year. And with nominal price at later stages made every basic telecom subscriber if India a 4G user. Free 4G service instantly became a hit plan and attracted even those customers who were not using phones at all before this. 4G has revolutionised the telecom market and different strategies of telecom players are taking it to a new high.
- **Revolution in Handsets and Smartphone Industry:**  
 With faster network in hands, a person can do so much beyond imagination. As technology changes, requirement of appropriate handsets also changes. Once upon a time, telecommunication was all about making calls to a distant person. With basic mobile phones, popularly called cell phone once, users were thrilled to have facilities such as torch, FM, music, simple games, musical ringtones of their favourite songs, calculator besides obvious service of calls and SMS. Nokia was popular and most trusted handsets of its time. However, it couldn't take cope with the changes came with 3G. Now it is back into the game with compatibility of 5G technology. Still its golden period is bygone. As the technology advanced and 3G showed its power, smart phone industry took a major reform. Smartphones with bigger screen enabling video calling features for skype etc were developed. Storage capacity was increased and people got into *Selfie* habit. This also refined camera quality of a phone. There came a period when people stopped using laptops and desktops because there smartphone made them able to do all the works on the go. According to IDC and Morgan Stanley Research, 95 percent of the smart phones sold in the country in the first quarter were 4G-enabled. Today, a mobile means so much more than merely a device of calling and messaging.
- **Cross Promotion of Telecom Service providers and Handset Companies:**  
 A faster speed network would require a smart phone to enable all the facilities. This telecom industry goes hand in hand with cell phone industry. Taping this opportunity a customer is provided with all the facilities at the same time. However, internally both work independently, work together to promote products together.

**Airtel-Nokia:** Airtel has tied up with Nokia. On buying a specific handset of Nokia, buyer will get free service from airtel for a certain period. This would encourage the buyer to buy an Airtel SIM, if not already a subscriber. If already a subscriber, he will get free subscription of various services.

**Jio-Xiaomi:** Jio joined hands with Xiaomi. One can buy a Jio SIM at flagship Mi-stores and enjoy multiple benefits.

**Vodafone-Samsung:** On buying a particular Samsung Smartphone there is a cash back offer of 1500 from Vodafone that can be used for a variety of services from the latter. Vodafone had previously offered various schemes with Micromax mobiles too.

**Idea-Panasonic:** Idea offered a cash back offer with Panasonic entry level smart phone to lure low end customers.

- **Indirect Impact on various other industries:**

Telecom technologies have pushed other industries to follow the change. Few examples are mentioned below:

*Wrist Watch:* A serious indirect damage is done to the traditional watch industry. Once wrist watch represented a classic gift category and represented status symbol. With mobile in hands showing time in digital tick-tock, traditional wrist watches suffered a jolt. Mobiles also enabled alarm facility, so alarm clocks are totally wiped out. At present, wrist watch has become more of a fashion accessory rather than a device required to know the time. However, in appositive stride, wristwatch industry revolutionised and presently, people are lured towards 'Health Bands'.

*Clothing and Fabric industry:* Once, small hidden pockets were made in men women's clothing to secretly keep some money safely. With e-commerce and online transactions, people do not even carry debit-credit cards or let's say wallets these days. Transaction on the click is the current trend. Thus, cloths have now bigger pockets to accommodate large size handsets. Thus 3G and 4G have indirectly changed the fashion statement of present times.

*Bag/Wallets/Handbags-* Waterproof, shockproof and inbuilt Charging facility: People do not carry many documents and certificates most of the times because now everything is available on emails and online lockers. As a change, except for those who essentially need, people have stopped carrying laptop bags to carry a laptop. Designing of handbags has changed to accommodate larger size smart phones or ipads with a facility of inbuilt charging for these devices.

*Traditional television turning into Smart TV:* Current trend of webseries, online streaming videos, shows at hotstar, Netflix, Amazon Prime videos etc are changing television watching habits of viewers. Earlier, people scheduled their whole day program depending upon when do they have to watch their favourite serial or movie on their television set. Mahabharata, Chitrahara, Krishi-Darshan are some program that stirred the life and emotions of common Indian viewers in tv history. Currently, viewers can decide what they want to watch and when. Thus dependency on television has reduced. Even the regular tv programs are now hosted on online platforms so that viewer is not bound by time and able to watch as per his preference and how much to watch. Thus new age televisions are now well equipped with usb ports etc so that they can become a medium to watch online programs. Jio claims India's data consumption went from 20 crore GB to 120 crore GB in six months, adding that the average consumer nowadays uses 10GB data per month.

*FM Radios overtaken by Live Radios and Music Apps:*

Before the entry of 3G network, FM radios were a popular music source for every commuters and music lovers. Being a 'Radio Jockey' was a happening profile for numerous years. On radio music content was overshadowed by RJ interaction and local advertisements. With the introduction of musical apps providing nonstop music, music lovers preferred to shift from radio to those apps. It reduced the charm of RJs interaction with audience and repeated advertising. With the introduction of 4G, apps like Saavn, Gaana, Spotify, etc, newer generation music lovers have world's music in their hands. Thus traditional radios are completely gone while FM radios had to redesign. All India Radio (AIR) has developed its official app "All India Radio Live" which offers a bouquet of infotainment & Public Service in multiple regional services to match the changing times and keep the nostalgia up for Indians who swear by the old good times.

## IX .FUTURE SCOPE

**All new mobiles to have panic button:** The Government has mandated the feature of Panic Button feature in all mobile phone handsets. Mobile phone handset manufacturers have intimated that they have implemented panic button in all their mobile handsets (smart as well as feature phones) that are being sold in India from 01-03-2017.

**Single number 112:** DoT has instructed TSPs to map Single Emergency Number '112' with existing Emergency Number '100' in all States /UTs in August 2016. At present Single Emergency Number 112 is operational and mapped on existing emergency number '100' in all States/UTs except Delhi. 112' is designed to be used to replace the multiplicity of Emergency Numbers operations in India such as 100, 101, 102 and 108 etc.

**BharatNet:** The Government of India has implemented the flagship BharatNet project to be launched in different phases. Its motive is to link each of the 2.5 lakh Gram Panchayats of India through optical fibre network. This is claimed to be the largest rural connectivity project of its kind in the world and is the first pillar of Digital India Programme. Purpose of this program is to facilitate the delivery of numerous E-Services and applications including e-health, education, e-governance and e-commerce in the future.

**Introduction of Virtual Network Operators (VNO):** The Government of India has issued guidelines for Unified Licence (Virtual Network Operators) [UL(VNO)] on 31st May, 2016. VNO system will allow Telecom Service Providers (TSP) to utilize their own networks and spectrum efficiently by sharing active and passive infrastructure. Moreover, VNOs can provide services in small towns and rural areas using the network of existing TSPs having unutilised capacity or by last mile connectivity. VNOs can be effective in providing services in airports or buildings or in smart cities.

### Fifth Generation (5G) Network:

After harnessing all the potentials of 4G network, the greed to further excel in the telecom field has made us welcome the fifth generation of mobile network communication technology- known as 5G.

Applications with higher social and economic value will trend. The concept of 'Hyper-Connected Society' may come into reality soon where technology plays even bigger role than now in people's lives

India may represent itself globally as a participant in the design, development and manufacturing of 5G based technologies, products and applications. However, as per technology experts, most 5G networks will first be rolling out in South Korea and Japan. Operators acting in the Asian markets are in a position to straight away pick up and invest in 5G technologies as they become available.

Government of India has already constituted High Level Forum to suggest vision, mission and goals for 5G India 2020 along with action plan & roadmap.

According to its own reports, DoT is supporting research and study in 5G through financial assistance to institutions of national importance for establishment of 'Indigenous 5G Test Bed at IIT Chennai, in collaboration with premier technology institutions including IIT Delhi, IIT Mumbai, IIT Hyderabad and IISc Bengaluru.

At global level, driverless automated cars, artificial intelligence, augmented reality, virtual reality, robotic surgeries, smart cameras etc, will take the lifestyle to the new highs. Nonetheless, for a common customer, Apps will continue to dominate.

## X. CONCLUSION

*The Change is the only constant.* This popular quote rightfully concludes the fast changes in telecommunication industry and even faster changes in society n the whole as an obvious outcome. Study concludes that elecom players who do not embrace the change, do not make strategies anticipating future are left behind in the race with reducing market share and subscribers. Those who constantly change and formulate strategies become the trend setter. 4G network brought multi faced progress in country, created stiff competition, wiped out weak performers from the market and opened the doors for future 5G network. Finding fulfils the objective of the study.

## REFERENCES

- [1] An overview of Indian telecom industry by Prashant Singhal
- [2] Brink, H.I.L. (1993), Validity and Reliability in Qualitative Research, *Curationis*, 16(2): pp 35- 38.
- [3] Burns, A. (1999), *Collaborative Action Research for English Language Teachers*, Cambridge: CUP.
- [4] Creswell, J.W. (2009), *Research Design: Qualitative, Quantitative and Mixed Method Approaches* (3rd Ed.), Los Angeles: SAGE Publications.
- [5] Desai Ashok, 2007, Revolution in India's Telecommunications Industry, *Economic and Political weekly*.
- [6] [economictimes.indiatimes.com](http://economictimes.indiatimes.com)
- [7] Golafshani, N. (2003), Understanding Reliability and Validity in Qualitative Research, *The Qualitative Report*, 8(4): 597-607.
- [8] Graziano, A.M. and Raulin, M.L. (2006), *Research Methods: A Process of Inquiry*, (6th Ed.) Boston, MA: Allyn & Bacon.
- [9] Haradhan Kumar Mohajan (2017), *Research Methodology*, Munich Personal RePEc Archive [www.mpra.ub.uni-muenchen.de](http://www.mpra.ub.uni-muenchen.de)
- [10] KR Mahalaxmi, Suresh Kumar N (2017), A Study On Service Quality And Its Impact On Customer's Preferences And Satisfaction Towards Reliance Jio In Trichy Region, *International Journal of Advanced Education and Research*, Vol 2; Issue 3
- [11] Mayank Vinodbhai Bhatt, (2008), A Study of Mobile Phone Usage Among The Post Graduate Students, *Indian Journal of Marketing*, Volume 38, issue 4.
- [12] R. Sakthi Prasath, N.Chandru and R. Amutha,(2017), A Study on Promotional Strategies And Impact Of Reliance Jio 4G Network With Special Reference To Coimbatore City, [www.ijariie.com](http://www.ijariie.com), Volume3 Issue 3
- [13] S.K. Sinha , Ajay Wagh, (2008), Analyzing Growth of Cellular Telecom Sector and Understanding Consumer's Preferences and Choices on the Use of Cellphone , *Indian Journal of Marketing*, Volume 38, issue 9.
- [14] Telecom industry in India, India Brand Equity Foundation, [www.ibef.com](http://www.ibef.com)
- [15] To identify the overall impact of Jio on the telecom industry of India - A study on Reliance Jio, The Researcher Hub, August 2018. [www.researcherhub.com](http://www.researcherhub.com)
- [16] [www.4g.co.uk](http://www.4g.co.uk)
- [17] [www.allindiaradio.gov.in](http://www.allindiaradio.gov.in)
- [18] [www.bgr.in](http://www.bgr.in)
- [19] [www.gadgets.ndtv.com](http://www.gadgets.ndtv.com)
- [20] [www.indiatoday.in](http://www.indiatoday.in)
- [21] [www.jio.com](http://www.jio.com)
- [22] [www.telecom.economictimes.indiatimes.com](http://www.telecom.economictimes.indiatimes.com)
- [23] [www.telecomlead.com](http://www.telecomlead.com)
- [24] [www.thehansindia.com](http://www.thehansindia.com)
- [25] [www.tradingeconomics.com](http://www.tradingeconomics.com)

**International Conference on  
Science, Technology, Women Studies, Business & Social Sciences 2016**



**CHOOSE TO BE HUGE**

Nov 03-05, 2016

organized by

International Multidisciplinary Research Foundation  
(IMRF)

in collaboration with

Center for Scientific Research Education  
Institute for Foreign Affairs & Diplomacy  
Ratna Prasad M Research & Educational Society  
IMRF Goa Chapter, Goa, India



Govt., of India Approved Conference : MHA Vide : F.No 42160876/CC ; MEA : F.No. AA/162/01/2016-639

G114A

**Certificate of  
Participation & Presentation**

This is to certify that

**MS. KHUSHBOO NIYARTA**

has participated and presented in / contributed to  
the International Conference on

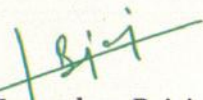
Science, Technology, Women Studies, Business & Social Sciences 2016  
with a paper titled


**MARKETING STRATEGIES OF INDIAN TELECOM SERVICE**

**PROVIDERS: A CONCISE LITERATURE REVIEW**

at IMRF Goa Chapter, Margoa, Goa, India

Nov 03-05, 2016.

  
**Dr. Jagmohan Bajaj**  
Director  
Institute for Foreign Affairs and  
Diplomacy

  
**Sri. D. Vara Prasada Rao**  
Chairman  
Center for Scientific Research  
Education

  
**Dr. Ratnakar D Bala**  
Director (Academics )  
International Multidisciplinary  
Research Foundation

B013A



**International Conference on Emerging Trends in E-Business,  
E-Commerce, E-Government and Social Sciences 2018**

July 20 - 21, 2018

**Organized by International Multidisciplinary Research Foundation (IMRF)**

CHOOSE TO BE HUGE

International Academic Research Conference Chandigarh 2018 | Govt., of India Approved Conference : MHA F.No 42180123/CC-189, MEA No. F.No AA/162/01/2018-876

**Participation & Presentation Certificate**

This is to certify that

**MS. KHUSHBOO NIYARTA**

has participated and presented in the

International Conference on Emerging Trends in E-Business, E-Commerce,

E-Government and Social Sciences 2018 with a paper titled

**IMPACT OF TELECOM TECHNOLOGY REVOLUTION**

**ON E-COMMERCE INDUSTRY IN INDIA**

at IMRF Chandigarh Academic Chapter, Hotel Orbit, Chandigarh, India.

**Dr. Jagmohan Bajaj**  
Conference Coordinator  
UNESCO Expert, Special Envoy,  
Ministry of Education, Macedonia

**Dr. Ratnakar D Bala**  
Conference Chairman  
Director (Academics), International  
Multidisciplinary Research Foundation





# International Journal of Business and Management Invention

*e-ISSN: 2319 – 8028 p-ISSN: 2319 – 801X*

## **CERTIFICATE**

*It is certify that the paper entitled by “Marketing Mix Strategies of Indian Telecom Service Providers:A Comparative Analysis” has been published in International Journal of Business and Management Invention (IJBMI).*

### **Your article has been published with following details:**

Author's Name: Khushboo Niyarta  
Journal Name: International Journal of Business and Management Invention (IJBMI)  
Journal Web: [www.ijbmi.org](http://www.ijbmi.org)  
Journal Type: Online & Offline  
Review Type: Peer Review Refereed  
Publication Year: 2019  
Publication Month: February  
Vol No.: 08  
Issue No.: 02



**Editor-In-Chief**  
International Journal of Business and Management Invention (IJBMI)  
E-mail ID: [ijbmi@invmails.com](mailto:ijbmi@invmails.com)  
Web: [www.ijbmi.org](http://www.ijbmi.org)

**UGC Approval Serial Number: 4485 & UGC Journal Number: 46889**



**INTERNATIONAL JOURNAL OF RESEARCH AND  
ANALYTICAL REVIEWS (IJRAR) | E-ISSN 2348-1269, P- ISSN 2349-5138**  
*An International Open Access Journal*

**Certificate of Publication**

The Board of  
International Journal of Research and Analytical Reviews (IJRAR)

Is hereby awarding this certificate to

**Khushboo Niyarta**

In recognition of the publication of the paper entitled

**ANALYSING INDIAN TELECOM INDUSTRY POST 4G NETWORK: IMPACT, ADVANCEMENTS,  
CHALLENGES, FUTURE**

Published in IJRAR ( www.ijrar.org ) ISSN UGC approved & 5.75 Impact factor

Volume 6 Issue 1 February-2019



**A. B. Joshi**

EDITOR IN CHIEF

PAPER ID : IJRAR19J1927

Registration ID : 196791

UGC and ISSN Approved - International Peer Reviewed Journal, Refereed Journal, Indexed Journal, Impact Factor: 5.75 Google Scholar



**INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS | IJRAR**

*An International Open Access Journal | Approved by ISSN and UGC*

Website: [www.ijrar.org](http://www.ijrar.org) | Email id: [editor@ijrar.org](mailto:editor@ijrar.org) | ESTD: 2014

IJRAR | E-ISSN 2348-1269, P- ISSN 2349-5138



# *Glossary*

## GLOSSARY

---

**ARPU** (Average Revenue per User) Average Revenue per User (ARPU) measures the average revenue generated per telephone, wireless, broadband or TV user per month. ARPU is used to compare various companies, as well as internally to spot lagging product lines.

**Bandwidth** – The common measure of transmission capacity. For analog transmission, it is measured in cycles per second. Digital rates are measured in bits per second, kilobits (kbps), megabits (mbps) or gigabits per second (gbps). The bigger the bandwidth, the faster the connecting speed and the more data can be transferred in a given time.

**Broadband** – A transmission medium that can support a wide range of frequencies, typically from audio up to video frequencies. It can carry multiple signals by dividing the total capacity of the medium into multiple, independent bandwidth channels, where each channel operates only on a specific range of frequencies. Broadband comes from the words “broad bandwidth”.

**Byte** – The smallest unit of information that a computer system stores in its memory. A byte consists of eight bits and represents an amount of information roughly equivalent to a single printed or typewritten character.

**CDMA** – Code Division Multiple Access – a cell phone system used to divide licensed radio spectrum so that it can be used by thousands of customers. Under CDMA all users transmit at once, but each set of users is assigned a code that permits them to talk to each other. It differs from of GSM.

**Cell Phones** – Wireless phones which receive their signals from towers. A cell is typically the area (several miles) around a tower in which a signal can be received.

**Churn** – Churn is a measurement of the percent of customers who leave you each month for voluntary reasons -usually to buy a competing service. A typical churn

rate is 2% per month, or 24% per year. Churn can be reduced through retention efforts by company marketers.

**Customer Segmentation** – Telecom customers are usually broken down into customer segments for marketing purposes. Segments may be based on usage or demographics (teenagers, seniors, etc.) Segments have proved to be a profitable system of marketing.

**Direct Marketing** – A means of marketing via a promotion delivered and targeted directly to the individual prospective customer – the opposite of mass marketing where promotions are sent (by radio, TV, print or billboards) to millions of consumers without specific targeting. Direct marketing typically uses direct mail, but can also involve individually targeted digital TV ads.

**GIS** – Geographic Information System – A cell phone system that permits users to know where they are on the surface of the earth. It is based on GPS satellites.

**GPS** – Global Positioning System – A US satellite system that lets those on the ground, on the water or in the air determine their position with extreme accuracy using GPS receivers.

**GSM** – Global System for Mobile Communications – The standard digital cellular phone service of Europe, Japan, Australia and elsewhere. It is used by AT&T wireless, whereas Verizon Wireless uses CDMA.

**IM** – Instant Messaging -A communications service that enables you to create a private chat room with another individual in order to communicate in real time over the Internet.

**Internet** – An international network of networks, originally started for military purposes, that connects millions of users instantaneously through commonly-used protocols such as TCP/IP, HTTP, FTP, etc. The widely-used World Wide Web is available through the Internet.

**IP** – Internet Protocol -Part of the TCP/IP family of protocols that tracks the outgoing address of nodes, routes outgoing messages and recognizes incoming messages.

**IPTV** – Internet Protocol Television – A system where a digital television service is delivered using packets over a network infrastructure. For residential users, IPTV is often provided in conjunction with Video on Demand and may be bundled with Internet services such as Internet access and VoIP. Despite its name, IPTV typically does not come to consumers over the Internet, but over carrier owned fiber optic, or coaxial cables. IPTV is provided by cable TV companies, telephone companies, and soon by electric utilities using BPL.

**ISP** – Internet Service Provider -A vendor that provides direct access to the Internet, and services such as email. The user accesses his ISP by dialing up through a personal computer and modem, or through a dedicated line. Also known as an Internet Access Provider (IAP).

**LAN** -Local Area Network — A short-distance data communications network. LANs are typically within a building or campus. They link together computers with a standard protocol. LANs are usually owned by the user.

**Land Line** – Plain Old Telephone Service (POTS) provided by a regular telephone plugged into a wall outlet.

**Last Mile** – Many of the problems of communications occur in the “last mile” – from the exchange to the house or final destination. Often the last mile is old, limited bandwidth copper wire that cannot support the faster modems and computers.

**Mbps** – megabits per second. – A measurement of data transmission. One megabit per second equals one million bits per second

**Megabits** – A measure, representing 1,000,000 bits, generally used to express the speed per second of telecommunications services and equipment. A bit is the smallest unit used to express digital information.

**Megabytes** – A measure, representing 1,000,000 bytes generally used to express the storage capacity of digital components. A byte represents a single character. It is made up of eight bits.

**Modem** – Contradiction of modulator-demodulator. A device that converts signals transmitted over communication facilities; for example, converts analog voice signals to digital signals.

**MVNO (Mobile Virtual Network Operator)** – In wireless communications, a company that does not own a licensed wireless system, but instead buys such services from an established company, and resells them under its own name. MVNOs help large wireless companies find customers who help pay for their networks.

**Online**- Online, in a generic sense, refers to when an electronic device is on and connected to other devices, such as another computer, a network or a device such as a printer. More recently, the term online has come to mean connected to the Internet. In this case, either a person may be online when he or she is using the Internet, or the computer itself may be said to online when it has established an Internet connection.

**Retention Rate** – The Retention Rate is the percentage of a specific group of customers who are still purchasing from you one year from now. It can be derived from the Churn Rate.  $RR = 1 - (\text{churn} \times 12)$ .

**Ring Tones** – The sound that a cell phone makes when it receives a call. Thousands of different musical and spoken tones are available for download to the millions of cell phones in the US at a price of about \$1.50 each. It has become a big business.

**Search Engines** – A search engine is an information retrieval system designed to help find information stored on a computer system, such as the Internet, inside a corporate or proprietary network, or in a personal computer. The search engine allows users to ask for content meeting specific criteria (typically those containing a

given word or phrase) and retrieves a list of items that match those criteria. This list is often sorted with respect to some measure of relevance of the results. Search engines use regularly updated indexes to operate quickly and efficiently. The most popular search engines today are Google.com and Yahoo.com.

**SKYPE** – A VoIP service owned by www.ebay.com.

**Smart Phone-** A mobile phone that performs many of the functions of a computer, typically having a touchscreen interface, Internet access, and an operating system capable of running downloaded apps

**SMS** – Short Message Service – A wireless service that permits sending short text messages on cell phones. It costs about \$0.10 per message. Very big in Europe, but not widely used in the US since cell phone calls are often paid for in bundled plans.

**Spectrum-** Spectrum is the life-blood of a telecom operator. It's literally a range of electromagnetic waves, the frequencies that are used to transmit sound and data across the country to our phones. Every telecom operator has been assigned certain portions of spectrum to use in India, through auctions and administrative allocations. Essentially, you have spectrum "bands", and frequencies around a particular band are then auctioned off.

**Streaming Video** – A one-way video transmission over the Internet or a data network. It is widely used on the Web to deliver video-on-demand or a video broadcast. Unlike movie files (MPG, AVI, etc.) that are played after they are downloaded, streaming video is played within a few seconds of requesting it, and the data is not stored permanently in the computer.

**Telecom Service Provider-** Telecommunication service provider means any public service corporation or public service company that holds a certificate of public convenience and necessity to furnish local exchange telephone service or interexchange telephone service.



**Telecom** – a general term for all industries and companies providing data, phone service or entertainment to consumers and businesses. Includes wireless, phone, cable TV, satellite TV, and VoIP companies.

**Teledensity:** Number of main telephone lines per 100 inhabitants within a geographical area. Effective teledensity reports fixed-line teledensity or mobile density—whichever is higher—in a particular geographical region.

**WiFi** – A broadband transmission system that transmits over the air at frequencies of 2.4 GHz or 5GHz. This frequency is considerably higher than the frequencies used for cell phones, walkie-talkies and televisions. The higher frequency allows the signal to carry more data. WiFi transmits and receives in short distances of about 100 feet.

**WiMAX** – WiMAX is a wireless broadband transmission system known as IEEE 802.16e. Unlike WiFi which has a maximum range of about 100 feet, WiMAX may reach three miles or more. With new chips WiMAX may be accessed by cell phones and laptops. Sprint has announced plans to set up WiMAX towers to cover up to 65% of the entire US by 2010.

**Wireless** – Mobile or cellular telecommunications, for which part of the communications pathway uses radio links to land-based networks. Wireless communications include cellular phones and pagers.

**World Wide Web or WWW or Web** – Another word for the Internet. An area of the Internet that allows for graphical information retrieval via hypertext-based software, such as a web browser like Netscape Navigator or Microsoft Internet Explorer, using point and click.



*Questionnaire*

# QUESTIONNAIRE

---

---

**1. Age Group (in years):**

10-20 ( )      21-30 ( )  
31-40 ( )      41-50 ( )      51 and above ( )

**2. Gender**

Male ( )      Female ( )      Transgender ( )

**3. Occupation**

Student ( )      Salaried ( )      Homemaker ( )  
Unemployed ( )      Retired ( )      Business ( )

**4. Preferred connection type**

Landline ( )      Broadband ( )      Mobile ( )  
All of the above ( )

**5. If using Mobile**

Pre paid ( )      Post Paid ( )      Both ( )

**6. Number of SIM do you use:**

1 ( )      2 ( )      3 ( )      4 ( )

**From how long you are using this Telecom Service Provider**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) 0-3 Months	( )	( )	( )	( )
(b) 3- 6 months	( )	( )	( )	( )
(c) 6-12 months	( )	( )	( )	( )
(d) More than 1 Year	( )	( )	( )	( )

**7. Rank these Telecom Service Providers from 1 to 4, one being highest rank, 4 being lowest.**

Airtel ( )      BSNL ( )  
Jio ( )      Others ( )

**8. Which of the following services provided by your telecom service provider do you use the most**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) Wallet/ Payment Bank	( )	( )	( )	( )
(b) Entertainment & Games	( )	( )	( )	( )

- |     |                         |     |     |     |     |
|-----|-------------------------|-----|-----|-----|-----|
| (c) | Designing your own pack | ( ) | ( ) | ( ) | ( ) |
| (d) | 4G/ Volte/ LTE          | ( ) | ( ) | ( ) | ( ) |
| (e) | None of the above       | ( ) | ( ) | ( ) | ( ) |

**9. What made you choose your Telecom Service Provider**

- |     | <b>Airtel</b>          | <b>BSNL</b> | <b>Jio</b> | <b>Other</b> |     |
|-----|------------------------|-------------|------------|--------------|-----|
| (a) | Advertisement          | ( )         | ( )        | ( )          | ( ) |
| (b) | Friends Recommendation | ( )         | ( )        | ( )          | ( ) |
| (c) | Retailer Influenced    | ( )         | ( )        | ( )          | ( ) |
| (d) | Attractive Package     | ( )         | ( )        | ( )          | ( ) |
| (e) | Other                  | ( )         | ( )        | ( )          | ( ) |

**10. What is your experience with Customer Service of your Telecom Service Provider**

- |     | <b>Airtel</b>               | <b>BSNL</b> | <b>Jio</b> | <b>Other</b> |     |
|-----|-----------------------------|-------------|------------|--------------|-----|
| (a) | Professional & Courteous    | ( )         | ( )        | ( )          | ( ) |
| (b) | Quick Response              | ( )         | ( )        | ( )          | ( ) |
| (c) | Unprofessional and impolite | ( )         | ( )        | ( )          | ( ) |
| (d) | Slow response               | ( )         | ( )        | ( )          | ( ) |

**11. What is the satisfaction level with your Telecom Service Provider**

- |     | <b>Airtel</b> | <b>BSNL</b> | <b>Jio</b> | <b>Other</b> |     |
|-----|---------------|-------------|------------|--------------|-----|
| (a) | Excellent     | ( )         | ( )        | ( )          | ( ) |
| (b) | Good          | ( )         | ( )        | ( )          | ( ) |
| (c) | Satisfied     | ( )         | ( )        | ( )          | ( ) |
| (d) | Bad           | ( )         | ( )        | ( )          | ( ) |

**12. Do you always get network coverage/ availability**

- |     | <b>Airtel</b>       | <b>BSNL</b> | <b>Jio</b> | <b>Other</b> |     |
|-----|---------------------|-------------|------------|--------------|-----|
| (a) | Always              | ( )         | ( )        | ( )          | ( ) |
| (b) | Not in Outskirts    | ( )         | ( )        | ( )          | ( ) |
| (c) | Not in Remote Areas | ( )         | ( )        | ( )          | ( ) |
| (d) | Not inside Home     | ( )         | ( )        | ( )          | ( ) |

**13. Which scheme in Pre/post paid do you use most**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) Data call only	( )	( )	( )	( )
(b) Voice call only	( )	( )	( )	( )
(c) Data call more than minutes	( )	( )	( )	( )
(d) Voice call more than data call	( )	( )	( )	( )

**14. Have you used Mobile Number Portability (MNP)? Yes/No\_\_\_\_\_.**

**If yes, to which Telecom Service Provider you have ported your no. before?**

**From \_\_\_\_\_ To \_\_\_\_\_**

**15. If given a chance, would you like to port your number to another Telecom Service Provider?**

**From \_\_\_\_\_ To \_\_\_\_\_**

**16. How do you find speed of the data Telecom Service Provider**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) Very Fast	( )	( )	( )	( )
(b) Fast	( )	( )	( )	( )
(c) Average	( )	( )	( )	( )
(d) Slow	( )	( )	( )	( )

**17. Do you experience Call drops or network loss during an ongoing Call**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) Yes	( )	( )	( )	( )
(b) No	( )	( )	( )	( )
(c) Sometimes	( )	( )	( )	( )

**18. How do you find call rates of your Telecom Service Provider**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) High	( )	( )	( )	( )
(b) Normal	( )	( )	( )	( )
(c) Low	( )	( )	( )	( )

**19. How satisfied are you from the internet speed**

	<b>Airtel</b>	<b>BSNL</b>	<b>Jio</b>	<b>Other</b>
(a) Strongly satisfied	( )	( )	( )	( )
(b) Satisfied	( )	( )	( )	( )
(c) Moderately satisfied	( )	( )	( )	( )
(d) Dissatisfied	( )	( )	( )	( )

**20. Which Telecom provider have you subscribed to?**

- (a) Bsnl
- (b) Airtel
- (c) Jio
- (d) Vodafone
- (e) Idea

In case you have multiple providers please mention .....

**21. Which one is your primary service provider?**

- (a) Airtel
- (b) Jio
- (c) Bsnl
- (d) Vodafone
- (e) Idea

**22. What is the best thing about your service provider?**

- (a) Great network
- (b) Great pricing
- (c) Good deals and offers
- (d) Great customer service
- (e) All of the above
- (f) None of the above.
- (g) All service providers are useless it's from fire to frying pan situation

**23. Why did you choose your service provider?**

- (a) Good network
- (b) Good price
- (c) Good deals
- (d) All of the above
- (e) None of the above, I chose at random

- 24.** Which of the following affect the choice of your service provider the most?
- (a) Good network
  - (b) Good pricing
  - (c) Good network, pricing and offers
  - (d) Peers and family opinion
  - (e) Research analysis available
  - (f) Good marketing and advertisement campaign
- 25.** Do you know all the services offered by your telecom provider?
- (a) Yes
  - (b) No
  - (c) Can't Say
  - (d) I don't bother for it
- 26.** Which of the following services affect the choice of your telecom service provider most?
- (a) Free calls, sms and internet
  - (b) Wi fi
  - (c) Broadband
  - (d) Smartphones / Cordless phones / Routers and other hardwares offered
  - (e) All of the above
  - (f) None of the above
- 27.** Which of the following may prompt you to change your service provider
- (a) Bad network and connectivity
  - (b) Bad consumer service
  - (c) Better services may be at a higher price
  - (d) Better services at lower or same price
- 28.** Which telecom service provider offers best quality smart phone
- (a) Jio
  - (b) Airtel
  - (c) Vodafone
  - (d) BSNL
  - (e) None

- 29.** Would you choose a telecom service provider who furnishes smart phones that are preloaded with their apps and services?
- (a) Yes
  - (b) No
  - (c) May be (depends upon deal)
  - (d) Can't say
- 30.** Does the brand of smartphone offered affect your choice of telecom player?
- (a) Yes
  - (b) No
  - (c) Can't say
  - (d) Depends upon deal
- 31.** How do you choose telecom provider for wifi and broadband services
- (a) Best deals and offers
  - (b) Best price and best service ( network, consumer care, etc)
  - (c) Only best price
  - (d) Only network
- 32.** Which telecom provider gives best combination of network, prices and products?
- (a) Airtel
  - (b) Jio
  - (c) Vodafone
  - (d) BSNL
- 33.** If your service provider gives you good network and price but not with a very swanky handset would you subscribe to them
- (a) Yes
  - (b) No
  - (c) Can't Say
- 34.** Suppose you have subscribed to a particular telecom provider for more than 3 years. Then you happen to visit a place where your service provider fails to give services and there you get stuck. What will be your next step after coming back?



- (a) Change my service provider
  - (b) Don't change my service provider
  - (c) Let my service provider know of the difficulty I faced but still continue with same provider. I am a loyal customer.
- 35.** Some service providers claim to show the number of towers and best location to get the best network around your location. How helpful are such services?
- (a) Extremely helpful
  - (b) Don't know my service provider doesn't give this service
  - (c) Not helpful at all
- 36.** With 4G artificial intelligence and augmented reality based smart phones are in demand. Would you change your service provider if other service provider gives you such smartphones without caring for cost and network?
- (a) Yes
  - (b) No
  - (c) Can't say
  - (d) I don't know what is ai and av
- 37.** Which Telecom service provider has best jingle?
- (a) Airtel
  - (b) Bsnl
  - (c) Jio
  - (d) Vodafone
  - (e) Idea
- 38.** Would you choose Telecom provider just on the basis of advertisement?
- (a) Yes
  - (b) No
  - (c) Can't say
  - (d) I will do my research then choose advertisement can be misleading
- 39.** Which Telecom service provider has the best tag line?
- (a) Airtel
  - (b) Jio
  - (c) Vodafone

- (d) Bsnl
  - (e) Idea
  - (f) None
- 40.** Which Telecom service provider has delivered best on promised incentives and additional services like extra data, free SMS, free talk time etc. ?
- (a) Airtel
  - (b) Jio
  - (c) Vodafone
  - (d) Bsnl
  - (e) Idea
  - (f) None
- 41.** Which Telecom service provider is most visible in sponsorships, events and promotions?
- (a) Airtel
  - (b) Jio
  - (c) Vodafone
  - (d) Bsnl
  - (e) Idea
  - (f) Can't say never noticed
  - (g) Doesn't matter to me
- 42.** Do promotions like free data, free talk time, extra validity etc affect your choice of Telecom service provider?
- (a) Yes of course
  - (b) No I go for quality services rather than offers
  - (c) Depends on what kind of deal it is
  - (d) I choose but realise that I don't get what they promise then I change
- 43.** Which Telecom service provider is offering best deal in data, talk time and pricing?
- (a) Airtel
  - (b) Jio
  - (c) Vodafone
  - (d) Bsnl
  - (e) Idea

- 44.** If a particular service provider is sponsoring your favourite IPL team would you choose that service provider?
- (a) Yes always
  - (b) No IPL is different, my Telecom choice is different
  - (c) If deals offered by sponsor are good I would change
- 45.** Are you aware of the CSR activities undertaken by your Telecom provider?
- (a) Yes and I participate in their initiatives
  - (b) No
  - (c) CSR what's that
- 46.** Does the CSR activity undertaken by a service provider affect your choice of a service provider?
- (a) Yes, I would go for a service provider who is involved in good social initiatives
  - (b) No, I will go for a service provider who offers good deals and services
  - (c) Can't say.
  - (d) Don't know what CSR is and how will my subscription affect their social cause.
- 47.** Are you happy with the promotional offers and discounts offered by your service provider?
- (a) Yes
  - (b) No
  - (c) Can't say
  - (d) Doesn't matter to me
- 48.** Have you ever changed a service provider just on the basis of promotional campaigns run by them?
- (a) Yes
  - (b) No
  - (c) I am not aware of any promotional campaigns run by any provider.
- 49.** How much does the personalized service offers like family recharges, pay as you use, affect your choice of service provider
- (a) Very much I choose the one which gives me all

- (b) Not at all only network and quality matters
- (c) There's nothing like these offers I end up paying more

**50.** Do you really like getting calls and emails of promotional offers?

- (a) Yes it gives me extra information and I can choose
- (b) No they are so irritating.

**51.** Give your opinion by ticking the relevant option.

SA- Strongly Agree

A-Agree

N-Neutral

D-Disagree

SDA- Strongly Disagree

S. No.		SA	A	N	D	DA
1	The physical facilities provided by the service provider are visually appealing.					
2	The employees of my service provider have a neat and professional appearance.					
3	Pamphlets, brochures, materials associated with the services are visually appealing.					
4	It is very easy to get a new mobile connection (SIM card); the related processes and procedures are friendly.					
5	Activation of additional services can be done very easily in my mobile connection.					