

CONSUMER PERCEPTION OF INNOVATIVE SERVICES OFFERED BY MOBILE SERVICE PROVIDERS

Simmi Rani Prasad*

Abstract: *Communication technology is a revolution. Companies providing telecom services are competing with each other to offer better prices and services to the customers. Consumer expectations are rising like never before. Delivering perfect customer experience is a challenge for all the telecom service providers. Innovation is the major force driving the growth. Consumer centric innovations related to equipment and services are central to success of telecom companies.*

The present paper tries to find out the consumer perception regarding innovation in connectivity, value added services, customer relationship etc.

Because of stiff competition and fierce price war, every operator offers a virtually similar plan to their customers. So operators should adopt service-centric approach to increase the loyalty and customer base. They should focus on investment to expand their network coverage and connectivity. Individual service quality can be improved by immediate attending of customer complaints and acting on its feedback..

Keywords: *Telecommunication, Mobile Phone, Consumer Satisfaction, Loyalty, Retention, Services*

INTRODUCTION

Communication technology is now central to everyone's life. Today, communication providers face more competitive pressure than ever before. Consumer expects to stay connected with the latest technology, far reaching coverage, and plans within their increasingly challenged budget. Customer expects adequate coverage and bandwidth along with a selection of devices and programming. What really sets a company apart is customer service experience.

Delivering the perfect customer experience in telecom is difficult, because customer can't see what they are getting until it gets wrong. The technology involved in providing telecom services has grown exponentially. Multiple providers can be involved in delivering services. Fierce competition has meant that prices for telecom packages are continually dropping, competitors are offering new services and price packages; consequently, loyalty is low. Churn is becoming a major issue for all operators.

Consumers now rely on telecoms operators more than ever. As services become ever more complex and competition increases, the customer experience will be the key differentiator when it comes to retaining consumers and reducing churn. Operators need to ensure they are delivering the multichannel experience that customer's demand - before they switch to the competition.

India is the fastest growing mobile phone market in the world. The booming telecom industry has been attracting large amount of investments in the country. The transformational impact of digitisation (the mass adoption of connected digital technologies and applications by consumers, enterprises, and governments) continues to drive telecommunications operators' most critical strategic and operational decisions. This trend governs how telecom companies try to monetise their infrastructure investments and exploding data traffic, boost newly needed capabilities, rationalise their product and service offerings, improve the customer experience, and evolve their asset portfolios and business models. So far, the results have been mixed. Global operators' revenues are stagnating, even as operating and capital expenditures are increasing. Meanwhile, the "over-the-top" (OTT) players - video, audio, and other services such as Netflix and Spotify that piggyback free on telecom systems - are gaining in number and popularity, making the traditional operators' task that much more difficult

LITERATURE REVIEW

According to Oliver (2005), the telecommunications industry is characterised by rapid innovation in the service and the transmission market. The legally protected public or private monopolist does not have the same incentive to foster innovation that would exist in a competitive environment.

* Marketing, Assistant Professor, Mumbai University, Maharashtra, India. Email: simmi@sfimar.org

Thus, state intervention based on the natural monopoly argument neglects dynamic aspects, which are crucial in the telecommunications sector.

According to Mather (2005), the challenge, of course, is that a competitor can show up in one of the established markets with new technology, better people, a better network of companies for support, and a better management style and steal huge chunks of one's business before one can respond. Staying at the forefront of all these issues will be the only way to stay successful.

Mittal (2005) explains the paradigm shift in the way people communicate. There are over 1.5 billion mobile phone users in the world today, more than three times the number of PCOs. India today has the sixth largest telecom network in the world up from 14th in 1995, and second largest among the emerging economies. It is also the world's 12th biggest market with a large pie of \$ 6.4 billion. The telecom revolution is propelling the growth of India as an economic powerhouse while bridging the developed and the developing economies.

World Telecommunication Development Report (2002) states that 30 technologies of mobile telecommunications and Internet are going to set the contours of further technological progress in the current decade. The most recently initiatives aims at convergence of voice and data received from multiple sources both web based and real time video streams in mobile handsets and calling cards have virtual presence possible almost everywhere overcoming the barriers of distance, topography and remoteness. Telecom Sector Innovation Council (Telecom Sector Roadmap for Innovation) 2010-2020 suggested roadmap for telecom service providers "As service providers have direct interaction with the end users of telecommunication equipment and services, they become the most important link in the telecom sector's innovation chain. Focus areas for innovation and action points for innovation in this domain are listed below."

- Connectivity to remote area
- Value-added services
- Securing the networks
- Green technology & innovative energy solutions
- Tele-education, healthcare, mobile banking and financial inclusion
- Quality of service
- CRM systems
- Telecom business domain
- Know your customer data collection

Broadband network's expansion suggested innovation metrics specific to this domain

- a. No. of indigenous products inducted
- b. No. of new indigenous VAS services introduced

- c. Quality of service parameters
- d. No. of research / innovation projects outsourced

RESEARCH METHODOLOGY

The literature review has revealed the areas which need to be explored to understand the role of innovative services which plays major role in customer satisfaction and retention as: value-added services, uninterrupted connectivity, CRM aspects, innovative new solution, and quality enhancement. The researcher has framed a questionnaire which includes questions regarding the value appropriated to the new innovative value added services

Geographic Area: The study covers the area of Mumbai suburbs. Research design used is descriptive research. the data is collected through survey of the mobile service customers through structured questionnaires.

Referring to the Krejcie & Morgan table, a sample size of 450 mobile service users of Mumbai suburbs were chosen to be surveyed with the help of a structured questionnaire. Out of 450 mobile service providers surveyed, 406 valid responses were considered for analysis.

The researcher has tried to find out the consumer perception of the quality of the services offered by the mobile phone service providers. The researcher has also tried to find out the importance given by the customers to various innovative incentives and offers. The users were asked to rate the services and offers on the basis of importance they give to them on a Likert scale.

OBJECTIVES

1. To identify and study the innovative services offered by the mobile service providers in Mumbai.
2. To find out the customer perception of the quality and importance of the services.
3. To study the association between the quality parameters and customer satisfaction & retention.
4. To find out most preferred and least preferred incentive option offered by the mobile service providers.
5. To find out the premier internet activities done by the mobile service offers.

To achieve the above objectives the researcher has tabulated the data and applied the following statistical tools.

1. Weighted average method
2. Maxdiff analysis
3. Pareto analysis
4. Chi square test

DATA ANALYSIS: QUALITY PARAMETERS

The question “How important are the following services to you? Please rate each of these statements on a scale of 1 to 5, Where 5 is extremely important and 1 is the least important.” was asked to the mobile service users in Mumbai, western suburbs.

The survey data is presented below in frequency tables (Tables 1 to 4) for the most important quality parameter.

Table 1: Efficient Mobile Connectivity

Efficient mobile connectivity	Frequency	Percentage	Cumulative Percentage
1	3	1%	1%
2	3	1%	2%
3	19	5%	6%
4	96	24%	31%
5	275	69%	100%
Grand Total	396	100%	

Table 2: Special Privilege and Deals

Special privilege and deals	Frequency	Percentage	Cumulative Percentage
1	13	4%	4%
2	12	3%	7%
3	113	31%	38%
4	103	28%	66%
5	122	34%	100%
Grand Total	363	100%	

Table 3: Capable Customer Care

Capable customer care	Frequency	Percentage	Cumulative Percentage
1	1	0%	0%
2	2	1%	1%
3	25	6%	7%
4	119	30%	37%
5	247	63%	100%
Grand Total	394	100%	

Table 4: Efficient and New Billing System

Efficient and new billing system	Frequency	Percentage	Cumulative Percentage
1	2	1%	1%
2	4	1%	2%
3	76	21%	22%
4	135	37%	59%
5	148	41%	100%
Grand Total	365	100%	

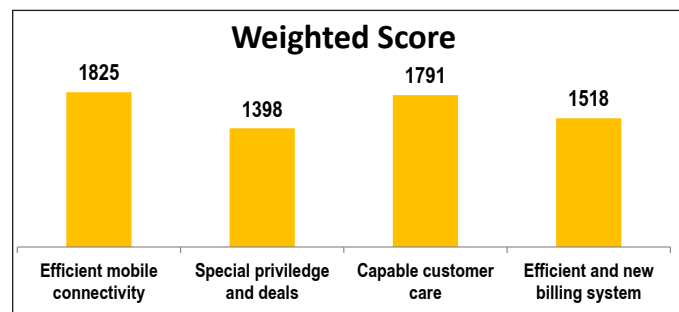


Fig. 1: Weighted Score

Weighted average method is a mathematical process by which figures and/or components are adjusted to reflect importance by value or proportion. Weighted average is calculated for all the parameters and it was found that the customers rated efficient mobile connectivity as the most important parameter for quality evaluation followed by customer care, efficient billing system, and special privilege and deals.

Telecommunication industry is witnessing a situation where uninterrupted mobile connectivity is seen as a service issue and not a technology issue so customer values uninterrupted connectivity the most.

Telecom business needs smart customer interaction management system, as it plays a very important role in customer satisfaction. Irrespective of providing high-value and low-value customers with bundled offerings and VAS, average rate per user per year substantially can decrease. If telecom business could invest in a superior quality customer management system, they could deliver a reliable and robust customer experience. Part of the business expends their time and resource to handle customer concerns and provide solutions for the issues experienced. What makes matters worse is when the agent handling the customer call is unequipped with the required information or tools to resolve the issue.

Efficient Billing System

With customers switching companies at a drop of a hat, telecom companies find it close to impossible to retain customers. With low-cost operators in the picture, differentiation is elusive in the industry. They offer services and products at lower costs, and the big brands have nothing more to offer.

MaxDiff is maximum difference scaling, an approach for obtaining preference/importance scores for multiple items. Although MaxDiff shares much in common with conjoint analysis, it is easier to use and applicable to a wider variety of research situations. MaxDiff is also known as «best-worst scaling.

Maxdiff analysis is done to find out the most preferred and the least preferred incentive option offered by the mobile service providers. It is an approach for obtaining preferences, it is also known as best-worst analysis.

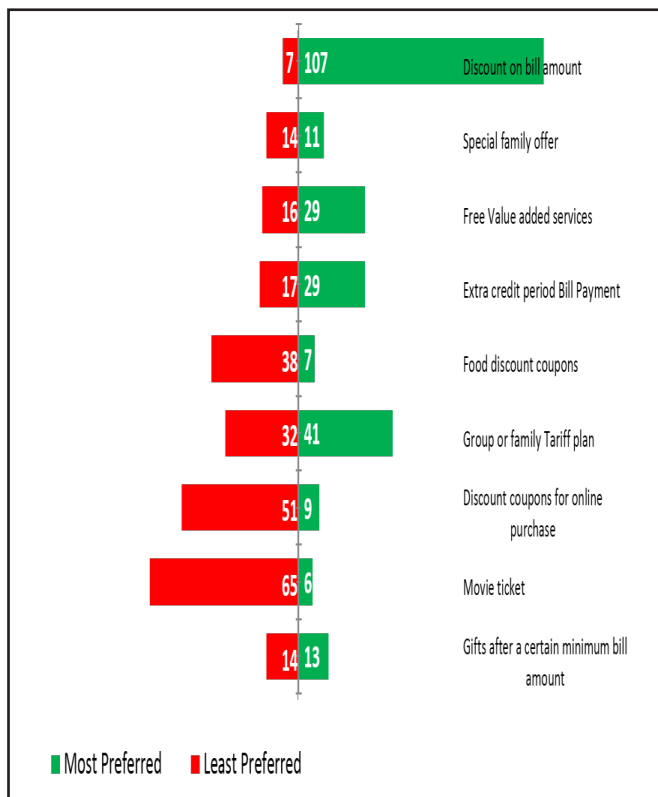


Fig. 2: Most and Least Preferred Incentive Options

Most preferred incentive option according to the Maxdiff analysis is discount on the total billing amount, whereas it is found that mobile service users are least interest in offers like discount coupons for online purchase, movie tickets, food coupons etc.

Fierce competition has meant that prices for telecoms packages are continually dropping, with operators

introducing new services to tempt customers to switch. Loyalty is consequently low, with churn a major issue for all operators.

Pareto Analysis is a statistical technique in decision-making used for the selection of a limited number of tasks that produce significant overall effect. It uses the Pareto Principle (also known as the 80/20 rule) which depicts the idea that by doing 20% of the work you can generate 80% of the benefit of doing the entire job. Here Pareto analysis aims at highlighting those elements which demand attention and should be examined first.

From the Pareto diagram (Fig. 3) we observe that two reasons constitute approximately 74% of the frequency.

Few vital reasons are:

- 1) Instant messenger-such as WhatsApp, Blackberry messenger, Yahoo messenger, etc.
- 2) Social networking-such as Facebook, Twitter

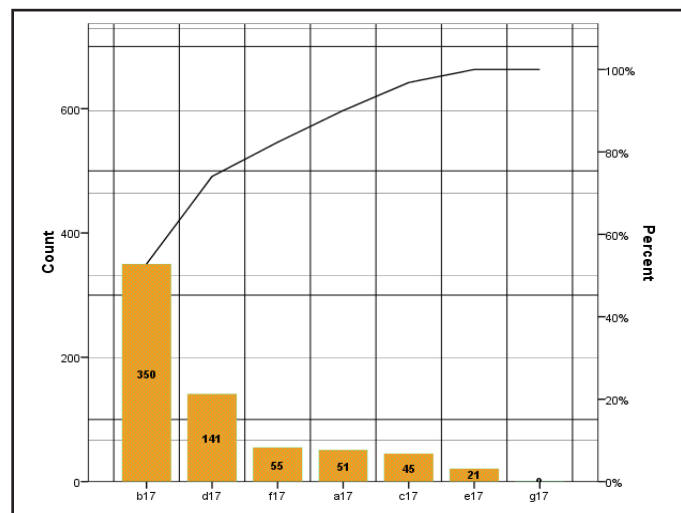


Fig. 3: Pareto Diagram

The face of communication is changing dramatically. Social networking websites and services are readily available and have become primary communication media for a new generation of digitally aware consumer. Driven by high broadband communication, maturing ‘social software’ available and affordable Internet-enabled multimedia.

The widespread social networking phenomenon reflects shifts in two long-term communication trends. First, there is a shift in communication patterns – from point-to-point, two-way conversations, to many-to-many, collaborative communications. Secondly, control of the communication environment is transitioning from telcos to open Internet platform providers, enabled by better, cheaper technology, open standards, greater penetration of broadband services and wireless communication networks. The combined

effect of these trends is altering the competitive landscape in communications and giving rise to emerging business models that include:

- Open and Free – This model features companies that offer one-to-one communication.

By conducting the Pareto analysis the researcher concluded that the customers are using data serviced mostly for services like Instant messenger: WhatsApp, Blackberry messenger and Yahoo messenger.

Consumer Satisfaction and Retention

The tremendous growth in the wireless telecommunication market has raised the importance of retaining current customers. Retaining existing customer is much less expensive than obtaining new customers, there is a high correlation found between customer satisfaction and the likelihood that they would retain the same service provider for one year.

Table 5: Descriptive Statistics

	Mean	Std. Deviation	N
Satisfaction	7.02	2.811	406
next one year service provider	3.76	1.203	406

		Satisfaction	next one year service provider
Satisfaction	Pearson Correlation	1	.895**
	Sig. (2-tailed)		.000
	N	406	406
next one year service provider	Pearson Correlation	.895**	1
	Sig. (2-tailed)	.000	
	N	406	406

** . Correlation is significant at the 0.01 level (2-tailed).

This means that there is a strong relationship between your variables. Changes in one variable are strongly correlated with changes in the second variable. Pearson’s r is 0.895. This number is very close to 1. For this reason, we can conclude that there is a strong relationship between our satisfied customers & likelihood to retain the same service provider for a longer period

Chi Square test was performed in order to test the framed hypothesis.

H1: Overall good experience with the customer care is positively associated with retaining a customer.

H2: Efficient mobile connectivity is positively associated with retaining a customer.

H3: Special privileges and deal are positively associated with retaining a customer.

H4: Efficient and new billing system is positively associated with retaining a customer.

Table 6: Association of Overall Experience with the Customer Care and Retaining the Customer

Crosstab

Count		14 (On a scale of 1-5, where 5 is very likely rate your preference of using your current primary service provider i.e. -----for next one year)					Total
		Least	Likely	Moderate	Most Likely	Extremely Likely	
7-c (Experience)	Least	0	0	2	0	1	3
	Likely	0	0	4	1	1	6
	Moderate	1	0	9	17	7	34
	Most Likely	6	6	30	32	52	126
	Extremely Likely	7	11	36	49	56	159
Total		14	17	81	99	117	328

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.140 ^a	16	.173
Likelihood Ratio	22.414	16	.130
Linear-by-Linear Association	.054	1	.816
N of Valid Cases	328		

a. 12 cells (48.0%) have expected count less than 5. The minimum expected count is .13.

Here p-value =0.173 >0.05, hence we Accept Ho i.e. retaining a service provider and experience are independent of each other.

A very efficient customer care cell may not be only reason for retaining a service provider for longer period, as the customer is always looking for fair price deals.

Table 7: Association of Efficient Mobile Connectivity with Customer Retention

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.252 ^a	16	.000
Likelihood Ratio	55.336	16	.000
Linear-by-Linear Association	5.912	1	.015
N of Valid Cases	392		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .11.

Here p-value =0.00 <0.05, hence we reject Ho i.e. retaining a service provider and experience are not independent of each other.

There is a positive association between efficient mobile connectivity and retaining a customer another one year. Effective connectivity is related to customer satisfaction and hence retention.

Table 8: Efficient and New Billing System

Crosstab

Count		14 (On a scale of 1-5, where 5 is very likely rate your preference of using your current primary service provider i.e. -----for next one year)					Total
		Least	Likely	Moderate	Most Likely	Extremely Likely	
5-d (Efficient and new billing system)	Likely	0	2	1	0	1	4
	Moderate	0	0	16	37	23	76
	Most Likely	10	10	34	27	54	135
	Extremely Likely	11	10	32	45	50	148
Total		21	22	83	109	128	363

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.490 ^a	12	.000
Likelihood Ratio	42.171	12	.000
Linear-by-Linear Association	1.764	1	.184
N of Valid Cases	363		

a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .23.

Here $p\text{-value} = 0.00 < 0.05$, hence we reject H_0 i.e. service provider and efficient & new billing system are not independent of each other.

A transparent and justified billing system results in customer satisfaction. One of the major causes of churn is inflated bills, or a consumer perception of inflated bills.

Table 9: Special Privileges and Deal

Crosstab

Count		14 (On a scale of 1-5, where 5 is very likely rate your preference of using your current primary service provider i.e. -----for next one year)					Total
		Least	Likely	Moderate	Most Likely	Extremely Likely	
5-b (Special privilege and deals)	Least	2	4	0	0	7	13
	Likely	1	0	2	5	4	12
	Moderate	8	10	26	33	36	113
	Most Likely	6	6	24	31	36	103
	Extremely Likely	4	2	31	40	45	122
Total		21	22	83	109	128	363

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.136 ^a	16	.007
Likelihood Ratio	34.987	16	.004
Linear-by-Linear Association	4.054	1	.044
N of Valid Cases	363		

a. 10 cells (40.0%) have expected count less than 5. The minimum expected count is .69.

Here $p\text{-value} = 0.07 < 0.05$, hence we reject H_0 i.e. service provider and special privilege & deals are not independent of each other.

FINDINGS, CONCLUSION & POLICY IMPLICATIONS

It was found that connectivity is top most issue with the customers. They judge the quality of services by uninterrupted connectivity at affordable price. Value-added services do play a very important role in customer satisfaction but connectivity at affordable price helps in retaining the customer for a longer period. Data is in fact driving their revenues up, far more than anything else because of increased usage of WhatsApp or Skype. There is no restriction on telecom operators from increasing data charges; however they are restricted by competition. Anyhow data revenue is going to drive the future of mobile operators

Because of stiff competition and fierce price war, every operator offers a virtually similar plan to their customers. So operators should adopt service-centric approach to increase the loyalty and customer base. They should focus on investment to expand their network coverage and connectivity. Individual service quality can be improved by

immediate attending of customer complaints and acting on its feedback.

Today consumers rely on a combination of mobile phones, broadband, and wireless data, to communicate with the world, work remotely, and stay in touch with loved ones. The significance of the customer service delivered by operators has grown immensely in the current times. If the subscribers are cut off, even for short while, customers become upset and want to be reconnected quickly. Delivering the highest level of customer service has never been more vital for the organisation. Telecoms companies need to operate efficiently, but at the same time ensure they are delivering the right experience if they want to retain customers for the long term. Telecoms companies need to operate efficiently, but at the same time ensure they are delivering the right experience if they want to retain customers for the long term. As services become ever more complex and competition increases the customer experience will be the key differentiator when it comes to retaining consumers and reducing churn.

REFERENCES

<http://capitalmind.in/2015/04/telecom-companies-are-not-losing-money-to-data-services-the-net-neutrality-debate/>
<http://www.eptica.com/blog/why-customer-service-vital-telecoms-success>

https://www.ibm.com/smarterplanet/global/files/nz__en_uk__telecom__gbe03121_usen_socialnetwork.pdf

Mather, H. (2005). *How to profitably delight your customers*. Butterworth Heinemann.

Mittal, R. B. (Feb. 15, 2005). Joint Managing Director, Bharti televenture limited, Trends and Development.

Oliver, S. (2005). *Network Competition for European Telecommunications*. Oxford University press Telecom Sector Innovation

Telecom Sector Innovation Council (Telecom Sector Roadmap for Innovation). 2010-2020.

World telecommunication report. (2002).