Challenges In A Commodity Offering : Indian Telecom Services (GSM)

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ABSTRACT

This paper is a theoretical research on the effect of branding in the Indian Telecom Services (GSM). Currently, number portability, dropping average revenue per user and a market approaching saturation presents challenges for cellular service providers. One of the fundamentals in branding is that a strong brand should give certain pricing power to its parent company. This is not observed in the telecom industry as average revenue per user is consistently declining. This paper highlights that the telecom service is becoming a commodity from the consumers' point of view. The only differentiation that may be experienced is the network availability and quality of coverage. Telecom service being a low involvement product with minimal differentiation; consumers would follow a learn-do-feel sequence in terms of their responses towards a telecom service brand. The quality of experience that the consumer has with the chosen telecom service provider is what is going to retain the consumer.

Indian telecom service providers' focus would need to move from Customer Acquisition Numbers to Customer Lifetime Value. Service providers simply cannot afford to lose high-value subscribers. This is even more important in a 3G scenario, where data is expected to help boost revenues, and the attempt is to get more voice users to access data or other revenue generating applications on their phones.

Keywords : GSM - Global System for Mobile Communications ; ARPU - Average Revenue Per User ; 3G - 3rd Generation Mobile Telecommunications ; 4G - 4th Generation Mobile Telecommunications ; BWA - Broadband Wireless Access ; MNP - Mobile Number Portability LSA - Licensed Service Area ; COAI - Cellular Operators Association of India ; Commodity ; Differentiation ; CLV - Customer Lifetime Value ; CDMA - Code Division Multiple Access ; Mean Absolute Deviation ; Sample Standard Deviation ; Market Share Volatility ; Power Pricing ; Consumer Response Hierarchy Models ; Product Involvement ; Cognitive, Affective and Conative

INTRODUCTION

Number portability, dropping ARPUs and a market approaching saturation present a challenging opportunity for cellular service providers in India. In the background of this context, this research paper seeks to understand the effect of branding in consumers' choice of the telecom service.

OBJECTIVES

1) To identify trends in All India GSM Subscriber Figures and Market Shares of major GSM players.

2) To identify trends in Revenues and ARPU of major GSM players.

3) To understand the effect of MNP on the Telecom Industry.

4) To conceptually understand the effect of branding in consumers' choice of telecom service.

METHODOLOGY

This research is based on Secondary Data. The time period of the research was from May 2011 to April 2012.

ANALYSIS AND DISCUSSION

All India GSM Subscriber Figures increased from 3,39,031 in March 1997 to 59,53,19,178 (595.32 million) in March 2011 and to 69,59,23,556 (695.92 million) in March 2012 (Refer to Chart 1). GSM subscribers' growth rate gradually declined from FY 07 onwards (Refer to Chart 2). However, this was due to growth over a larger subscriber base in the preceding year. FY 11 witnessed the highest amount of GSM incremental additions at 173.46 millions. In FY 12, GSM incremental additions declined to 100.60 million (Refer to Chart 3). In the next few years, the market is more likely to reach saturation.

Bharti Airtel, Vodafone Essar, Idea, BSNL and Aircel are the top 5 GSM players in India. Combined together, they accounted for more than 90% market share throughout 2010, varying from 93.38% in January 2010 to 90.26% in December 2010 (Refer to Charts 4 - 8). Rest of the market was contributed by the remaining GSM players such as

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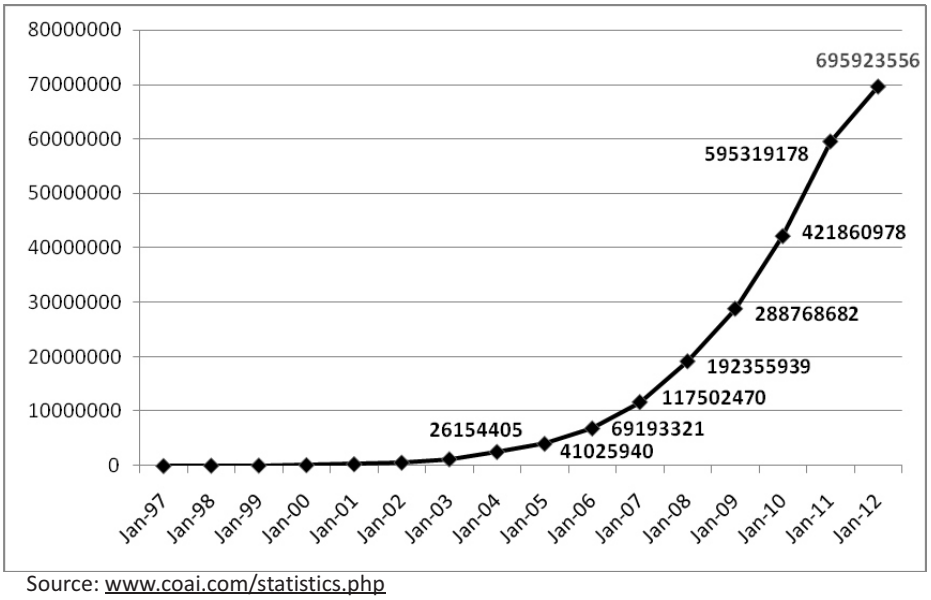
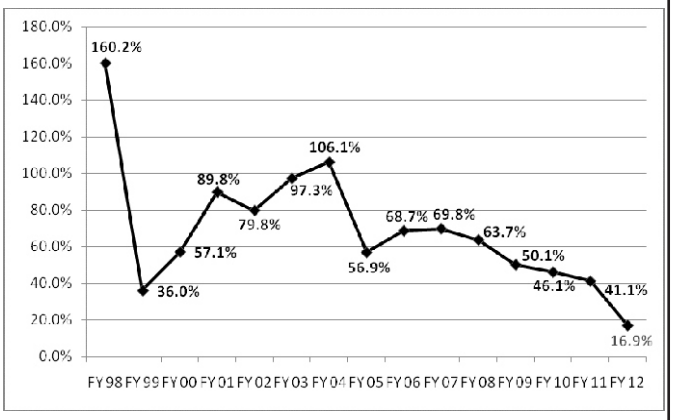
Chart 1 : All India GSM Subscriber Figures



Source: www.coai.com/statistics.php

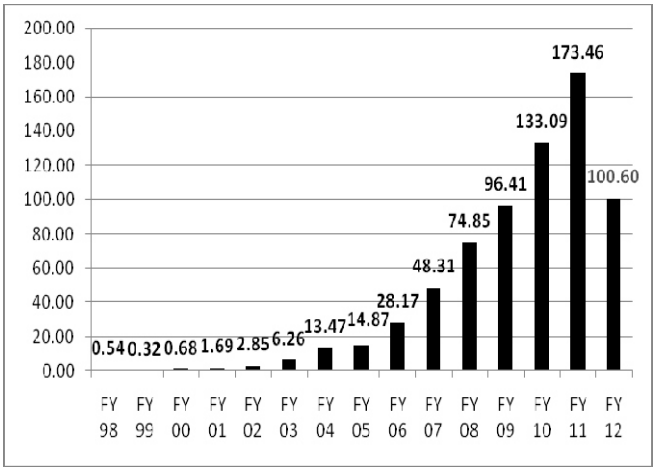
Note: 1. GSM Subscriber Figures corresponds to March in a given year.
2. GSM Subscriber Figure for March 2007 is estimated.
3. GSM Subscriber Figures excludes Tata Docomo Subscriber Base.

Chart 2: All India GSM Subscribers - Growth Rate



Source: www.coai.com/statistics.php

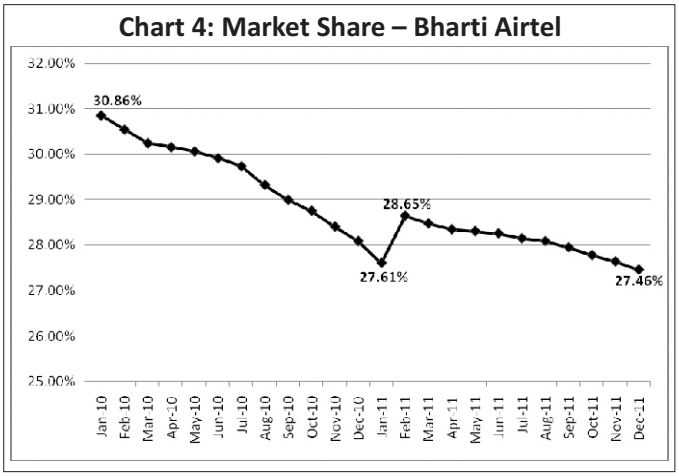
Chart 3: All India GSM Subscribers - Incremental Additions

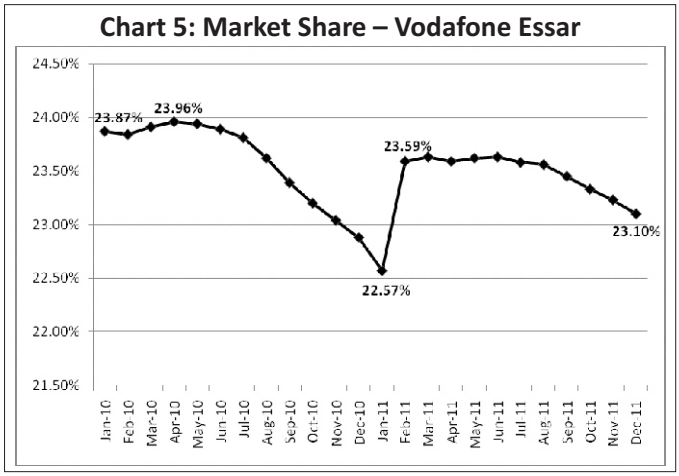


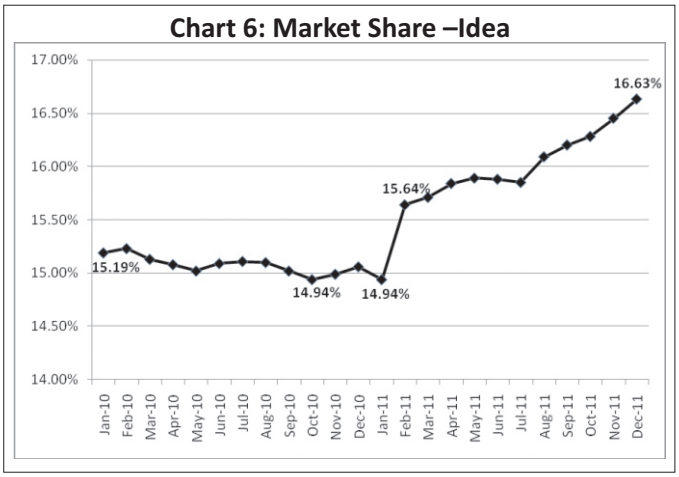
Source: www.coai.com/statistics.php
Note: GSM Subscribers Incremental Additions is in millions

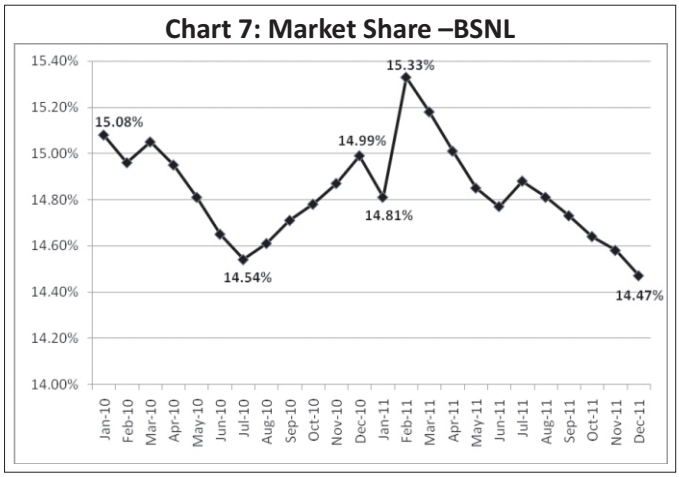
Reliance Telecom, Uninor, Videocon, MTNL, Loop Mobile, STel and Etisalat. Bharti Airtel and Vodafone Essar showed a declining market share trend in 2010. Idea, BSNL and Aircel showed up and down trends in 2010.

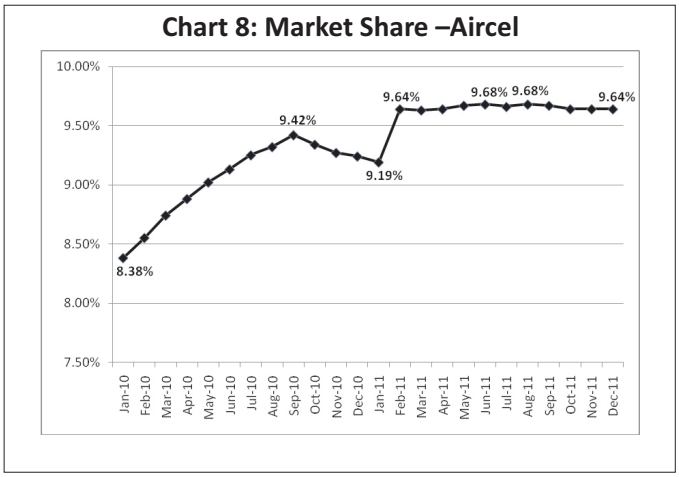
Throughout 2011, Bharti Airtel, Vodafone Essar, Idea, BSNL and Aircel combined together accounted for more than 90% market share, except for in the month of January 2011; varying from 92.85% in February 2011 to 89.12% in January 2011 (Refer to Charts 4 - 8). For all the top 5 GSM players, there was a sizeable increase in their market share in February 2011. Thereafter, their market shares showed different trends. For Bharti Airtel and BSNL, there was almost a steady decline in their market shares post February 2011. Vodafone Essar had a declining market share trend in the second half of 2011. Aircel's market share was almost constant from February 2011 onwards. The biggest gainer







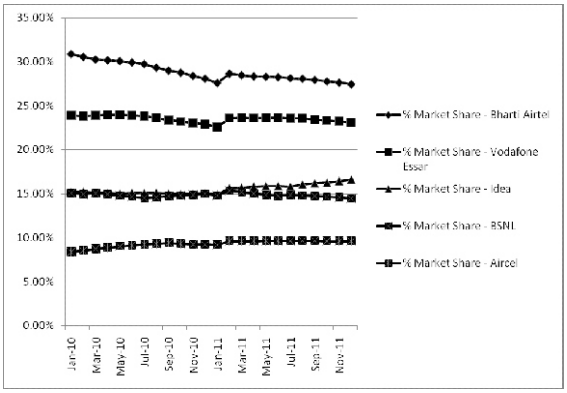




Note: Charts 4 to 8 give market shares of Bharti Airtel, Vodafone Essar, Idea, BSNL and Aircel in the GSM Market across 2010 and 2011.
Source: www.coai.com/statistics.php (for Charts 4 to 8)

was Idea, which showed an increasing market share trend throughout 2011. It is evident that the market shares of the top 5 GSM players converged in December 2011 when compared with January 2010 (Refer to Chart 9). It appears that Idea, Aircel and the smaller GSM players are the beneficiaries in the loss of market share by Bharti Airtel and Vodafone Essar.

Chart 9: Market Share – Bharti Airtel, Vodafone Essar, Idea, BSNL and Aircel



Source: www.coai.com/statistics.php

Table 1: Market Share Volatility of The Top 5 GSM Players in 2010

Player	Market Share - Max	Market Share - Min	Mean	Median	Mean Absolute Deviation	Sample Standard Deviation
Bharti Airtel	30.86% (Jan 2010)	28.09% (Dec 2010)	29.60%	29.83%	0.73%	0.87%
Vodafone Essar	23.96% (Apr 2010)	22.88% (Dec 2010)	23.61%	23.83%	0.32%	0.39%
Idea	15.23% (Feb 2010)	14.94% (Oct 2010)	15.08%	15.09%	0.06%	0.08%
BSNL	15.08% (Jan 2010)	14.54% (Jul 2010)	14.83%	14.84%	0.15%	0.18%
Aircel	9.42% (Sep 2010)	8.38% (Jan 2010)	9.05%	9.19%	0.28%	0.34%

Source: www.coai.com/statistics.php (for Market Share - Max and Market Share - Min)

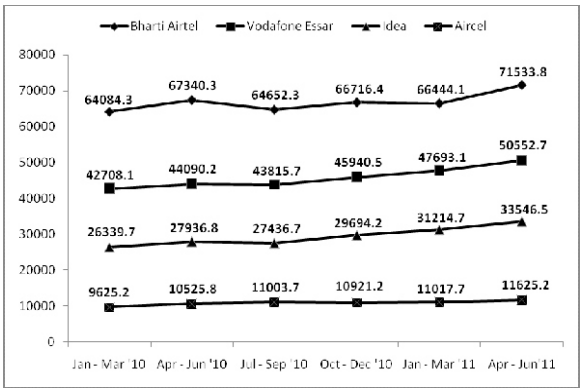
Table 2: Market Share Volatility of The Top 5 GSM Players In 2011

Player	Market Share - Max	Market Share - Min	Mean	Median	Mean Absolute Deviation	Sample Standard Deviation
Bharti Airtel	28.65% (Feb 2011)	27.46% (Dec 2011)	28.06%	28.12%	0.31%	0.38%
Vodafone Essar	23.63% (Mar 2011, Jun 2011)	22.57% (Jan 2011)	23.41%	23.57%	0.23%	0.32%
Idea	16.63% (Dec 2011)	14.94% (Jan 2011)	15.95%	15.89%	0.32%	0.44%
BSNL	15.33% (Feb 2011)	14.47% (Dec 2011)	14.84%	14.81%	0.18%	0.24%
Aircel	9.68% (Jun 2011, Aug 2011)	9.19% (Jan 2011)	9.62%	9.64%	0.07%	0.14%

Source: www.coai.com/statistics.php (for Market Share - Max and Market Share - Min)

On an overall basis, the Market Share Volatility of the top 5 GSM players in 2010 was relatively low. Bharti Airtel had the highest market share volatility, whereas Idea had the lowest level. Mean Absolute Deviation of market share for Bharti Airtel was 0.73%, which indicates that on an average, at any particular time period in 2010, the market share of Bharti Airtel varied from its mean market share value by 0.73% (Table 1). As in 2010, Market Share Volatility of the top 5 GSM players in 2011 was relatively low. Idea had the highest market share volatility, whereas Aircel had the lowest level. Mean Absolute Deviation of market share for Bharti Airtel was 0.31%, which indicates that on an average, at any particular time period in 2011, the market share of Bharti Airtel varied from its mean market share value by 0.31% (Table 2). Average Revenue Per User (ARPU) was declining for all the major GSM players throughout 2010 (Refer to Charts 10 - 11, and Table 3). In the case of Aircel, it declined at an increasing rate. The decrease in ARPU was more than compensated by an increase in subscribers leading to an increase in Quarter Turnover by the end of 2010. In the first half of 2011, with the exception of Bharti Airtel, ARPU declined for the other major GSM players. For Bharti Airtel, in the April - June 2011 quarter, positive ARPU Growth Rate was mainly contributed by the Delhi Circle, which had a 36.29% ARPU Growth Rate.

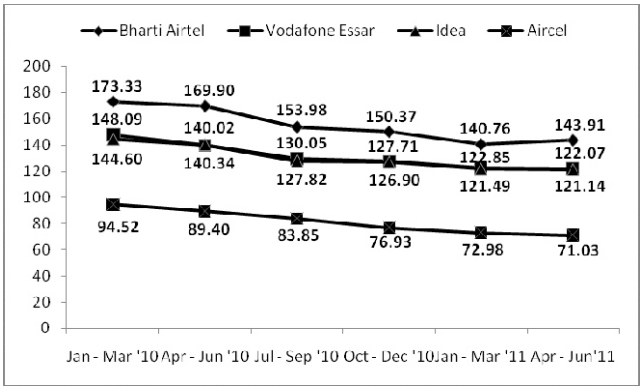
Chart 10 : Total Quarter Revenues (in Million ₹)



Source: www.coai.com/revenue.php

Table 3: Total Quarter Revenue Growth Rate						
	Jan - Mar '10	**Apr - Jun '10**	**Jul - Sep '10**	**Oct - Dec '10**	**Jan - Mar '11**	**Apr - Jun '11**
Bharti Airtel	5.04%	5.08%	-3.99%	3.19%	-0.41%	7.66%
Vodafone Essar	4.18%	3.24%	-0.62%	4.85%	3.81%	6.00%
Idea	2.01%	6.06%	-1.79%	8.23%	5.12%	7.47%
Aircel	23.56%	9.36%	4.54%	-0.75%	0.88%	5.51%
Source: www.coai.com/revenue.php						

Chart 11 : Average Revenue per User (ARPU) – Q1 2010 to Q2 2011



Source: www.coai.com/revenue.php

Table 4: ARPU Growth Rate - Q1 2010 to Q2 2011						
	Jan - Mar '10	**Apr - Jun '10**	**Jul - Sep '10**	**Oct - Dec '10**	**Jan - Mar '11**	**Apr - Jun '11**
Bharti Airtel	-2.25%	-1.98%	-9.37%	-2.35%	-6.39%	2.24%
Vodafone Essar	-5.58%	-5.45%	-7.12%	-1.79%	-3.81%	-0.63%
Idea	-8.86%	-2.95%	-8.92%	-0.72%	-4.26%	-0.29%
Aircel	2.86%	-5.43%	-6.20%	-8.25%	-5.13%	-2.67%
Source: www.coai.com/revenue.php						

Chart 12: Average Revenue Per User (ARPU) - 2008

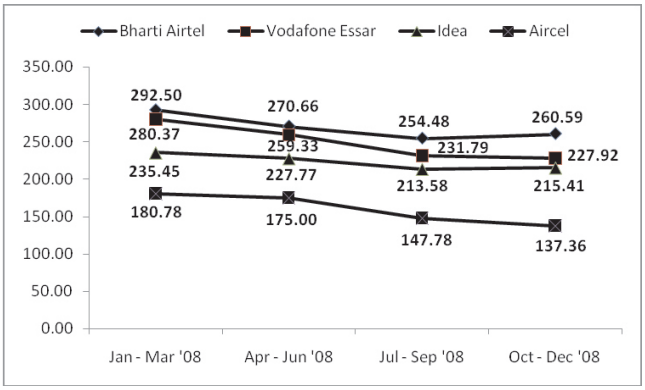
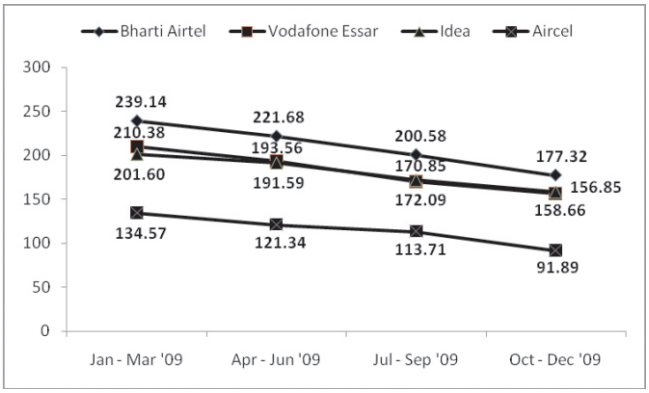


Chart 13: Average Revenue Per User (ARPU) - 2009



Source: www.coai.com/revenue.php (for Chart 12 and Chart 13)

Table 5: ARPU Growth Rate - 2008 to 2009

	Jan - Mar '08	Apr - Jun '08	Jul - Sep '08	Oct - Dec '08	Jan - Mar '09	Apr - Jun '09	Jul - Sep '09	Oct - Dec '09
Bharti Airtel	-2.13%	-7.47%	-5.98%	2.40%	-8.23%	-7.30%	-9.52%	-11.60%
	Jan - Mar '08	**Apr - Jun '08**	**Jul - Sep '08**	**Oct - Dec '08**	**Jan - Mar '09**	**Apr - Jun '09**	**Jul - Sep '09**	**Oct - Dec '09**
Vodafone Essar	0.92%	-7.50%	-10.62%	-1.67%	-7.70%	-8.00%	-11.73%	-8.19%
Idea	1.25%	-3.26%	-6.23%	0.86%	-6.41%	-4.97%	-10.18%	-7.80%
Aircel	-2.97%	-3.20%	-15.55%	-7.05%	-2.03%	-9.83%	-6.29%	-19.19%

Source: www.coai.com/revenue.php

Table 6: MNP Early Trend - Mobile Subscribers Ported-in and Ported-out

Operators	Subscribers Ported-in	Subscribers Ported-out	Net Additions
Vodafone Essar	488250	295489	192761
Idea	391191	240402	150789
Bharti Airtel	530615	382400	148215
Aircel	162664	117822	44842
Uninor	31019	24689	6330
Videocon	5404	11633	-6229
MTNL	3793	14851	-11058
TTSL	197404	236793	-39389
BSNL	107724	257817	-150093
Reliance	44753	351170	-306417

Source: www.coai.com (COAI Press Release on Mobile Number Portability dated 18-3-2011)

Note: 1. MTNL - Mahanagar Telephone Nigam Ltd. 2. TTSL - Tata Teleservices Ltd.
3. BSNL - Bharat Sanchar Nigam Ltd.

During the time period from 2008 to 2011, ARPU declined at a faster rate during 2009 to 2010 than in 2011 (Refer to Charts 12- 13, and Tables 4 - 5). In the second half of 2011, mobile tariffs increased in some segments due to increase in operating costs for the Companies to serve rural markets and low-end customers, who use only voice calls and SMS. Further, there were increased commercial costs in the form of spectrum prices for 3G and Broadband Wireless Access (BWA) based on 4G technology. For instance, Airtel raised its pre-paid tariffs in some segments in July 2011 and again in November 2011. In July 2011, Airtel pre-paid customers across Delhi-NCR, Andhra Pradesh, Gujarat, Mumbai, Madhya Pradesh-Chattisgarh and Kerala had to pay an increase in tariff under 'Pay per Min' and 'Pay per Sec' plan.

Table 7: Mobile Subscribers Ported-in and Ported-out Till August 2011			
Operators	**Subscribers Ported-in**	**Subscribers Ported-out**	**Net Additions**
Aircel	1045704	1071223	-25519
Bharti Airtel	4000051	3704709	295342
BSNL (CDMA)	340	137	203
BSNL (GSM)	846429	1355554	-509125
Idea	3905457	2333249	1572208
MTNL (GSM)	16499	92772	-76273
Reliance (CDMA)	136344	980144	-843800
Reliance (GSM)	1583797	2083640	-499843
TTSL (CDMA)	42320	797014	-754694
TTSL (GSM)	1461046	1567217	-106171
Uninor	271011	274126	-3115
Videocon	26786	195791	-169005
Vodafone Essar	4419966	3214287	1205679
Note: Reliance (GSM) figures include both Reliance Communication (GSM) and Reliance Telecom (GSM)			
Source: http://www.religareonline.com/religareonline/media/pdfforresearch/2012/1/TelecomTracker.pdf			

Table 8: Operators' Competing Plans For MNP	
Operator	**Offers for Users who Port to a New Network**
Vodafone Essar	Get 100MB of data transfer for six months free.
Idea	Dedicated MNP pack that costs ₹ 37; Free talktime of ₹ 5
BSNL	No porting charges of ₹ 19; free additional talktime of ₹ 100; free 5GB GPRS for 30 days
Tata Docomo	Additional talktime on recharge vouchers of ₹ 100, ₹ 200, ₹ 300 and ₹ 400; 100 MB free download per month for six months.
MTNL	No porting charges of ₹ 19; free additional talktime of ₹ 100; 200MB free data usage for one month; free 2000 SMS on local network for one month; free 100 minutes of local video calls for one month.
Source: http://www.mnp-india.com/mobile-operators/mnp-offers, http://gstek.info/forum/index.php?topic=18305.0	
Note: Operators' Competing Plans are different for their pre-paid and post-paid mobile users.	

Furthermore, 'Advantage' and 'Freedom' pre-paid tariff packages were also increased and revised (http://telecomtalk.info/airtel-hikes-its-prepaid-tariff/72262/) . One of the key achievements for the telecom industry in India for the year 2010-11 was the successful implementation of Mobile Number Portability (MNP). MNP was successfully implemented in the Haryana Licensed Service Area (LSA) on November 25, 2010 followed by Pan India launch on January 20, 2011. The early trends in MNP within two months of its national launch clearly showed customers' preference for GSM players than CDMA players (Table 6) . In addition, MNP was not a 'game changer' for the telecom industry as less than 1% of the total subscribers opted to change their service providers.

Till August 2011, MNP requests were about 18 million. This was just 2 percent of the then overall mobile subscriber base of 865.71 million customers. Major operator wise breakup of requests is given in the Table 7.

The biggest gainers from the MNP are Idea and Vodafone Essar. India's top two CDMA players - namely Reliance and TTSL lost subscribers in MNP. All the smaller operators whose 2G telecom licences were revoked have announced or will be announcing closure of their operations. Customers from such operators are currently being encouraged to port-out to other operators. This would automatically reduce the number of operators in a Licensed Service Area. By the end of December 2011, about 29.24 million subscribers had ported their mobile number (http://www.indiatelecomonline.com/topics/regulatory-govt-policies/mnp/).

The total mobile subscriber base (GSM + CDMA) by the end of December 2011 reached 893.84 million (www.trai.gov.in). This makes MNP requests at 3.27 percent of the overall mobile subscriber base. Operators are using competing plans to gain customers in MNP (Table 8). Two clear trends emerge; net movement of customers from small operators to large operators, and net movement of customers from CDMA players to GSM players. However, consolidation is unlikely to happen in the Indian telecom industry in the near future as the industry is still growing. Further, an operator with a reasonable subscriber base is not small enough to be acquired by another operator.

RESULTS

Four important observations come from the above analysis of the GSM market in India. It can be generalized for the telecom market as a whole.

1) In the next few years, the telecom market is more likely to reach saturation.

2) Market Share volatility of players remains relatively low. Only very small players will show volatility in their market share because of lower base effect.

3) Average Revenue Per User (ARPU) is showing declining trend for all players. However, it appears that the telecom industry has gone past the worst scenario in ARPU decline.

4) GSM is clearly preferred over CDMA by customers in MNP. But MNP is yet to result in a significant change in the players' position in the market as it accounts for less than 4 percent of the total mobile base.

CONCLUSION

Today, the differentiation between the different telecom service providers is blurring or narrowing down. The only differentiation that may be experienced is the network availability and quality of coverage. This is the most important aspect of the telecom relationship today. All the telecom companies have been investing in branding and advertising. However, a strong brand should give certain pricing power to its company. This is not observed in the telecom industry as ARPU is consistently declining. Price is a reflection of the value perceived by the customer, and this value determines his or her willingness to pay. Understanding this distinction and creating value from the beginning are the keys to good pricing. Once value is created in terms of quality, brand and service, then a price can be set in a way that reflects this value. Pricing is ultimately a question of value delivery and value extraction. This is called as 'Power Pricing'. The fact that telecom brands are unable to perform 'Power Pricing' means that the telecom service is becoming a commodity from the consumers' point of view. It is important to conceptualize how consumers would process a commodity product within themselves before making the purchase decision. The traditional Consumer Response Hierarchy Models propose that a consumer typically moves through various stages of responses ranging from first becoming aware about a product to finally purchasing it. These responses can typically be divided into cognitive, affective and behavioural responses. One of the popular traditional Consumer Response Hierarchy Model is AIDA (Awareness-Interest-Desire-Action) model.

The shortcomings of traditional Consumer Response Hierarchy Models is that they all assume that consumers move through a hierarchical sequence of cognitive-affective-behavioural response. They assume that consumers pass through these stages only in that order. In other words, awareness and knowledge about a brand precede feelings, liking and preference for it, which in turn precede purchase or adoption. This is a learn-feel-do sequence that is appropriate when the consumer has high involvement with the product category and the differences among products are also high, for example, in furniture, cars or homes. However, this hierarchy may not be relevant for all product categories.

It is here that Alternative Response Hierarchies (Figure 1) become useful tools. Three alternative models of information processing based on consumers' level of involvement in a product and perceived product differentiation were identified by the social psychologist Michael L. Ray.

1) The Standard Learning Hierarchy: The standard learning model assumes a learn-feel-do sequence. Response stages for consumer durables and industrial products often follow this sequence.

2) The Dissonance / Attribution Hierarchy: The dissonance / attribution hierarchy follows a reverse of the traditional order presented in the learning hierarchy. Here action occurs first, then attitude shift, and finally development of awareness and comprehension. Thus, it assumes a do-feel-learn sequence. Response stages for steel tubes, electrical appliances etc. follow this sequence.

3) The Low-Involvement Hierarchy: It was originally developed by Krugman (from General Electric). This hierarchy puts forward a learn-do-feel sequence for low-involvement products. For products following this hierarchy, a consumer first becomes aware about the product. But he is not intensely involved and ,therefore, does not develop any attitudes towards the product. Instead, when opportunity arises, he purchases the product, after which he develops liking and preference from repeated use and experience with the product. Packaged and convenience goods such as soaps, toothpastes etc. fall in this category.

Figure 1: Alternative Models of Information Processing (by Michael L. Ray)

		Involvement with Product	
		High	Low
Perceived Product Differentiation	High	(Learning Model) Cognitive ↓ Affective ↓ Conative	(Low Involvement Model) Cognitive ↓ Conative ↓ Affective
	Low	(Dissonance / Attribution Model) Conative ↓ Affective ↓ Cognitive	

Source: Kruti Shah, Alan D'Souza (2010). 'Advertising & Promotions: An IMC Perspective.' Tata McGraw-Hill Publishers, New Delhi, p.195

As telecom services are becoming a commodity, consumers will be processing information as per the Low Involvement Model. Awareness level on the different telecom brands will be high in India due to the high penetration level of telecom services. A new consumer will choose a particular telecom service provider without elaborately getting into the details of comparing all the available brands. The quality of experience that the consumer has with the chosen telecom service provider is what is going to retain the consumer. The consumer will start thinking about Mobile Number Portability (MNP) only when the service provider starts messing with him.

SUGGESTIONS

As market saturation is imminent, there is no better time than now to focus on Customer Lifetime Value (CLV). To drive profits in this business, you must increase the average lifetime value per customer and minimize the service cost, even as service choices increase. To increase the average lifetime value per customer, it is important to achieve a high level of customer satisfaction. Achieving a high level of customer satisfaction in the telecom sector may be more like a moving target. Hence, it is important for telecom providers to continually access customer segments and identify the drivers of customer satisfaction so as to retain their profitable customers (Joshi, 2011).

If it costs ₹ X to acquire a subscriber, and you lose him to competition in a short duration of time, chances are you have lost money on him. Service providers simply cannot afford to lose high-value subscribers. This is even more important in 3G and 4G scenarios, where data is expected to help boost revenues, and the attempt is to get more voice users to access data or other revenue generating applications on their phones. Here, it is important to identify the right tool to be used to access the Customer Lifetime Value (Mallik, 2011). This research paper suggests the shift of importance from traditional branding practices to ensuring quality experience for the consumer across all the possible

touch points between the telecom brand and the consumer. Importance of operational excellence is significant in a commoditized telecom service.

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