

# ANALYSIS OF THE ANTECEDENTS OF CUSTOMER SWITCHING BEHAVIOUR IN MOBILE TELECOMMUNICATION MARKET

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## ABSTRACT

Mobile Number Portability (MNP) helps in increasing competition among the service providers, acts as a catalyst for the service providers to improve their quality of service and customer switching behaviour imminent with negative consequences such as declining market share and poor profitability. To ascertain the fundamental drivers of customer switching behaviour and association between demographic profile & switching behaviour, data was collected from one of the cosmopolitan city of northern India, Chandigarh and supplemented with secondary data collected from books, journals and internet. SEM results enticed cost, environment and service quality accounted for 83% variation in switching behaviour. Service quality emerged as the most important factor influencing switching behaviour followed by environment and least by cost as evident from the relevant SRW. Except for job profile, age and qualification were found to be associated with switching behaviour. To improve service quality, telecom companies are suggested to undertake mandatory training programme for front level employees, initiate differentiated customer relationship programmes and provide bundle of integrated value added services.

**Key words:** MNP, customer switching behaviour, differentiated customer –mix offerings

## INTRODUCTION

Promotion of competition and efficiency in the telecom sector, particularly in the area of mobile telecommunication, requires, inter alia, the facilitation of easy movement of subscribers from one service provider to another or across mobile technologies. Mobile Number Portability (MNP) allows the subscribers to retain their existing mobile telephone number when they move from one access provider to another irrespective of the mobile technology or from one cellular mobile technology to another of the same access provider, in a licensed service area. The facility of retention of existing mobile telephone number despite moving to a new telecom service provider helps the subscriber maintain contact with his friends/ clientele. Introduction of MNP helps in increasing competition between the service providers and acts as a catalyst for the service providers to improve their quality of service. MNP is implemented in different ways across the globe - Recipient –Led system (The International & European standard) and 'Donor Led' (U.K & India). In India, MNP has been launched on 20<sup>th</sup> January 2011 and the terminology was changed from PAC to UPC (Unique Porting Code). With the

MNP, switching costs are brought down, competition is encouraged, market stabilization is ensured, enhancement in termination charges, reduction in the aggregate profits in the industry on the whole, price volatility by entrants to steal business from the incumbent and reduction in the incumbents' incentive to make cost reducing investments.

## REVIEW OF LITERATURE

Long term business success is dependent upon building up the ability to manage networks, relationships and interactions (Gronroos, 1983 & Gummesson, 1987). In telecommunication industry, technologies are in continual development and market relations are frequently threatened by new or more aggressive competitors. Customer switching has become a critical issue with negative consequences such as declining market share and poor profitability (Keaveney, 1995). According to Byravee Iyer (2009) there are four factors that make customers stick to a service provider: A good network, service recovery, technology and great value for money. Dissatisfaction with service quality, product quality and price perpetuate switching behaviour among telecom subscribers (Parasuraman et al. 1994). Declining perceptual service quality with the core service, physical environment, interaction with the service providers, etc. also leads to switching (Bitner and Hubert, 1994). Continual upgradation of relational investments of mobile users through three constituent variables: service usage, duration of user provider relationship and service bundling desist users from migrating to a different service provider (Keaveney & Parthasarathy, 2001 and Tellis, 2002). Many research studies have focussed on two demographic variables namely age that influence users attitude towards switching (Gilbert & Hans, 2005 & Okazaki, 2006). Richard Lee, Jamie Murphy (2005) found price, technical service quality, functional service quality, switching costs, etc. which affects the customers to switch loyalties to another provider. Mohammed Sohel Islam (2008) found that trust has strongest relationship with customer loyalty than cost & corporate image and switching intentions is curvilinear i.e, positive linear and negative quadratic. Oyeniya & Abiodun (2008) found that when the customer is satisfied, then loyalty towards the telecom company is strengthened but if they do not complain – might switch. The switching determinants are: Influential trigger – price – partial change; Situational trigger – Range of goods – Partial change and Reactional trigger – Service policy – Total change (Johnson & Gustafsson, 2000 and Johnson, 2001). Complementary services also builds long term relationship with the firm (Lopez et al. 2006). Therefore, the paper focuses on understanding the fundamental drivers of switching behaviour and ascertain any association exist between demographic profile & switching behaviour.

## RESEARCH METHODOLOGY AND HYPOTHESES SETTING

A questionnaire was generated for circulation, which consisted of items of ordinal scale as well as open-ended for the public

to respond to. These questions were related to the awareness about MNP, added services offered and satisfaction with regard to telecommunication services offered by telecom companies. Respondents were contacted using convenience sampling technique, selection criteria being switched behaviour in the last three months. Sample respondents were from one of the cosmopolitan city of northern India, Chandigarh. Secondary data were collected from books, journals and internet. Two hypotheses were set for the study

**Hyp1:** Cost, environment and service quality contribute significantly to switching Behaviour in mobile telecommunication market.

**Hyp2:** Switching behaviour in mobile telecommunication market is associated with demographic profile of the customers.

Collected responses were reduced through factor analysis carried with Principal Component Analysis method along with the orthogonal rotation procedure or varimax for summarizing the original information with minimum factors and optimal coverage. The statements with factor loading and communalities less than 0.5 and Eigen values less than 1.0 were ignored for the subsequent analysis (Hair et al., 2007). The data reduction was performed in three steps-First, in the anti-image correlation matrix the items with value less than 0.5 on the diagonal axis were deleted. In the second step, the extracted communalities were checked (amount of variance in each variable) and items with values less than 0.5 were ignored for the subsequent analysis. In the third step, in the rotated component matrix statement with multiple loading and values less than 0.5 were ignored.

After series of rounds, out of initial 28 statements only 11 were retained and classified under three factors namely, cost (4 items), environment (3 items) and service quality (4 items). Dimension-wise composite reliability of the factors were cost (.666), environment (.729) and service quality (.767). The variance explained and KMO value of the three factors were 50.916% & .662, 78.68% & .692 and 59.18% & .697 respectively.

Face validity of the construct was assessed through review of literature and discussions with experts. Convergent validity was checked with the help of Bentler-Bonett coefficient and the value above 0.90 indicated strong convergent validity. Discriminant validity was tested through variance extracted for each construct was greater than squared correlation between them. Nomological validity was proved as the construct provided theoretical relationship among different constructs.

Table 1 shows descriptive characteristics of the 100 sample respondents. Majority of the respondents were male, below 25yrs. of age, undergraduate, students and shifted from BSNL and others to Airtel followed by Vodafone.

**Table 1: Descriptive Characteristics of Respondents**

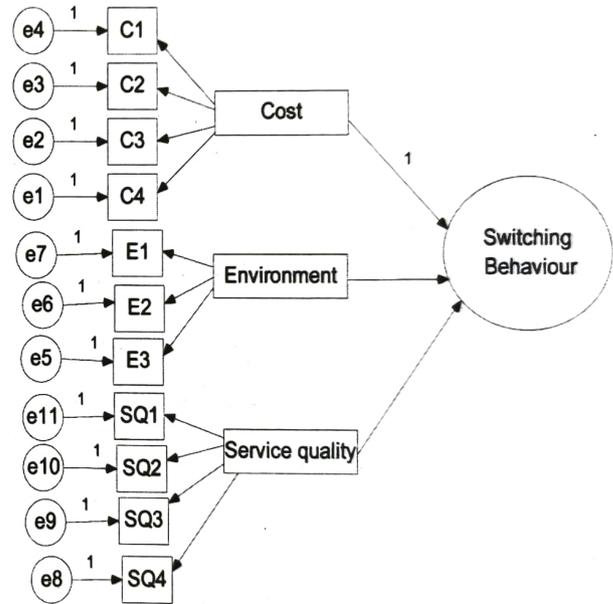
Variables	Description	Number	%
Gender	Male	64	64
	Female	36	36
Age (Yrs.)	Below 25	48	48
	25-40	12	12
	40-60	32	32
	Above 60	8	8
Qualification	Under graduate	40	40
	Graduate	32	32
	Post graduate	28	28
Job profile	Business	8	8
	Govt. jobs	16	16
	Others	12	12
	Private job	12	12
	Students	32	32
	Existing service provider	Vodafone	32
Existing service provider	Airtel	40	40
	BSNL	8	8
	Idea	4	4
	Reliance	8	8
	Aircel	8	8
	Others	4	4
Old service provider	Airtel	24	24
	BSNL	24	24
	NA	32	32
	Reliance	4	4
	Vodafone	16	16

**DATAANALYSIS & INTERPRETATION**

**Analysis of antecedents of switching behaviour**

This was tested using Structural Equation Modelling (SEM). SEM go beyond ordinary regression models to incorporate multiple independent and dependent variables as well as hypothetical latent constructs that clusters of observed variable might present. It also provides a way to test the specified set of relationships among observed and latent variables as whole (MacCallum and Austin, 2000). Fig 1 shows impact of cost, environment and service quality on latent construct of switching behaviour. Exploration of factor-wise impact of cost, environment and service quality revealed that all factors account for 83% variation in switching behaviour ( $R^2 = .834$ ). Service quality emerges as the most important factor

**Fig 1 : Antecedents of Switching Behaviour**



**Table 2: Fitness Criteria of Various Measurement Models (CFA)**

Constructs	Chi-Square	df	GFI	AGFI	RMR	RMSEA	CFI	NFI
Cost	2.731	2	.986	.932	.046	.061	.988	.959
Environment	4.624	1	.941	.923	.003	.190	.100	.912
Service quality	.40	1	.998	.976	.011	.0000	1.000	.996

**Table 3: Fitness Criteria under Structural Equation Modelling**

Dependent variable	Independent variable	SRW	CR	R <sup>2</sup>	Other Values
Switching behaviour	Cost	.677	.666	.843	
	Environment	.546	.729		
	Service quality	.792	.767		
Chi square					4.829
GFI					.923
CFI					.999
RMR					.011
AGFI					.863

influencing switching behaviour followed by environment and least by cost as evident from the relevant SRW.

**Impact of demographic factors on switching behaviour**

Association of age, qualification and job profile with switching behaviour was analysed using Chi-square. Age, qualification and job profile were classified into two groups namely, below 25 yrs. & above 25 yrs. ,graduate & post graduate and students & service /business class. Except for job profile, age and qualification were found to be associated with switching behaviour ( Table 4) as the  $p < 0.05$ .

**Table 4: Association of Demographic Variables with Switching Behaviour**

Demographic variables	Pearson Chi-Square value	Df	Sig
Age	11.278 <sup>a</sup>	1	.001
Qualification	15.737 <sup>b</sup>	1	.000
Job profile	21.234 <sup>c</sup>	1	.565

- a: 0% cell have expected count less than 5. The minimum expected count is 20.68
- b: 0% cell have expected count less than 5. The minimum expected count is 21.15
- c: 0% cell have expected count less than 5. The minimum expected count is 22.09

**CONCLUSION & MANAGERIAL IMPLICATIONS**

Customer retention in mobile telecommunication market is highly competitive and telecom companies are focussing on a good network, prompt service recovery, technology and great value for money to retain customers. Results indicated that service quality followed by environment & cost effects switching behaviour. Age and qualification are associated with switching than job profile among mobile users in UT of Chandigarh. To improve service quality , telecommunication companies can undertake mandatory training programme for few weeks for front level employees so that favourable service encountered with customer could be built. Several companies have also initiated customer relationship programmes such as Anubhav, pulse, touch-point programme wherein customers meet company executives for prompt redressal for their grievances. Long time relationship with customers could also be built by providing bundle of integrated services that include telecommunication direct to home and broadband services. A differentiated customer relationship model based on revenue

per minute, cost per minute and margin per minute could also be designed for different segments of the customers and delivering offerings up to their expectations. In future a longitudinal study on switching behaviours of banking ,insurance, hotelling, IT enabled service etc. on a large sample size could be taken up.

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