Age as a Determinant of Customer Loyalty:  
Study of Mobile Subscribers

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ABSTRACT

Customer Loyalty has always remained a much sought after but equally elusive goal for every company and it is more true in case of highly competitive mobile telephone industry. This paper attempts to understand the various facets of customer loyalty with respect of customers belonging to different age groups in mobile industry. Data was collected from 530 mobile users in Gwalior region whose ages varied from 15 years to 80 years. Findings suggest that level of customer loyalty varies with age.

Keywords: Customer Loyalty, ANOVA, Scheffe’s Post hoc Test.

INTRODUCTION:

India is a country with one of the largest subscribers in telephone sector in the world. As per December 2018 count there were almost 1200 million telephone users out of which almost 530 million subscribers belonged to rural India only. With second position in the world in terms of total number of telephone users, India’s teledensity has reached 91.45% which breaks into 159.8% teledensity for urban India and 59.5% for rural India. As every big business house saw an opportunity in this sector, competition too has intensified as so many service providers jumped into the fray. Fierce competition has been forcing every company in the industry to pay utmost attention to improve customer loyalty. This research paper is an effort to disentangle the riddle about customer loyalty in respect to age of the telephone subscribers.

PURPOSE OF THE STUDY:

The paper aims to achieve following objectives:
1. To delineate concept of Customer Loyalty
2. To understand Customer Loyalty with respect of customers belonging to different age groups.

LITERATURE REVIEW:

Customer Loyalty:
Loyalty is defined in terms of attitude which leads to a relationship with the product or brand resulting in commitment to buy again and again. Loyalty is a revealed behavior resulting in brand acceptance which causes repeat purchase. Another concept loyalty is based on individual’s attributes, circumstances, and the purchase circumstances which results in chance buying of a particular brand.
Engel et al., (1982) studied brand loyalty and categorized it as preferential, attitudinal, and behavioral response of consumers shown towards one or more brands in a product category again and again.
Several studies attempted to find the antecedents of customer loyalty. Lee, Lee,& Feick, (2001) suggested that efficacious method of developing customer loyalty is to keep customer delighted.
Customer Loyalty and Customer Retention:

Earlier studies did not try to differentiate between customer retention and customer loyalty and both of the terms were used interchangeably to denote the same phenomenon (Zenithal et al., 1996; Reichheld and Sasser, 1990). This research paper also continues with the same approach and both the terms Customer Loyalty as well as Customer retention describe the same concept.

Several studies consider switching cost as an important variable which moderates the influence of customer loyalty through customer satisfaction (Fornell, 1992; Lee et al., 2001; Oliver, 1999).

All marketing companies cherishes Customer Loyalty as a cherished goal (Reichheld & Schefter, 2000). Dawes and Swailes (1999) propounded that high customer loyalty is critically important for successful customer retention, and firms who compete on the basis of loyalty will be winner in long run.

Customer Loyalty as a construct has evolved gradually over past many years and initially the emphasis was on loyalty towards tangible goods only (Day, 1969).

Dick and Basu 1994 categorized customer loyalty into 3 types as brand loyalty, service loyalty, and store loyalty. Customer loyalty is directly connected to company’s revenue. A loyal customer brings higher profitability to the firm by 1) increasing the buying frequency 2) increasing the expenditure by patronizing new products and services 3) recommending the advantages to others and 4) providing useful feedback which further improves the service (Reichheld and Sasser 1990).

Day (1964) concluded that there is more to brand loyalty than just regular purchasing of same brand. Jacoby and Chestnut (1978) in a later study defined brand loyalty by incorporating both behavioral and attitudinal constituents. Brand loyalty is the extent of the faithfulness shown by the consumers’ for a particular brand, expressed through their repeat purchases, despite of the marketing pressure generated by the competitors. Brand loyalty is non random behavioural response expressed over time by some decision making unit with regard to one or more brands out of a set of brands and is a function of psychological processes Jacoby and Chestnut, (1978).

A study by Gremler and Brown (1996) revealed that most of past studies on customer loyalty were largely about goods related and research about customer loyalty pertaining to service firms were almost missing. They further opined construct of goods related customer loyalty cannot be generalized in context of service related customer loyalty because of following reasons:

Person to person interaction is an essential element in marketing of services Suprenant and Solomon, (1987). Impact of perceived risk is larger in case of services, as customer loyalty may act as a barrier to customer switching behaviour Zeithaml, (1981).

Intangible attributes like reliability, and confidence may play a vital role in building or maintaining loyalty in the context of services Dick and Basu, (1994).

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A person to person interface is an essential attribute in marketing of services Suprenant and Solomon, (1987). Perceived risk plays a larger role case of services, as customer loyalty proves as a constraint in customer switching behaviour Zeithaml, (1981).

Reliability, and confidence which are intangible attributes may play a crucial role in developing and maintaining loyalty services context Dick and Basu, (1994).

Geropott et al., (2001) studied the linkages between customer satisfaction and customer loyalty in mobile service sector in Germany. They discovered that three constructs, namely, customer satisfaction, customer loyalty and customer retention are different from each other. Customer satisfaction causes customer loyalty, which results in customer retention.

RESEARCH METHODOLOGY:

Data Collection:

530 mobile users were questioned to understand the trends about customer loyalty. They belonged to different ages between 15 years to 80 years.

Research Design:

To collect data from the subscribers a questionnaire was designed based on 5 point Likert scale. The questionnaire had 5 items which were chosen after elaborate review of literature.
Measurement Scale:
A 5 item scale derived from the work of Morgan and Hunt (1994) was deployed to measure customer loyalty. The items in the scale are listed below:
1. I would like to continue with my present service provider for next 6 months.
2. I would like to continue with my present service provider for next one year.
3. I would like to continue with my present service provider for next two year.
4. I would suggest the services of my telephone service provider to my relatives and friends.
5. If I were to choose mobile service provider once again I will choose my current service provider once again.

Following Null hypothesis was designed to serve the purpose of the study:
H0: No significant difference was found in the degree of customer loyalty among the subscribers of different age groups.

Age of Respondent:
Subscribers’ age is one of the key determinant which shapes the expectation and perception of subscribers regarding diverse aspects of service quality delivered by mobile service providers. Service quality lays foundation for customer satisfaction which in turn determines the degree of customer loyalty. Hence, the present study revolves around the age of subscribers. The data came from subscribers with age ranging from 15 years to 80 years.
To carry out the study systematically the subscribers were put into 5 different groups on the basis of their age.
Group 1 had subscribers with age below 20 years.
Group 2 had subscribers with age between 21-35 years.
Group 3 had subscribers with age between 36-45 years.
Group 4 had subscribers with age was between 46-60 years.
Group 5 had subscribers with age between 61-80 years.

Table 1 shows break up of subscribers belonging to different sub categories

| Group | Age       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| 1.00  | Under 20  | 50        | 9.4     | 9.4           | 9.4                |
| 2.00  | 21-35     | 149       | 28.1    | 28.1          | 37.5               |
| 3.00  | 36-45     | 139       | 26.2    | 26.2          | 63.8               |
| 4.00  | 46-60     | 119       | 22.5    | 22.5          | 86.2               |
| 5.00  | 61-80     | 73        | 13.8    | 13.8          | 100.0              |
| Total |           | 530       | 100.0   | 100.0         |                    |

Table 1 shows that prominent groups are 2, 3 and 4 as they collectively constitute almost 75% of subscribers whose age varies from 21 to 60 years. About 10% subscribers had age less than 20 years and 12% subscribers were above 60 years of age.
DATA ANALYSIS:
Reliability of the questionnaire used for measuring of Customer Loyalty was checked with the help of SPSS and result was as follows:

| Number of Items | Cronbach's Alpha |
|-----------------|------------------|
| 5               | .836             |

With .836 value of Chronbach alfa was, the scale was found reliable as per reference value of .7 set by Nunally(1978).
Having done Reliability test, the Null hypothesis was put to test by using ANOVA and there after Scheffes’s Test for post hoc analysis.

**H0:** No significant difference was found in the degree of customer loyalty among the subscribers of different age groups.
ANOVA (One way) was used to test the above hypothesis. Output is shown in the table 2 as generated by SPSS. The table 2 shows the F value of 7.7 which is significant at 5% level of significance as the p-value is .000 which is much less than the reference value of .05. It conveys that above Null Hypothesis is rejected and it is concluded that there is significant difference in the degree of customer loyalty among the subscribers of different age groups.

### Table 2: One Way Anova: Customer Loyalty & Different Age Groups

|                         | Sum of Squares | df | Mean Square | F    | Sig. | NS/S |
|-------------------------|----------------|----|-------------|------|------|------|
| Between Groups          | 19.7           | 4  | 4.9         | 7.7  | .000 | S    |
| Within Groups           | 333.8          | 525| .6          |      |      |      |
| Total                   | 353.5          | 529|             |      |      |      |

S- Significant
NS- Not Significant

**Customer Loyalty and Age: Post hoc test:**
To identify the age group which differs significantly from other groups on the basis of customer loyalty’s mean score, Post Hoc test was deployed and the method used was Scheffe’s method because numbers of subscribers in each group differed in number. The received outcome is compared in table 3.

### Table 3: Post hoc test by Scheffe’s method : Customer Loyalty & Age

| (I) Age of subscriber | (J) Age of subscriber | Mean Difference (I-J) | Std. Error | Sig. | NS/S |
|-----------------------|-----------------------|-----------------------|------------|------|------|
| Under 20              |                       |                       |            |      |      |
| 21-35                 | 21-35                 | .153                  | .130       | .846 | NS   |
| 21-35                 | 36-45                 | -.156                 | .131       | .842 | NS   |
| 21-35                 | 46-60                 | -.116                 | .134       | .944 | NS   |
| 21-35                 | 61-85                 | -.672                 | .146       | .000 | S    |
| 21-35                 | Under 20              | .153                  | .130       | .846 | NS   |
| 36-45                 | Under 20              | .002                  | .094       | 1.000| NS   |
| 36-45                 | 46-60                 | .036                  | .098       | .998 | NS   |
| 36-45                 | 61-85                 | -.518                 | .113       | .000 | S    |
| 36-45                 | Under 20              | .156                  | .131       | .842 | NS   |
| 46-60                 | 21-35                 | .002                  | .094       | 1.000| NS   |
| 46-60                 | 46-60                 | .039                  | .099       | .997 | NS   |
| 46-60                 | 61-85                 | -.516                 | .115       | .001 | S    |
| 46-60                 | Under 20              | .116                  | .134       | .944 | NS   |
| 36-45                 | Under 20              | .036                  | .098       | .998 | NS   |
| 36-45                 | 36-45                 | .039                  | .099       | .997 | NS   |
| 36-45                 | 61-85                 | -.555                 | .118       | .000 | S    |

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To ascertain the age group which differs from other groups post hoc test was used and it was carried by using Scheffe’s method because numbers of subscribers were different in different groups.

Table 3 shows the results of Scheffe’s test which conveys that 5th age group (61 years to 85 years) differs from all the other Age groups i.e.1 (Under 20), 2 (21 to 35), 3 (36 to 45) and 4 (46 years to 60 years)

Figure 2 shown below emphasizes that 5th group subscribers who are 61 years to 85 years old are significantly different from other groups i.e. 1st, 2nd, 3rd and 4th in terms of mean score for subscribers’ Customer Loyalty.

**Figure 2: Customer Loyalty Mean : Age of subscribers**

| (I) Age of subscriber | (J) Age of subscriber | Mean Difference (I-J) | Std. Error | Sig. | NS/S |
|-----------------------|-----------------------|-----------------------|------------|------|------|
| 61-85                 | Under 20              | .672*                 | .14638     | .000 | S    |
|                       | 21-35                 | .518*                 | .113       | .000 | S    |
|                       | 36-45                 | .516*                 | .115       | .001 | S    |
|                       | 46-60                 | .555*                 | .118       | .000 | S    |

S –Significant
NS–Not Significant,

**FINAL CONCLUSION:**

Differences in the degree of customer loyalty was found among the subscribers belonging to different age groups. Subscribers of 5th group whose age was between 61 years to 85 years showed significantly higher degree of loyalty towards their telephone service provider in comparison to 1st, 2nd, 3rd and 4th age group whose age varied from 20 years to 60 years . The explanation for this higher degree of loyalty could have been partly due to higher level of satisfaction towards telephone service providers and partly due to their reluctance and inertia to change their telephone service provider at this age.

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