A Study on Comparative Analysis of Impact of Price Reduction on Bharti Airtel and Idea Cellular Customers with Special Reference to Eastern Rajasthan, India

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Abstract

The increase in number of players in cellular telephony has raised the expectation level of customers compelling firms to devise various marketing-mix strategies to gain competitive edge. Thus, the main objective of this research is to comparatively study impact of price reduction among customers and employees of Bharti Airtel and Idea Cellular. The exploratory study involves a sample of 250 existent customers and 25 employees for Bharti Airtel and Idea Cellular respectively and the methodology employed is structured questionnaire for customers and employees separately with reference to eastern Rajasthan. By identifying the impact of price reduction on customer decisions the present research will contribute to understanding the significance of pricing strategy. It would also enable marketing managers to identify the impact of price reduction on STD and local calls, internet usage and messaging. The study also attempts to analyze whether customers suggested the subscriber to friends and relatives when prices were lowered. The study will assist service marketers in understanding the relationship between price reduction and customer usage.

Key words: Telecommunication services, Bharti Airtel, Idea Cellular, Eastern Rajasthan, Price reduction.

Introduction

Telecommunication sector in India has contributed significantly to the country's economy with signs of profitability. The key players in telecommunication are Bharti Airtel, Reliance Communication, Vodafone, Idea, BSNL and Tata Communications.

Opportunities in the sector have brought in its own set of challenges as the industry currently is fiercely competitive and aggressively contested by fifteen big and small telecom service providers. With the entry of new players competition in the industry has heightened and share of established players has skid.

The intensified competition in the telecommunication sector has lead consumers to enjoy sumptuousness of choice and higher bargaining power. Telecom companies in current times are becoming customer centric and are striving hard for distinction in the way they deliver services to the customers. Today, the marketer is expected to carefully design the marketing-mix elements with due consideration to price. Thus, the aim of the current research is to determine the influence of price reduction on customer decisions.

Organizations Studied
Bhart Airtel Limited
Bharti Airtel Limited headed by Sunil Bharti Mittal is a leading telecommunication service provider with its services and operations in 20 countries across Asia and Africa having headquarters in New Delhi. In India, it provides 2G, 3G and 4G services, fixed line, high speed broadband through DSL, IPTV and DTH. Bharti Airtel is segregated into four strategic business units - Mobile, Telemedia, Enterprise and Digital TV. Airtel is the world's fourth largest mobile telecommunications company by subscribers, with over 275 million subscribers across 20 countries as of July 2013. It is the largest cellular service provider in India, with 192.22 million subscribers as of August 2013.

Overview of Idea
An Aditya Birla Group Company, Idea Cellular held excess revenue of $4 billion; nearly 15% market share; and over 121 million subscriber base in the year 2013. Idea has been certified ISO 9001:2008 for its customer service delivery platform for all 22 service areas. Idea leads all other telecom operators in India in the MNP (Mobile Number Portability) race, with a net gain of 1,031,380 subscribers as on 31 August 2011. Idea also leads all other competitors in having the most active subscriber base, scoring highly on the Visitor Location Register (VLR) statistics. The services offered by Idea includes Android based 3G Smartphone, dongles etc. with a wide range of 3G applications and high-end data services such as Idea TV, games, social networking etc. at moderate prices.

Objectives of the Study
The main objectives of the present study are as follows:
- To study the effect of price reduction on consumers in case of telecommunication services.
- To comparatively analyze the influence of price reduction on Airtel and Idea Cellular customers.
- To study Airtel and Idea Cellular employee's perception regarding impact of price reduction on customers.

Methodology
The methodology of collecting and interpreting data is as follows:

Hypothesis of the Study
  H_1: There is no significant impact on usage of telecom services on account of price reduction among Bharti Airtel and Idea Cellular customers.
  $H_{1(a)}$: There is significant impact on usage of telecom services on account of price reduction among Bharti Airtel and Idea Cellular customers.

Research Sample
The present study has been conducted on two Indian telecom giants, Airtel and Idea. The study is carried in four cities of Eastern Rajasthan with varied demographics. A pilot survey was conducted on a sample of 50 respondents drawn from Jaipur city on convenience basis. An online sample size calculator provided by Raosoft.com was used to calculate sample size. A minimum of 385 respondents were recommended by the software for the survey. The final sample size taken for the study was 550. Customers were drawn on the basis of multi-stage sampling while purposive sampling technique was employed for employees.

Sample size – The sample size was distributed as following-
- **Employees**: Total of 50 Employees from sales and marketing department were chosen as respondents from Rajasthan Circle office based in Jaipur City.

- No. of Employees of Idea Cellular (Rajasthan circle office) - 25
- No. of Employees of Bharti Airtel (Rajasthan circle office) - 25

- **Customers:** Total 500 customers from Jaipur, Bharatpur, Alwar and Dausa were chosen as respondents.
  - No. of Customers of Idea Cellular – 250
  - No. of customers of Bharti Airtel – 250

The research was limited to four districts with 100 respondents from Jaipur and 50 each from Bharatpur, Alwar and Dausa for each Airtel and Idea.

Table 1 District-wise Number of Respondents

Category of Respondents	Name of Unit	No. of Respondents (Bharti Airtel)	No. of Respondents (Idea Cellular)
Employees	Jaipur (Rajasthan Circle office)	25	25
Customers	Jaipur	100	100
	Dausa	50	50
	Alwar	50	50
	Bharatpur	50	50
	Total	275	275

The demographic data for customers were tabulated in Table 2:

Table 2 Demographic Profile of Customers

Demographic Variables	Factors	Airtel (%)	Idea (%)
Age	15-40 years	95.2%	92%
	40-60 years	4.8%	8%
Educational Qualification	Under Graduates	48.4%	41.2%
	Graduates	30%	29.2%
	Post Graduates	10.8%	11.2%
	Professional	3.2%	3.2%
	Others	7.6%	15.2%
Occupation	Students	56.4 %	41.2 %
	Service	18%	30%
	Self-employed	25.6%	25.6%
	Housewives	---	3.2%
Type of connections	Pre-paid	91.6%	98%
	Post-Paid	8.4%	2%
Duration of usage of services	Less than 1 month	2.8%	2.4%
	2-6 months	20.8%	9.6%
	6-12 months	10.4%	7.2%
	More than a year	66%	80.8%

Data Collection Tool

A consumer and employee survey was carried out using structured questionnaire designed separately for both. The selected respondents in both cases responded to 12 statements on 5-point Likert Scale (1=Strongly disagree to 5=Strongly agree). The data was collected using face to face interview. On account of price reduction the impact on STD and local calls, internet usage and messaging has been explored. The study also attempted to analyze whether customers suggested the subscriber to friends and relatives when prices were lowered.

Data Analysis

Reliability Analysis has been done to measure internal consistency of variables. Cronbach's alpha has been used to measure internal consistency. For the purpose of testing hypotheses Independent T-Test and Chi-square test have been considered.

The Independent T-Test compared the means between two unrelated groups Airtel and Idea on the same continuous, dependent variables. The SPSS T-Test method allowed the testing of equality of variances (Levene's test) and the *t*-value for both equal- and unequal-variance. It also provided the relevant descriptive statistics.

In the present study the internal consistency of two questionnaires was found to be strong and reliable as the Cronbach's alpha score was close to 1. Table 3 shows reliability score of 0.852 for questionnaire related to customers and Table 4 shows the reliability score of 0.897 for questionnaire related to employees.

Table 3 Reliability Analysis of Questionnaire for Customers

Reliability Statistics	
Cronbach's Alpha	N of Items
0.852	72

Table 4 Reliability Analysis of Questionnaire for Employees

Reliability Statistics	
Cronbach's Alpha	N of Items
0.897	76

Low Cost Strategy

Effect of Price Reduction: Consumer's Response

Null Hypothesis: There is no significant impact on usage of telecom services on account of price reduction among Bharti Airtel and Idea Cellular customers.

Table 5 Effect of Price Reduction on Airtel and Idea Customers

Group Statistics					
	Organization	N	Mean	Std. Deviation	Std. Error Mean
The usage remains same	Idea	250	2.79	1.146	.072
	Airtel	250	2.65	1.103	.070
Increased local calls of long duration	Idea	250	3.56	.977	.062
	Airtel	250	3.82	.752	.048
Increased STD calls of long duration	Idea	250	3.14	.954	.060
	Airtel	250	3.20	.917	.058
Increased Messaging	Idea	250	3.38	.880	.056
	Airtel	250	3.45	.981	.062
Increased Internet usage	Idea	250	3.12	1.119	.071
	Airtel	250	3.53	.998	.063
Suggested subscriber to friends and relatives	Idea	250	3.93	.905	.057
	Airtel	250	3.72	.751	.047

Table 6 T-Test for Effect of Price Reduction on Airtel and Idea Customers

Independent Samples Test		Levene's Test for Equality of Variances		T-Test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
The usage remains same	Equal variances assumed	.613	.434	1.431	498	.153	.144	.101	-.054	.342
	Equal variances not assumed			1.431	497.269	.153	.144	.101	-.054	.342
Increased local calls of long duration	Equal variances assumed	32.495	.000	-3.334	498	.001	-.260	.078	-.413	-.107
	Equal variances not assumed			-3.334	467.487	.001	-.260	.078	-.413	-.107

Increased STD calls of long duration	Equal variances assumed	.961	.327	-.621	498	.535	-.052	.084	-.216	.112
	Equal variances not assumed			-.621	497.207	.535	-.052	.084	-.216	.112
Increased Messaging	Equal variances assumed	2.210	.138	-.816	498	.415	-.068	.083	-.232	.096
	Equal variances not assumed			-.816	492.212	.415	-.068	.083	-.232	.096
Increased Internet usage	Equal variances assumed	3.315	.069	-4.386	498	.000	-.416	.095	-.602	-.230
	Equal variances not assumed			-4.386	491.697	.000	-.416	.095	-.602	-.230
Suggested subscriber to friends and relatives	Equal variances assumed	1.939	.164	2.851	498	.005	.212	.074	.066	.358
	Equal variances not assumed			2.851	481.640	.005	.212	.074	.066	.358

Table 6 shows different values of Independent T-Test, Levene's F-test for equality of variances and significance probability for effect of price reduction on the usage of services at Airtel and Idea.

Description
The Levene's Significance value for increased local calls of long duration │p =.000│ i.e. │p < .05│. This means that the variability in the two conditions is not the same. The Sig. (2- Tailed) value for increased local calls of long duration │p =.001│ i.e. │p< .05│ and is statistically significant.

The Levene's Significance value for usage remains same │p =.434│, Increased STD calls of long duration │p =.327│, Increased Messaging │p =.138│, Increased Internet usage │p =.069│, and Suggested subscriber to friends and relatives │p =.164│ i.e. │p > .05│. This explicates that the variability in two conditions is about the same. The Sig (2-Tailed) value for Increased Internet usage │p =.000│ and Suggested subscriber to friends and relatives │p =.005│ i.e. │p < .05│ and is statistically significant. The Sig. (2-Tailed) value for the usage remains same │p =.153│, Increased STD calls of long duration │p =.535│, and Increased Messaging │p =.415│ i.e. │p > .05│ which is statistically not significant.

Interpretation

The mean from Group Statistics box (Table 5) divulged that when price of products and service were reduced at Airtel and Idea, significant changes were observed. Customers of Airtel made more local calls of long duration and increased usage of internet as compared to Idea customers. Though effect of price reduction was more in case of Airtel, the extent of suggesting brand Idea to Friends & relatives on account of price reduction was high at Idea.

Since $\mu 1 \neq \mu 2$ for some variables of low-pricing strategy, null hypothesis is rejected and alternate hypothesis is accepted. Here it can be concluded that there was significant effect of price reduction on the usage of product and services.

Effect of Price Reduction: Employee's Response

Table 7 Effect of Price Reduction on Idea and Airtel customers (Employees Perspective)

Group Statistics					
	Organization	N	Mean	Std. Deviation	Std. Error Mean
Increased Product Usage	Idea	25	3.92	.759	.152
	Airtel	25	3.84	.624	.125
Increased Market share	Idea	25	4.20	.816	.163
	Airtel	25	3.64	.700	.140
Increased Consumer base	Idea	25	4.16	.746	.149
	Airtel	25	4.00	.577	.115
Increased Revenues	Idea	25	4.16	.898	.180
	Airtel	25	3.44	.821	.164

Table 8 T-Test for Effect of Price Reduction on Idea and Airtel customers (Employees Perspective)

Independent Samples Test		Levene's Test for Equality of Variances		T-Test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Increased Product Usage	Equal variances assumed	.554	.460	.407	48	.686	.080	.197	-.315	.475
	Equal variances not assumed			.407	46.274	.686	.080	.197	-.316	.476
Increased Market share	Equal variances assumed	.158	.693	2.603	48	.012	.560	.215	.128	.992
	Equal variances not assumed			2.603	46.906	.012	.560	.215	.127	.993
Increased Consumer base	Equal variances assumed	2.454	.124	.848	48	.401	.160	.189	-.219	.539
	Equal variances not assumed			.848	45.157	.401	.160	.189	-.220	.540
Increased Revenues	Equal variances assumed	.107	.745	2.959	48	.005	.720	.243	.231	1.209
	Equal variances not assumed			2.959	47.614	.005	.720	.243	.231	1.209

Table 8 shows different values of Independent T-Test, Levene's F-test for equality of variances and significance probability for effect of price reduction on the usage of services at Airtel and Idea.

Description

The Levene's Significance value for Increased Product Usage $\lfloor p = .460 \rfloor$, Increased Market share $\lfloor p = .693 \rfloor$, Increased Consumer base $\lfloor p = .124 \rfloor$, Increased Revenues $\lfloor p = .745 \rfloor$ i.e. $\lfloor p > .05 \rfloor$. This explicates that the variability in two conditions is about the same. The Sig (2-Tailed) value for Increased Market share $\lfloor p = .012 \rfloor$ and Increased Revenues $\lfloor p = .005 \rfloor$ i.e. $\lfloor p < .05 \rfloor$ which is statistically significant. The Sig (2-Tailed) value for Increased Product Usage $\lfloor p = .686 \rfloor$ and Increased Consumer base $\lfloor p = .401 \rfloor$ i.e. $\lfloor p > .05 \rfloor$ which is statistically not significant.

Interpretation

The mean from Group Statistics box (Table 7) revealed a significant increase in market share and revenues for Idea and Airtel. This implies that there was significant effect of price reduction among both Airtel and Idea customers. According to employees of Idea there was an increase in number of new customers when price was reduced. Employees at Idea also verified increase in usage of telecommunication services among existing customers on account of price reduction.

Therefore, it can be concluded that employees of both telecommunication players agreed that there is significant difference in the usage of services when price was reduced.

Findings, Conclusions and Policy Recommendations

From the findings of this research, it can be inferred that telecommunication companies need to focus on cost leadership pricing strategy while devising marketing strategies. Based on the survey results it can be concluded that price reduction had a significant impact on both Airtel and Idea customers. The study unveiled that when the price of product and services were reduced, customers used telecom services more than before, which in turn increased revenue. The study further revealed that customers referred Airtel and Idea to their friends and relatives which increased market share and consumer base.

This finding can assist marketers in devising effective pricing strategies for their services and reinforces the fact that price plays a significant role in customers decision making.

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