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A REVIEW OF MONOPOLISTIC COMPETITION AMONG INTERNET SERVICE PROVIDERS

Jehangir Bharucha

Vice Principal H R College, Mumbai, India.

ABSTRACT

The purpose of this research paper is to explore and analyse the monopolistically competitive Internet Service Providers' (ISPs) market structure in Mumbai and their operative strategies. Assessing the various factors at play, the project focuses on the relative effect of the corresponding marketing strategies on subscribers and attempts to identify how inconsistencies between the assured services and its subsequent delivery, results in failing to capture the competitive advantage that is observed in other marketplaces. Factoring in the opinions and feedback of the survey respondents, as well as the conceptual tactics of non-price competition and product or service differentiation in a monopolistic market, the study proposes an informed framework to tackle the existing issues therein.

Key Words: Competition, Internet service providers, Strategies.

INTRODUCTION

Web penetration is increasing at a brisk pace, partly fuelled by easy internet access on smartphones and the addition of certain economical subscription plans. As per a recent report by NASSCOM, India's Internet base is likely to cross 730 million by 2020.

With the population of Mumbai bursting at the seams, the city currently has an internet user base in excess of 1.2 crores, much higher than any other city in the country. For the purpose of this project, monopolistic competition is studied among the following three Internet Service Providers (ISPs) that are meant for home / domestic customers in Mumbai:

1. Mahanagar Telephone Nigam Limited – *MTNL*
2. Tata Teleservices Limited – *Tata*
3. Reliance Communications Limited – *Reliance*

RESEARCH OBJECTIVE

The objectives established for this project provide a direction to the study and analysis of the current home internet services landscape and puts forth certain recommendations that could enhance the overall effectiveness of service delivery.

The primary research is aimed at achieving the following objectives:

- To review the internet services provided by various ISPs, their pricing and marketing strategies.
- To determine the advantage of the differential service offerings
- To examine various challenges faced by customers while availing of such services.
- To propose measures based on the analysis presented and suggest a methodical approach towards improving the service providers' operational strategies that would lend a competitive advantage.

PRIMARY DATA

A research survey was created using an online application. The survey was distributed to 60 respondents via email. In addition to gathering the personal details of the respondents, the survey consisted of a total of 21 questions. The data gathered from this would contribute toward understanding the market structure and deducing how certain systemic changes could help advance the general industry functioning.

Age-wise and Gender-wise profile of the respondents:

Corresponding Author:

Dr. Jehangir Bharucha, Vice Principal H R College, Mumbai, India.

E-mail: drjehbharucha@gmail.com

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Approximate Age Group	No. of respondents	Male	Female
18-25	34	22	12
26-45	17	12	5
45 and above	9	7	2
Total	60	41	19

Notes

- While selecting the target audience, the mixed age groups of the consumers have been kept in mind.
- Though the researcher has made the attempt to get a balanced proportion of respondents from every age group, there is a specific focus on the age groups of 18-25 and 26-45 with a view to get responses from those people who make the decision of selecting a particular internet plan.
- A few responses were also specifically administered to people in distinct regions of Mumbai to cover for the regional internet service differences.

SECONDARY DATA

Certain parts of the study have also been compiled through various secondary data sources. These include online news articles, research papers, websites and reliable review sites. Wherever possible, this content has been integrated with the findings of the primary data. The information obtained through secondary references facilitated the analysis of data collected through the survey. Secondary data is also used to detail out particular recommendations and facts that would contribute towards achieving the objectives of this project.

PRIMARY RESEARCH FINDINGS & DISCUSSION

Table 1: Internet Connection Type (*select multiple, if applicable*)

Connection Type	No. of responses
Dial-up service	-
DSL Broadband	50
Fibre Broadband	4
Cable Internet Connection	6
Data Card	26
Total	86

As seen in the table, respondents predominantly use a DSL Broadband service, which is also referred to as high speed

internet. Data Cards are used by 26 respondents. For the most part, data cards are used for their portability function – that is, one can use it while travelling; while only a small percentage use it as their primary internet connection.

The survey statistics clearly indicate that most people using a data card, already have another type of internet connection. It was also found that most people using a data card and another internet connection fall in the age group of between 18 to 25 years.

In Mumbai, DSL Broadband is the most widely used broadband or high speed internet connection type for home purposes. On the other hand, as indicated in the table, a very small number of users opted for fibre broadband and cable internet connection.

Table 2: Current Internet Service Provider (*follow-up question if more than one option selected*)

Internet Service Provider	No. of Responses (A)	Percentage of Responses (B) B = (A ÷ 86) × 100
MTNL	45	52.32
Reliance	18	20.93
Tata	14	16.28
Other	9	10.47
Total	86	100

MTNL is a state-owned telecommunications service provider in Mumbai. Due to the telecom services monopoly it enjoys in several pockets of Mumbai, it is able to effectively provide wired internet services to those users. Like MTNL, Reliance and Tata can provide wired internet services, but to only those who either have or opt for a telephone connection that subscribes to their services. Though MTNL has wireless services on offer, none of the respondents uses them.

Table 3: Internet usage pattern (*select multiple, as applicable*)

Usage Pattern	No. of Responses	Males (each out of 41)	Females (each out of 19)
Surfing entertainment sites	24	15	9
College or work purposes	60	41	19
Send or receive emails	58	41	17

Research	22	12	10
Online news	25	18	7
Regular Video chatting	39	27	12
Play online games	18	13	5
Download music and / or videos	46	33	13
Use other online applications	16	15	1

Most respondents have cited that they use the internet predominantly for college or work purposes and emails could be regarded as an integrated element of that. A good number of respondents also suggested that they use their ISP for video chatting and downloading multimedia from the web.

It was observed that all users in the age group of 18-25 stated that they use the internet for downloading or streaming online multimedia. Among this age group, this is particularly important as there are several different internet plans that could be targeted to highlight this need of increasing online content consumption.

The researcher is of the opinion that understanding data usage patterns not only helps the user in selecting the appropriate connection plan, but also in effectively marketing particular internet plans.

Table 4: Whether the respondent is the key decision maker of the internet connection plan (select any one)

Decision Maker	No. of Responses	% among Males (no. of male respondents ÷ 41) × 100	% among Females (no. of female respondents ÷ 41) × 100
Yes	40	95	5
Not interested	16	2.5	79
Have a say in the decision	4	2.5	16
Total	60	100	100

39 out of 41 males under the survey suggested that they are the key decision maker for the internet connection plan one

wishes to take in the house while only 1 of the 19 females stated that they are responsible for the same. Though 3 females have a say in the decision, most females stated that they do not intend on playing a role in deciding on a connection plan.

For an effective marketing strategy, it is imperative to identify the key decision makers so that personal selling could be more targeted by analyzing the needs of the family itself.

In this regard, it is pertinent to pay attention as to how internet usage takes place on familial level than at an individual level. The ISPs should look beyond decision makers and focus on laying out their promotional and personal selling messages as to how the internet speed and data limit could suffice the needs of the entire family.

Table 5: Internet Connection Speed of your Primary ISP (select any one)

Internet Connection Speed	No. of Responses
Up to 512 Kbps	7
Up to 2 Mbps	28
Up to 8 Mbps	10
Up to 15 Mbps	4
Up to 50 Mbps	5
> 50 Mbps	-
Not sure	6
Total	60

As indicated in table 5, most respondents have availed of a connection speed that ranges up to 2 Mbps. A majority of these 512 Kbps and 2 Mbps users have MTNL as their ISP. Both these segments are DSL Broadband. Speeds ranging up to 8 Mbps (4 Mbps in case of Reliance) are offered at competitive prices by all three firms. Speeds ranging from 10 Mbps to 50 Mbps are usually, either Fibre Broadband plans or cable internet plans. However, consumers primarily differentiate these on the basis of service and speed reliability, as well as the data limits for each plan.

The speed particularly comes into question while analyzing the needs of the family. If there are multiple heavy users of internet data in one family, it is recommended that the customer opts for a plan of greater speed and a higher data limit.

Table 6: Internet Plan Bill Amount of Primary ISP (select any one)

Plan Amount (in INR)	No. of Responses
< INR 500	3
INR 500 – Rs. 750	3
Rs. 751 – Rs. 1100	23
Rs. 1101 – Rs. 1400	14
Rs. 1401 – Rs. 2000	7
> Rs. 2000	2
Don't know	8
Total	60

When asked about the prices, most respondents stated that they pay between Rs. 751 to Rs. 1100 for their existing primary ISP. However, the researcher has observed that when multiple family members of the respondents use the internet and if there are multiple heavy users, there is a need for a higher speed, as it gets divided between the users in an equitable manner depending on their usage requirements. For example, a 2Mbps connection might suffice an individual or 2 individuals with slight challenges. However, a 4 Mbps or an 8 Mbps connection would easily suffice internet usage between 3 to 6 individuals, at a decent internet speed.

Another important finding in this research was that many respondents made a specific mention to this researcher that when they required additional downloads or need for higher speeds, they would use their data card.

As per the tariff rates of the ISPs, the price and speed are similar – due to the ISPs being characterized as monopolistically competitive market structure.

Table 7: Whether the speed level is as advertised by your Primary ISP (select any one)

Is speed as advertised?	No. of responses (A)	Percentage of Responses (B) $B = (A / 60) \times 100$
Yes	28	46.67
No	21	35
Can't say	11	18.33
Total	60	100

The respondent internet users in the survey were asked if the speed is as advertised by the primary ISP. Only about 47% answered in the affirmative, while 35% replied otherwise.

There is a strong correlation between the internet speed satisfaction and the service provider. It was found that 19 out of the 21 respondents who stated that the speed was not as advertised were MTNL subscribers. Moreover, only 17 out of the 28 respondents who answered in the affirmative stated that MTNL provides the speed advertised. The researcher has found that though MTNL is said to be the most reliable ISP in several pockets of Mumbai, this is only the case where the distance between the user and the ISP's access point (locational internet hub) is within the recommended distance limits. Where the speed opted for is 512 Kbps to 2 Mbps, most MTNL customers are satisfied – whereas speeds upwards of 2 Mbps, have received negative reviews among respondents as well as online review websites.

Table 8: Whether the internet plan amount is justified (select any one; respondents were requested to state their reason if they said no)

Amount Justified?	No. of Responses	Percentage of Responses
Yes	21	35
No	30	50
Can't say	9	15
Total	60	100

50% of the respondents believe that the amount they are paying is not justified compared to the services and speed.

There are three main components of ISP pricing:

- Speed & Data limit
- Service reliability
- Infrastructure requirements

Keeping the above three considerations in mind, Reliance and Tata's wireless services have done fairly well.

Table 9: Any issues with current ISP (select multiple, as applicable; unless NA)

Issues	No. of Responses
Frequent disconnections	11
Speed slower than promised	22
Speed fluctuations	18
Infrastructure issues	2
Price	31
N.A.	6
Total	90

As indicated in table 9, though customers might have overall satisfaction with their ISP, there are some issues they would

like to be addressed. 31 of the respondents mentioned that they have a problem with a price – a similar trend to what was asked in question 8. Speed issues are a close second. However, a slight disorientation in answers has been observed when it comes to speed issues, in comparison to the responses seen in question 7. An overall review and recommendation has been suggested in the ‘Recommendations’ section of this project.

Table 10: Reasons as to the respondent not opting to shift to a higher speed plan or switch to another ISP (select any one)

Reason	No. of Responses (A)	Percentage of Responses (B) B = (A / 60) x 100
No interest	10	16.67
Price of the other ISP	15	25
Limitations of the other ISP	12	20
Need a different option to fit my internet hardware needs	1	1.67
Do not trust the service of other ISPs	5	8.33
Satisfied with my current plan and ISP	17	28.33
Other	-	-
Total	60	100

This question does not show a weak correlation when weighed against some of the responses determined in earlier questions. Though most respondents state they are satisfied with their current ISP, they do seem to have some issues with their plans.

There is a sizeable percentage 45 percent of respondents who are not willing to shift to another ISP because of price or certain other restrictions. This is primarily seen in the case of MTNL users.

This question was particularly asked to judge the non-price differences that consumers would perceive in terms of not switching from their current ISP to another. Even though the customer may want to definitely switch from their current ISP, the objective of this assumption has been made as to assess the competitive factors that influence customer decisions in this monopolistic market.

CONCLUSION

MTNL, as a state-owned organization operating in Mumbai has enjoyed a sizeable chunk of market leadership until now. With the entry of several small and big level private players in the city, it is gradually losing out on its market monopoly. Competitive tariff schemes and lightening fast services are the main strengths of these private players and they are able to attract consumers that were earlier MTNL subscribers. Thus MTNL has had to lower its tariffs significantly.

Reliance and Tata are the two biggest private sector players. Both these private sector players have various wired and wireless connection types that need independent infrastructure setups.

Akamai, a firm that runs a globally distributed network of servers, has commented that the average internet speed in India is a grey area as there are several connections below the 2 Mbps mark which is a basic threshold speed for broadband services. Taking these recommendations into consideration, the National Broadband Plan had proposed that the minimum broadband speed should be increased to 2 Mbps by January 1, 2015; however, this has not been implemented until yet.

RECOMMENDATIONS OF THE STUDY

Some of the recommendations are as follows:

- India's information and communications-technology expenditures need to be increased significantly. Though certain suggestions have been laid out in the Digital India initiative, the time frame of this project execution has to be reduced. As robust as the potential may be, various regions of India, including Mumbai, face challenges to get ready for an aggressive ramping up of Internet adoption and improvement of existing technologies.
- Though Mumbai has a robust high-speed broadband network, a lot of enterprises cater to the commercial segment. The lack of focus and cost reduction for homes is one of the major reasons that has hampered broadband penetration in Mumbai.
- With the increase in cellular towers for transmitting mobile internet, it is also important for the government to invest in and subsidize the city's cable infrastructure.
- Since the fundamental internet infrastructure is the responsibility of the government which is then parted through spectrum auctions, there is a need for improving cable connectivity. Fibre cable connectivity is extremely important in this regard – most of the developed countries have been able to ramp up extremely high speed broadband through this technology.
- With respect to the promotional strategies followed by the three ISPs, it is particularly important as seen from

- the primary survey that ISPs identify key age-groups and modify internet plans – in terms of speed and data limit – to cater to this market. Though such age groups would already have an ISP, the gaps in service delivery, is an area where companies can gain significant competitive advantage.
- Further, when it comes to pricing strategies, it is critical to have comparable prices. Though Reliance and Tata's early advent in to the internet foray led to MTNL lowering its prices, now the situation has reversed. MTNL has been able to significantly subsidize its prices on account a vast customer base and additional services that it provides. However, Reliance and Tata have extremely capable wireless services. It should look to aggressively promote its wireless services against the wired services provided by other players at a comparative price. In part, this issue is caused due to regulations of TRAI that has set certain price caps.
 - More importantly, the private sector players, as well as, MTNL need to improve its service delivery for the domestic customer segment. The response to customers' service queries on the part of ISPs is at a very low level in Mumbai. This has not only been conveyed by the respondents, but also, several online reviews reflect the same scenario. Thus, speed in complaint resolution and establishing conclusive and time-framed settlement metrics that are looked into by the respective regulatory bodies will aid in improving this chief concern among several customers.

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