THE CAUSE AND EFFECT – STEEP HIKE IN DATA CONSUMPTION DURING LOCK DOWN

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ABSTRACT

The department of telecommunications in India released information that showed that the increase in data consumption by Indians in India was 9% from 282PB of data consumed on March 21, the day ‘Janta Curfew’ was announced. This hike was as much as 13% from March 19 was 270 PB (As per Bloomberg file photo). However from March 22nd 2020, Indian started using 308 PB daily from the beginning of March 22, 2020. This study is to analyse cause and the possible effects for this phenomenon.

Introduction

In India data consumption started picking up since JIO announced its platform couple of years ago providing free entertainment and television content on its platform. However this was gradual and was limited to one particulars service provides. There was a sudden spurt in data consumption by Indian since ‘Janta Curfew’ and the subsequent lockdown to the corona novel virus covid 18 pandemic. According to official data beginning March 22, 2020. Indian used up 300 PB of data per day on an average, equivalent to 500 billion pages of text.

The cellular operators association of India said that by 3rd week of March, service providers recorded a jump in data usage of up to 30%. The media companies were advised by the authorities to downsize the digital content so that the bandwidth is reduced by OTT sites. Further, ISSN the website speed test analysed the internet access performance, and declared that during covid 19, the impact was a reduction of 6% in fixed line speed and 18% in mobile speed. Even goggle report according to on April 30, found that digital dependence in India is increasing, time spent on smart phones rose to about 5 hours a day from the 3rd week of March and there was data made available on search analysis by Indian during this period. There was an increase in searches for content on education and online video accounts formed more than 70% of India total data usage.

We have used some secondary research data and reports available to study the causes and the resulting effects on the increase in data consumption in India. Have digital payments found more acceptance during covid 19.

Statement of the Problem

It was observed that there was a sudden peak in demand and usage of data since the ‘Janta curfew’ was announced and since the lock down, extended to prevent the spread of pandemic, the surge was so high that the telecomm department had to suspend data usage for a day. The study is to find what caused the spurt in data demand the effect on usage pattern in India

Research Methodology

Descriptive Analysis based on comparison of available secondary literature.

A. ET brand equity – 30/April/2020
The report cites that the ever-growing usage of digital media is increasing and people spent almost 4 to 4.5 hours a day on smartphones and mostly was spent on online video, for either education or entertainment and gaming. There were instants of people just searching for different items on the google search. As per a google data survey, there was growth of 3 times search for learning ‘programming language python’

B. Hindustan Times New Delhi

Indians were using almost 300 PS of data every day as per DOT data reported through Hindustan Times New Delhi editing reported on April 21, 2020.

This proved how people spent more time and money on using data for digital streaming and due to work from home concept the logged on to lap tops and tabs, during lock down period. As per Nokia annual mobile traffic index (MBIT), there was a huge 47% jump in overall data traffic in India. This is almost 11 GB use per month per user, driven by 4G.

C. Digital 2020 – July global statshot

This report talks of global data traffic surge due to universal lockdown, that forced people to be isolated from the community. The report states that even after lifting of lock downs in some countries, people have not changed their digital behaviour TIKTOK, Instagram and search usages have increased exponentially, the respond highlights that more than 1 million new people have enrolled into social media for the first time, that is 12 new users per second.

The elderly people who faced isolation in particular, had to use digital devices and data/voice networks to be in touch with their families. This too was an added factor.

Findings based on statistics surveys and general google reports

1. Digital role in helping people cope with covid 19 - Hoot Suite Survey

As per Ericson mobility report (usage produced below), surveyed in many countries, including India for uses aged between 15 – 69 years. The findings was as below based on responses. Listed are major usages.

<table>
<thead>
<tr>
<th>Usage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps with coping of Covid 19 lock down stress</td>
<td>83%</td>
</tr>
<tr>
<td>Children’s online education usage</td>
<td>76%</td>
</tr>
<tr>
<td>Social use to be in touch with friends and family</td>
<td>74%</td>
</tr>
<tr>
<td>Work from home and job related</td>
<td>67%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>65%</td>
</tr>
<tr>
<td>Shopping and groceries</td>
<td>45%</td>
</tr>
<tr>
<td>Health care and fitness</td>
<td>40%</td>
</tr>
</tbody>
</table>
2. Pattern of internet and data usage in India – source – McKinley and companies

As per statista report citing above sourced survey, the pattern was found out as below. Total of 582 Indian were surveyed and the increased usage was as below:

- People watching online video + 60%
- Watching TV shows – NET change + 57%
- Engaging in social media increase + 48%
- Chatting and texting increases + 48%
- Playing video game + 11%

The above survey was for period of two weeks following March 30, 2020.

3. Video conferencing spurt in usage due to work from home and online learning and education conducted by schools and college.

This has caused a very steep spike in people using video conferencing for WIFI and online class rooms. Video uses very high bandwidth and hence the increase in data demand is inferred. According to the Hoot Suite Survey the July 2020 survey provides that graphic of video conferencing expected usage globally and also the specific breakup on platforms like zoom, meet, Microsoft teams so on. It can be noted that the top 3 are:
<table>
<thead>
<tr>
<th>Service</th>
<th>Daily Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom</td>
<td>300 million per day</td>
</tr>
<tr>
<td>Google meet</td>
<td>100 million per day</td>
</tr>
<tr>
<td>Teams</td>
<td>75 million per day</td>
</tr>
<tr>
<td>Skype</td>
<td>40 million per day</td>
</tr>
<tr>
<td>Cisco</td>
<td>15 – 20 million per day</td>
</tr>
</tbody>
</table>

The distribution adds up to around 550 million per day of video meets globally. Further, India leads the revolution by constituting almost 46% of surveyed population globally.

Summary of Facts

While most of our nation was under lock down, during the Corona Novel Virus Pandemic, media consumption had skyrocketed as per the google search analysis summary:

a) Time spent on smartphone went up by up to 4.5 hours
b) People showed keen interest in pursuing their education in IT programming and the search went up 2.5 times
c) Online payments searches went up by 66%

There have been uses spiked due to loneliness, to interact socially and using the lock down time to watch video. There was a spurt in online class rooms and video conferences activities.

The elderly used increased data for healthcare and consumer used for online shopping including groceries and payments for them.

In general it was seen that overall population had a extra demand for data for different uses. This means that the country is going digital and digital behaviour is being adopted by citizens, increasingly.

Conclusion

The altered digital behaviour of Indians should be sustained and nurtured to create a modern Digital India. This could be utilised to reach rural India and can be used to assist people in agriculture timely real time information on natural disasters and interactive and instant relief to the affected people.

The interest shown in digital learning should be groomed further so that more of online universities can function enabling remotely located people to acquire higher education. Thus literacy in the country can be improved.

Scope for further research

This study can be researched further to analyse the specific consumer data usage to a larger population and even the ecommerce can be studied for broader reach. Further the need for specific health care online, and help line in emergency can be established based on user patterns.

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