

# Recital Prophecy Using Crowd-Sourced Mobile Network Measurements in Moradabad

Lakshay Agarwal

CCSIT, TMU, Moradabad  
 agarwal.lakshay88@gmail.com

**Abstract**—in this paper describes a careful download scheduling for mobile clients simultaneously with geo-location-based bandwidth prediction may be used to reduce download times, reduce energy usage and improve streaming performance. For the future reference the use of crowd-sourced-based network performance measurement services and technologies is used to increase among the National Research and Educational Networks for identifying the behaviour of network performances issues. In this paper we use a large scale crowded areas in India to evaluate the prediction accuracy and achievable performance improvements with such data.

**Keywords**— Government policies, Mobile network, GPS

## I. INTRODUCTION

In present scenario, number of mobile users is increasing into the powers. This affects the signal bandwidth as well as downloading speed many times. While the concept of performance maps has been demonstrated to provide significant performance benefits, many questions arise.

Technologies, crowd-sourced measurements and network performance maps, conclude the information from these measurements can be valuable for predicting future download speed and improving user performance. By concluding the information from previously observed download speed measurements, these maps allow mobile devices to predict the available bandwidth at different locations and determine opportune times and places to download content.

This paper has three primary contributions. First, we characterize the mobile speed test towards crowded regions (where mostly people live). The usage of mobile phones is also directly proportional with the crowd of people.

Second, I examine the variation of the download speeds observed within and across different locations.

## II. LITERATURE SURVEY

On the basis of study of six places in Moradabad, India, that is, two government places, two academic places and two entertainment places, we collect some data according to the numbers of mobile users that are connected with different network. I also found that number of Jio users is increased in comparison to the past data.

### A. Government Places

At railway station I found that number of Airtel users (30%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 17 % approx users are using these three companies.

TABLE I(APPROX DATA)

Railway Station	
Bsnl	950
Airtel	1500
Idea	950
Jio	1100
Telenor	300
Vodafone	250
Tata Docomo	300
Total	5000

At court I found that number of Bsnl users (25%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 20 % approx users are using these three companies.

TABLE II (APPROX DATA)

COURT	
Bsnl	1200
Airtel	950
Idea	800
Jio	1100
Telenor	250
Vodafone	175
Tata Docomo	200
Total	3000

B. Academic Places

At TMU I found that number of Airtel users (45%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 2 % approx users are using these three companies.

TABLE III (APPROX DATA)

TMU	
Bsnl	800
Airtel	4000
Idea	1100
Jio	3100
Telenor	500
Vodafone	200
Tata Docomo	150
Total	9000

At MIT I found that number of Airtel users (41%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 13 % approx users are using these three companies.

TABLE IV (APPROX DATA)

MIT	
Bsnl	500
Airtel	1800
Idea	800
Jio	1500
Telenor	250
Vodafone	175
Tata Docomo	170
Total	4300

C. Entertainment Places

At WAVE I found that number of Jio users (67%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 40 % approx users are using these three companies.

TABLE V (APPROX DATA)

WAVE	
Bsnl	300
Airtel	800
Idea	600
Jio	950
Telenor	300
Vodafone	130
Tata Docomo	145
Total	1400

At PVR I found that number of Airtel users (87%) approx. related to other is comparatively high.

Number of users of three companies, that is, Telenor, Vodafone ad Tata Docomo is very less. Only 23 % approx users are using these three companies.

Number of jio users are 66% which is slitley less than the number of airtel users.

TABLE VI (APPROX DATA)

PVR	
Bsnl	550
Airtel	1050
Idea	750
Jio	800
Telenor	270
Vodafone	170
Tata Docomo	200
Total	1200

III. CHARACTERIZATION OF MEASUREMENT USAGE

A. Location and Measurement Concentration

To understand the skew in the location where the measurements takes place, I calculate the number of users present at each location.

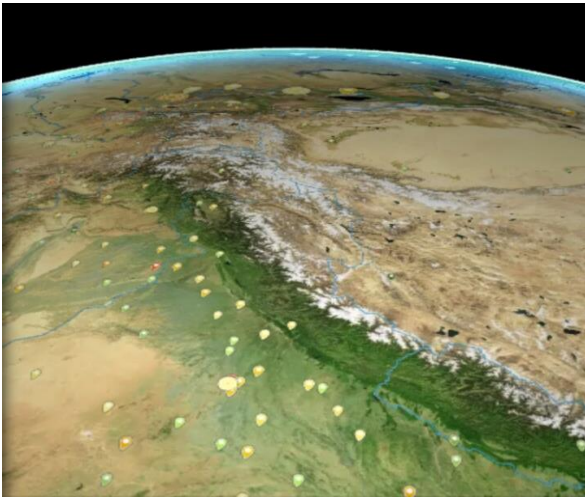


Fig 1. Geographic measurement overview (3<sup>rd</sup> reference)



Fig 2. Population estimation (3<sup>rd</sup> reference)

### B. Time of delay analysis

On the basis of survey and analysis of three locations, that is

#### IV. Government Areas

In court area, downloading as well as surfing speed of mobile servers of bsnl quiet better than other service providers. There is no buffering while we are using bsnl service.

In railway station area, downloading as well as surfing speed of mobile servers of airtel quiet better than

other service providers. There is no buffering while we are using bsnl service.

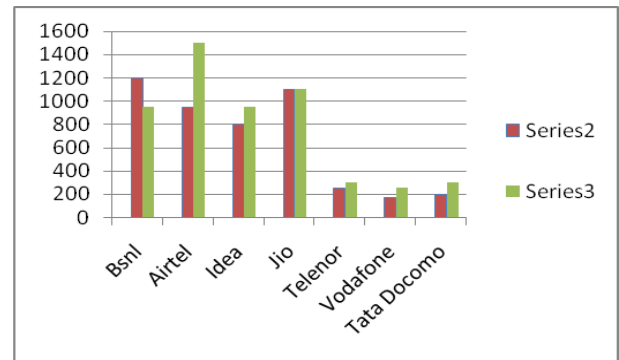


Fig 3. Comparison between no. of users present in court and railway station area.

#### V. Academic Areas

In TMU, downloading as well as surfing speed of mobile servers of airtel quiet better than other service providers. There is no buffering while we are using bsnl service.

In MIT area, downloading as well as surfing speed of mobile servers of airtel quiet better than other service providers. There is no buffering while we are using bsnl service.

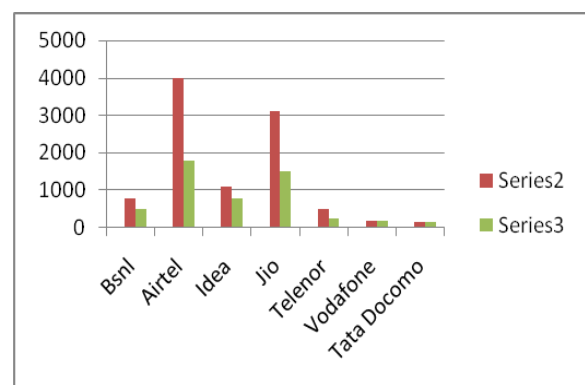


Fig 4. Comparison between no. of users present in TMU and MIT area.

#### VI. Entertainment Areas

In Wave, downloading as well as surfing speed of mobile servers of airtel quiet better than other service providers. There is no buffering while we are using bsnl service.

In PVR area, downloading as well as surfing speed of mobile servers of airtel quiet better than

other service providers. There is no buffering while we are using bsnl service.

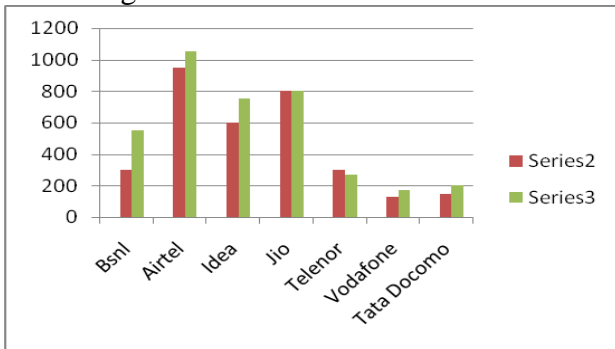


Fig 5. Comparison between no. of users present in Wave and PVR area.

## VII. RESULT AND FUTURE SCOPE

On the basis of comparison we finalized that how to improve mobile bandwidth for increasing the searching as well as downloading speed.

We have a sufficient data of the users, area wise, accordingly for establishment of higher bandwidth devices.

## VIII. CONCLUSIONS

This paper evaluates the number of mobile users of different companies present in different locations. In this paper I also measure the variation in searching speed that is bandwidth variation and downloading speed of mobile signals.

Result shows that in comparison with the past years searching as well as downloading speed of mobile signals are improved.

## IX. ACKNOWLEDGEMENT

I take this opportunity to view our profound gratitude and intense thanks to our guide **Dr. Rajeev Kumar** for his exemplary guidance, monitoring and constant encouragement throughout the source of this paper.

I also take this opportunity to express a deep sense of gratitude to our principal Prof. (Dr.) Rakesh Kumar Dwivedi and HOD Prof. (Dr.) Ashendra Kumar Saxena for his cordial support, valuable information and guidance.

Last but not least, we are quietly thanks to almighty and also our relatives for their constant encouragement without which this research paper would not be completed.

## X. REFERENCES

- [1] <http://ieeexplore.ieee.org/document/8038447/?anchor=references>
- [2] <http://ieeexplore.ieee.org/document/7765398/>
- [3] [https://geopedia.world/#T12\\_x8769633.691354644\\_y3354887.7552539934\\_s14\\_b17](https://geopedia.world/#T12_x8769633.691354644_y3354887.7552539934_s14_b17)
- [4] <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.573.5232&rep=rep1&type=pdf>
- [5] <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.228.6333&rep=rep1&type=pdf>
- [6] (2002) The TMU website. [Online]. Available: <http://www.TMU.org/>
- [7] M. Shell. (2002) TMUtran homepage on CTAN. [Online]. Available: <http://www.ctan.org/text-archive/macros/latex/contrib/supported/TMUtran/>
- [8] *FLEXChip Signal Processor (MC68175/D)*, Motorola, 1996.
- [9] "PDCA12-70 data sheet," Opto Speed SA, Mezzovico, Switzerland.
- [10] A. Karnik, "Performance of TCP congestion control with rate feedback: TCP/ABR and rate adaptive TCP/IP," M. Eng. thesis, Indian Institute of Science, Bangalore, India, Jan. 1999.
- [11] J. Padhye, V. Firoiu, and D. Towsley, "A stochastic model of TCP Reno congestion avoidance and control," Univ. of Massachusetts, Amherst, MA, CMPSCI Tech. Rep. 99-02, 1999.
- [12] *Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification*, TMU Std. 802.11, 1997.