

AN ANALYSIS OF MODE OF PAYMENT IN PUBLIC TRANSPORTATION SYSTEM WITH SPECIAL REFERENCE TO JNNURM, BHOPAL

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Abstract

As India is migrating from traditional to a cashless environment especially after demonetization, the initial wonder and confusion have given way to a whirl of concerns. Will the focus on online transactions provide convenience and tangible benefits? The decision of shifting towards a cashless economy and cashless nation, the government has come up with a bunch of discounts and cash back on digital transactions. But will these be enough along with other benefits, counter the higher risk of identity theft once the currency notes are back in circulation. Even after the stepping stone decision of the government, is the ground reality is same as government clam, along with benefits this system also faces a lot of issues one of them is related with the payment of public transportation system. Increasing population of Bhopal will shift travelers from own convince to public transportation system especially to red bus (under JnNURM), when a large number of population were shifting from own convince to public transportation, then it became very important to facilitate online mode of doing payment, so this paper highlights and analyze the

Keywords:

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usage of online mode of payment while using public transportation system in Bhopal.

1. Introduction:

Digital India is a national mission launched on 1 July 2015 by owner able Prime Minister MrNarendraModi; it is both enabler and beneficiary of other key Government of India schemes, such as BharatNet, Make in India, Startup India and Standup India, Industrial corridors, Bharatmala, Sagarmala, Dedicated Freight Corridors and UDAN-RCS.

The initiative includes plans to connect rural areas with high-speed internet networks throughout the country. Digital India comprises of three main pillars, (a) Digital Infrastructure, (b) Online Government Services, and (c) Digital literacy.

As part of promoting cashless transactions and converting India into the less-cash economy, various modes of digital payments are available; these are Banking Cards, USSD, AEPS, UPI, Mobile Wallets, Banks Pre-paid Cards, Point of sale, Internet Banking, Mobile Banking, Micro ATMs.

Bhopal is situated in the centre of the nation and state and capital of Madhya Pradesh and the administrative head office of Bhopal district and Bhopal division. Bhopal is famous for its natural and artificial lakes, known for its beautiful views and is also one of the cleanest & greenest cities in India. It is the 17th largest city in the country and 131st in the world.

According to census 2011, the population count of Bhopal is 2371061, the Total area covered by Municipal Corporation of Bhopal is 450 sq km, and more than 85% were literate here. Bhopal carries various respected institutions and another destination which is of national importance, including ISRO's Master Control Facility and BHEL. Bhopal city has a large number of Institutes of National Importance in India, namely IISER, MANIT, SPA, AIIMS and NLIU.

From last one decade, Bhopal evolved as an educational hub with eight universities, six national institutes, five medical colleges, eighty-five engineering colleges and fifty-nine management colleges, thousands of students are studying in these famous institutions who are also using public transportation(JnNURM) for several purposes

The City Development Plan focuses on the elements to which JNNURM will be providing its support. The City Development Plan is prepared to take in to view the problems and essentials of the city regarding Urban Infrastructure and Governance and Basic Services for Urban Poor till 2021. It targets for a sustainable and peaceful growth and development of the city of Bhopal, to be fulfilled by 2021. This will indirectly phase the development period in two stages of seven years each. The first seven years will be the years in which government is focusing on the utilization of funds under JNNURM as envisaged by JNNURM and expecting the same for next seven years, which will be subsequently reviewed. With the increased usage of public transportation, the mode of doing payment will also get change, So this paper analyses the change in payment mode while using the public transportation system.

2. Objective:

The objective of this research paper is as follows:

- 2.1 To analyze the usage of digital payment mode for using public transportation system
- 2.2 To find out the problem/challenges in digital payment.
- 2.3 To find out the solution to increase the usage of digital payments while using public transportation system.

3. Research Methodology:

The study is a part of my research work which is conducted to obtain data on usage of digital mode of payment while using the public transportation system. The study is conducted in Bhopal, Madhya Pradesh. A sample size of 143 was selected using the convenience sampling procedure. The sample includes a response of those who are using public transportation (Under JnNURM) in Bhopal out of which 133 respondents mark their choice in the variable “How do you normally pay for Bus Fare?” Since they are the ones who gave their views on using of digital payment methods, their responses determine the reliability of survey. Survey method is used for

collecting data with the help of the questionnaire .The responses from the respondents were collected and analyzed using the simple percentage method.

4. Data Analysis:

Collected Data:

Data Collected through a primary source i.e. through simple survey method on variable “How do you normally pay for bus fare?” are given below:

| Variable | Desirables | Frequency | Percentage (%) |
|--------------------------------------|-----------------------------|-----------|----------------|
| How do you Normally Pay for Bus Fare | Through Cash | 126 | 94.7 |
| | Through Debit/Credit Cards | 1 | .8 |
| | Through Paytm | 0 | 0 |
| | Through Smart Cards of BCLL | 6 | 4.5 |

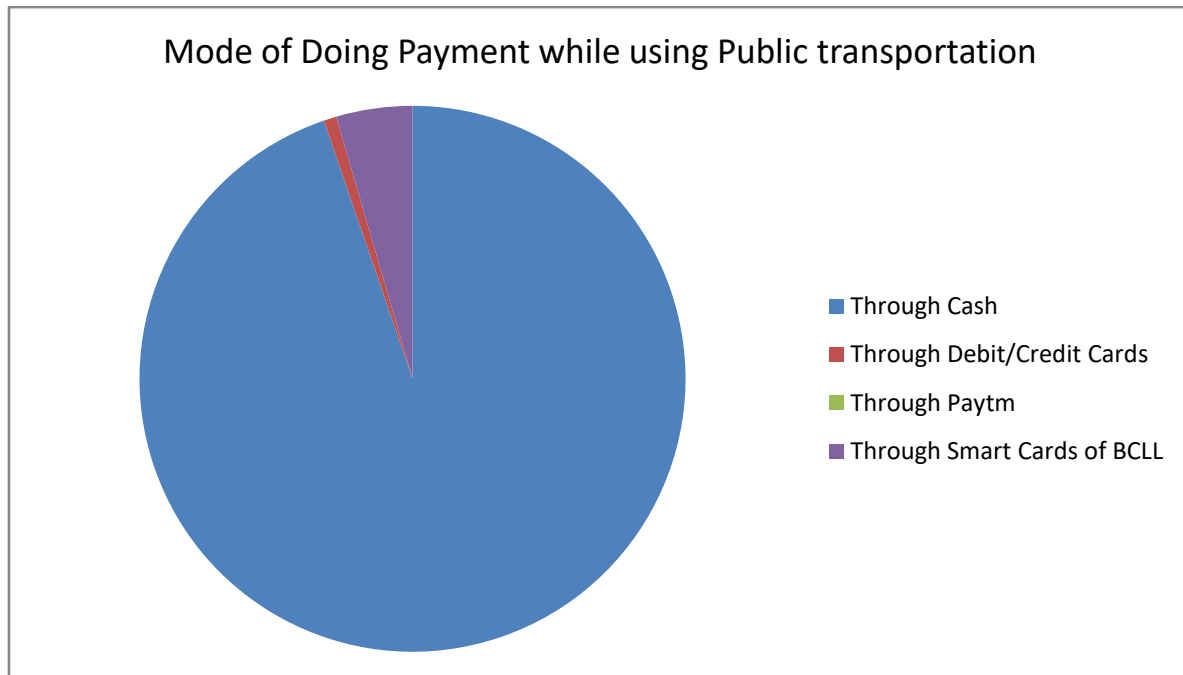
The above mentioned data was collected by sixteen routes of Bhopal city which are as follows:

| S.no. | Route Number | Travel from | Travel to | No. of Responses |
|-------|---------------|-------------------|-------------------|------------------|
| 1 | 101 (TR-4) | Chiraayu Hospital | HEG Mandideep | 10 |
| 2 | 101 A (TR-4A) | Chiraayu Hospital | Bangrasiya | 8 |
| 3 | 102 (TR-4B) | Vardhaman | Gandhi Nagar | 8 |
| 4 | 103 (TR-1) | Chiraayu Hospital | Akriti Eco City | 8 |
| 5 | 104 (SR-4) | KarondChouraha | BairagarhChichili | 9 |
| 6 | 105 (SR-5) | Chirayu Hospital | Awadhपुरी | 8 |

| | | | | |
|----|-------------|---------------|------------------------------|---|
| 7 | 106 (SR-8) | Coach Factory | BairagarhChichili | 8 |
| 8 | 201 (SR-1) | Phanda | Kajrikheda | 9 |
| 9 | 202 (SR-1A) | Phanda | BairagarhChichili | 8 |
| 10 | 203 (SR-2) | Katara Hills | Nehru Nagar | 8 |
| 11 | 303 | Rangmahal | Ayodhya Nagar Via JK Road | 9 |
| 12 | 304 | Nadra | Ratibad | 8 |
| 13 | 306 | Halalpur | Aiims | 8 |
| 14 | 307 | Kokta | Habibganj | 8 |
| 15 | 309 | Islam Nagar | Archana Homes | 8 |
| 16 | 311 | LNCT | NariyalKheda | 8 |

Source: <http://mybusbhopal.in/>

It is always easy to interpret data, graphically, so graphical presentation of response sheet is given below:



5. Data Interpretation:

By above-mentioned table-1, following information has been extracted from it:

5.1 Even after efficient IT infrastructure, 94.7 % population travelling from public transportation (JnNURM) pay through cash.

5.2 To promote digital payment, BCLL launched Smart Card, which is used by only 4.5 % of the population.

6. Conclusion & Inference:

On the basis of above graphical interpretation, study finally concludes that:

6.1 Survey Report says still 94.7 % population were using cash as a mode of payment, which is because of lack of facilities for online payment provided by the management.

6.2 Only 4.7 % population pay their fare through smart card of BCLL is because of lack of promotional activities among users.

7. Problems/Challenges:

Following are the challenges observed while surveying consumer of public transportation in Bhopal city :

7.1 Another big challenge is lack of awareness about the digital mode of payment among customers.

7.2 Lack of infrastructural facilities provided by management such as POS machine, efficient wifi facilities, and other IT equipment.

7.3 There is no booking facility available.

7.4 Lack of trust on digital payment among customers because of the chance of getting a loss of money.

8. Suggestions:

By above challenges following are the suggestions to be incorporated by Nagar Nigam to strengthen the infrastructural and financial condition of public transportation (JnNURM):

8.1 Create awareness regarding the digital payment among customers.

8.2 Booking facility should be provided by Nagar Nigam, Bhopal for customers

8.3 The issue of the smart card to regular customers through an online portal.

8.4 Provide POS machine at all bus stops to receive payment through Debit/Credit cards.

8.5 Nagar Nigam needs to promote their BCLL smart card more frequently by providing additional cash back facilities.

8.6 Providing these sources of doing payment, to strengthen the financial position and help Nagar Nigam Bhopal to reduce corruption because the collected amount will then directly transferred to their account, which is also beneficial.

8.7 If Nagar Nigam adopts these suggestions, definitely in coming years, Public transportation in Bhopal shifts their self from traditional mode to online mode of Payment.

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