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CUSTOMER SATISFACTION, PREFERENCE, AND AWARENESS OF FASTAG: A COMPREHENSIVE STUDY

Dr.M.Sathis Kumar[1], Dr.E.Muthu Kumar[2], Dr.R.Moses Daniel[3], Dr.N.Shani[4]

1. Dr.M.Sathis Kumar, Associate Professor, Department of Management Studies, Nehru Institute of Information Technology and Management
2. Dr.E.Muthu Kumar, Associate Professor, Department of Management Studies, Nehru Institute of Information Technology and Management
3. Dr.R.Moses Daniel, Professor, Department of Management Studies, Nehru Institute of Information Technology and Management
4. Dr.N.Shani, Professor, Department of Management Studies, Nehru Institute of Information Technology and Management

ABSTRACT:

The advent of FASTag has revolutionized toll collection in India, introducing a seamless and efficient method for travelers to pay toll fees. This study examines customer satisfaction, preferences, and awareness related to FASTag, focusing on its adoption, usage patterns, and overall effectiveness. The research was conducted through surveys involving 100 respondents and analyzed using statistical tools. The findings reveal high levels of customer satisfaction, driven by convenience, reduced traffic congestion, and cashless transactions. However, challenges such as technical issues and the need for better awareness campaigns are also highlighted.

Keywords: customer satisfaction, customer preferences

INTRODUCTION:

FASTag is an electronic toll collection system introduced by the National Highway Authority of India (NHAI). It uses Radio Frequency Identification (RFID) technology, allowing drivers to pass through toll plazas without stopping, as payments are automatically deducted from linked accounts. Launched as a pilot project in 2014, FASTag has since expanded nationwide, becoming mandatory for all vehicles in 2019. This study aims to understand customer satisfaction, preferences, and awareness regarding FASTag, focusing on its impact on toll plaza efficiency and user convenience.

The Evolution and Implementation of FASTag

Background and Significance: India's road network is among the largest in the world, necessitating efficient toll collection methods to manage traffic and fund road maintenance.

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Traditionally, toll collection has been manual, leading to long queues and delays. FASTag was introduced to address these issues by enabling cashless transactions, thereby reducing wait times and improving traffic flow at toll plazas.

OBJECTIVES OF THE STUDY:

The primary objectives of this study include:

- Assessing the socio-demographic profile of FASTag users.
- Analyzing customer satisfaction and preferences.
- Evaluating the convenience and efficiency of electronic toll payments.
- Identifying challenges and areas for improvement in the FASTag system.

SCOPE AND LIMITATIONS:

The scope of the study is confined to users of FASTag, focusing on their experiences and satisfaction levels. Limitations include potential biases in self-reported data and the geographic concentration of the sample in a specific region.

INDUSTRY AND COMPANY PROFILE

Overview of the Toll Collection Industry: The toll collection industry in India has undergone significant transformation with the introduction of electronic tolling systems like FASTag. These systems are part of a broader effort to modernize infrastructure and improve road travel efficiency. The industry now includes various stakeholders, including government bodies, private companies, and technology providers, all contributing to the widespread adoption of digital tolling.

The Role of FASTag in the Industry: FASTag represents a critical shift in how toll collection is managed in India. It has simplified the payment process, reduced the need for cash transactions, and significantly decreased traffic congestion at toll plazas. The system’s success is reflected in its rapid adoption and the government’s mandate for its use across all national highways.

RESEARCH METHODOLOGY

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Research Design: The study adopts a descriptive research design, focusing on quantitative data collected from FASTag users. A structured questionnaire was used to gather information on user demographics, satisfaction levels, usage patterns, and challenges encountered.

Data Collection: Primary data was collected through surveys distributed to 100 respondents. Secondary data was sourced from existing literature on electronic toll collection, NHAI reports, and related research studies. The data was analyzed using percentage analysis and chi-square tests to draw meaningful insights.

Sampling Methodology: The study utilized stratified random sampling to ensure a representative sample of FASTag users across different demographics. The sample size was determined based on the population of FASTag users in the selected region, with a focus on those frequently using national highways.

Tools for Analysis: Data was analyzed using statistical tools, including percentage analysis and chi-square tests, to evaluate relationships between variables such as user satisfaction, frequency of use, and demographic factors.

FINDINGS AND ANALYSIS

Demographics of Respondents: The study found that a majority (61%) of respondents were between 20-24 years old, with a slightly higher representation of males (56%) compared to females (44%). Most respondents were degree holders (64%), and a significant proportion (32%) were students.

User Experience with FASTag: The analysis revealed high satisfaction levels among users, with 43% expressing high satisfaction and 17% reporting very high satisfaction. The convenience of cashless transactions and reduced traffic congestion were the primary drivers of satisfaction. However, some users reported issues such as transaction failures and excess debit, highlighting areas for system improvement.

Payment Methods and Usage Patterns: The majority of respondents (87%) preferred using FASTag over traditional payment methods, citing convenience and faster processing times. Google Pay was the most preferred app for managing FASTag transactions, followed by Paytm. Most users deposited amounts between ₹1,000 and ₹10,000 into their FASTag accounts, indicating regular use.

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Challenges and Issues: Despite its advantages, FASTag users reported several challenges, including technical glitches, the potential for lost or stolen tags, and occasional malfunctions. Additionally, users expressed concerns about the lack of dedicated FASTag lanes at some toll plazas, leading to delays even for FASTag-equipped vehicles.

DISCUSSION

Impact of FASTag on Toll Plaza Efficiency: FASTag has significantly improved toll plaza efficiency by reducing the time vehicles spend at toll gates. This has led to smoother traffic flow and decreased fuel consumption. However, the system's effectiveness is hampered by issues such as non-FASTag vehicles using dedicated lanes and technical problems with RFID scanners.

Customer Awareness and Satisfaction: Awareness campaigns have successfully promoted FASTag adoption, with 42% of respondents learning about the system through advertisements. Satisfaction levels are generally high, but there is a need for continuous system improvements to maintain user confidence and encourage wider adoption.

Recommendations for Improvement: To enhance the effectiveness of FASTag, the study recommends:

- Expanding dedicated FASTag lanes at all toll plazas to prevent delays.
- Enhancing the reliability of RFID technology to reduce transaction failures.
- Increasing public awareness through targeted campaigns, especially in rural areas.
- Offering additional incentives, such as higher cashback rates, to encourage adoption.

CONCLUSION

FASTag has revolutionized toll collection in India, offering a convenient and efficient solution for both users and toll operators. The system has received positive feedback for its ability to reduce traffic congestion and facilitate cashless transactions. However, addressing the technical challenges and ensuring wider adoption through continued awareness efforts are crucial for the system's long-term success.

REFERENCES

- Chaudhary, R. H. (2003). Financial Value of ETC Deployment.
- Markov, K. (2004). Queuing Behavior at Toll Plazas.

ISSN: 0975-3583, 0976-2833 VOL10, ISSUE 1, 2019

- Ministry of Road Transport and Highways (2010). Central Motor Vehicles Rules.
- Vreeswijk, J. D. (2010). Eco-Driving and Traffic Management.
- Gupta, S. (2014). FASTag and Its Impact on Toll Collection in India.