Integration of Transport Department Check Posts with the help of National Register (NR) of Vehicle in the Perspective of E-Governance

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Abstract- Government of Uttar Pradesh has taken major initiatives and policy plans to accelerate the development and implementation of e-Governance to provide an appropriate environment by introducing G2G, G2B, G2C and G2E services within the state. Impact of e-Governance is gradually changing our life, from day to day access of information to access various services at our door steps. Transportation is also improving their mechanism for service delivery using ICT in their service delivery process. This paper discusses the current scenario of Road tax collection of commercial vehicle in state of Uttar Pradesh and various issue related to therein. It gives a brief idea of initiative regarding structure and service delivery framework for e-Governance in state of Uttar Pradesh. Further its discussed benefits and improvement in transport sector after this e-Governance initiative

1. Introduction

"E-Government" [1] refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

Government of Uttar Pradesh trying to utilize ICT to improve its efficiency in service delivery, through implementation of e-Governance. The transport sector is one of them but it is limited to only digitization of vehicles and driver information and providing vehicle related services from Transport offices only . Ministry of Road Transport & Highways also providing fund to state government to improve citizen service and e-Governance. The final objective of this paper is to show the problem and solution in collection of Road Tax of commercial vehicles which are coming from other state into Uttar Pradesh

2. TRANSPORT CHECK POST

Transport Department of Uttar Pradesh state having Check Post on each entry of boarder to collect road tax from vehicles to run in state of Uttar Pradesh for a particular period and transport department deployed 3 to 4 person for 24*7 service delivery. Due to shortage of manpower state transport department remove some check post and open single counter in transport department office.

3. ISSUES IN CURRENT CHECK POST SYSTEM

The Citizens/Transporters visiting the states were required to go to the Transport Department Office for payment of Road Tax. This process was time consuming as the Citizens/Transporters were required to divert from their route, find the nearest Transport Department Office and make payments. There used to be long waiting time at the payment counters as well. Many Transport Unions have reached to state government to find out a simple solution for this because transporter are losing his revenue due delay in check post and government also not able to track record of number of vehicles which are coming to Uttar Pradesh. The enforcement agencies used to verify the paper based Road Tax Receipt manually. There was no mechanism to cross check the payment details. There were instance of producing forged document during verification. The above issues can be resolved by removing all Check Post and develop application approach on top of National vehicle data registry, it can improve the interconnectivity between states that helps to improve business prospects for citizens as well as transport department of the states.

4. NATIONAL REGISTER FRAMEWORK

The National e-Governance Plan (NeGP)[2] of the Government of India aims to make and create a unified data schema which could be used by all States and Union Territories to computerize their respective transport offices (for faster and better-managed issue of vehicle registration certificates and driving licenses). To meet this vision government's needed to cooperate, collaborate and integrate information across different State RTO in the Centre, and States levels. The given framework in figure1 is the National register framework to deliver e-Governance services to the citizens as well as numerous department of the India, in respect to transport sector.

National Register [3]

Data from the different **State Registers** situated at State Data Centers flow to the National Register. Selected information has been envisaged to be captured at the national level. The National Register will act as a central repository of all crucial data / information. This will also enable users to avail the service on "Anywhere Service" basis. National Register will provide information to DoRTH, RTO/DTO/MLO/SDM, inter—state check post, police department and other G2C services.

State Registers [4]

Data from the different RTOs situated in different Districts flow to state register with the help of VPN over broadband, this data is basic data which are in RTOs without filter and transport department can we .2state level service can be delivered form State register.

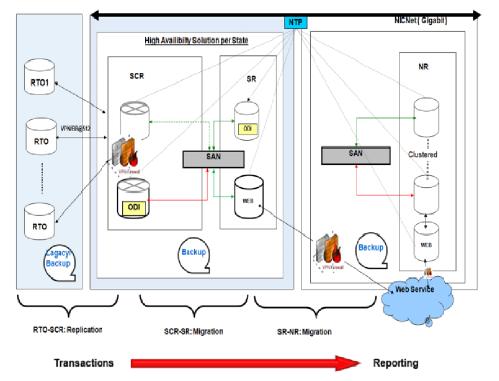


Fig. 1 National Register framework

Domain Gateway: Domain gateways are purpose specific or department specific gateways to provide G2G, G2C and G2B service to the citizens. These are implemented for specific business needs requirements for the perspective projects to route request between front end and backend applications are known as domain gateways. Many government departments of centre and state have required domain gateways to satisfy their specific needs.

5. INTEGRATION OF CHECK POST SOLUTION WITH NATIONAL REGISTER

Check Post software [5] deployed on web server of state register and this has integrated with payment gateway to facilitate transport to make payment on line. This application which intern call domain gateways which are for transport department for consuming web service to fetch vehicle verified data and calculate road tax on the vehicle parameter provided by national register and receipt for same has been generated by portal and one SMS goes to transport and one SMS goes to Transport authority or Transport department with full payment detail. Fig.2 describes integration process of Check Post application with NR and with domain gateway.

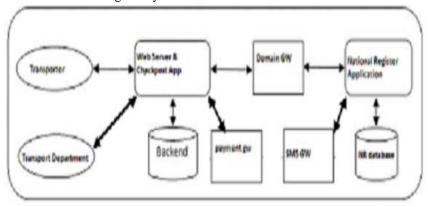


Fig.2 Integration of checkpost solution

6. CORE ADVANTAGES

- After implementation of Check Post Portal, the transport department staff across the state has been able to
- waiting while depositing the tax in Transport office
- Enforcement agencies can check the authenticity of receipt using web site or through SMS produce more output in a day as there is reduction of footfalls at the offices.
 - Data would be more accurate and easily available to the higher authority for decision making
- Presence of agents at various issuing authorities across the state has been reduced
- After implementation of Check Post Solution there is no need to go to Transport Office for tax deposition
- Customer can deposit tax using the portal through SBI payment gateway

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- Tax can be deposited before the start of journey; hence no need to make Tourists/Passengers
- The process is transparent and transactions related to tax deposition/collection can be viewed online
- After implementation of Check Post Solution fraud, misrepresentation of paper has been controlled and enforcement agencies may easily verify the authenticity of paper provided by Transporters / Citizen just by sending an SMS.

Benefits in terms of Time Efficiency

S.N.	Name of Services	Delivery time through Manual System	Delivery Time Through Check Post Portal
1.	Payment of Road Tax and Generation of receipt for other state vehicles	2 – 3 hours	*Immediately from the Web before commencement of journey
2.	Payment of Road Tax by Contract Carriage for NCR	2 – 3 hours	Immediately from the Web if Vehicle Details are available in the Database
3.	Verification of Road Tax Payment	Manual Document Verification	Immediately from Web or through SMS

^{*} Note: In case of online payment

Benefits in terms of Cost Efficiency

- Before the implementation of Check Post Solution transporter/citizen were forced visit Transport Department Office to make payments for Road Tax of other state vehicles and Contract Carriage for NCR. Now the Contract Carriage Transporters needs to visit the Transport Department Office only once to get the details of the vehicle recorded in the database. The Transporters/ citizen are able to save at-least few thousands by avoiding multiple visits to the office.
- Online Payment and reduction of footfall at the Transport Department Offices has
 resulted in reduction of workload of the employees. The scares manpower may now
 be used for other works in the department thereby reducing the requirement of
 additional cost of resources.
- After implementation of Check Post Solution fraud, misrepresentation of paper had also controlled and enforcement agencies can easily check the authenticity of paper provided by Transporters / Citizen just by sending an SMS to given no. This has resulted into increase in revenue for the department as there is less chance of malpractices.

7. CONCLUSIONS

The implementation of e-Governance in any sector can enhance the quality of service delivery. It could be beneficial for public transportation as well as private transportation. National Register frame work will acts as the backbone for integrating the Check Post of the state in India. The integration of the Check Post permits the transporter and officials to access services from any states from one stop. This will boost up the business prospects for citizens and transport to improve batter coordination between transporter and State Transport department.

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