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INTEGRATION OF TRANSPORT DEPARTMENT WITH VEHICLE DEALER WITH THE HELP OF DEALER POINT REGISTRATION APPLICATION AND HOMOLOGATION DATABASE 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 eGovernance 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 registration of 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

I. 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 funds to state government to improve citizen services and e-

Governance. The final objective of this paper is to show the problem and solution of delay in delivery of registration certificate to citizen due to lengthy registration process at RTO/ARTO side in state of Uttar Pradesh.

II. VEHICLE REGISTRATION

Vehicle Registration involves the recording of a motor vehicle in the official records after due verification. Vehicle Registration is mandatory under the law and is essential to prove the ownership of a vehicle. It is also required during the sale of a vehicle and transfer of its ownership.

III. PRESENT SYSTEM OF VEHICLE REGISTRATION

To register a new, private, non-commercial vehicle, you need to apply in the prescribed form (either available online or with the concerned local authorities) to the RTO (Regional Transport Officer)/Transport Department of the area of your residence. You will be required to produce the sale certificate issued by the vehicle dealer, the road-worthiness certificate issued by the manufacturer, an attested copy of a valid vehicle insurance policy, documents as proof of address, a print of the chassis number and such other papers as may be needed. In addition, you will be asked to submit one-time road tax and the required registration fee. The vehicle will be physically inspected by the Inspecting Authority and a unique Registration Mark assigned to the vehicle for display thereon.

IV. ISSUES IN CURRENT REGISTRATION SYSTEM

This task used to take hours, even days/weeks to complete, as all activities were carried out at different counters and the poor, hapless citizen had to run around, stand in separate queues, and collect receipts to get her/his work done. For each of these steps during registration, the citizen had to interact with different persons at different counters. Cumbersome office functions had gaps which provide the scope for manipulation and inaccuracies, especially in calculation of fee/tax etc. After receiving all document and payments from citizen RTO official has to enter all vehicle and owner related data into VAHAN software for approval. After record approval by officer data is ready for Registration Mark and printing of registration process, due to heavy load of registration at RTO office this full activity of a registration took minimum 10 to 15 days.

V. HOMOLGATION FRAMEWORK [2]

Homologation refers to the term “Type Approval” or “Certification” - that is, the granting of approval by an official authority which makes evaluation on the basis of a set of strict rules or standards.

Automotive Homologation is the process of certifying the vehicles for roadworthiness as per specified criteria laid by Government for all vehicles made or imported in the country. The tests ensure that the vehicle matches the requirements in terms of emission and safety and road-worthiness standards as notified under the Central Motor Vehicle Rule - 1988.

Globally, Automotive Homologation is a well-established process whereby prior to sale or export of motor vehicles, automotive systems and their components should necessarily have approvals according to the official

standards of their destination countries. The standards mainly pertain to the areas of environment and safety as well as the quality of products and production process.

This application provides a unified and single-point platform for Vehicle Manufacturers and Testing Agencies to roll out new vehicle models, get them certified, upload comprehensive inventory of manufactured vehicles and build up a consistent database that feeds the Nation-wide dealer network and RTOs for subsequent stages of vehicle Sale and Registration.

VI. THE OBJECTIVES FOR HAVING A HOMOLOGATION APPLICATION ARE

- Provision of system based framework for Models and Inventory management
- Facilitation and integration amongst Manufacturers, Test Agencies, Dealers and RTOs
- Ensuring consistency of technical parameters for any specific model
- Facilitating a clear workflow for model certification process
- Ensuring uniformity of models in Vahan database
- Ease of Registration process at RTOs / Dealer points
- Ensuring correct tax calculation based on accurate parameters
- Bringing overall transparency and Homogeneity

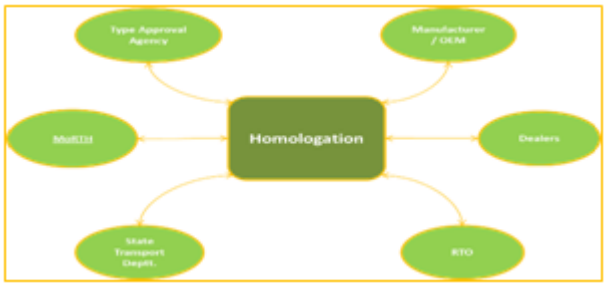

Fig.1 Homologation Framework

VII. DEALER POINT REGISTRATION APPLICATION [3]

All vehicles purchased from the Dealers located in state of Uttar Pradesh and which are to be registered in the office of RTO/ARTO Transport Offices, are registered from the Dealer's showroom through web based dealer point application . Activities related to vehicle registration, such as entry of Vehicle detail, entry of Owner detail and subsequently online payment of Registration Fee, Hypothecation fee (if any) and Road Tax is done by the dealer through the net-banking/Credit Card/Debit Card facility with help of State Bank of India Payment GW. An e-receipt is generated by the system along with the Form 20 (for vehicle registration). The car dealer then hands over the Form 20, the e-receipt and the Sale Letter from the company to the owner after which the owner will remit the aforesaid amount to the dealer. It is also required that the owner should present all documents such as Vehicle Insurance and Address proof to the car dealer. On completion of this process, all the relevant documents are furnished at the concern RTO/ARTO during the time of obtaining the Registration Certificate.

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VIII. INTEGRATION OF HOMOLGATION DATABASE WITH DELERPOINT APPLICATION

Dealer Point application is tightly coupled with homologation database. When dealer want to register a new vehicle with chassis number then all vehicle related parameters has been fetched from homologation database so there is no need to enter any technical detail related to that vehicle and dealer is not allowed to change any technical parameter at the time of registration. By the help of homologation database this application has standard Make/Model in dealer application across states.

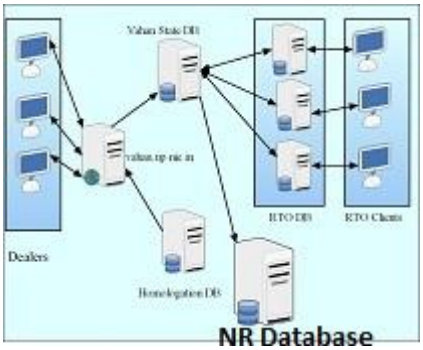

Fig.2 Dealer Application Framework with Homologation Database

IX. CORE BENEFITS

Benefits to the Government

- All the applications are workflow based system, so this prevents any illegal transaction thus offering better transparency.
- Online services have reduced the footfall and work pressure at the Transport office.
- Increased Revenue Generation as no transaction is allowed without payment of fees.
- Transport Department, can access on real time, to monitor the Revenue collection and the number of vehicles registered. It has also benefitted the Treasury Department, as it can now verify the figure online for every single transaction
- Middlemen and agents are no longer involved
- Efficiency in the System.
- Since the vehicle registration process is done from the car dealer, the office is able to conserve energy towards this and this aspect may be considered as one of the green computing practice

9.1 Benefits to the Citizen

- The citizen is saved from the agony of making several visits to the RTO and each time waiting for several hours in long queues waiting for their turn to make payments or have their vehicle inspected.
- Service delivery to the citizen has improved considerably in terms of time taken and accuracy, since data entry and payment is completed at the showroom. Only verification, approval and Registration Number generation is now done from the RTO.

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9.2 Benefits to the car Dealers

- The car dealers have received a boost in their sales.
- Saves time
- Enhanced customer service
- Able to register all vehicles sold on same day
- Need not wait to submit applications in bulk

X. IMPACT ANALYSIS AFTER IMPLEMENTATION

This application has been started in the year 2014 as a pilot project in Uttar Pradesh with few districts and nearly 300 dealers has started this application. In 2015 after successful implementation of dealer application Uttar Pradesh Transport Department has decided to rollout this application in all over UP. The impact of this application in terms of acceptance and revenue generation and number of registered private vehicles shown in fig.-3, Fig.-4 and fig.-5

Fig.-3 Registered Dealer Figures

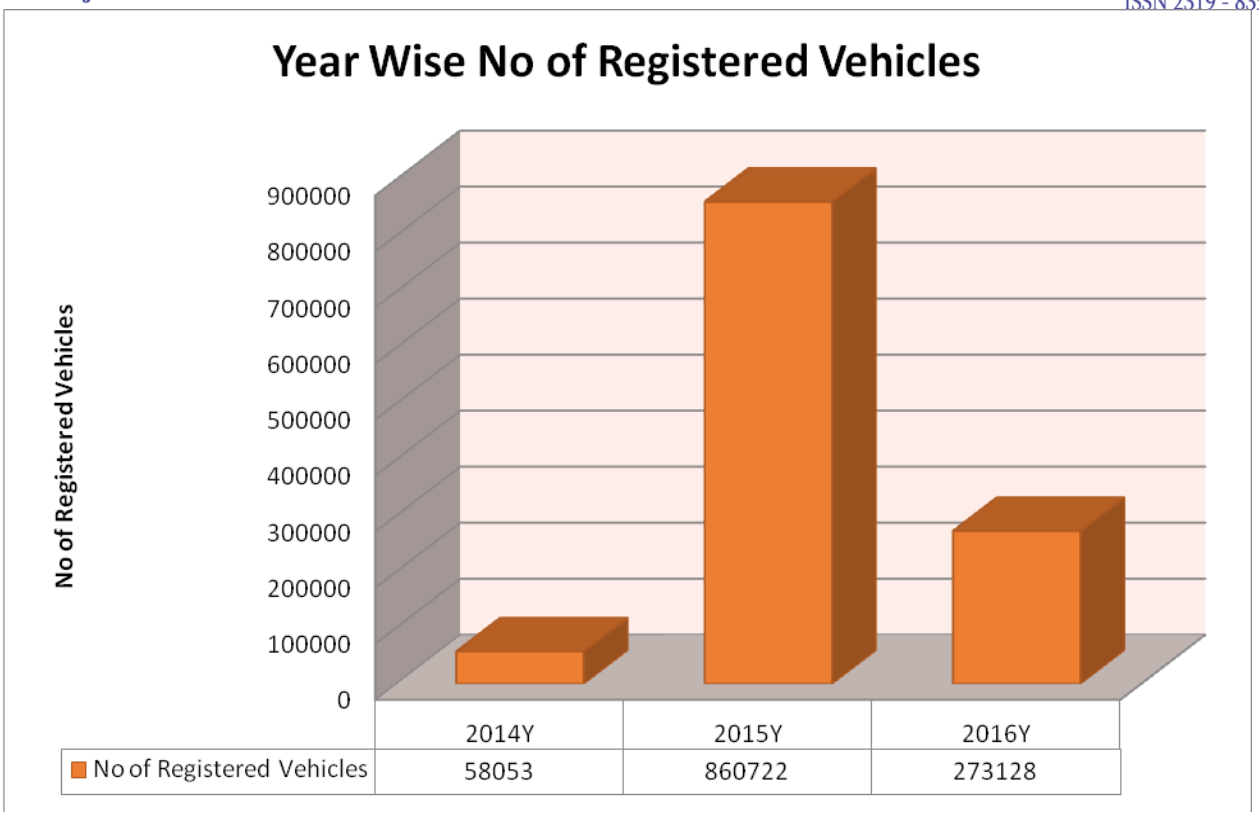

Fig.-4 Year Wise Registered vehicles

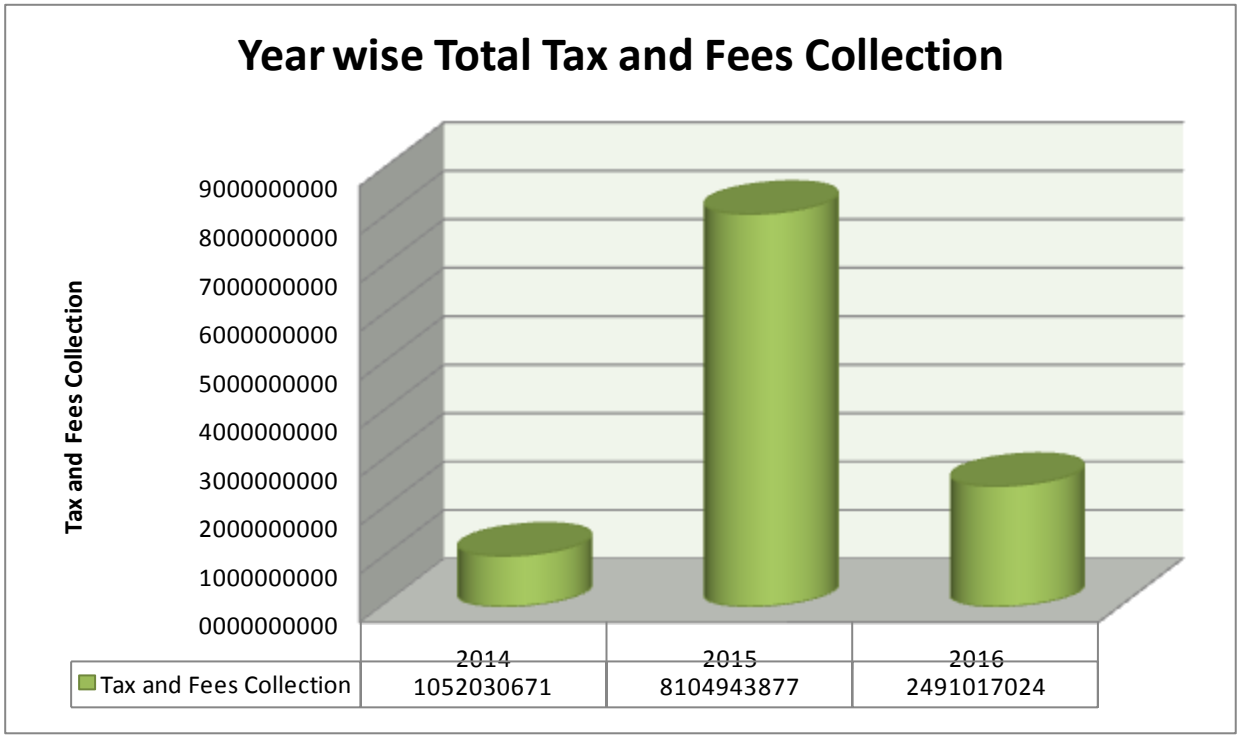

Fig.-5 Year Wise Revenue Collection

XI. CONCLUSION

The implementation of e-Governance in any sector can enhance the quality of service delivery. It could be beneficial for citizen as well as for government. Homologation frame work will acts as the backbone for integrating the dealer application and manufacturer. 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

REFERENCES

1. Business Intelligence And E-Governance, Analytics & Modeling Division National Informatics Centre Department of Information Technology, Ministry of Communication & IT, New Delhi, India
2. HOMOLGATION FRAMEWORK: Homologation is the process of certifying that a particular vehicle is roadworthy and matches certain specified criteria laid out by the government for all vehicles made or imported into that country. **https://vahan.nic.in/makermodel/vahan/welcome.xhtml**
3. DEALER POINT REGISTRATION APPLICATION**:** Online Dealer Point Registration (collection of Application in form-20 with fees and tax for Registration) is a step towards decentralizing the digitization of registration data and eliminating cash handling at RTO cash counter that makes the registration process more simplified and faster with intent to execute the CMV Rule 42. **https://vahan.up.nic.in/vahaninweb/**

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