Service Center

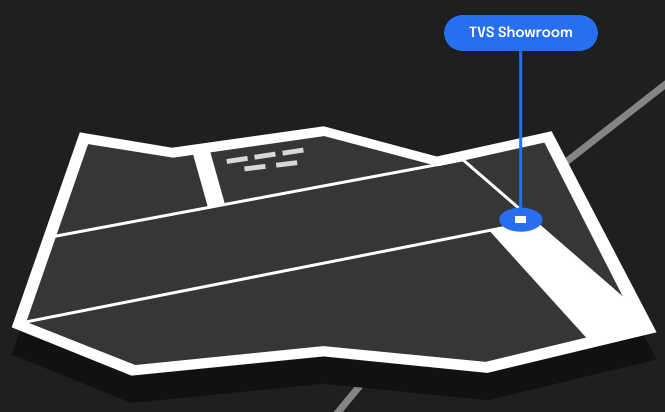
Digitalizing Vehicle Service Centre Job Card

Context:

- The current service process at TVS is manual, causing delays, errors, and limited digital engagement for customers.
- Operational inefficiencies impact both employee workflows and customer satisfaction.

Objective:

- To propose a digital transformation plan aimed at streamlining service workflows, improving data accuracy, and enhancing customer transparency



Problem Statement

The current TVS two-wheeler service process is heavily manual, leading to delays, errors, and limited digital transparency for customers. Service centers struggle with inefficient workflows and resource allocation, data accuracy, and customer communication. This results in operational bottlenecks and a suboptimal service experience for both customers and employees.

Overview of TVS Services

TVS Motor Company, a leading two-wheeler manufacturer, is known for its customer-centric service approach, offering streamlined processes across service centers. Their offerings include regular maintenance, repairs, spare parts, and value-added services. They aim to ensure customer satisfaction with timely and quality service delivery, leveraging innovative tools and strategies to enhance customer experience.

Services

- Comprehensive Service Network
- Customer Support
- Genuine Spare Parts
- Commitment to Sustainability

Vision and Values

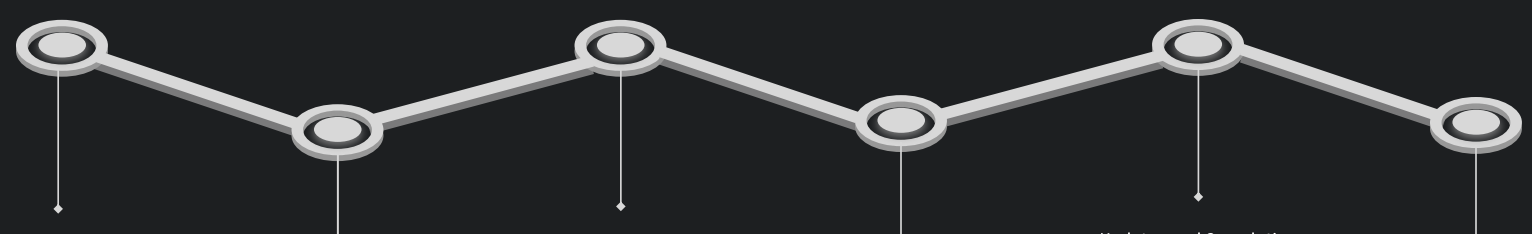
Driven by innovation and a customer-first approach, TVS Motor Company continually evolves to meet the changing demands of its customers while upholding its core values of trust, value, and service.

TVS Job Card Process

NOTE : Mostly, the service advisors fill out the job card manually at the service center. Afterward, the same details are entered into a digital platform for tracking and further processing.

The job card process at TVS service centers involves recording customer and vehicle information, noting service requirements, and tracking service progress on paper or non-digital systems. Below is an overview of the process and its associated challenges:

Job Card Process Flow



Customer Interaction

The customer visits the service center and explains their concerns.
The service advisor records the details manually on a physical job card, noting down vehicle issues, service type (routine or repair), and any additional requests.

Vehicle Inspection

A preliminary inspection is conducted, and findings are documented on the job card.

Approval Process

Estimated service costs and timelines are shared with the customer, requiring manual approval or signature.

Work Allocation

The job card is handed over to technicians for service work, often with minimal digital tracking or coordination.

Updates and Completion

Service advisors provide manual updates to the customer via phone or in person.
On completion, the job card is finalized with service details, costs, and customer signatures.

Payment

Customers pay to the payment counter and receive their payment reciept

Impacts of the Manual Process (For Customers)

- Lack of Transparency: Customers receive limited real-time updates about the service status.
- Delays in approval processes prolong service timelines.
- Error-Prone Communication: Miscommunication due to manual note-taking or lack of digital confirmations leads to unmet expectations.
- Inconvenience: The absence of a digital booking or tracking system requires customers to visit the center for updates or approvals.

For Service Advisors

- High Workload: Manually creating and managing job cards increases the administrative burden.
- Coordination with technicians is less efficient without automated task assignments.
- Error Risks: Paper records can be misplaced, and handwritten details are prone to errors.
- Missing updates or incorrect customer information impacts service quality.
- Time Inefficiency: Advisors spend significant time on repetitive tasks like data entry, which could be automated.
- Limited Analytics: Paper-based records prevent access to service insights, making it difficult to assess technician performance or identify common issues.

NOTE : This dual-entry process introduces inefficiencies and the potential for errors, as the information is recorded twice in different formats.

Competitor Analysis

Primary Research

Key Insights and Challenges

Inefficiency Due to Manual Processes: The need to fill job cards manually, re-enter data, and rely on personal communication significantly reduces the overall efficiency of service operations.

Limited Customer Engagement: The lack of a customer-facing digital platform means that customers are not empowered to track their own service status or history, which decreases customer satisfaction.

Faced by Service Advisors

Opportunity for Digital Transformation: Introducing a more integrated digital solution that allows both customers and service advisors to track and manage service requests would enhance efficiency, transparency, and customer engagement.

Operational Bottlenecks: The network issues and the mandatory manual form filling create operational delays, making it harder for service advisors to provide quick and accurate service updates.

Demand for Transparency: Customers are increasingly requesting videos of the servicing process. This suggests a need for greater transparency and trust, as customers want to see firsthand how their vehicles are being handled.

Waiting Time Concerns: The long waiting times are a significant pain point, which can negatively impact the customer experience, particularly if customers are not kept engaged during their wait (e.g., lack of entertainment or updates).

Digital Communication: The use of digital channels to send service reports is a positive aspect. It shows TVS's efforts to digitize and streamline communication, which aligns with modern customer expectations for instant access to service details.

Persona

Customer

Full Name : Ravi Kumar

Age : 32 Years old

Pain Points
Long wait times, lack of updates on service status, difficulty in booking slots.

Goals
Quick service, transparency, and smooth booking experience.

The Service Advisor

Full Name : Priya Sharma

Age : 28 Years old

Pain Points
Time-consuming manual documentation, missed follow-ups, inefficient workload distribution.

Goals
Automated processes, better resource visibility, and effective customer communication.

The Manager

Full Name : Anil Verma

Age : 40 Years old

Pain Points
Difficulty tracking team productivity, lack of performance insights, delayed reporting.

Goals
Dashboard analytics, team performance insights, and reduced bottlenecks.

The current TVS service center process has several inefficiencies related to manual job cards, long waiting times, limited customer interaction, and lack of transparency. To address these challenges, we propose a digital solution involving QR codes, a WhatsApp chatbot, and a self-service kiosk machine outside the service center. This solution aims to enhance customer experience, operational efficiency, and service transparency.

The proposed solution consists of three main components:

Job card Integration in TVS original app

QR Code Integration in Kiosk Machine

WhatsApp Chatbot

Prototype

Click here to see

Prototype

Click here to see

Prototype

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Integration and User Journey :

Pre-Service:
Customer books an appointment online and receives a personalized QR code for their service.The QR code can be scanned via WhatsApp, or at the kiosk when arriving at the center for check-in.

During Service:
Customer tracks the service progress via WhatsApp or scans the QR code for real-time video updates and status reports. The kiosk offers self-service updates and allows easy payment options.

Post-Service:
Customers receive a digital report, invoice, and future service reminders through WhatsApp and via the QR code dashboard. A feedback survey is sent automatically to ensure continuous improvement.

Key Benefits of Solution:

- Efficiency: The digital systems reduce administrative overhead and streamline the service process, reducing wait times and errors.
- Customer Engagement: Personalized experiences through QR codes, WhatsApp, and kiosks make customers feel valued and informed.
- Transparency: Real-time updates and video footage of the service process create a higher level of trust and satisfaction.
- Convenience: Customers can easily track service status, schedule appointments, and receive reports without needing to visit the service center frequently.
- Cost-Effectiveness: Digital solutions like kiosks and WhatsApp chatbots reduce the need for additional human resources, improving service center efficiency.

Usability Testing

The usability testing aimed to evaluate the effectiveness, user experience, and overall satisfaction of:

Service Center Workers

- The center workers found the system intuitive but needed guidance for advanced features.
- Filling job card took 30% less time than manual process.
- They appreciated the QR integration for vehicle history and Chatbot feature.
- Few workers who were not well acquainted with smartphone features were reluctant about the idea.

Customers

- Customers found it easy to access updates through Whatsapp, a familiar platform.
- They found it easy when they got to know that they will directly receive notifications about service stages.
- Customers suggested integrating payment options and post-service feedback in the chatbot.

Feedback

The digital service report was very convenient. I no longer need to keep track of paper receipts. However, I'd like to see an option to provide feedback directly through WhatsApp after my service.

Real-time data validation is a great feature. I no longer worry about missing key information on the job card. I wish we had offline capabilities, as network issues can disrupt workflow during peak hours.

I feel we need training sessions to explore all the features like retrieving past service records.

It's a nice feature, especially for those who prefer not to engage with staff. The touchscreen is responsive, but I'd like to see a feature where I could schedule my next service through it.

It would be helpful if it also had a troubleshooting guide for customers who get stuck.

The usability testing highlighted significant improvements in efficiency and customer satisfaction with the proposed digital system. While there are challenges in network dependency and initial user adaptation, the solution has strong potential to revolutionize TVS service operations. Adopting the recommended changes will ensure a smooth transition and maximize the benefits of digitalizing job card processes.

Thankyou!