





Vehicle warranties are a cornerstone of customer trust in the automotive industry. However, maintaining the integrity of warranty claims presents a formidable challenge. In the first three years of a vehicle's warranty, three service claims are available. The process of filing a service warranty claim begins with the creation of a job card, a pivotal step in ensuring transparency and reliability. These job cards are meticulously crafted, capturing essential details such as the vehicle registration number, the code below the handle, and the chassis number in scooters.

This documentation serves as the foundation for subsequent service claims, safeguarding against fraudulent activities and ensuring the integrity of the manufacturer's service operations. For a leading Indian two-wheeler manufacturer, the proliferation of fraudulent service claims across its vast service center network posed a significant threat.

This case study explores Ahana's strategic approach to address their challenge, incorporating innovative AI solutions to verify the physical presence of vehicles at service centers and streamline the service claim process.

Client Profile:

The client, an Indian multinational motorcycle and scooter manufacturer headquartered in Delhi, is globally acclaimed as the largest producer of two-wheelers. In 2001 they achieved the top position in India's two-wheeler manufacturing sector. Additionally, they earned the prestigious title of 'World No.1' two-wheeler company for leading in unit volume sales.

Challenges:

Facing an onslaught of fictitious service claims, our client grappled with preserving profitability and customer trust. The rampant nature of fraudulent activities within their extensive service network demanded a robust solution to verify the physical presence of vehicles at service centers and thwart deceptive practices.



Ahana's Solution:

To address the challenge, our team engineered a sophisticated AI solution comprising two pivotal components: Fake Image Detection and VIN/REG Optical Character Recognition (OCR). Leveraging cutting-edge deep learning algorithms and computer vision techniques, the Fake Image Detection module scrutinized images for anomalies, detecting any signs of manipulation or tampering. Concurrently, the OCR module adeptly extracted alphanumeric characters from vehicle identification numbers (VIN) and registration plates, irrespective of varying image conditions.

Benefits:

- Scalable system architecture utilizing GPU-enabled Azure cloud virtual machines and a load balancer.
- Capacity to handle 80,000 to 100,000 requests per day with 40-50 concurrent connections during peak hours.
- Al model's response time optimized to 0.6 seconds per request.

The Impact:

- Generation of authentic job cards, ensuring transparency.
- Drastic reduction in fraudulent activities.
- Streamlined service claim process, leading to a 60% improvement in processing time.
- Enhanced customer experience by 60%, fostering satisfaction and loyalty.
- \$10 million saved per year.

Conclusion:

By leveraging innovative Al-driven solutions, the Indian two-wheeler manufacturer successfully curtailed fraudulent service claims, fortifying the reliability of their service operations. The implementation of Fake Image Detection and VIN/REG OCR technology not only delivered substantial cost savings but also ushered in efficiencies that bolstered customer satisfaction. In an industry where trust is paramount, this initiative underscores the manufacturer's commitment to integrity and excellence.

About Ahana Systems and Solutions:

Ahana Systems & Solutions is a leading IT Infrastructure Management Services and Digital Transformation company based in Bengaluru, India. Our expertise extends to a wide range of solutions, including Cloud, RPA, DB & EDW, BI & Analytics, and Application Development. Our 100+ roster of clients relies on us for our deep domain expertise, skilled resource base, and proven partnership with the best technology providers.

Contact Us: