

Workforce Reinvention Blueprint

Automotive Industry

How Al and Automation will Transform the Workforce Based on Reejig's Proprietary Work OntologyTM Intelligence

How Al is Reinventing the Automotive Industry

The automotive industry, valued at \$3.9 trillion in 2023, is projected to grow at a compound annual growth rate of 7.2% from 2024 to 2028.

Top 3 Concerns Facing Automotive Industry CEOs in 2025

- 1. Electrification and EV Profitability
- 2. Supply Chain Resilience
- 3. Al and Automation Integration

Focus Area 1: Workforce Shifts

Projected Workforce Shifts in 2025 and Beyond

Where Al and Automation Will Drive Operational Effectiveness



Assembly Line Automation

The integration of AI into manufacturing processes allows for enhanced precision, reducing human error in tasks like welding, assembly, and quality control.

Al significantly reduces operational costs by minimizing errors, waste, and downtime. Studies project that by 2030, this technology will lead to a 35-45% reduction in production costs.



Supply Chain Optimization

Al-driven platforms analyze vast amounts of supply chain data to identify patterns, predict disruptions, and recommend proactive strategies.

This optimization results in increased supply chain resilience, improved resource allocation, and reduced lead times. Businesses can meet customer demands more efficiently while reducing costs like overstocking.



Autonomous Driving Development

Al will support autonomous vehicle technology, enabling object recognition, path planning, and real-time decisionmaking for self-driving cars.

Al reduces accidents by minimizing human error, offers fuel efficiency through optimized driving, and creates new business models, such as ride-hailing services using self-driving fleets.

Focus Area 2: Roles Impacted by Al

Key Roles Impacted and Reskilling Pathways for 2025

How Impacted Roles Can Transition to In-Demand Roles

Job Family

Automotive

Maintenance

Impacted Roles

Traditional Internal
Combustion Engine (ICE)
Mechanics, Assembly Line
Workers in Combustion
Vehicle Manufacturing

In-Demand Transition Roles

EV Maintenance Technician,
Automation and Robotics
Maintenance Specialist, Data
Analyst or Process
Automation Specialist

Reskilling Pathways

EV Maintenance Certification (6-9 months)

Siemens Mechatronics Systems (12-18 months)

Automotive
Manufacturing
Operations

Assembly Line Workers in Combustion Vehicle Manufacturing, Quality Control Inspectors, Material Handlers

Robotics Maintenance
Specialist, Al-Powered
Quality Assurance Analy
Advanced Supply Chain

Quality Assurance Analyst,
Advanced Supply Chain
Coordinator

Robotics Operations Training (8-12 months)

Al in Quality Management (6-9 months)

Administrative and Back-Office Operations

Administrative Roles in
Dealerships, Scheduling
Coordinators, Customer
Relations Specialists

Process Automation

Manager, Digital Workflow

Analyst, Customer Insight

Analyst

RPA and Workflow Management (4-6 months)

Data Interpretation and Analytics

(4-6 months)

Focus Area 3: Driving Operational Effectiveness

2025 Al Strategies to Boost Operational Effectiveness

Prioritized Roles for Al Transformation based on Al Potential Index, Operational Efficiency Index & Time to Benefit Realization

1

Autonomous Driving Developers and Testers

This role accelerates the development of autonomous vehicles, saving substantial time and costs in physical testing and improving software precision and regulatory compliance.

With an AIPI of 1.35 and an OEI of 91%, this role is a top priority for investment because it delivers short-term benefits with high efficiency improvements, ensuring market leadership in autonomous vehicle innovation.

Al Potential Index (AIPI) Score: 1.35

Breakdown: Potential Automation Proportion: 90%, Al Maturity/

Risk Adjustment: 0.75, Current Automation Proportion: 50%

Operational Efficiency Index (OEI) Score: 91%

Breakdown: Time Savings: 40%, Cost Savings: 30%, Process

Improvement Factor: 1.3

Time to Benefit Realization: Short-Term (6-12 months) based on the rapid implementation of AI tools enabling immediate improvements in development cycles and testing protocols.

2

EV Battery Production Automation Staff

This role streamlines EV battery production, saving significant costs in material handling and labor while improving output consistency and scalability for growing EV demand.

With an AIPI of 1.48 and an OEI of 75%, this role is a high-priority investment with medium-term benefits that enhance competitiveness in the electrification market.

Al Potential Index (AIPI) Score: 1.48

Breakdown: Potential Automation Proportion: 85%, Al Maturity/Risk

Adjustment: 0.7, Current Automation Proportion: 40%

Operational Efficiency Index (OEI) Score: 75%

Breakdown: Time Savings: 35%, Cost Savings: 25%, Process Improvement Factor: 1.25

Time to Benefit Realization: Long-Term (2-3 years)

The integration of Al-driven automation in battery production processes.

