



TMAP.AI

AI Models to Elevate Your After Sales Business



TAVANT AT A GLANCE | INNOVATION FOR THE MANUFACTURING INDUSTRY



GLOBAL PRESENCE

Offices in Europe & UK

LOCATIONS

8 Countries

INTERNATIONAL CLIENT BASE

BEST COAST DELIVERY



3,000+

GLOBAL HEAD COUNT



Artificial
Intelligence and
Machine Learning

APPROACH TO BUILD PRODUCTS

Analyst Speak



Manufacturers in complex industries with complex networks demand partners like **Tavant**, that can support its clients with **personalized, configurable offerings** that can deliver **AI-based capabilities** and **improve point processes** while ensuring data can be leveraged across the enterprise.”-

Aly Pinder (IDC)

24

YEARS

Aftermarket software expertise

200,000 + users

150 + countries

Industries

Automotive

Building/Construction
Materials

HVAC

Electrical Appliances

Ag/Farm Equipment

Heavy Equipment

SERVICE LIFECYCLE
MANAGEMENT

- Warranty Management
- Quality Management
- Service Contract Management
- Service Parts
- Service Analytics

Best Place to Work

in the Digital Space by the CEO
Magazine

KEY PARTNERSHIPS





LEADER

IDC MarketScape for Warranty Service Management Applications 2024

MAJOR PLAYER

IDC MarketScape for Service Life-cycle Management 2023- 2024

MAJOR PLAYER

IDC MarketScape for Service Parts Planning Applications 2023-2024



TMAP

AI Models to Elevate Your After Sales Business



Warranty.AI

- Suspect Claim
- Claim Automation
- Peer Averaging
- Code Predictions
- AI Content Extractor from Images & PDF
- Data Models & API Integrations
- Warranty Dashboards, Metrics & Reserve Forecasting



Price.AI

- Price Optimization
- Price Strategies
- Competitive Pricing Analysis
- Alerts, Price Metrics, What-If Analysis
- Inventory optimization
- API Integrations
- Parts Demand Forecasting



Field.AI

- Copilot for Field Engineers
- Service & Parts Predictions
- Real-time visibility
- Intelligent Service Recommendations
- MTTR, MTBF, Fix Rate
- Causal Parts Probabilities
- Workforce & Route Optimization
- Customer Sentiment Analysis



Knowledge.AI

- Structured and unstructured data collection & optimization
- Gen AI enabled smart search and chatbot
- Persona based questions and answers
- Copilot integration in your application
- Automation Agent – Case creation, Warranty Claim Entry
- Generate content - service documentation, knowledge articles.



Connect.AI

- Data collections
- Alerts & Uptime
- Failure Prediction Models
- Asset Utilization for IoT devices
- Anomaly Detections
- Integrations with Business Applications
- Digital Twin



Quality.AI

- Early Warning Signals
- Machine Failure Clusters and Root Cause Analysis
- Failure predictions from Claims
- Quality Metrics
- Weibull, Survival, Defect, and Part Failure Analysis
- Recalls & Return Analysis



Contract.AI

- Parts & Service Demand Forecasting
- Profitability Analysis
- Pricing
- Service Contract Metrics
- Contract renewal & Churn
- Plan Performance Optimization
- Segmentation, Upsell & Cross sell Opportunities

WARRANTY



Warranty Analytics

AI Models & Insights to automate claims processing, identify suspicious information, improve dealer performance and reduce warranty spend. Enhance quality of the claim as well as identify anomalies in the image.



Suspect Claim Analytics

Leverage Machine Learning algorithms to flag suspicious claims and reducing warranty spend



Image Anomaly Detection

Neural net-based image labelling of the attached images, PDF and Videos



Code Prediction

Predict QA codes using AI, ensuring better data quality, and data accuracy in identifying the issues



Predictive Analytics

Predict future warranty cost, failure rates and maintenance requirements and allocate resources effectively



Warranty Analytics

Benefit from large number of standard KPIs, dashboard based on industry best practices



Claims Automation

AI Models to automate the validation and processing claims. models to analyze claim data, and verify warranty coverage



Warranty Cluster

Auto cluster of similar claims, based on a multitude of parameters to provide the labor/part cost peer averaging



Optimize Warranty Spend

ML models to predict failure probabilities for existing and replaced components. With a help from AI, Identify cost optimization drivers

QUALITY



Quality Analytics

Analyzing claims, returns, and repairs, businesses can identify product quality issues, failure rates, and areas for improvement. This allows them to take corrective actions, enhance product quality, and reduce post-sales costs



Early Warning Signals

Collect, find, and alert product quality issues by combing data from warranty, work orders, cases, product usage, and IoT sensors



Root Cause Analysis

AI enabled 8D Problem solving templates. 5 whys analysis, Ishikawa/Fishbone diagrams and Fault tree Analysis



Defect Detection

AI enabled defect detection leverages computer vision and deep learning models to identify defects in components



Key Metrics

Cost of Quality, Yield Rate, Audit Score, Scrape rate, MTTR, MTBF, Variances, Supplier Score card, Reliability growth rate



Quality Assurance

AI Models to analyze inspection test and audits. Defect Analysis, Statistical Process Control, FEMA and Pareto Analysis.



Recalls and Returns Analysis

APIs to connect with external systems. Proactive alerts includes customer dissatisfaction results and quality issues.



Reliability Analytics

Custom ML models for evaluating system reliability using Weibull, Scale Analysis, Defect and Part Failure Analytics



Quality Prediction

Predictive Models that forecast future quality issues or trends. Leverage supplier data for risk modeling and optimization

CONNECT



Connect Analytics

Turning Data into Insights.
Predict Machine Failures,
Remaining Useful Life, Early
warning alerts and Anomaly
detection



Data Collection

Connectors will collect data from a wide range of devices, sensors, wearables, and connected devices



Anomaly Detection

Predict failures from predictive models to stop and reduce breakdowns



AI Alerts & Uptime

Critical DTC events, outlier values from sensors, service campaign, uptime and downtime metrics



Visualize and Explore

Aggregate corporate data and dig down to understand individual equipment performance



Asset Utilization

Determine Cost of Ownership, Remaining Usable Lifetime, MTBF, MTRR, and Consumption Metrics



Integration APIs & Digital Twin

APIs to connect with external systems. Digital representation of your equipment and plants



Sensor Health

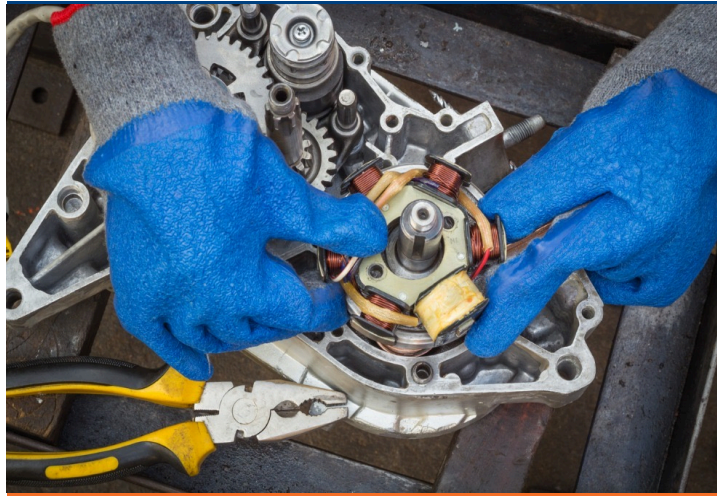
Monitor sensor network performance, identify malfunctioning sensors, determine the root cause of failures, risk scores, and anomaly data points



Failure Prediction

ML models to predict failure probabilities for existing and replaced components, Survival Analysis and Cost Analysis

PRICE



Price Analytics

Recommend optimal parts price, competitive pricing analysis, and evaluate performance of pricing strategies. Ability to monitor and alert the price changes and segment customers based on their price sensitivity.



Competitive Pricing Analysis

Gather and analyze pricing data from competitors in the market



Price Monitoring & Alerts

Continuously monitor the price changes and alert businesses when it reaches the threshold



Price Optimization

ML Models to optimize the price dynamically. Considers different market parameters to determine optimal price



Real-Time Insights

Insights into pricing performance, trends, and the effectiveness of pricing strategies



Price Strategy

Take advantage of out of the box pricing strategies and optimization scenarios or configure/customize your own strategy



API Integration

REST APIs to connect inventory systems, sales data and other external systems



What-if simulations

Make use of what-if simulations to better understand how client net prices affect profitability



Parts Demand Forecasting

AI Models to predict forecast demand using sales data, market trends, demand patterns and external factors

FIELD



Field Analytics

Optimizing services using AI Smart search, service & parts demand predictions and real time insights, enabling you to improve service quality, enhance customer satisfaction.



Real-time visibility

Provide real-time visibility into field service operations, monitor technician performance, and track work orders



Predictive Maintenance

Predict failures from predictive models to stop and reduce breakdowns



AI Smart Search

Pull service history, equipment preferences, technician interactions, knowledge articles, cases, videos, and manuals



MTTR, MTBF, Fix Rate

First time fix rate, MTTR, MTBF, MTTF, Repeat visits, Avg response handling time



Advanced scheduling and routing

Machine learning to optimize technician schedules and routes, improving efficiency and reducing travel time



Cost Analysis

Insights and forecast into cost drivers, field service operations and cost saving opportunities



Service & Parts Demand Predictions

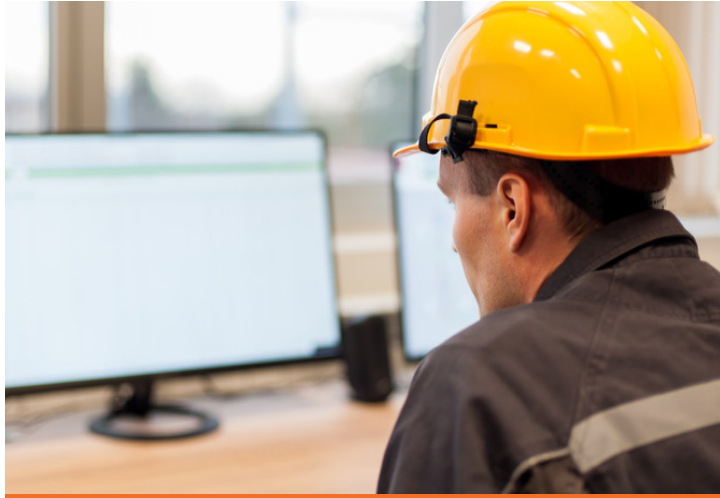
Find symptom, causal parts probability, part combinations commonly needed to solve an issue



Customer Insights

Gain insights into customer preferences, service history and satisfaction levels. Helps personalize and proactive service experiences

CONTRACT



Contract Analytics

Enhance contract performance, improve profitability, mitigate risks, and strengthen customer relationships through personalized contract offerings and optimized price.



Service Plan Monitoring

Optimize non-performing plans, tracking renewal rates, profitability, CSAT, and SLA



Portfolio Optimization

Analyze the contract types, service provisions, and pricing models to optimize the contract portfolio



Profitability Analysis

Analyze contract revenue, parts cost and service deliver expenses including inflation



Contract Risk Portfolio

Comprehensive approach to manage risks and disruptions with probability vs severity heatmap, parts and technician availability



Contract Renewal and Churn Analysis

Track customer behavior patterns, influencers for renewals and churn



Service Contract Pricing

Optimized price for a segment and personalized price for a customer



SLA Performance

Analyzing response, resolution time, service quality compliance gaps and performance against contractual obligations



Service Demand Forecasting

Forecast the service demand to find parts availability prediction, labor prediction and service cases

KNOWLEDGE



Knowledge AI

Gen AI and Large Language models to help business and organization improve operations and decision-making process with access to knowledge and expertise to troubleshoot, automate and take actions.



Data Ingestion & Optimization

Data connectors to support wide range of data sources – structured and unstructured data.



Content Generation

Assist OEMs/Dealers with Service documentation and knowledge articles.



Smart Search and Chatbot

Search, Chat, Converse and troubleshoot with documents, images, audio and video files.



Warranty Copilot

Summarize, Recommend and troubleshoot claims, cases, warranty information.



Customized Personas

Personalize recommendations and responses for OEMs/Dealers to provide relevant information and suggestions.



Caching and Context Aware

Context aware suggestions, responses and recommendations. Conversation history is persisted and retrieved when needed.



Automation Agents

Agents to recommend and take actions such as case creation, warranty order creation, claim entry.



Multimodal Capabilities

Understand and Process information from multiple modalities – text, pdf, audio, images, video.

TMAP | VALUE PROPOSITION

Improve **operational efficiency** (Reduce Cost, Improve Quality and Maximize resource utilization), **elevate service quality, drive revenue growth** (IoT Monetization, Parts Price) and **Service Focus** (Focus on Total Cost of Ownership, Uptime Assurance Programs)



Comprehensive AI Models for Manufacturing After Sales teams to reduce cost, optimize outcomes, and solutions relevant to their operations

Real-time Insights

enabling businesses to make proactive and immediate decisions based on the most up-to-date information.

Industry specific Expertise

enabling standardization & reducing data engineering investments exponentially

Advanced Predictive capabilities

utilizing ML models to forecast future trends, anomalies, or potential issues based on historical and real-time data

Wide choice AI models

that seamlessly & securely run on your data and store insights in your subscription

APIs that offer flexibility

to build or run solutions analytics, reports & dashboards

Turning Data into Insights & Recommendations. Elevate Your After Sales Experience with AI-Powered Intelligence.



THANK YOU

PEOPLE. PASSION. EXCELLENCE.

Santa Clara | Dallas | New Jersey | Indianapolis | London | Bangalore | Hyderabad | Noida | Kolkata | Sydney | Tokyo | Colombia

Tel: 866-9-TAVANT | Email: hello@Tavant.com



Tavant Proprietary & Confidential