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VIMANA Elevate

Smart Manufacturing Analytics

VIMANA Elevate is the next-generation Smart Manufacturing Analytics application with outof-the-box functionality for immediate value realization.

VIMANA Elevate goes beyond Machine Monitoring and OEE to predictive analytics, providing decision support to improve operational and financial manufacturing performance. It is adaptable to heterogeneous manufacturing environments and fully customizable to an everexpanding list of use cases.

VIMANA Elevate Benefits

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#### Increase Manufacturing Efficiency

Reduce waste, lean processes and improve standardized work practices. Decrease operating costs and optimize CAPEX investments.



#### Improve Asset Performance Management and Production Line Efficiency

Boost factory throughput. Reduce downtime, move to predictive maintenance. Decrease cycle time and WIP inventory.



#### Boost Workforce Efficiency and Productivity

Remote monitoring. Optimize staffing. Adopt productivity tools to increase operator effectiveness.



#### Make Supply To Meet Demand

Manage disruption. Optimize profitability during volatile demand. Enable manufacturing flexibility.

## **VIMANA Elevate Capabilities**

## **Visualize and Monitor**

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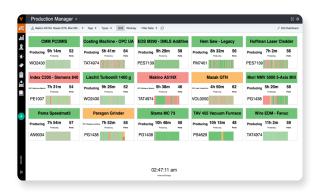
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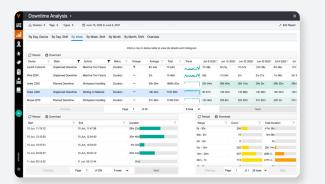
#### **Machine Monitoring**

Remotely monitor your machines across the globe to understand performance, capacity, and machine health.

## Manufacturing KPI Metrics and OEE

Gain real-time performance visibility into the manufacturing process with out-of-the-box dashboards and KPIs to benchmark and compare using standardized metrics for manufacturing efficiency and continuous improvement measurement.





#### **Custom Dashboards and Reports**

Create intuitive visualizations based on user personas and provide drill down insights into processes, assets and facilities to improve day-today decision making.

#### **Machine Downtime Tracking**

**Track machine downtime** with out-of-the-box dashboards, reports, historical analysis, and ML/ Al powered solutions for root cause analysis and predictive and insights to improve asset utilization and reduce downtime.

## **Analyze and Predict**



#### Condition Monitoring and Quality Analysis

Monitor relevant parameters (vibration, temperature etc.), to identify significant changes in machine performance to prevent failures and provide early warnings in part quality degradation.



#### **Production Line Management**

Visualize your shop floor layout and get real-time insight into line performance, Takt time and cycle time. Identify line bottlenecks and root causes to improve flow and balance lines.

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#### **Part Analysis**

Get insight into part setup/changeover time, actual part cycle time, and parts produced. Analyze in-cut time for insight into actual machining costs.

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#### Workforce Performance Management Enablers

Give operators a real time view of their performance so they can manage and control daily work. Analyze shift performance for better planning and scheduling. Use lights outs manufacturing analysis to optimize resources.

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#### **Cutting Tool Analysis**

Get insight into your cutting tools useful life by combining data on tool usage, cutting speeds, and feed rates to determine the best time for tool replacement to reduce costs while ensuring part quality.

### **Communicate and Empower Actions**



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#### **Alerts and Notifications**

Be proactive and keep your operation running with alerts that are triggered by KPIs, machine alarms, and condition thresholds to communicate risks requiring rapid resolution.

#### Ticketing System for Shop Floor Communications

Communicate and track operational issues and requests across the workforce for rapid, closed-loop problem-solving and to inform process change.



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#### **Work Instructions**

Provide operators productivity tools including digital work instructions for on-the-job dynamic training.

#### **Digital Logbook**

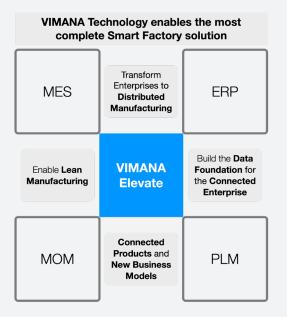
Enable paper to digital migration, capturing the history of a workstation's issues and operator comments for smooth shift handover and tribal knowledge sharing.

## **Integrate and Automate**

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#### **Process Optimization**

Transform from Lean Manufacturing to Digital Lean. Collect and analyze data across all your digital systems to power lean manufacturing initiatives. Understand production losses and root causes, track OEE performance, execute bottleneck analysis, measure takt time, standardize work, and deliver continuous improvement.

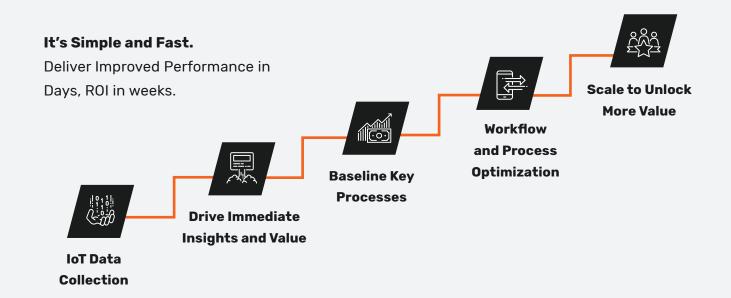


#### Enterprise Application Integration

Automate Insight to process execution. Leverage your investment in existing manufacturing and enterprise application software. Integrate analytics with EAM and CMMS software to automate machine maintenance processes.

Integrate with ERP systems to capture actual shop floor performance to enable more profitable and competitive pricing models. Integrate with MES systems to optimize workflow across the manufacturing operation and SCM systems to gain visibility into the entire supply chain.

## How to Get Started with VIMANA Elevate, Smart Manufacturing Analytics Today.





#### IoT Data Collection

**Connect to everything in minutes** and collect real-time data from sensors, older machines, new devices and production lines and workers. Devices can be connected remotely. **Data is unified, prepared and instantly available**.



#### **Baseline Key Processes**

**Establish baseline from KPI metrics aligned to priority use cases** and measure performance in 2~4 weeks. Capture ROI and business value.



#### Scale to Unlock More Value

Easy to scale to new plants and new use cases from machine monitoring, OEE, and predictive maintenance to digital twins.



## Drive Immediate Insights and Value

**Use out-of-the box dashboards, reports and root cause analysis tools** for visibility and analysis of production processes to manage, control and continuously improve performance across your manufacturing enterprise.



#### Workflow and Process Optimization

**Use Connectors to integrate existing systems to** enable end-to-end processes from data driven insight to process execution.



# ΥΙΜΛΝΛ

VIMANA helps industrial businesses transform their operation and grow revenue with industrial analytics software, services, and solutions for Smart Manufacturing, asset maintenance & reliability, and IoT connected products.

Learn more at **www.govimana.com** 

