



# Manufacturing & Distribution

*Advancing Industry 4.0 with connected plants and intelligent supply chains.*





# Industry Overview

Manufacturers and distributors are being asked to run leaner, respond faster, and absorb disruption that arrives more often than their planning cycles assume.

Industry 4.0 has moved from pilot to production. The organizations pulling ahead are those that connected the plant floor to the supply chain and made both visible in real time.

**\$455B**

Global smart manufacturing market, 2025

**15.5% CAGR**

Smart manufacturing growth, 2025 to 2030

**27.6% CAGR**

Manufacturing digital transformation growth to 2030



# Key Challenges

Siloed OT and IT systems, fragile supply chains, and ageing equipment are limiting throughput, visibility, and resilience across plant and distribution networks.

## Supply chain disruption as the norm

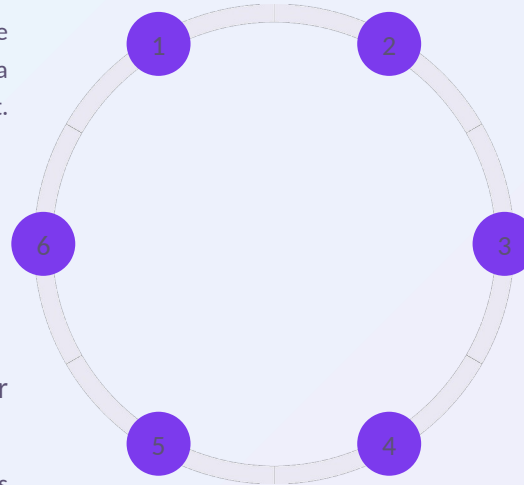
Disruption events are rising year on year, and the average enterprise now faces one often enough to erase a quarter of profit.

## Forecasting without reliable signal

Demand planning runs on historical data that cannot reflect current disruption or real consumption.

## Legacy systems that cost more each year

Disconnected legacy infrastructure costs several times more to maintain than modern equivalents.



## No end-to-end visibility

ERP, MES, and OT systems run disconnected, so no one sees from machine to customer in one view.

## Unplanned equipment downtime

Manufacturers carry hundreds of hours of unplanned downtime annually, at costs that have risen sharply since 2019.

## Ransomware targeting the plant floor

Manufacturing has been the leading ransomware target for several consecutive years, with most OT attacks beginning as IT breaches.



# The Cost of Standing Still

Every year of delay compounds cost, risk, and lost output across the operation.

800 hrs

Average annual unplanned downtime per manufacturer

\$184B

Annual global cost of supply chain disruption

87% YoY

Rise in ransomware against industrial organizations

70%

Factories running disconnected ERP, MES, and OT



# How WinVibe Solves Them

WinVibe operates as the orchestration layer across your entire operating environment, connecting infrastructure, data, and decision-making into one intelligent ecosystem.



## Decision-Making

Live production and supply chain intelligence that turns data into faster action.



## Operations

Unified visibility from machine and line through to distribution.



## Infrastructure

Secure connectivity extended across plants, warehouses, and yards.



## Data

Fragmented ERP, MES, and OT systems consolidated into one trusted source.



## Security

Zero-trust protection embedded across OT and IT from day one.



## Automation

Predictive maintenance and AI-driven production intelligence at scale.



# Connected Plant & Distribution

Deterministic connectivity across production lines, warehouses, and yards.

## Private 5G and edge infrastructure

Low-latency coverage supporting automation, robotics, and AGVs across plant and logistics environments.

## Managed wireless and session control

Authenticated, policy-controlled access across warehouses, yards, and visitor networks.

## Intelligent site and asset monitoring

Continuous condition monitoring across fixed plant, mobile equipment, and distributed sites.



# Command, Visibility & Security

Unified monitoring and secure control across OT and IT environments.

## Integrated NOC and command centre

Production, quality, logistics, and equipment health in one real-time operational view.

## SOC and zero-trust OT/IT defense

Continuous threat monitoring with ransomware isolation across converged OT and IT.

## Unified network management

Fault, performance, and configuration control linking plant networks to enterprise IT.



# Predictive & Supply Chain Intelligence

Turning machine and logistics data into forecasts and earlier warning.

## AI predictive maintenance

Equipment failures predicted weeks ahead, converting unplanned downtime into planned intervention.

## Supply chain traceability and provenance

Blockchain-backed component traceability with automated supplier settlement and anti-counterfeit verification.

## Digital twin and demand forecasting

Production digital twins and predictive demand models used to test changes before committing them.



# Transformation & Lifecycle Support

Guiding strategy, delivery, operations, and continuous optimization.

## Advisory and architecture roadmap

Industry 4.0 roadmaps sequencing automation, connectivity, and analytics investment.

## Cloud, edge and hybrid orchestration

Integrated platforms operating together across plant, data centre, and cloud.

## Managed operations and optimization

24x7 monitoring, managed operations, and continuous improvement beyond go-live.



# Use Cases & Outcomes

50%

## Connected Factory Operations

Faster decisions through unified production visibility

40%

## Predictive Equipment Maintenance

Reduction in unplanned downtime across critical assets

60%

## OT/IT Security Convergence

Faster threat response with ransomware isolation

30%

## Supply Chain Traceability

Reduction in disruption impact through early warning

99.95%

## Warehouse & Yard Automation

Network availability supporting AGV and robotics operation

30–40%

## Legacy System Modernization

Efficiency gain from consolidating ERP, MES, and OT



# Why WinVibe

## Outcome Accountability

Our commercial model is built on measurable results such as downtime avoided, OEE improvement, and OpEx savings, not delivery milestones.

## Speed to Value

Pilot to scale in months, not years, backed by a proven playbook and prebuilt integrations.

## Vendor-Neutral by Design

We are not tied to any single OEM roadmap, giving you long-term flexibility across your technology stack.

## Security and AI, Built In

Zero-trust architecture and AI-native monitoring from day one, never bolted on after the fact.

## Solution Lifecycle Partnership

One accountable partner across strategy, deployment, operations, and continuous optimization.



# Let's build the manufacturing operations of tomorrow, today.

Schedule a strategy session with our Manufacturing & Distribution team.



EMAIL

Info@winvibe.in



WEBSITE

winvibe.in



PHONE

+91 97279 89600



LOCATION

Ahmedabad, India