

Digital operations solutions for manufacturing

Observability Maturity Assessment for Manufacturing Operations

Improve operational maturity and performance management across the entire manufacturing infrastructure — from the factory floor to the enterprise network.

Manufacturers today are under immense pressure to maintain production efficiency, minimize downtime and ensure high product quality. NTT DATA's Observability Maturity Assessment (OMA) helps manufacturers optimize and enhance operations and better manage performance enterprise-wide.

Service overview

Operational success in manufacturing depends on the seamless performance of both machinery and digital systems. These complex production environments require careful monitoring and proactive remediation to prevent costly delays or quality issues. Unfortunately, many monitoring tools are siloed, limiting visibility into the entire production ecosystem.

Platforms are available to help manufacturers track everything from equipment monitoring to factory network performance and application management. These platforms provide end-to-end visibility, combine on-premises and cloud-based systems to make your operations more efficient, and can predict and prevent performance issues before they affect production.

By adding OMA, manufacturing leaders can take a critical first step toward understanding and improving performance management and operational maturity across their organization. The advantages of using our Observability Maturity Assessment include:



Summarizing and aligning current business goals and objectives, including measurable key performance indicators (KPIs) to track improvements and ensure quality standards



Analyzing gaps between current manufacturing capabilities and desired future states



Identifying high-level architectures and strategies for aligning production processes, personnel and technologies to support efficient, reliable, scalable and uninterrupted manufacturing



Leveraging a self-assessment exercise focused on observability maturity in the context of manufacturing operations



Receiving customized recommendations and a high-level roadmap to improve both short-term and long-term performance management goals as well as production line efficiency, reduce operational costs and optimize return on investment

Assessment deliverables

Manufacturing clients who complete the assessment receive:



A comprehensive Observability Maturity Assessment report covering key findings specific to each manufacturer’s production environments



High-level recommendations and a roadmap to address immediate production needs and long-term performance goals



A detailed presentation and review session with manufacturing stakeholders to discuss findings and actionable steps

How the assessment works

The OMA workshop guides our manufacturing clients through a thorough assessment of their production and IT estate. Using a structured advisory approach and practical framework, we develop a realistic plan to help you move up the observability maturity model.

The OMA includes a detailed analysis of the current state of your manufacturing and IT processes, a gap and overlap analysis, and expert recommendations tailored to your production goals. Topics covered include:

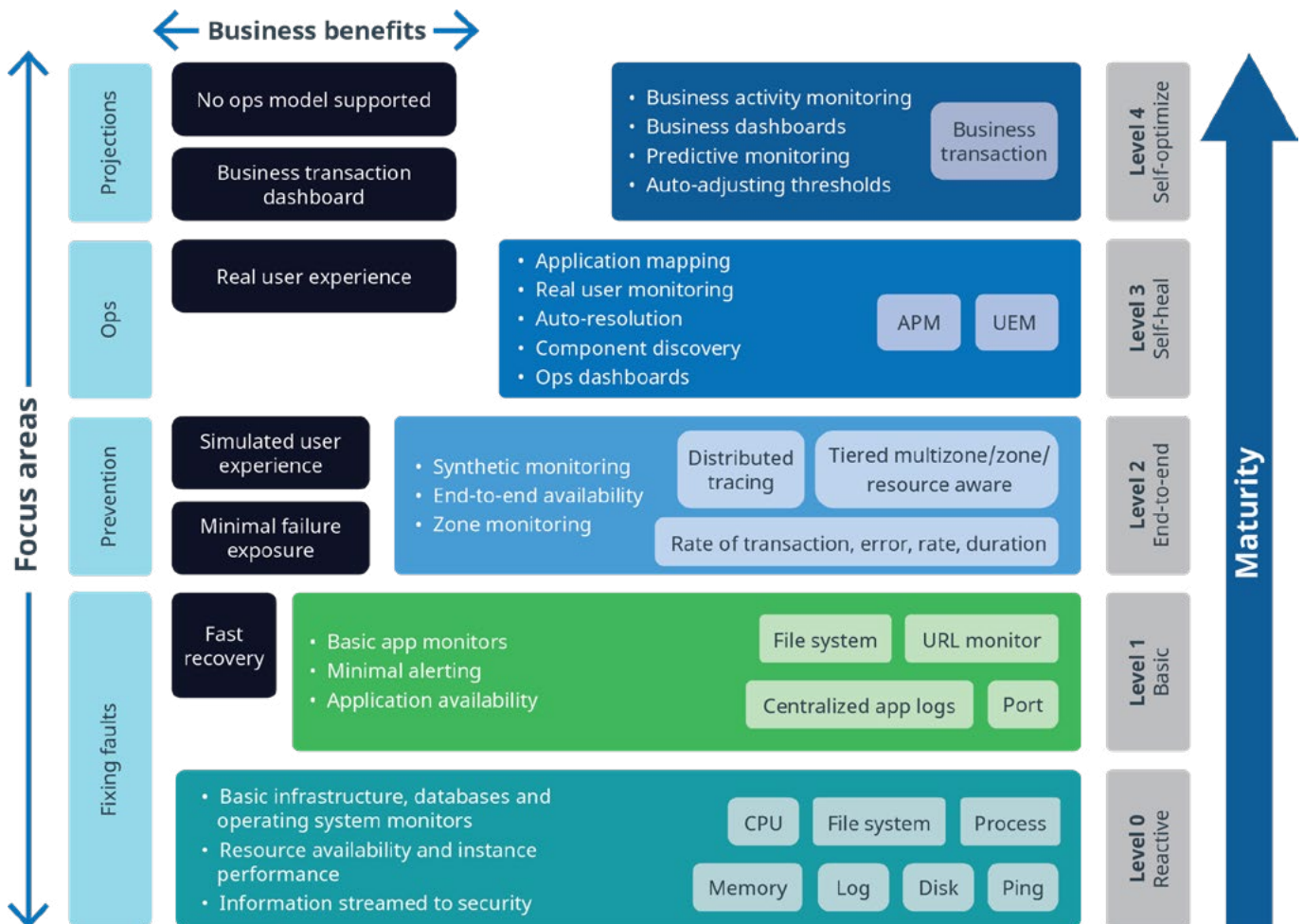


Figure 1: Performance observability maturity model

Business and production

goals. Assesses your technology transformation initiatives, competitive advantages in manufacturing, and KPIs related to production efficiency, downtime reduction and quality control

Organization and process. Reviews your operational workflows, organizational structure and the maturity of your current production processes

Monitoring technologies. These include:

- Application performance management (APM) to oversee production control systems
- Synthetic user experience and path visualization
- Full packet capture and flow, including those for factory network traffic, ensuring that all data streams are optimized for your production needs
- Device and user digital experience monitoring
- Logging, including application, performance, and security information and event management (SIEM)
- Traditional infrastructure status and performance
- AIOps detection and rapid, secure resolution of application issues

Client responsibilities

To complete our assessment, you will need to provide access to:

- Key operational stakeholders, such as the heads of technology infrastructure, applications and networks, production line managers, IT service management leaders, business liaisons, and the chief information officer, chief technology officer and chief data officer
- Data on recent production slowdowns, equipment failures or quality issues, along with access to relevant performance dashboards

Workshop agenda

Service phase

Agenda

Current-state assessment

- Discuss and document current information systems, critical business applications, organizational structure, and deployed platforms, technologies and tools
- Review current processes and procedures related to:
 - Application development, testing and deployment
 - Monitoring, troubleshooting and incident management
 - Availability and continuity management
 - Project and portfolio management as well as change and configuration management
- Identify and document current pain points and problem areas
- Discuss upcoming initiatives as well as future business goals and priorities

Future-state vision and goals

- Describe the ideal application performance management maturity state
- Discuss business requirements, standards and principles for desired future state
- Discuss success factors, operational performance metrics and expected benefits
- Discuss upcoming initiatives as well as future business goals and priorities

Current- and future-state gap analysis

- Identify initiatives, actions and steps to achieve the future state
- Discuss needs and impacts on people, processes, technologies, budget and resources
- Identify potential roadblocks or barriers

Summary and next steps

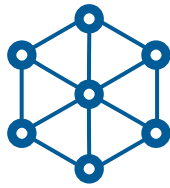
- Recap discussion, assumptions and conclusions
- Establish timeline for report preparation
- Set date and identify participants and goals for report presentation

Why NTT DATA



Global footprint:

We support over 47 technologies in 14 languages across 145 countries.



Integrated services platform:

Our automated AIOps have cross-cloud DevOps capability.



Leading skills and certifications:

NTT DATA holds the top manufacturing service provider partnerships with Microsoft Azure, Amazon Web Services and Google Cloud Platform. We're also the only company to combine those skills with SAP partnership and networking skills in 80 countries.



Recognized:

We're a Leader in the Gartner® Magic Quadrant™ for Managed Network Services.*

Get in touch

If you'd like to find out more about our [Observability Maturity Assessment](#), speak to your client manager or visit our [website](#)

*Gartner, Magic Quadrant for Managed Network Services, By Ted Corbett, Nauman Raja, Jon Dressel, Lisa Pierce, Karen Brown, Danellie Young, 14 October 2024

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