



IT Service and Asset Management Essential Guides

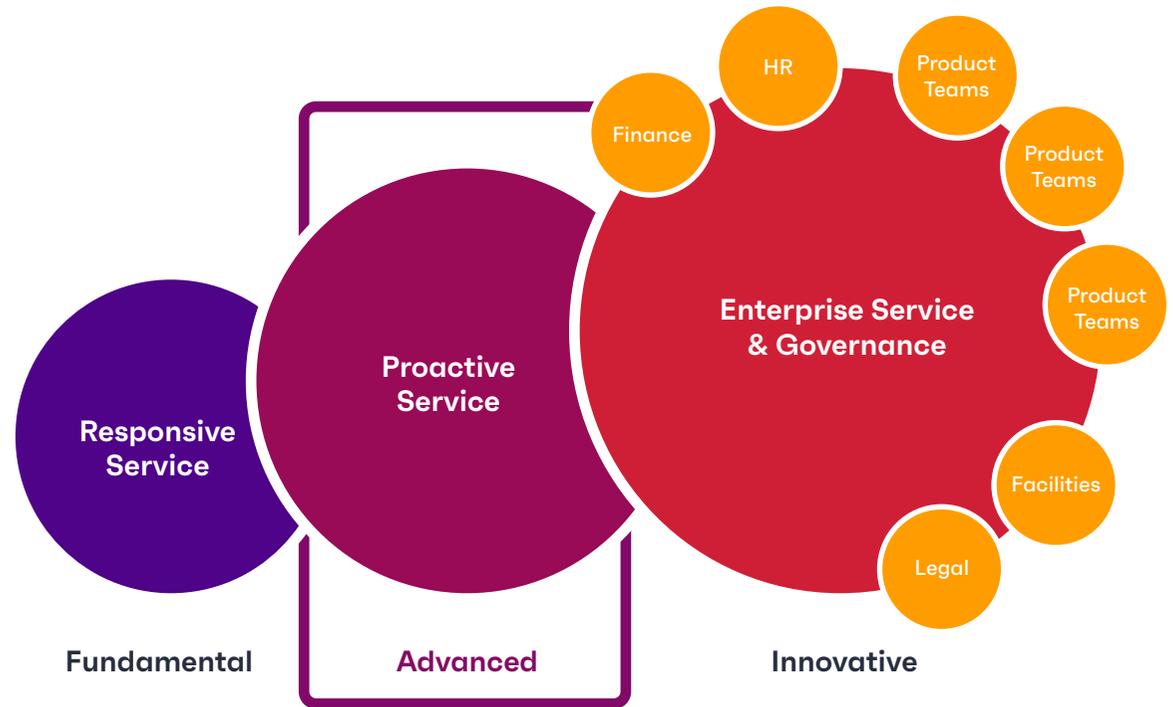
eBook 3: Advanced Capabilities

ITSM Maturity Level Overview

The discipline of IT service and asset management encompasses three levels of IT maturity: fundamental, advanced and innovative. This spectrum of capabilities and tools can be built upon and leveraged to achieve increasingly better operational efficiency and user experiences while reducing risks to the business. At the most advanced level, it can act as a catalyst for strategic digital initiatives that provide quantifiable value to the business.

If your organization is looking to lay the foundation for an innovative future, deliver superior employee and customer experiences, streamline operations and ultimately become a leader in core business functions, it's important to understand the spectrum of IT maturity levels and where you stand in relation to them. Awareness of the IT maturity hierarchy provides guidance to help you move from a reactive and turbulent state to one that is proactive, managed and strategic.

In this third eBook in the [IT Service and Asset Management Essential Guide series](#), the capabilities, benefits and risks of the advanced level of IT service maturity are explored.



Advanced Maturity: A Proactive State

As organizations mature, they evolve from fighting fires to fire prevention. They become more proactive and shift from tracking how work comes into the ticketing system to managing how work gets done within IT. At the advanced level of maturity, IT focuses on maintaining service continuity across the service environment while also increasing operational effectiveness and speed.

Building on the basic capabilities introduced in the fundamental level of maturity, IT teams implement asset and configuration management systems that make it considerably easier to control the thousands — or even millions — of data and metadata points in a dynamic IT service environment.

The management of assets and configurations is one of the most important processes for service continuity because its presence is felt throughout the operational environment and the service lifecycle. Each data point generates extensive amounts of information, all of which become important when maintaining uninterrupted service during problem identification and resolution and when implementing changes. All of this data is fed into a Configuration Management Database (CMDB), which consolidates it with all other service workstreams to create a single, detailed and holistic view of the service environment, making it possible to control and manage IT service operations proactively.

For employees, interacting with IT is no longer fraught with delay and frustration. They use a self-service portal, supported by a service catalog and a fully-formed knowledge base, to troubleshoot many of their own problems.

“Employees expect fast, consumer-grade access to the services and information they need to get their jobs done.”¹

Forrester

The IT team also formalizes, standardizes and automates operational workstreams across the service environment using advanced workflow automation and dashboards. Metrics are less operational and more focused on supported services. Analytics not only measure success and performance, but also expose costly information bottlenecks and blockages, providing in-depth insights. The algorithms needed to automatically generate this kind of analysis require clean data sources, so having a reliable database — and one that integrates operational data across the whole of the service environment — is another extremely valuable benefit of the CMDB.

Operationalizing IT Service and Asset Management

The overarching goal of IT service and asset operations management is to eliminate and prevent all incidents, resulting in 24/7 uninterrupted service. Admittedly, that's a tall order for any IT service group.

IT teams achieve it, or something very close to it, by instituting a CMDB that consolidates and manages real-time, point-to-point data about IT assets — where they are, how they are configured and the relationships that exist between them. Asset management auto-discovery and configuration auto-dependency mapping tools translate this information and feed it into the CMDB. Data from the request and incident ticketing and the beginnings of a knowledge base, discussed in eBook 2 of the [IT Service and Asset Management Essential Guide series](#), are also consolidated in the CMDB.

“CMDB investments can deliver substantial business benefits, yet many organizations repeatedly fail to achieve desired results.”²

Gartner, Inc.



Advanced automation techniques interact with the data in the CMDB and are applied to a variety of situations in order to reduce the risk of operational failures. Problem management processes identify the root causes of recurring incidents automatically. These automations can also alert IT staff to impending problems that can be fixed before users are impacted. Advanced automation is also applied to change implementations, which more than any other process can result in disruption to IT services. Capabilities like automated risk assessment analyses and change policy and approval mechanisms manage and curtail these risks.

A sophisticated workflow automation engine is also introduced to automate and standardize many tasks across IT in ways far beyond the automation capabilities of a basic request and incident management solution. Human error is reduced and manual activity is lowered significantly. Workstreams incorporate visual editors and low-code capabilities that enable staff without a coding background to create new or customized workflows. Highly-skilled IT resources are now redirected to focus on developing new and better service optimizations.

These tables provide an overview of the key capabilities and benefits of operationalizing IT service and asset management.

Asset Management	Benefits
Performs auto-discovery and consolidation of hardware and software assets	Simplify coordination, reconciliation and updating of asset data from many sources
Tracks and manages assets, capturing usage, compliance and license status	Maintain compliance, identify software license shortfalls and avoid software audit risks; reallocate licenses and unused or underutilized software assets to eliminate waste
Reconciles purchasing data with asset inventory	Manage asset inventory from purchasing to eventual disposal
Feeds reliable, real-time asset inventory data to CMDB automatically	Enable configuration management

Configuration Management	Benefits
Dependency tools monitor configuration items, recording status and upstream/downstream interrelationships automatically	Find redundancies and inconsistencies in configuration relationships and interdependencies to increase efficiency and stability while reducing costs
Configuration topology maps graphically display interconnections	Spot, understand and resolve underlying issues
CMDB maintains and stabilizes complex network interactions	Achieve holistic management of IT service operations based on accurate, real-time data
Real-time integration with the incident, problem and change workstreams	Enable proactive problem and change management and integrate with the ticketing system

Problem and Change Management	Benefits
Unites request and incident processing with problem and change workstreams to enable integrated management	Curb incident recurrence proactively, identify root causes to resolve problems faster and avoid unplanned, reactive outages; retain staff by significantly alleviating service agent frustration
Performs risk impact analyses to identify and assess change impacts, with dependency visualization to the configuration item level	Plan changes and reduce the risk of change collisions and service disruptions efficiently and proactively
Triggers change policy and approval mechanisms for different tiers of changes	Structure and automate change implementations and accelerate time to value

Employee Self-Service

Introducing employee self-service is not just about launching a web-based service portal. The focus should be on creating a service experience that is commensurate with the consumer-grade online experiences employees use outside the workplace.

Self-service provides important benefits to the IT team — the first among them being significantly reduced costs and secondly greater productivity — but the defining characteristic should be how easily employees can interact with IT to quickly obtain the information they seek and have their requests fulfilled and their problems resolved.

These tables provide an overview of the key capabilities and benefits of employee self-service.

Service Catalog	Benefits
Provides a centralized and searchable catalog of IT services	Enable self-service and information delivery on a web-based portal
Integrates with service and asset operations management	Deliver service continuity
Imposes and manages employee access permissions and approval levels	Govern who can use which services, what approval levels are needed and how they are obtained

Self-Service Portal	Benefits
Translates and displays the IT service catalog to employees in simple terms	Deliver a self-service portal with navigation that employees understand and want to use
Supports a search field with keyword tagging, subject headings, indexing and more	Reduce employee clicks to find the services and information they need, increasing portal usage
Routes requests that require human interaction to the correct person and provides alerts when incomplete tasks are nearing SLA violations	Increase efficiency of non-automated service requests
Provides analytics tools that monitor and report portal usage	Increase self-service effectiveness

Workflow Automation, Dashboards and Analytics

Workflows and dashboards are configured to formalize and standardize IT operations, establishing practices that avoid human error and incorporate a tiered approval methodology to increase operational efficiency and reduce costs.

Advanced workflows incorporate sophisticated automation to control self-serviced, semi-manual and manual work. Based on predefined sets of actions, nested workflows can also be initiated. Pre-built workflows, incorporating ITIL best practices, are widely available and can be customized using visual editors, drag-and-drop wizards and other editing efficiencies to meet specific needs.

“In a world where digital acceleration is the name of the game, business leaders are clamoring for digital operational excellence.”³

Gartner, Inc.

Dashboards present workflows in a graphical, intuitive way and are tailored to a wide variety of applications and users. For example, an IT technician's dashboard might display a drop-down menu of tasks, prompt for required information and, if approvals are needed, trigger authorizations processes. A change manager's dashboard might display, among other things, change-impact mapping and require a change form to be completed before the next action can proceed.

Dashboards also present operational analytics that are likewise tailored to different applications and audiences. The dashboard the IT technician uses for daily service fulfillment might also display a list of pending assigned tasks, how long they have been in the queue and which ones are nearing a KPI infraction. An IT manager might see team performance modeling compared against historical operations and industry benchmarks, to determine if the workload is optimized or to identify bottlenecks where adjustments are needed. An IT director might be presented with analysis that is less operational and more focused on costs and supported services, including forecasting and financial modeling. Dashboards for company executives may display key accomplishments that highlight the value of IT as well as visual presentations that help them make quick and informed decisions.



These tables provide an overview of the key capabilities and benefits of operationalizing advanced workflows, dashboards and analytics.

Advanced Workflows	Benefits
Provides pre-built workflows for standard ITIL processes	Institute standardized operational workflows immediately based on best practices
A low-code or no-code automation platform enables modification of automated workflows without scripting or coding knowledge	Roll out optimizations faster
Includes visual editors, drag-and-drop wizards and “action blocks” of multiple automated steps	Quickly build workstreams, dashboards and portal enhancements with pre-built configuration elements
Combines CMDB analytics with knowledge-base intelligence to trigger nested workflows automatically	Automate self-serve operations
Initiates and completes pre-defined actions and workflows like password changes and asset request against individual records or groups of records	Support rapid, no-IT-touch self-service

Dashboards	Benefits
Steps staff through simple tasks with intuitive dashboards and drop-down menus	Lower the skill threshold of IT staff who provide services when human interaction is required
Offers capabilities such as visualization managers that predict and display change impacts and trigger necessary approvals	Simplify and structure complex tasks to standardize, optimize and secure the operational environment
Presents management reporting and operational metrics in customized views based on user role	Generate on-demand reporting that is appropriate for different layers of management and roles, including executives, IT directors, IT technicians and others

Analytics	Benefits
Gathers operational metrics across all ITSM workstreams and processes	Visualize IT service environment operations as a whole, avoiding decisions made with incomplete analysis
Generates reports using real-time, dynamic data with both current and historical performance data	Reveal actionable insights in the details of day-to-day operations and manage audits and compliance with aggregated data
Provides pre-built reports with time charts, forecasts and breakdowns based on industry requirements and best practices	Expedite KPI tracking, identify bottlenecks and areas for improvement, and enable stakeholders to make better decisions
Offers reporting customization capabilities using simple or complex search criteria	Quickly pinpoint meaningful patterns and trends to increase efficiency, reduce costs and deliver optimized employee experiences
Graphically displays performance trends and predictive forecasts	Easily create presentations that enable executives and managers to make quick, informed decisions at a glance while demonstrating and promoting IT's value to the business
Ability to drill down into performance and cost reporting	Answer questions on the spot

Risks

At this level, the business impact from IT issues remains uncertain, and change analysis may be too slow to meet business expectations. Costs and risks are reduced due to greater visibility and control, timeframes for most IT projects are more predictable, and overall service quality is increasing. Employees feel they have the support resources necessary to be productive, and the business has confidence in IT as a reliable partner that can keep key services and systems available and performing well. With advanced capabilities in place, IT can expand its automated governance capabilities to other cross-functional groups within the broader business.

About Ivanti

Ivanti makes the Everywhere Workplace possible. In the Everywhere Workplace, employees use myriad devices to access IT networks, applications and data to stay productive as they work from anywhere. The Ivanti automation platform connects the company's industry-leading unified endpoint management, zero trust security and enterprise service management solutions, providing a single pane of glass for enterprises to self-heal and self-secure devices, and self-service end users. More than 40,000 customers, including 78 of the Fortune 100, have chosen Ivanti to discover, manage, secure and service their IT assets from cloud to edge, and deliver excellent end user experiences for employees, wherever and however they work. For more information, visit [ivanti.com](https://www.ivanti.com)

Ivanti can help

If you are interested in exploring some or all of the capabilities described here, Ivanti can help.

Find out more here:

- [Ivanti Neurons for ITSM](#)
- [Ivanti Neurons for ITAM](#)
- [Ivanti Neurons Hyperautomation Platform](#)

You may also want to take a look at eBook 4 of the [IT Service and Asset Management Essential Guide series](#) to find out more about the innovative level of maturity.

The Ivanti logo consists of the word "ivanti" in a bold, lowercase, sans-serif font. The letter "i" is red, while the remaining letters "vanti" are black. A small registered trademark symbol (®) is located at the top right of the letter "i".

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1. 1 Betz, C., McKeon-White, W., Balaouras, S., Flug, M., Lynch, D; The Forrester Wave: Enterprise Service Management, Q4 019; "The 15 Providers That Matter Most and How They Stack Up; October 10, 2019
2. 2 Williams, R., "Summary Translation: Break the CMDB Failure Cycle With a Service Asset and Configuration Management Program"; Gartner, Inc.; September 21, 2020
3. 3 Burke, B., "Top Strategic Technology Trends for 2021"; Gartner, Inc. 2020