

# Leveraging closed-loop automation: A game changer for IT operations



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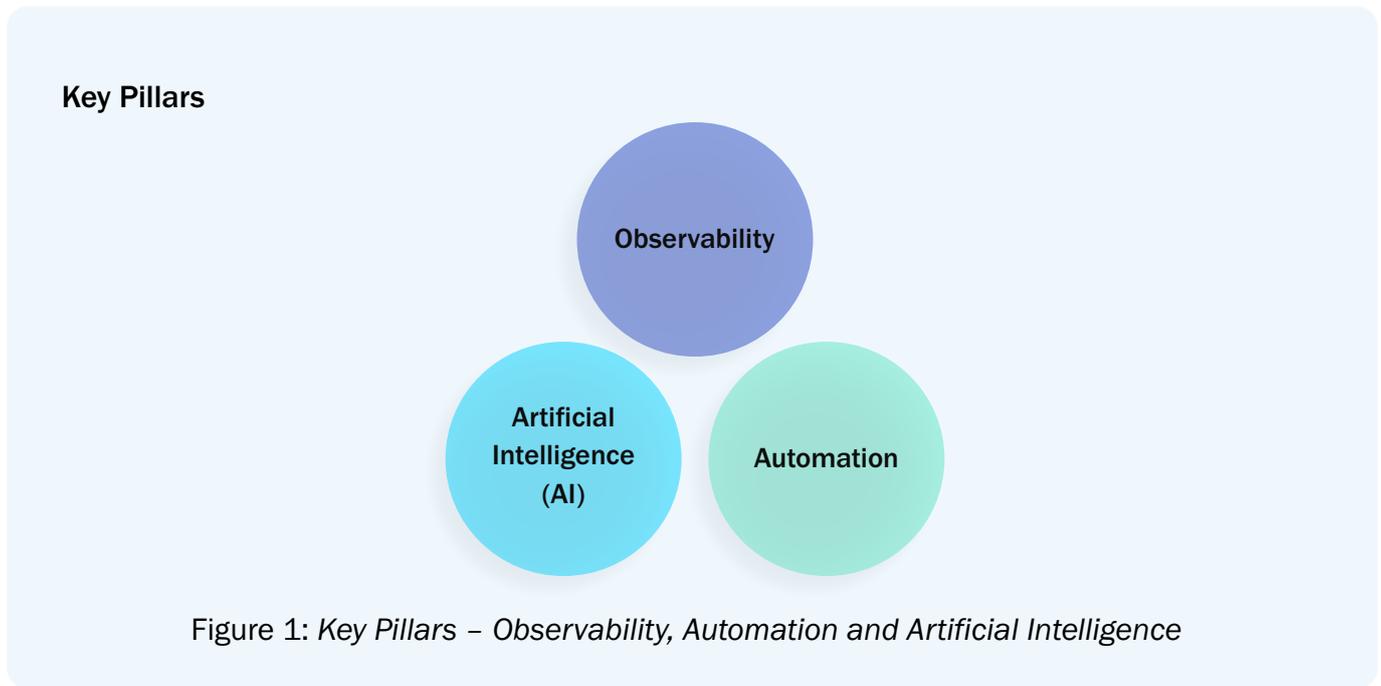
## Introduction

In today's dynamic business landscape, the integration of automation technologies has become paramount for organizations striving to streamline processes, enhance efficiency, and drive innovation. This paper explores various facets of automation, starting with a clear definition of closed-loop automation and its significance. It then delves into the application of automation in a hybrid cloud environment, followed by an exploration of the universal need for closed-loop automation across industries. Furthermore, it addresses the crucial aspect of measuring value derived from automation. Finally, it examines the scope of IT automation throughout the enterprise value chain, encompassing infrastructure, cloud, applications, SAP, batch processing, and End-User Experience Management (EUEM).



## Digitate's 3 pillars story

Before we delve into defining and understanding closed loop automation, let us understand some key concepts of Observability, Automation and Artificial Intelligence as perceived by industry and then Digitate's take on it.



The IT industry is crowded with companies offering automation, observability, and AI platforms. These companies cater to the growing demand for solutions that streamline processes, improve visibility, and use AI to drive efficiency. As businesses aim to stay competitive, the importance of automation, observability, and AI becomes clear.



**IT automation companies** create tools to optimize IT processes, eliminate repetitive tasks, and reduce human error. Their offerings include infrastructure management, network configuration, software deployment, and workflow orchestration. By automating these tasks, businesses save time, cut costs, and boost productivity. Closed-loop automation, with its self-healing and proactive management capabilities, ensures optimal system performance and reliability. Unlike Robotic Process Automation (RPA), which handles repetitive tasks, closed-loop automation continuously gets the changing context from the system and optimizes systems without human intervention, making it essential for high-performance IT environments.



**IT observability** companies offer solutions to monitor and analyze IT systems and applications. By gathering and correlating data from logs, metrics, traces, and events, these companies provide insights into system health, performance, and dependencies. This helps businesses identify and resolve issues proactively, optimize performance, and maintain reliable IT operations.



**AI platform companies** develop AI solutions for IT operations, using technologies like machine learning, natural language processing, and predictive analytics. Their platforms enable intelligent automation, anomaly detection, predictive maintenance, and self-healing systems, helping businesses streamline IT operations and innovate.

Despite the strengths of individual tools, using separate platforms for automation, AI, and observability can disrupt workflows and increase complexity. This fragmentation leads to duplicated efforts, scalability challenges, and incomplete insights, reducing efficiency. Security risks, vendor lock-in, and interface issues also hinder productivity and agility. For maximum impact, these platforms must work together seamlessly, avoiding manual hand-offs and siloed operations.

### Digitate AIOps for an Autonomous Enterprise

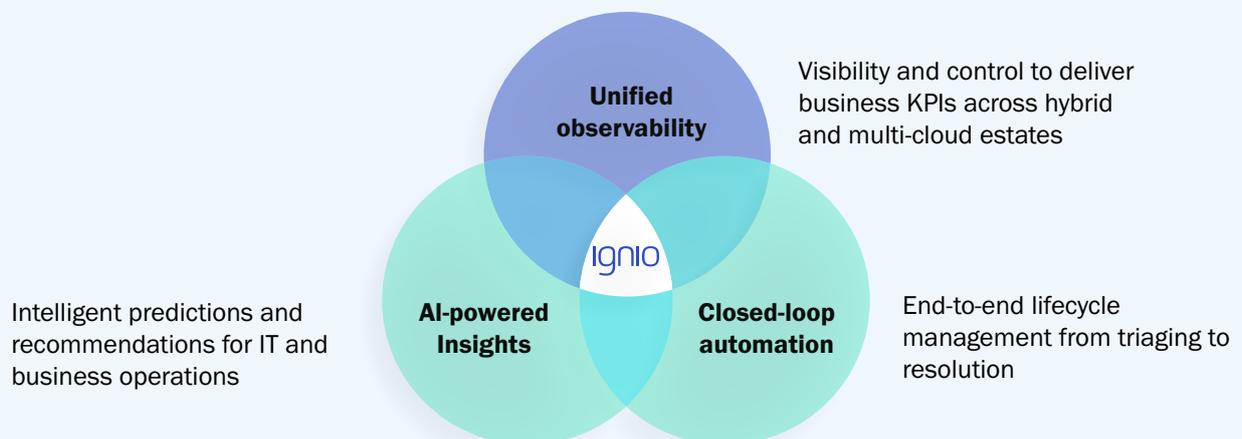
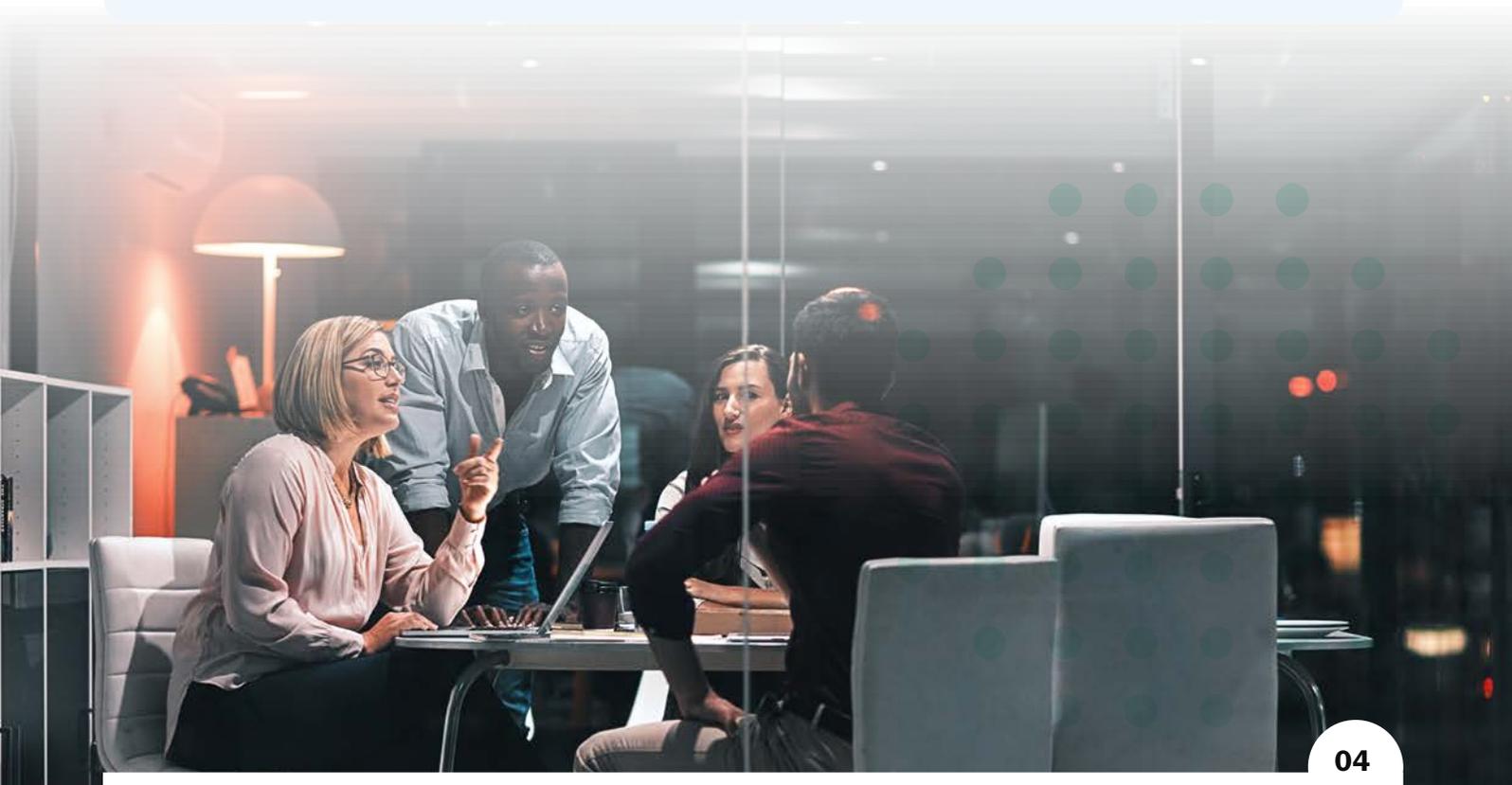


Figure 2: Digitate AIOps for an Autonomous Enterprise



At Digitate, we have combined the power of these three fundamental pillars to offer a comprehensive solution that seamlessly integrates AI and observability with automation into IT operations. Our aim is to empower organizations to automate repetitive tasks, preemptively identify and resolve issues, optimize resource allocation, and enhance overall efficiency and reliability. By doing so, we take them closer to the goal of an autonomous enterprise, enabling businesses to achieve unprecedented levels of self-sufficiency and operational excellence through intelligent automation and proactive approach.



By combining these three pillars, we offer a solution that is greater than the sum of its parts – for instance, observability provides unified visibility and control across on-premises, hybrid, and multi-cloud environments, connecting business KPIs to IT performance.

AI-powered insights provide more actionable and intelligent analytics, predictions, and recommendations to enhance IT and business operations.

Additionally, automation leverages AI-driven insights and data from monitoring the IT landscape, creating a closed-loop system by resolving issues or suggesting actions. This includes out-of-the-box intelligent automation for incidents, service requests, and changes, all managed on a central platform across the enterprise value chain.

This drives greater automation across the IT enterprise, and with Digitate; enterprises can improve not just the extent of automation but also its overall impact. In fact, Digitate leverages a unique way to track the impact of automation projects, that we call Automation Index. This is derived by considering both, the Coverage of Automation (how many tasks are automated) and the effectiveness of automation (how much accurate is the automated action), to track the overall impact, with appropriate KPIs for measuring success at each stage of the automation project.

# Defining closed-loop automation (backed by observability and AI)

Digitate specializes in closed-loop automation, a fundamental element of its flagship AIOps platform. By seamlessly integrating observability and AI, Digitate optimizes IT operations, from issue detection to resolution, utilizing a closed-loop approach.

With Digitate, automation is both context-aware and intelligent. **ignio™ is Digitate's unique SaaS-based AIOps platform, that integrates context, intelligence, and actions, to revolutionize the way enterprises deal with IT operational challenges.** ignio leverages the knowledge of the existing technology landscape, and relational behaviors to estimate how any automation will impact existing processes – for instance, after every automated patching action, it can conduct post-patch checks to understand the success of the patching operation. ignio also understands the dynamic behavior, patterns and trends to intelligently detect anomalies/deviations from normal behavior and take automation actions – enabling intelligent proactive automations. In scenarios where it does not have the learning for the right action, it can learn from human behavior, enabling closed-loop learning.

Let us understand the following three examples with different types of learning.



### 1. Heuristic Learning (Unsupervised Learning)

An AI system monitors employee email patterns to detect potential phishing attempts. It identifies unusual communication patterns or anomalies without pre-labeled data, improving its detection capabilities over time.



### 2. SOP Supervised Learning (When Human Provides Inputs)

A chatbot for IT support is trained using a Standard Operating Procedures (SOP) document. IT staff provide the bot with responses for common issues, like password resets or software installation. The bot learns to deliver these specific responses based on human-provided examples.



### 3. Assisted Learning Example (Reinforced Learning)

An AI system where bot learns from how a Subject Matter Expert (SME) resolves complex queries. When a similar issue arises, the bot applies this learned experience to handle the situation independently, improving with each interaction.

All these learning types at hand promotes self-monitoring, self-governance, and self-healing within IT operations, leading towards an autonomous enterprise. This ensures that operations run smoothly and reduces the burden on IT staff, who would otherwise be consumed by routine tasks or firefighting. With a repository of over 10,000 pre-built automations spanning 45 technologies, Digitate expedites automation initiatives for organizations.



The platform caters to IT tasks including event management, service requests, and change requests, enhancing scalability across infrastructure, cloud, applications, and more. It offers flexibility in implementing AI-driven automation triggered by events, time, or demand. To mitigate unintended consequences, Digitate incorporates controls such as action approval, subscription-based operations, and time-based restrictions.

Security is paramount, with Digitate providing access controls and detailed audit trails to ensure accountability and compliance. Customers have complete access control over the automation service account, with minimum privilege access requirements.

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Digitate's standout achievement lies in its ability to deploy AI-driven automation at scale, achieving an average 45% automation Index (Auto-resolved tickets / Total no. of tickets) across diverse use cases for large enterprises. This underscores its effectiveness in revolutionizing IT operations through intelligent automation.

In summary, Closed-loop automation, as implemented by Digitate, is a sophisticated system/principle powered by artificial intelligence that operates in a seamless, continuous feedback loop. In this process, ignio's AI engine, actively monitors various systems, meticulously analyzes incoming data, swiftly identifies any issues or anomalies, and autonomously resolves them without the need for human intervention. Moreover, it ensures that users are promptly notified of any significant developments. The primary goal of this automated cycle is to sustain or even improve performance levels without relying on constant manual oversight. Additionally, it empowers decision-makers by furnishing them with pertinent information, thereby facilitating informed decision-making processes.

There are two types of automation: one enables autonomous operations, which includes incident, change request, and service request management, and another is called augmented automation, which supports humans in the loop. Let's explore both of these automation types.

## Incident | Change | Service Request Management

We have categorized automation into three types: Incident Management, Change Management, and Service Request Automation.



**1. Incident Management:** ignio monitors IT continuously through automated health checks, analyzing Key Performance Indicators (KPIs) to detect potential issues. It evaluates tickets and alerts, prioritizing based on business needs. Some issues are resolved through self-healing mechanisms, while others undergo Root Cause Analysis (RCA) before manual resolution. Intelligent Automation enables autonomous operations across hybrid infrastructures.

**2. Change Management:** This automation optimizes handling changes in IT infrastructure or business processes to minimize errors and boost efficiency. Activities like patching, provisioning, and hardening are common. ignio's Change Management Automation includes features such as version control, approval processes, audit trails, and notifications, ensuring a systematic approach to change management.



**3. Service Request Automation:** It involves using ignio to streamline the lifecycle of service requests, such as user onboarding/offboarding and identity/access management. Through technology and verification processes, it efficiently handles requests, providing users with status notifications.

These automation categories streamline IT operations, enhance efficiency, and ensure standardized and controlled implementations, ultimately contributing to improved organizational performance and user satisfaction.

This is the kind of automation every organization dream to achieve with maturity levels. In Digitate's terms, it represents a step towards autonomous operations, where the machine can take auto-corrective measures with necessary approvals and logs. At the same time, there is a simpler yet crucial type of automation in the industry known as **augmented automation**.

## Augmented Automation

Augmented automation is where the machine (ignio, in this case) can become your genius partner. It can help you take decisions quicker. Augmented automation is a type of automation that combines human intelligence and decision-making with automated processes. While the system handles routine tasks and data processing, humans provide oversight, make strategic decisions, and intervene when necessary. This approach enhances productivity and efficiency by leveraging the strengths of both humans and machines.

Let us understand this with some examples.

<p><b>01</b></p> <p>Let's start with a simple example of how-to guides, ticket updates, and self-help guides for end users. With machine intelligence, simple questions and queries are addressed immediately. For instance, users can learn how to open a bank account through a mobile app or how to raise a complaint for a defective product, and so on.</p>	<p><b>02</b></p> <p>Now, let's consider the user persona of the service desk team, specifically the L0 and L1 teams. They encounter a wide range of issues of various sorts. If your intelligent partner can assist with analyzing end-to-end network topology, interaction history, ticket status, email updates, and resolver analytics through simple dashboards, reports, or a chatbot, the workload of the service desk team is significantly reduced, and quick decisions can be made</p>	<p><b>03</b></p> <p>The third persona is the L2 and L3 teams, who also belong to the service desk but require detailed analysis to identify root causes. Here, the intelligent partner can significantly assist with tasks such as auto-updating tickets in ITSM, auto-routing tickets, prioritizing and clustering errors, and conducting pre-check assessments to find the root cause. It can also learn from historical data, provide prioritized recommendations, and trigger recovery actions.</p>
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In designing the flow for Augment automation while leveraging GenAI, we focus on two crucial dimensions: First Mile GenAI features, and Last Mile GenAI features for Closed-Loop automation.

### First Mile GenAI Features for Closed-Loop Automation

Our approach integrates advanced capabilities tailored for the Persona Implementation team of Close Loop Automation:

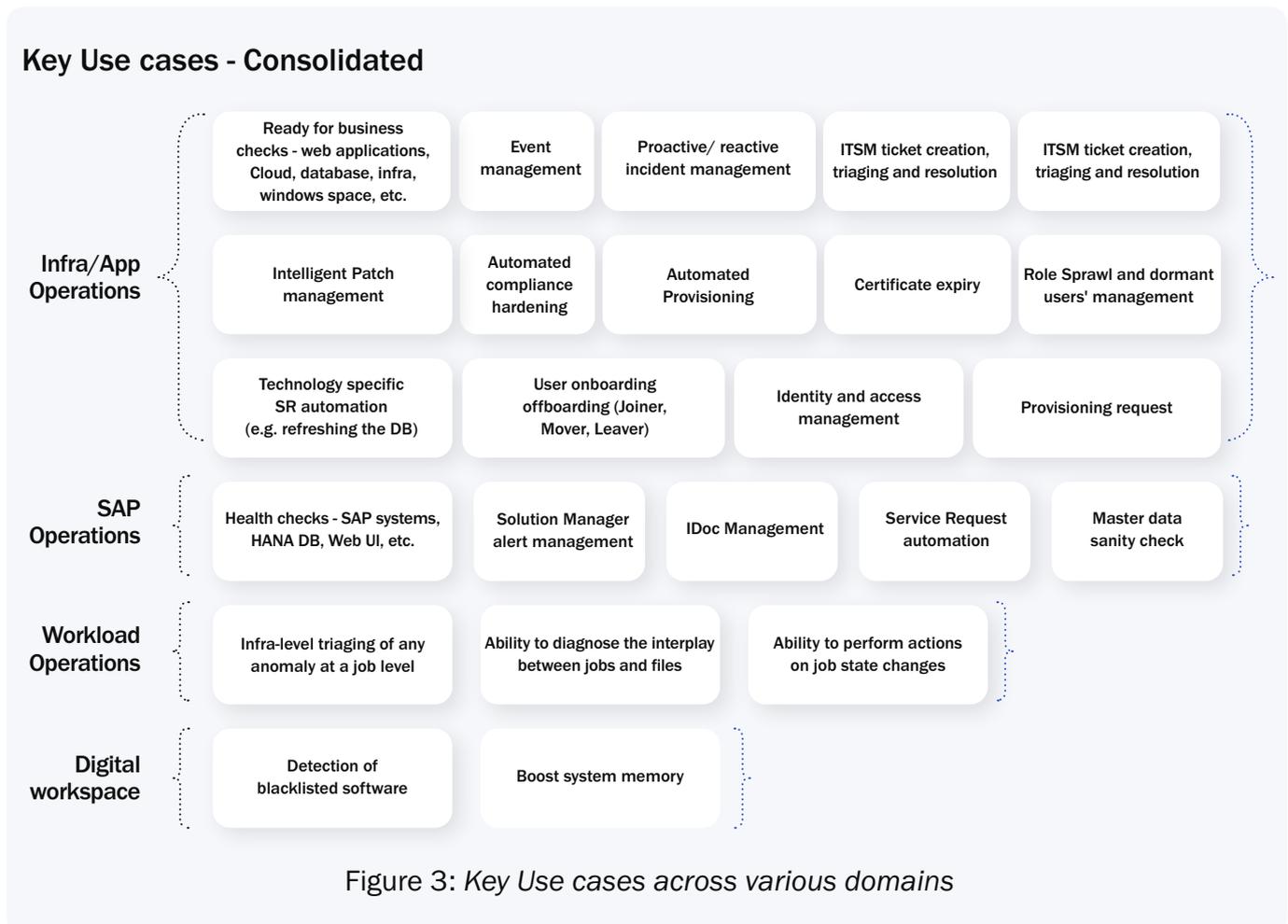
1. Code Generator: Empowering users to articulate requirements in natural language, our GenAI bot generates automation scripts customized for ignio, facilitating seamless code generation.
2. Code Converter: Leveraging natural language instructions, this tool converts existing code across source and target languages, ensuring precision through human-in-the-loop validation.
3. Pseudo Code Generator: Transforming existing code into natural language pseudo-code for enhanced comprehension, with support for Bash, PowerShell, Groovy, and PL/SQL.

### Last Mile GenAI Features for Close Loop Persona

Aligned with our integrated artifact, we introduce intelligent conversation capabilities designed for diverse IT Operations personas, facilitating contextual understanding and operational efficiency.

## Key use cases

Now, let us see the most popular automation use cases outlined in the image reflect a sophisticated and comprehensive strategy to optimize and automate various IT operations across multiple domains.



In **Infra/App operations**, the focus is on maintaining system integrity and ensuring business continuity through several critical processes. Ready for business checks encompass thorough evaluations of web applications, cloud infrastructure, databases, and system resources like Windows space to ensure operational readiness. Event management and Proactive/reactive incident management enable organizations to swiftly address and mitigate potential disruptions. Additionally, tasks such as Intelligent Patch Management and Automated compliance hardening enhance system security and reliability by ensuring systems are up-to-date and compliant with industry standards. Other critical functions like User onboarding/offboarding and Identity and access management streamline user access controls, while Automated provisioning and Provisioning requests simplify

resource allocation and management. Moreover, the management of Certificate expiry and Role sprawl/dormant users ensures that access rights are consistently monitored and adjusted, reducing security risks.



In **SAP operations**, the emphasis is on maintaining the health and stability of SAP environments. Regular Health checks on SAP systems, including HANA databases and web user interfaces, are vital for detecting and addressing issues before they impact business operations. Solution Manager alert management helps in proactively identifying and resolving system alerts, while IDoc Management ensures smooth data interchange within SAP systems. Service request automation and Master data sanity checks are essential in automating routine tasks and validating critical data integrity, respectively, thereby maintaining the overall reliability of the SAP environment.



**Workload operations** are crucial for optimizing job performance and system resource allocation. This includes Infra-level triaging to quickly identify and resolve anomalies at the job level, and tools for diagnosing the interplay between jobs and files to prevent workflow disruptions. The capability to perform actions on job state changes ensures that automated processes adapt dynamically to the evolving state of system operations, maintaining operational efficiency.

Lastly, the Digital workspace is enhanced through targeted actions like the Detection of blacklisted software, which protects the system environment from unauthorized applications, and the Boost System Memory function, which optimizes system performance by efficiently managing memory resources. These use cases collectively ensure a robust, secure, and efficient IT infrastructure capable of supporting the complex needs of modern enterprises.



## Automation in a hybrid cloud world

In a hybrid cloud environment, where an organization's enterprise Information Technology landscape is split across on-premises, private cloud, and public cloud, understanding the scope and ownership of automation becomes paramount for effective management.

In most enterprises, IT teams leverage multiple automation tools across their tech landscape – these may be specific to technology areas (such as browser automaton, OS automation, Database automation), specific to control towers (IT teams looking after distinct IT areas), or specific to use cases and defined processes (SOP-based, RPA-based). This creates a fractured automation process and may cause issues.

Here is a breakdown of automation ownership across different areas.



**On-premises / Private Cloud:** In on-premises and private cloud environments, organizations have full control over infrastructure and operations. Automation is typically managed by the organization's IT team, covering tasks such as infrastructure provisioning, configuration management, and application deployment. This includes automating processes related to servers, storage, networking, and security within the organization's own data centers or private cloud infrastructure.



**Automation for Infrastructure as a Service (IaaS):** With IaaS, cloud providers offer infrastructure resources like virtual machines, storage, and networking, while customers manage the applications and data. Automation for IaaS involves both the cloud provider and the customer. Cloud providers automate tasks related to infrastructure management, such as provisioning and scaling of virtual machines, storage, and networking resources. Customers automate tasks related to application deployment, configuration management, and workload scaling within the cloud environment.



**Automation for Platform as a Service (PaaS):** PaaS providers offer platforms and tools to develop, deploy, and manage applications, with the cloud provider managing underlying infrastructure. Automation for PaaS is primarily managed by the cloud provider, focusing on automating infrastructure management and platform services. Customers utilize automation features provided by the PaaS provider, such as CI/CD pipelines, application scaling, and management of platform resources. Customers may also automate application-specific configurations and deployment processes within the PaaS environment.



**Automation for Software as a Service (SaaS):** SaaS providers deliver applications over the internet, managing both the application and underlying infrastructure. Automation for SaaS is predominantly the responsibility of the SaaS provider. SaaS providers automate tasks such as application maintenance, updates, security, and scalability. Customers leverage the automation capabilities provided by the SaaS provider, focusing on tasks like user provisioning, data integration, and customization of the SaaS application.

In a hybrid cloud world, organizations need to collaborate closely with cloud partners to ensure seamless automation across different deployment models. By understanding the division of automation responsibilities, organizations can effectively manage their resources, optimize operations, and leverage the benefits of hybrid cloud environments for agility, scalability, and cost-efficiency.

### Cloud Operations – Ownership Context

On-Prem/Private Cloud	IaaS	PaaS	SaaS
Identify and Access Management			
Business Value Chain	Business Value Chain	Business Value Chain	Business Value Chain
Enterprise Solutions (e.g. SAP)			
Batch	Batch	Batch	Batch
Application Operations	Application Operations	Application Operations	Application Operations
Runtime	Runtime	Runtime	Runtime
Operating system	Operating system	Operating system	Operating system
Virtual machines	Virtual machines	Virtual machines	Virtual machines
Compute	Compute	Compute	Compute
Networking	Networking	Networking	Networking
Storage	Storage	Storage	Storage

Customer ownership    Cloud provider ownership

Figure 4: Cloud Operations – Ownership Context

The diagram above illustrates the division of automation ownership based on color coding. It shows which aspects are managed by the cloud provider and which are the responsibility of the customer or service provider. The colors indicate the areas of responsibility, making it clear who handles each part of the automation process.

## Need for closed-loop automation across industries

In today's business landscape, IT operations functions as the central nervous system, coordinating and optimizing processes across industries. Like the nervous system in the human body, it ensures smooth communication and efficiency. By leveraging technology and innovation, IT operations drive business forward, maintaining agility and competitiveness in a digital world.

The need for intelligent, AI-powered automation in IT is crucial for several reasons. Firstly, it enables faster and more accurate decision-making by analyzing large amounts of data efficiently. This is particularly important in fast-paced environments where real-time insights are key to staying competitive. Secondly, AI-driven automation enhances predictive capabilities, helping IT teams anticipate and address issues before they become major problems, thus reducing downtime and improving system reliability. Lastly, it frees up IT professionals from repetitive tasks, allowing them to focus on strategic initiatives and foster innovation and growth.

Let's look at the scope of closed-loop automation across various industries.



**Retail:** Closed-loop automation offers significant benefits to the retail industry, streamlining processes and improving efficiency through:

- a. **Supply chain optimization:** Closed-loop automation enhances supply chain management by improving stock availability, order fulfillment, and store replenishments. Real-time data and analytics optimize inventory levels, reducing stockouts, and minimizing overstock situations, enhancing customer satisfaction while reducing costs.
- b. **Financial management:** Closed-loop automation improves financial management by reducing delays in reporting sales, inventory status, and invoice closure. It provides accurate insights into decision-making, minimizes errors, and ensures compliance.
- c. **Store operations:** Closed-loop automation smoothens store operations by addressing product scanning errors, price discrepancies, and ensuring readiness checks. Automating tasks like price tag printing and inventory reconciliation enhances efficiency, customer service, and employee productivity.

Overall, closed-loop automation streamlines operations, improves inventory management, optimizes financial processes, and enhances the shopping experience. Retailers can stay competitive by leveraging advanced technologies and data-driven insights.



**Banking and financial services:** Closed-loop automation has immense potential for the banking industry, insurance, and other financial services, ensuring continuous availability of critical systems while meeting regulatory requirements. Here are some key use cases:

- a. **Enhanced application uptime:** Closed-loop automation improves application uptime by supporting hybrid operations, efficiently allocating infrastructure, and minimizing downtime in critical systems like fraud detection. This ensures uninterrupted access to banking services and reduces service disruption.
- b. **Transaction issue reduction:** Automation reduces transaction issues by eliminating data mismatches, preventing incorrect authorizations, and minimizing declines. Banks can enhance transaction accuracy and reliability, improving service quality.
- c. **Accurate data capture:** Closed-loop automation ensures accurate data capture by reducing errors and delays in risk and settlement reports. It provides file monitoring and data sanity checks, ensuring compliance and improving data integrity.

Overall, closed-loop automation enhances operational efficiency, reduces errors, ensures compliance, and improves the customer experience in banking. By leveraging automation, banks can streamline operations, mitigate risks, and maintain competitiveness in the financial landscape.



**Utilities:** Closed-loop automation significantly enhances efficiency in the utility sector by streamlining operations. Key use cases include:

- a. **Billing and meter readings:** Automation ensures timely meter reads and accurate billing, synchronizing billing processes with actual consumption to reduce errors and improve customer satisfaction.
- b. **Enhanced customer communications:** Automation minimizes incorrect invoicing by ensuring accurate, up-to-date data, leading to consistent payment records and timely customer communication, thereby boosting satisfaction and retention.
- c. **Supplier and contractor management:** Automation streamlines interactions with suppliers and contractors by automating payment validations and reconciliations, facilitating faster onboarding/offboarding, and enhancing transparency and relationships with external partners.

Overall, closed-loop automation in utilities optimizes resource management, improves grid stability, enhances customer service, and enables better adaptation to market conditions.



**Life sciences and healthcare:** Closed-loop automation is crucial in healthcare and life sciences for enhancing efficiency, reducing errors, and improving communication. Key use cases include:

- a. **Critical Application Maintenance:** Automation minimizes downtime for essential applications in medical research and EMS systems by swiftly detecting and resolving issues, ensuring uninterrupted services.
- b. **Pharmaceutical Process Optimization:** Automated systems streamline end-of-day pharmaceutical reports, predict product trends, and update regulatory databases like the FDA. This enhances inventory management, compliance, and supply chain efficiency.
- c. **Access Management:** Automation simplifies access management for healthcare apps and platforms, ensuring authorized personnel have timely access while maintaining security and compliance.

Overall, closed-loop automation in healthcare streamlines operations, reduces costs, improves patient outcomes, ensures regulatory compliance, and fosters innovation in healthcare delivery.



# Measuring value from closed-loop automation

Automation projects go through various stages – and need appropriate KPIs for measuring the success at every stage. Measuring the success throughout the lifecycle of automation projects becomes important.

Various KPIs to measure the automation effectiveness are:



**Ability to Auto-triage and Resolve System-generated Events:** This KPI measures the efficiency of IT automation in automatically identifying, categorizing, and resolving system-generated events without human intervention. It assesses how well automation tools can analyze incoming alerts, prioritize them based on severity and impact, and execute predefined actions or remediation steps to address the underlying issues. A high score in this KPI indicates that automation is effectively reducing the burden on IT staff by handling routine tasks and allowing them to focus on more strategic initiatives.



**Average Noise Suppression:** This KPI evaluates the effectiveness of IT automation in reducing the volume of irrelevant or non-actionable alerts, also known as ‘noise’ generated by monitoring systems. It measures the percentage of alerts that are automatically filtered out or suppressed by automation tools, thereby preventing unnecessary distractions and enabling IT teams to concentrate on genuine incidents. A higher average noise suppression rate indicates that automation is successfully improving the signal-to-noise ratio and enhancing the overall efficiency of incident management processes.



**Percentage of Service Requests Automated:** This KPI quantifies the extent to which IT automation is utilized to fulfill service requests without manual intervention. It measures the proportion of service requests, such as user account provisioning, software installations, or system configurations, that are handled automatically by predefined workflows or self-service portals. A higher percentage indicates a greater level of automation adoption, resulting in faster request fulfillment, reduced operational costs, and enhanced user satisfaction.

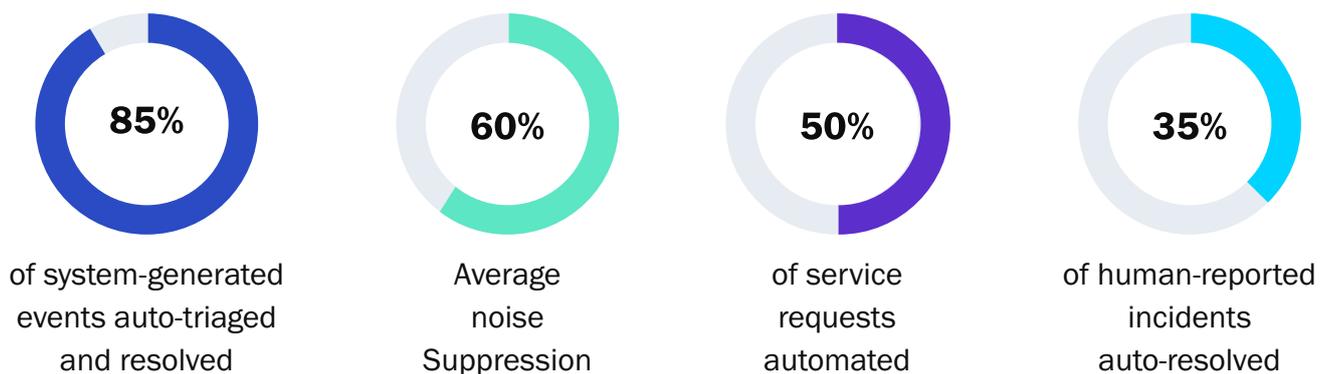


**Percentage of Human-reported Incidents Auto-resolved:** This KPI assesses the effectiveness of IT automation in autonomously resolving incidents reported by human users or detected through user feedback channels. It measures the percentage of incidents that are identified, diagnosed, and remediated automatically by automated systems or scripts, without the need for human intervention. A higher percentage indicates a higher degree of maturity in automation capabilities, leading to faster incident resolution times, improved system reliability, and reduced reliance on manual troubleshooting efforts.

By tracking these KPIs, organizations can gauge the impact and effectiveness of IT automation initiatives, identify areas for improvement, and optimize their automation strategies to drive greater operational efficiency and business value.

Digitate helps measure the success throughout the lifecycle of automation projects with a tried-and tested measurement process, from Coverage (identification, prioritization and automation of critical needs) to Effectiveness (improvement in accuracy of automated actions) to Automation Index (to track the overall impact of automation).

**Our unique closed-loop automation capability, coupled with our proprietary implementation methodology, has played a pivotal role in enabling autonomous operations for companies of all sizes. Here is a snapshot of value Digitate has provided to customers:**



Digitate is the only AIOps vendor able to perform at scale for large enterprises, achieving an average 45% automation across the enterprise in the first year of deployment.

## Key Measures for Mitigating Automation Risks

As automation becomes more integral to business operations, it's essential to implement robust measures to mitigate potential risks. Here are the critical controls designed to ensure the secure and effective use of automation within ignio:

- 1. Action Firewall:** This feature requires approval from an authorized person or subject matter expert (SME) before executing any automated action, adding a vital layer of oversight and security.
- 2. Subscription Controls:** These controls manage the scope of automation by setting specific parameters, such as time-based, target entity-based, or action-based limits, to ensure automation is applied appropriately.
- 3. Password Policies and Integration:** Strong password policies, along with integration with Active Directory (AD) and Privileged Identity Management (PIM/PAM) tools, are essential for maintaining robust security.
- 4. Audit Logs:** Detailed audit logs are maintained to track and review automated actions, providing transparency and accountability.
- 5. Agentless vs. Agent-Based Solutions:** The platform supports both agent-based and agentless approaches, offering flexibility while ensuring security.
- 6. Secure Communication and Hardened Platform:** Secure communication channels and a hardened platform architecture are crucial to protecting against potential threats and vulnerabilities.

# IT automation across the enterprise value chain – infrastructure, cloud, applications, SAP, batch processing, EUEM

IT automation across the enterprise value chain involves the implementation of automated processes and technologies to streamline and optimize various aspects of IT operations. This includes infrastructure management, cloud services, application deployment and management, SAP (Systems, Applications, and Products in Data Processing), batch processing, and End-User Experience Monitoring (EUEM).

Infrastructure automation focuses on automating the provisioning, configuration, and management of hardware resources such as servers, storage, and networking devices. Cloud automation involves automating tasks related to the deployment, scaling, and management of cloud-based services and resources.

Application automation aims to automate the deployment, monitoring, and maintenance of software applications throughout their lifecycle, from development to production environments. SAP automation involves automating tasks related to SAP software implementation, configuration, and ongoing management.

Batch automation focuses on automating batch processing tasks, such as data processing and job scheduling, to improve efficiency and reduce manual intervention. EUEM automation involves monitoring and optimizing end-user experience by automating tasks related to performance monitoring, troubleshooting, and resolution of issues affecting user experience.



# Success Stories: A brief insight to some significant values delivered

Now, let's explore a few customers' success stories, where Digitate has contributed to generating business value through its automation capabilities across different domains.

## 1. Powering Digital Transformation for a diversified power management company

A leading provider of sustainable power management solutions for the aerospace, utilities, and healthcare industries faced challenges due to manual operations and reliance on expert personnel. These issues caused delays in cost center creation, commodity code availability, demand planning, and sales office creation.

To enhance operational efficiency, the company integrated AI and automation with Digitate's ignio AI.ERPOps, an SAP automation solution. They deployed over 43 Service Request management use cases, utilizing 60% out of the box and tailoring others to their environment. The results were transformative—ignio reduced demand planning cycles and cut cost center creation time from 15 days to 3-4 days. It also improved mean time to resolution for tasks like commodity code availability and sales office creation.

### Key benefits included:



60% reduction in mean time to resolution (MTTR).



80% decrease in lead time for creating new cost centers.



100% automation of manual checks, reducing routine task efforts.



By partnering with Digitate and implementing ignio AI.ERPOps, the company overcame challenges and positioned itself for sustained success in a competitive market.



Automation of 7,000 tickets per year, saving 3,600 human hours.

## 2. Making Patch Management Autonomous - For Woolworths, Australia's largest supermarket chain

Woolworths, a leading retailer, grappled with the challenge of managing its extensive IT infrastructure, comprising numerous applications and servers. Monthly patch updates were crucial for system performance and security, but manual patching processes involving multiple teams led to risks, errors, and time-consuming operations.

To address these issues, Woolworths implemented ignio, an intelligent automation solution. ignio seamlessly manages pre-patching and post-patching tasks, communicates with various teams via email, and automates end-to-end processes without disrupting existing workflows. It handles necessary approvals, logs tasks in ITSM for audits, and has significantly reduced patching time.



Currently overseeing 3,700 servers supporting five business applications at Woolworths, ignio has delivered remarkable benefits:



A remarkable 75% saving in effort per month, enabling Woolworths to reallocate resources to more strategic initiatives.



A notable 50% reduction in patching cycle time, enhancing system efficiency and security while minimizing downtime.

“ignio is one of the powerful automation tools in Woolworths delivering real value for our teams, with the capability to deliver even more”

**Tony Fitzgibbon**

(Head of Technology, Woolworths Enterprise Productivity & Process Automation Tools)

### 3. Performance Delivery for a Large American Corporation

A multi-billion-dollar private American corporation faced significant IT monitoring challenges, relying on a legacy tool and manual ‘Eyes on Glass’ operations. This setup required a dedicated command center team to monitor alerts 24/7, leading to inefficiencies and high Mean-Time-To-Detect (MTTD), which adversely affected customer satisfaction.

To address these issues, the corporation implemented Digitate’s Event Management to automate alert analysis and incident creation. Integrated with the legacy tool, ignio used AI and ML to identify actionable alerts in real-time and automatically create incidents in the IT Service Management (ITSM) tool.

In the first week, ignio eliminated 34% of noise alerts and enabled self-healing for actionable alerts, reducing human intervention. As a result, only 44% of alerts required manual review, significantly decreasing reliance on the command center team.

#### Key benefits included:



Handling approximately 18,000 alerts per month.



Eliminating the ‘Eyes on Glass’ team.



Enrich incident and auto-resolution of false positives and non-actionable alerts.

**34%**

reduction in incident volume.

**100%**

automation of command center operations, including automatic ticket creation.

**33%**

of incidents self-healed without manual intervention.



Enriching incident tickets with triaged information for faster resolution.

By leveraging Digitate's automation capabilities, the corporation increased efficiency, reduced manual workload, and improved incident resolution times, enhancing the overall IT system experience for its customers.

## Conclusion

In conclusion, the journey through the topics of closed-loop automation has highlighted its significance in today's hybrid cloud environment and its critical role across various industries. By defining closed-loop automation and exploring its applications in IT across the enterprise value chain, including infrastructure, cloud, applications, SAP, batch processing, and End-User Experience Monitoring (EUEM), we understand its transformative potential. Through closed-loop automation, organizations can measure value, improve operational efficiency, reduce costs, enhance agility, and ultimately deliver better services to end-users. By automating repetitive tasks, IT teams can redirect their efforts towards strategic initiatives and innovation, thereby driving business growth and maintaining a competitive edge in today's dynamic market landscape.



Digitate is a leading software provider bringing agility, assurance, and resiliency to IT and business operations. ignio™, an award-winning AIOps software, reimagines enterprise IT and business landscapes with its unique and innovative closed-loop approach that combines context, insights and intelligent automation to autonomously resolve and prevent issues. ignio's customers span across industry verticals and includes large, global enterprises that are leaders and innovators in their respective industries. Digitate is headquartered in Santa Clara, California, USA and Pune, India.

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