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Delivering Autonomous Enterprise Operations

Proven Customer Stories

Journey to Autonomous Operations

Traditional Operations

- Total human dependency to perform tasks
- Prone to risk of human error
- Output depends on human judgment and tacit knowledge
- Lacks consistency
- Less efficient

Automated Operations

- Machine operated tasks with limited control (human in the loop)
- Mimics human actions
- Suitable for environments with similar tasks to be performed
- Actions taken based on pre-defined heuristics
- Functions only within a defined set of parameters
- Improved consistency and less prone to errors
- Improved efficiency and resilience

Autonomous Operations

- Autonomous Enterprise Operations includes IT operations and Business operations
- Learns and adapts to changing environments, changing workloads, changing technologies and changing policies
- Mimics human thinking
- Has the ability to reason and take actions thus providing a closed loop system
- Capable of more reliable and sophisticated decision-making
- Leverages AI/ML to understand behavioral patterns and recommend actions
- Continuous Learning
- Intelligent and consistent

What is Autonomous Operations?

Powered by AI and Machine Learning, Autonomous Operations is the ability of a system to understand the environment around it, leverage contextual awareness to identify operational deviations, generate actionable insights, and resolve issues with minimal or no human intervention. It allows the enterprise to reduce manual efforts, focus on innovation and adapt to business or IT changes efficiently with minimal cost

Key Attributes of Autonomous Operations

- Unified 360° unified view of the Enterprise landscape
- Open ecosystem, allowing enterprises to integrate with other tools and technologies of their choice to address their specific demands or requirements
- Application of AI/ML to augment human actions through self-learning models
- Closed loop automation to optimize operations
- Intelligent Insights and recommendations that can be leveraged to predict and prevent future issues
- Self-healing and self-optimizing

Why should enterprises opt for Autonomous Operations?

Key Challenges

- Sluggish Operations due to the increase in scale and complexity of operations
- Silos between IT and business
- Lack of context-awareness within domains and across domains
- Heavy reliance on human tacit knowledge and operational risks of human error
- Time spent on the repetitive and mundane stuff with very little time left for innovation

Benefits

- Improved efficiency and productivity
- Improved agility and resiliency
- Improved business assurance and continuity

In today's constantly evolving business environment, businesses need to adapt to the changes, evolve and unleash innovation to sustain and grow. Autonomous enterprise operations is a key vehicle towards that goal

Autonomous Operations, powered by AI and ML helps eliminate the above challenges and paves the way for Digital transformation of the enterprise from reactive to proactive, from fragile to resilient and from sluggish to agile

How do Autonomous Operations Function?

Three basic principles -

Understand Context

Understand the IT and Business environment that influences its operations

Derive Insights and Foresights
(Analytics and ML)

Analyzing the IT & Business landscape data to determine actionable insights

Automate Actions
(Reactive and Proactive)

Reactive Actions – Respond to issues once they have happened

Proactive Actions– Mine the historical data to identify data pattern and leverage this to proactively detect, analyze and remediate issues even before they occur

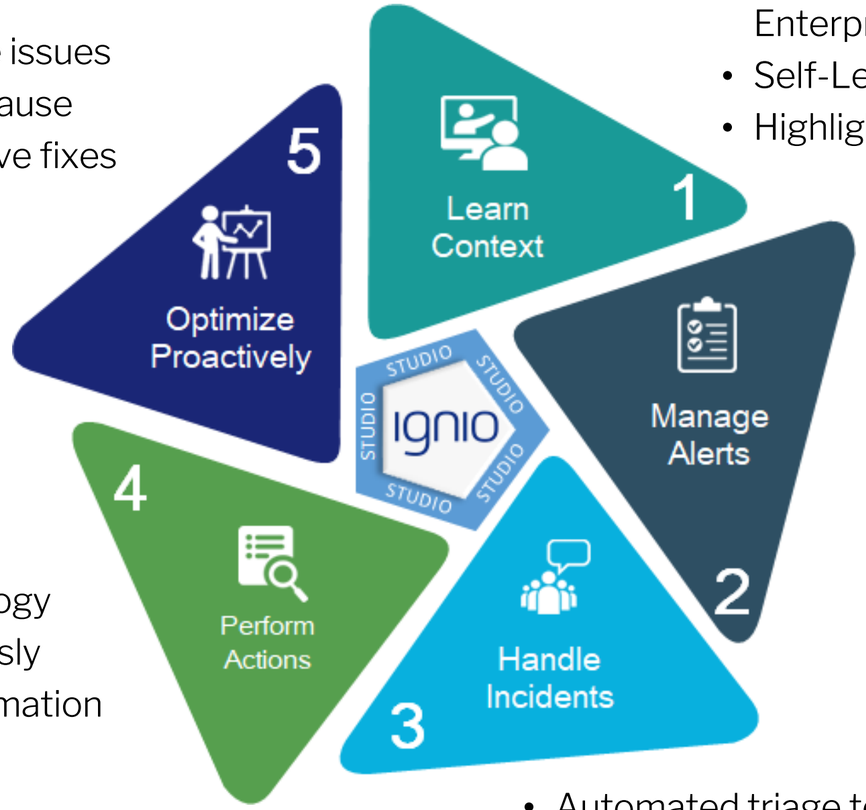
Every Autonomous product/solution in the marketplace functions around these three principles or its derivative based on its design and desired value output

How we do it - The ignio way

ignio has applied the three principles of autonomous operations into five key features

- Construct end to end view of Enterprises' IT landscape
- Self-Learn normal behavior
- Highlight behavioral patterns

- Identify repetitive issues
- Determine root-cause
- Prescribe proactive fixes



- Anomaly Detection
- Alert filtering and suppression of false positives
- Alert correlation and aggregation
- Alert prediction and Alert prioritization

- Out of the box extensible automation libraries
- Performs end-to-end technology lifecycle activities autonomously
- Adaptive, pattern-based automation

- Automated triage to identify root-cause
- Identify and prescribe best action
- Autonomous Incident Resolution

Using Studio, all core capabilities can be extended, adapted, customized for enterprise needs

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Learns Context

Customer: A large financial institution serving 40,000 institutions in 190 countries with platform and products for buy-side, trading, wealth and banking customer

CHALLENGES

- The company wanted to migrate over 60,000 physical and virtual servers to a smaller footprint within 24 months thus converging their scattered 16 data centers to seven global sites and reducing their carbon footprint by 10,000 units annually

SOLUTION

- Accelerated Customer Data Center Migration Process by utilizing ignio’s blueprint capabilities of Data visualization and dashboarding
- Improved data quality/sanity of data by using ignio's Query Builder capability
- Improved migration success rate by getting rid of Excels/various versions of the excel and associated data quality issues

BENEFITS

- With the transformed blueprints and contextual behavioral profiling availability with ignio, discovery and design downtime is reduced to zero
- ignio helped automate the data extraction process and improved the discovery phase by 62% thus enabling faster migration.

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Manages Alerts

Customer: A Global Car rental company having 64% of its customers at On-Airport. Their mobile application has 1.5 million transactions and 400,000 unique customers

CHALLENGES

- The company's mobile application faced a major resiliency and uptime issue, leading to a bad customer experience
- The mobile rental application downtime has potential to lost revenue, customer and brand reputation

SOLUTION

- ignio is connected to the company's eight CMS systems and its associated peripheral systems (3500 Resource Units) to correlate, de-duplicate and suppress false alerts so that operations team can focus on real issues
- The genuine alerts were converted to incidents and triaged by ignio autonomously

BENEFITS

- 360°view of the customer landscape - behavioral and structural context
- Noise reduction by 75% and 15% incidents self-healed autonomously and MTTR and MTTD reduced by 90% and 80% respectively

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Handles Incidents

Customer: Fortune 20 Healthcare company specializing in distribution of pharmaceutical and medical products serving more than 100,000 locations

CHALLENGES

- Multiple system failures in the applications caused issues in the company's warehouse operations
- Printing issues for labels, Issues in sales applications, Warehouse Pick-to-Voice device unavailability

SOLUTION

- ignio was implemented in eight different IT sub-functions where it handled incidents autonomously across 22 critical applications
- Ignio is performing over 6,200 proactive health checks daily of the applications and their underlying infrastructure to deliver required resiliency for warehouse operations

BENEFITS

- ignio triaged 400 incidents autonomously, related to shipping label and pick to voice device availability, leading to order delivery as per plan
- The IT Operations team saved over 25,000 hours annually
- Improved employee productivity and superior customer experience due to meeting the order promise date

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Performs Actions

Customer: The largest postal delivery organization in the Scandinavian region, sorting around 0.5 M parcels every day for last mile delivery

CHALLENGES

- The company relies on two parcel sorting applications – Nordic and international – which are business critical to make over half a million last-mile parcel deliveries
- Downtime for just a couple of hours can send the chain in a tizzy with hundreds of trucks left idle and over 10,000 parcels undelivered for the day, especially during peak season

SOLUTION

- ignio created a blueprint of all parcel sorting business applications
- Correlated and de-duplicated alerts to reduce noise from multiple monitoring tools like Solarwinds, OP5, Jboss Op Console, Tibco Hawk and Site 24X7
- Autonomously triaged and self-healed incidents, thus getting the system up and running within minutes for sorting process to continue

BENEFITS

- With over 200,000 parcel delays averted annually, ignio helped the company reduce operating losses of $2 million annually
- ignio suppressed 68,000 false alerts and autonomously self-healed 21,500 incidents per annum
- MTTR reduced by 95% by these business critical applications

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Optimizes Operations Proactively

Customer: Large food and pharmacy retailer with over 2000 stores and 25+ distribution centers in North America

CHALLENGES

- The company's IT environment consists of 200+ business apps, has one of the largest SAP retail environment with 20,000+ servers in two data centers and on the Cloud
- Major challenges to achieve resolution for customer facing systems within 15 minutes
- Several store system outage during the year which has potential revenue loss and reputational risk

SOLUTION

- ignio SaaS was deployed across all apps, SAP system, IT Operations, Store applications, and so on integrating with 19 monitoring systems to manage events and alerts
- Event Management deployed across store and corporate application, batch workloads and infrastructure
- Conducted proactive health checks and autonomously triaged incidents with over 275+ use cases across IT and business processes

BENEFITS

- 55% incidents managed autonomously, resulting in $20 million in operational savings annually
- Proactively eliminated 20% incidents from service desk and store operations
- 95% noise reduction for batch job operations
- The company now has a proactively managed Central Store Command Center and high store availability all year round

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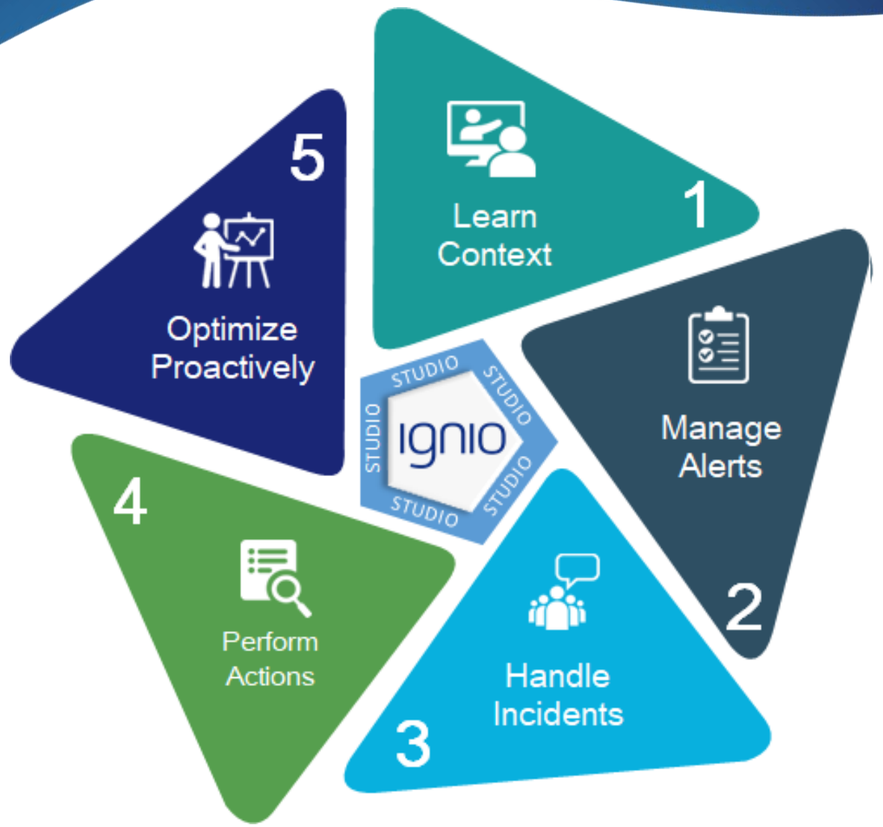
Used in Multiple Areas of Enterprise Operations



- Datacenter Operations
- Batch Operations
- ERP Operations
- Digital Workspaces - End-user computing
- Business Operations - Procurement

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Delivering Autonomous Enterprise Operations

Digitate is a software venture of TCS. Launched in 2015, Digitate's ignio is an award-winning solution that reimagines enterprise IT operations with its unique and innovative design that blends artificial intelligence, machine learning, and advanced software engineering to quickly and autonomously resolve issues when they arise and preempt incidents wherever possible. ignio has been adopted by large, global enterprises, mostly Fortune 500 and Global 2000 corporations, which are leaders and innovators in their respective industries. Digitate is headquartered in the heart of the Silicon Valley in Santa Clara, California, USA and Pune, India.

For more information, reach out to us at contact@digitate.com or visit www.digitate.com