# IBM DevSecOps and Service Management

#### Client Presentation



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Profile ↗ Slack ↗

IBM Consulting



## The majority of transformation programs to the cloud **fail to achieve their desired outcomes,** according to the IDC\*

Transformation missteps are costly and the frequency of occurrence high.

Conflicting priorities, a lack of commitment, multiple service providers and SLAs, rapid evolution of cloud technologies and processes, destabilization of critical applications and exposure to security risks are just a few of challenges faced.

It doesn't have to be this way.



"Having more control over incident response and application performance greatly reduces the risk of costly unplanned downtime which could ultimately help improve customer experience."\*\*

<sup>\*</sup>An IDC analysis estimates that 70% of all digital transformation initiatives do not reach their goals.

<sup>\*\*</sup>Forrester Research THE TOTAL ECONOMIC IMPACT™ OF IBM WATSON AIOPS WITH INSTANA, July 2021

### What if...



You could achieve 60% improvement in Time to Business Value



You could improve your Innovation Quotient through improved developer productivity by up to 50%



You could reduce the Total Cost of Ownership through operational savings by up to 40%?



You could significantly improve the End user experience and NPS through improved Solution Reliability



Evolution of IT is resulting in increased complexity, calling for solutions that are 'Fit for Future'

#### Legend

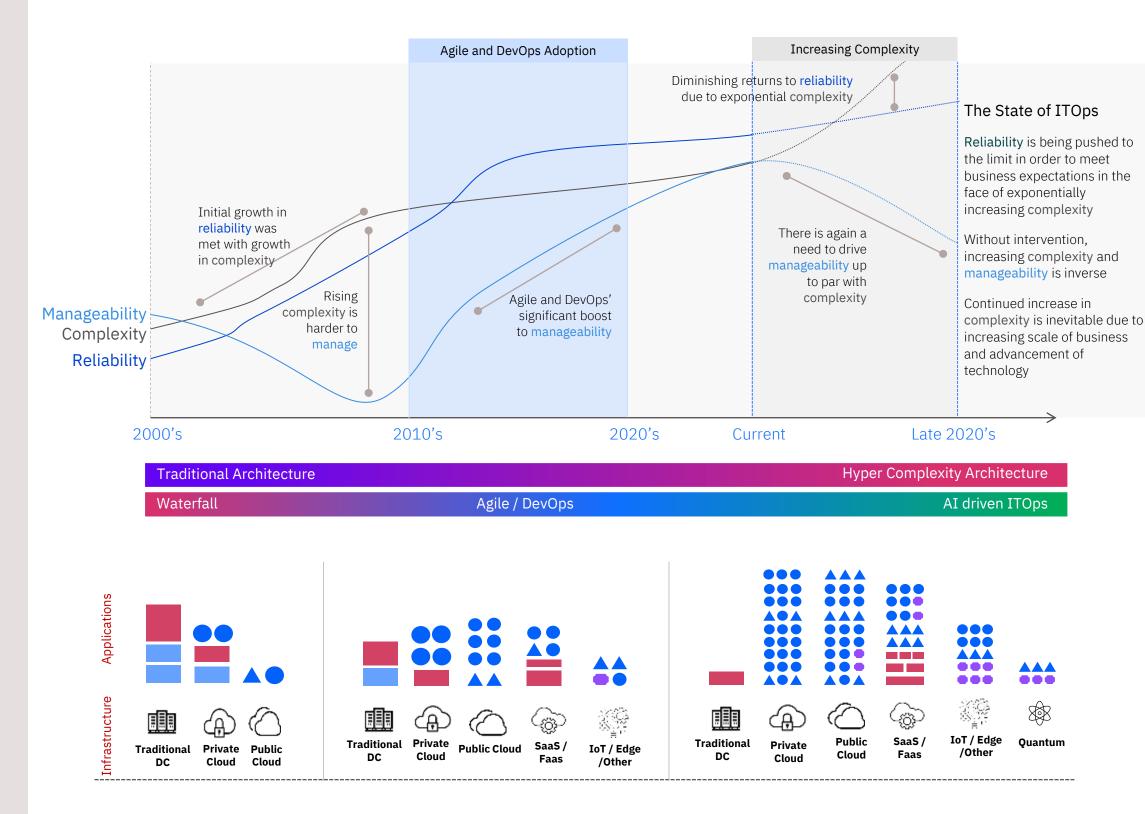
Home-grown / Monolith

Package/COTS

Containers/Hybrid/Microservices

PaaS

Next Generation



## Therefore, Intelligent IT Operations represents the foundation for successful Hybrid Cloud transformation

#### **Business expectations**



Improve time-to-value



Improve innovation quotient



Reduce Total Cost of Ownership through operational savings



Improve customer experience through higher solution reliability

#### **Future proof IT Operations**

- Integration of siloed operational data
- Proactive incident avoidance through AI and Automation
- Universal AI experience improving SRE productivity
- End-to-end solution observability
- Closed loop DevSecOps implementation from observation to insights

#### With intelligent IT Operations building blocks













DevSecOps

Integrated Service Management

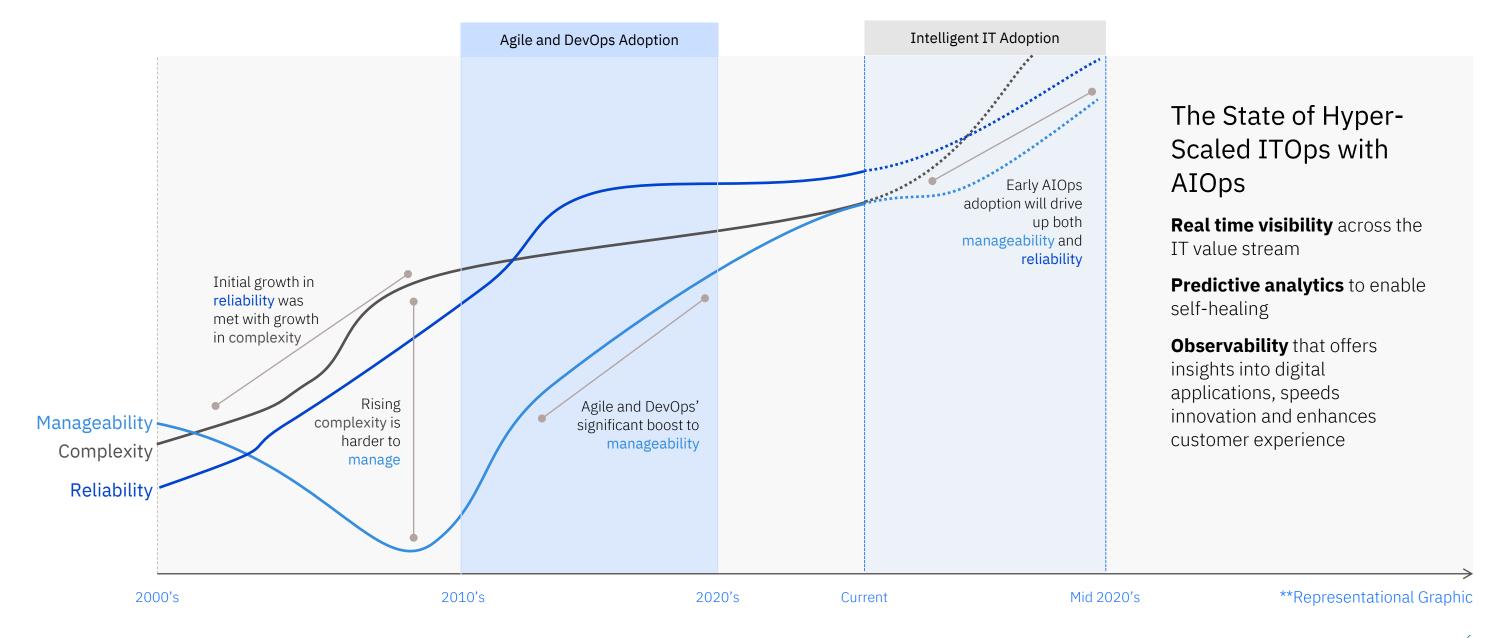
Automation

Quality Engineering

Continuous Compliance

Hybrid Cloud Operations

#### IBM can help you scale DevOps and ultimately AIOps to achieve desired business outcomes



## Establish an IT Operations and Service Management foundation that is future-ready

#### Today

Infrastructure-centric approach to IT Ops

#### **Tomorrow**

 Business outcome, value-focused approach

Focus on the application operations parameters that are most relevant to impact business outcomes and key stakeholders –Developers, IT Operators, App Owners

Lack of observability due to siloed teams, tools, processes Full visualization and observability

Remove silos and automate discovery to allow operators and developers to understand context, isolate and resolve problems in real time

IT data explosion: unable to manage using current methods



AI for IT insights

Introduce intelligent, predictive solutions; identify signals at the right time, supporting DevSecOps culture and automation to scale IT benefits

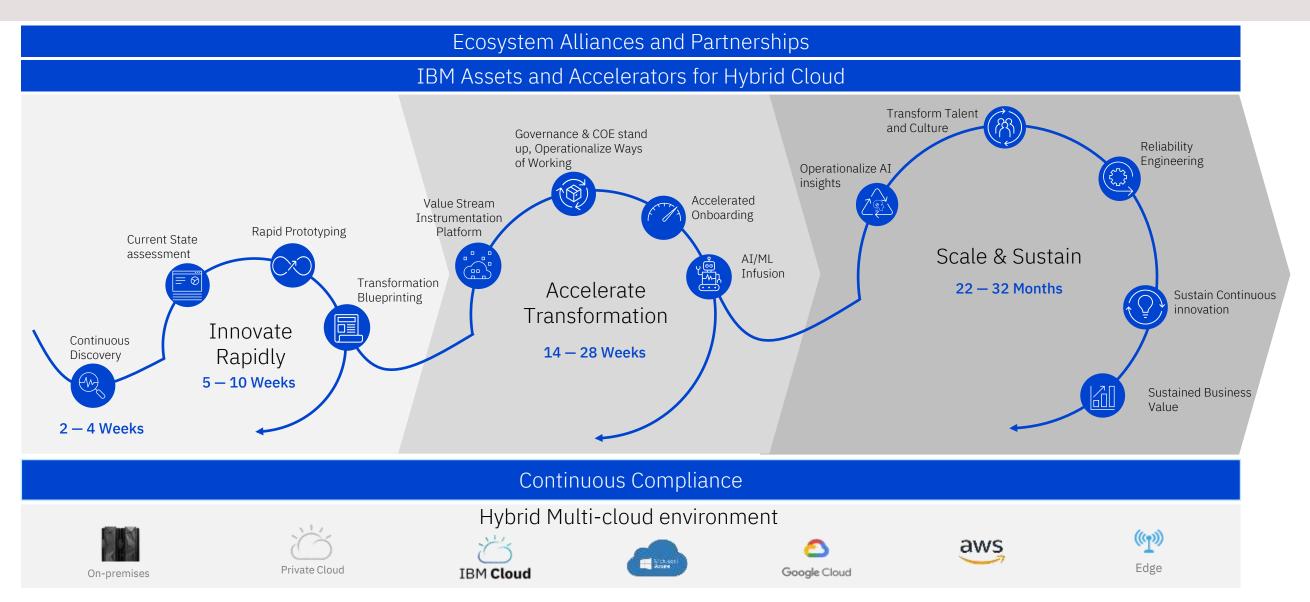
Scalability is impacted by slow, manual processes that inhibit innovation



**Continuous Innovation Powered by Data** 

Drive dynamic, data-powered, and automated processes with AI-enabled tools, assets and a workforce with the requisite cloud skills to catalyze digital reinvention

## IBM provides a well-defined path to achieve desired transformation outcomes for your IT Operations and can help you thrive in any hybrid multi-cloud environment



# Every IT operations transformation journey is unique; IBM can help you get it right

Leading global companies across industries have partnered with us to transform their IT operations by taking advantage of our expertise in next gen technology: Intelligent DevSecOps, AIOps, Site Reliability Engineering, Observability, Infrastructure-as-code and many more...



#### **Major US based insurer**

Ensure uninterrupted business post migration to the cloud; Reliability of 99.99% application availability to be achieved

#### **KEY COMPONENTS:**

- Solution Operations Center provided 24\*7 support, and monitoring across 14 application environments
- Site Reliability Engineers (SREs)
   ensured the right design principles for
   a high availability solution
- Auto provisioning of middleware through 'Infra-as-code' automation
- DevOps telemetry for real time status updates

Reduced downtime due to real time monitoring

Self provisioning of environments through infrastructure-as-code

Significant improvement in operational reliability



### Leading Canadian telecom service provider

Improve application reliability and reduce time-to-market for new products and services by adopting a DevOps oriented test and quality approach

#### **KEY COMPONENTS:**

- Established standardized foundational processes for tool consolidation, regression automation, test data management etc.
- Established AutoDSR for customized reporting, AutoRUN framework for continuous testing, and AutoPilot framework implementation
- Implemented Analytics Dashboard,
   Perfecto Mobile Testing, accelerators and Test Services virtualization
- Aligned Automation and DevOps approaches

Achieved 96% customer satisfaction in 2021, an improvement over previous years

Achieved 35% reduction in testing effort and operating cost

Achieved Disaster Risk Reduction (DRR) of 99.85%

Increased automation to 70% over a 12 month period



#### Major Indian automotive manufacturer

End-to-end monitoring & management of 'Connected Cars' application platform focused on delivering safety, security and convenience for customers

#### **KEY COMPONENTS:**

- DevOps-as-a-Service for tracking day-to-day activities, to improve code quality and automated deployment
- Monitoring from a Service Operation Center (SOC) to ensure high availability of the applications (99.5%)
- Site Reliability Engineering (SRE) that ensured the right design principles are implemented early in the lifecycle

99.5% uptime availability for businesscritical connected cars

Automation through DevOps has improved productivity, speed, reusability

## Innovate Rapidly

#### **Principles of Engagement:**

Learn Fast Minimize Risk Establish Proof of Value



Engage in a start-up **experience** at enterprise scale through co-creation engagements to **learn fast**. reduce risk, and deliver proof of value



## 1. Continuous Discovery and Analysis

2-4 weeks

- Analyze operational data by applying AI / ML models, provide visualization dashboards for ease of consumption
- Assess current state using KPIs/KTIs and understand business pain points and current IT Strategy



## 2. Rapid Prototyping

4-8 weeks

- Conduct experiential workshops facilitated by a multidisciplinary SME team
- Identify quick win improvement opportunities and where to leverage reusable solution patterns or other accelerators
- Conduct proof of concept / MVP, innovate iteratively, learn fast
- Identify risks, mitigation plans and best course forward



## 3. Transformation Blueprint to AIOps

1-2 weeks

- Bring Thought leadership to define an Insights driven transformation roadmap, including key milestones, rooted in research
- Define the KPIs and OKRs
- Finalize the technical solution along with identified tooling, assets & accelerators

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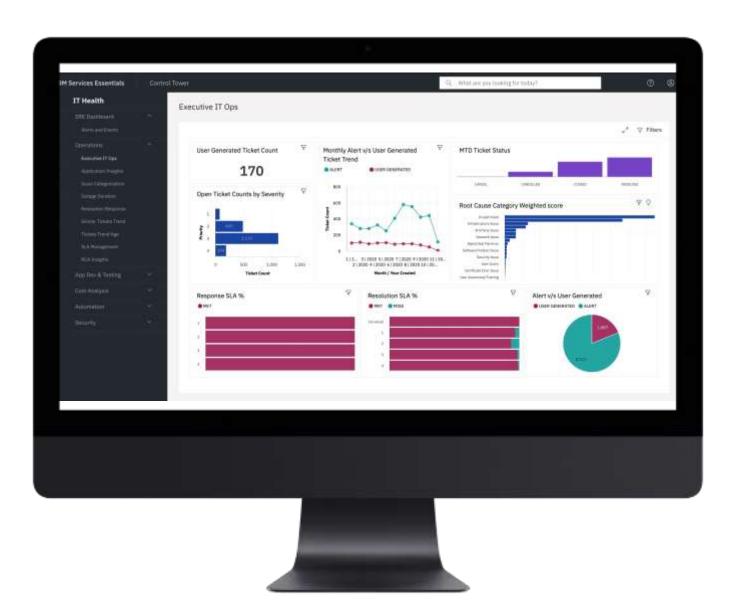


# Assess your current value stream and identify areas of improvement with continuous discovery and analysis

We produce dashboards and visualizations based on the initial analysis to help us chart the course of action during transformation, covering metrics in the following areas:

- Contractual (SLO/SLA) Metrics
- Operational Metrics
- Release Management Metrics
- Security & Compliance Metrics
- Test Efficiency Metrics
- Development Velocity & Quality Metrics
- Traceability Metrics

Leverage our pre-configured Machine Learning models and Dashboard templates by plugging in your data sources to quickly analyze and visualize your ITOps estate



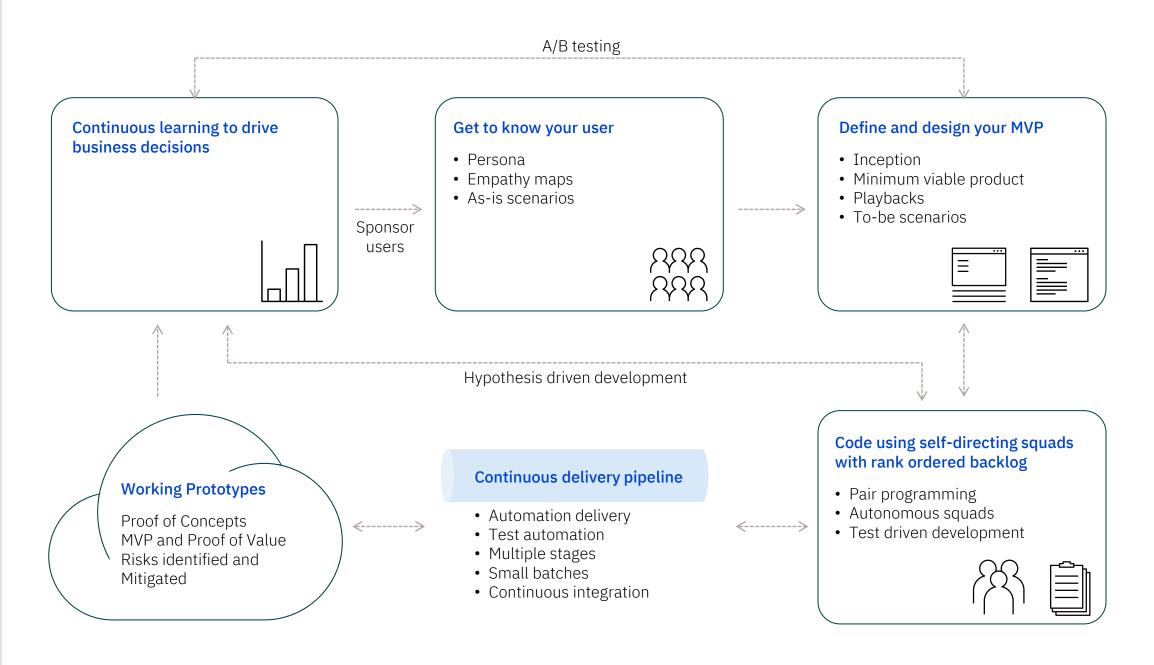
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#### Innovate Rapidly



Engage in rapid prototyping to innovate iteratively, and learn fast

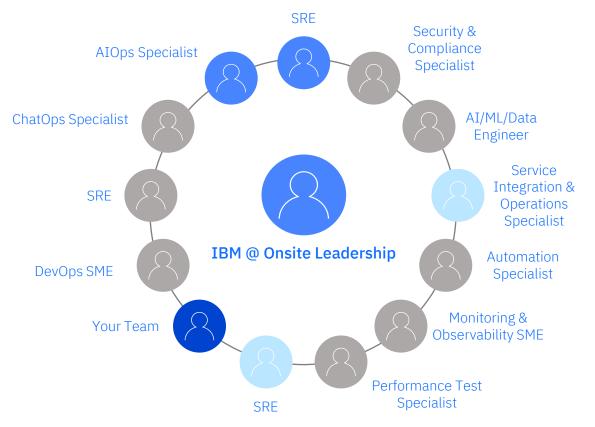
#### Prototype Workflow Example



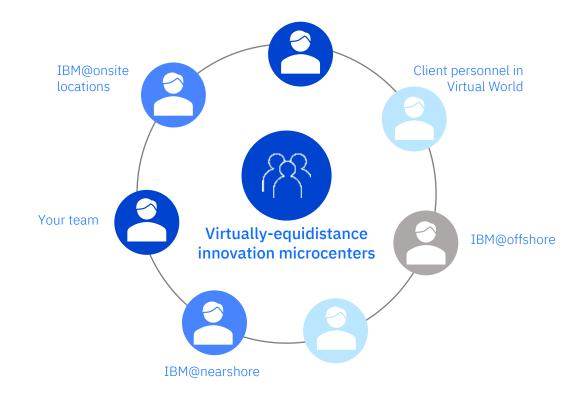


IBM's multi-disciplinary squads bring experience and expertise for rapid prototyping and define a transformation roadmap

#### Sample 'multi-disciplinary' team composition



You + IBM in a virtually-equidistant world with no physical contact, working towards business outcomes

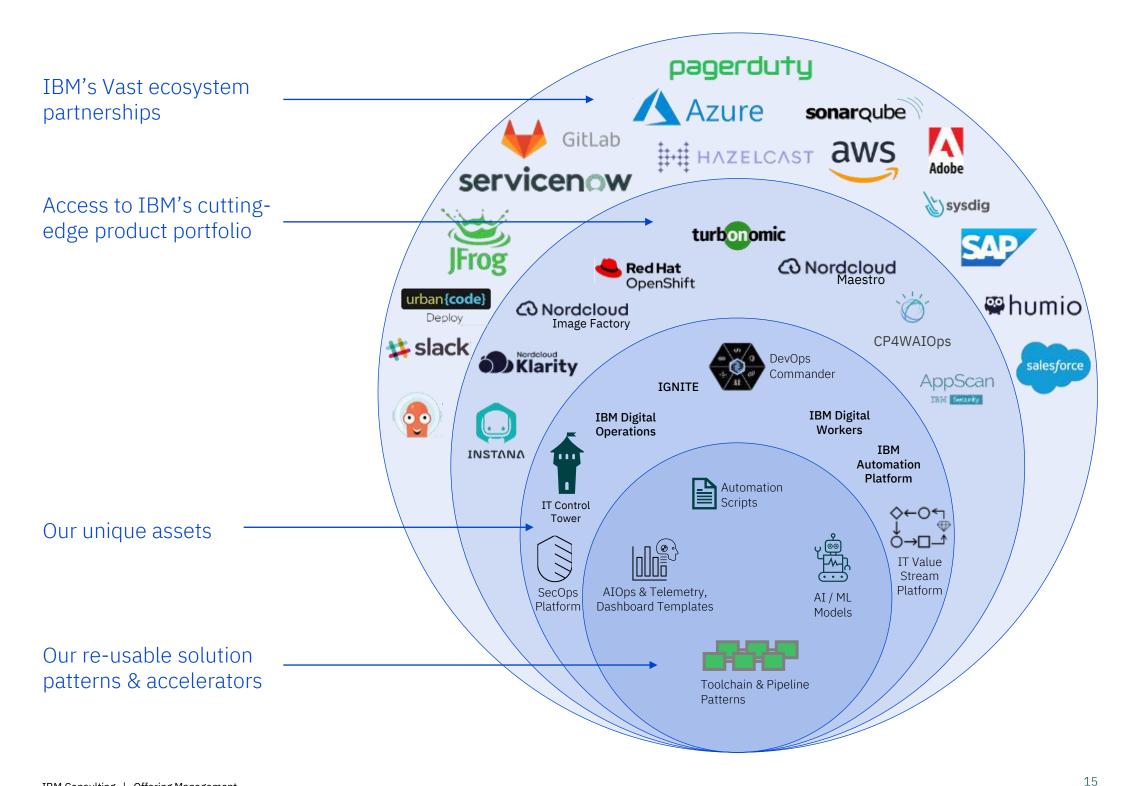




#### Innovate Rapidly



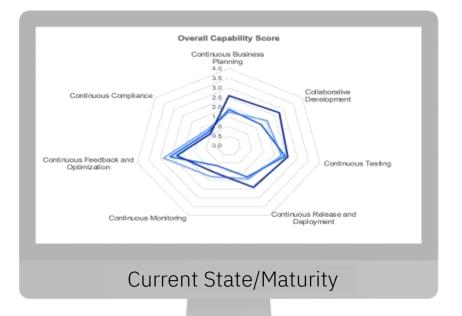
Leverage our re-usable solution patterns and AI powered assets combined with our ecosystem alliances and partnerships for accelerated outcomes

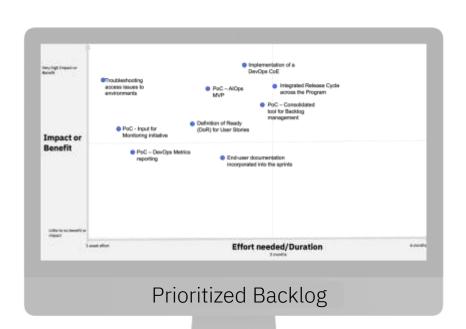


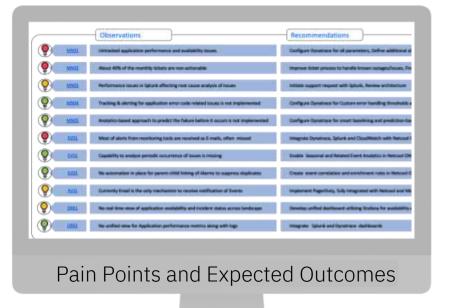
#### Innovate Rapidly

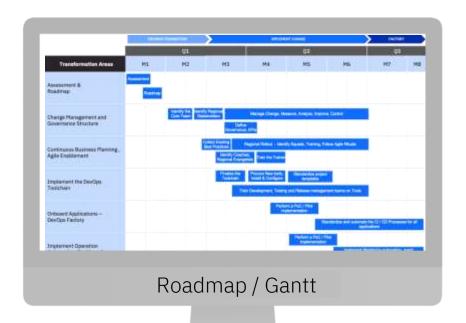


Create a blueprint for end-to-end transformation along with clearly defined roadmap, sprint plans and mitigation approaches for known risks









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#### Large Insurance Company

#### **Business Challenge**

This insurance company was challenged with legacy code applications that were inflexible, expensive to maintain, and lack the ability to deliver real time insights. They partnered with IBM for a Platform-as-a-Service solution for the insurance industry that improves business agility and affords them the financial flexibility to invest in both technical and business innovation.

As part of the integrated IT solution for this client, IBM designed and executed a monitoring and management solution for this critical platform application.

#### **Our Solution**

- DevOps-as-a-Service that leverages existing shared Toolchain for DevOps, Service management and helpdesk, Application-level monitoring for critical APIs, Runbook based auto remediation and/or preliminary diagnosis
- Solutions Operations Center (SOC) that leverages first responders, L1.5 support, Incident Management, Integrated SLA Management and Reporting, Integrated Dashboards.
- Middleware Management and Support for tools like WAS, API Connect EE, IIB, IISE (Datastage), Advanced MQ, Active Directory, TDS (Tivoli Directory Service), DB2, MS SQL and Docker Enterprise based Containerized Microservices

#### **Impact**

- Automation through DevOps has improved productivity, speed, reusability, history records, avoiding manual errors, communication time between teams within the client. In fact, one click in the tool can trigger multiple deployments at a time –which provides the user more time to do other tasks.
- Integrated service management including 3rd party packaged application vendor
- Integrated Dashboards for Monitoring OS and network



20%

savings in operating cost achieved for re-investment into value-added SaaS solutions and modernization

IBM partnered with this client to create a 'Solution-as-a-Service' platform for the insurance industry

## Accelerate Transformation

#### **Principles of Engagement:**

Orchestrate and integrate without compromise Simplify and optimize for the user



Enable **Smart** ways of working and employ AI/ML to gain momentum and drive performance across the application portfolio



## 1. Enterprise IT Orchestration

#### 4-8 weeks

- Operationalize the IT value stream using an open-standards Platform, infused with AI, Quality Engineering, Security, and DevSecOps
- Set-up Operations Command
   Center and leverage the IBM
   Garage Method to establish the
   Integrated Service
   Management, with cross functional teams, underpinned
   by self service capabilities and a
   flexible engagement /
   commercial model



#### 2. AI / ML Infusion

#### 8-16 weeks

- Enable an enterprise IT data strategy, including collection, storage & retention
- Enable AI/ML capabilities to continuously derive insights that are utilized by SREs to drive operational stability and efficiency to application lifecycle
- Instrument AI/ML capabilities to continuously derive insights from IT data and ensure visibility and compliance with key operating metrics
- Enable SREs to drive operational stability and efficiency through AI insights

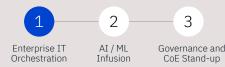


## 3. Governance and CoE Stand-up

#### 2-4 weeks

- Implement governance structure for onboarding
- Align stakeholders to common goals, continuous innovation, and a transformation-first approach; promote the best practices for Agile, Design Thinking, & DevSecOps; leverage open standards
- Promote the best practices from Agile, Design Thinking, & DevSecOps

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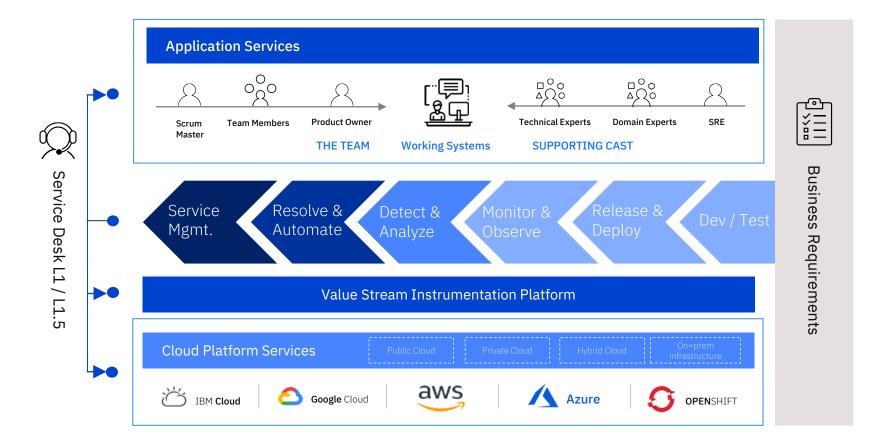


## Operationalize the IT value stream through integrated application operations and service management

### Integrated Application Operations (AppOps) provides a factory approach to operationalize:

- DevSecOps and Application Reliability Engineering
- End to end test automation and quality assurance across the lifecycle
- Embedded Hybrid IT Security assures data protection, resiliency, and compliance
- Hybrid Operations Command Center to proactively monitor, avoids outages, quickly troubleshoot and continuously improve reliability
- Integrated Service Management to provide a Single point of contact & pane of glass view into Hybrid multi-cloud provider landscape
- AI infused Observability, Analysis and Automation to drive continuous improvement

Integrated Application Operations for Hybrid Multicloud Environments



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#### Accelerate Transformation



Integrate application operations through an AI infused value stream instrumentation platform to drive an accelerated transformation

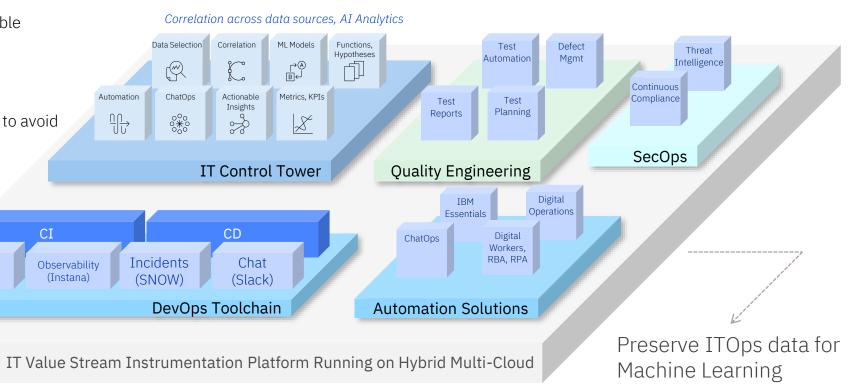
#### Platform approach to Value Stream Instrumentation

- ✓ Built using client's existing toolchain, IBM provided solutions, products and services from ISV & Cloud partners
- ✓ Enterprise grade solutions enable standardization & Reliability
- ✓ Fully integrated Security and Compliance
- Modular solution components to avoid vendor lock-in

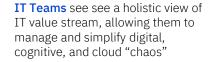
Logs

(ELK)

 Re-usable patterns to improve productivity









**Business Users** get a uniform IT experience across the enterprise with common instrumentation, and common language across the organization

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App2 MW1

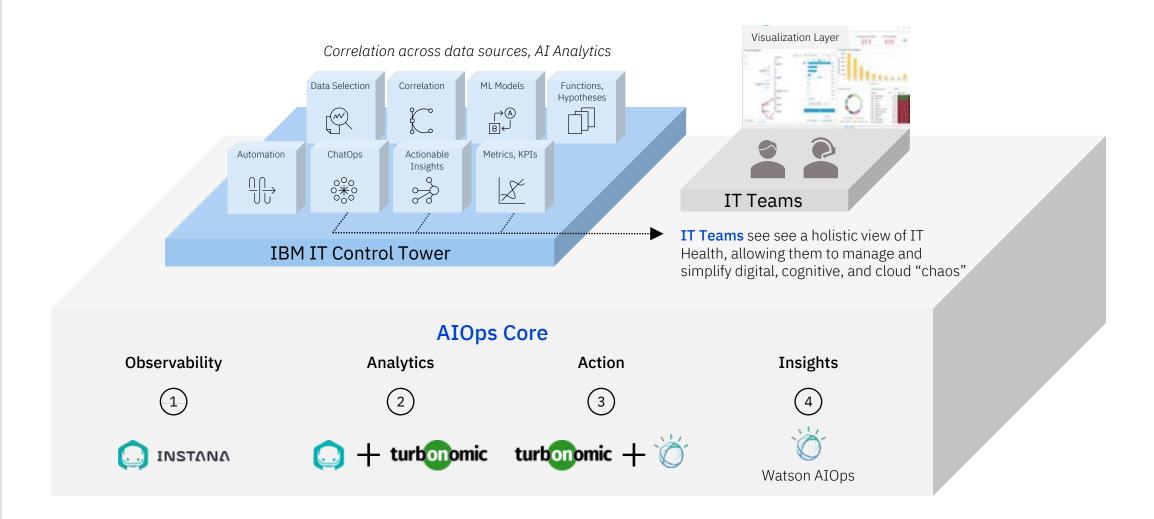
IT Landscape on RHOS (Client)

#### Accelerate Transformation



Provide actionable insights to allow teams to raise the bar on system performance

Instana, Turbonomic, and Watson AIOps are core automation tools that feed valuable data and insights into IBM's Control Tower. Altogether the system provides visibility into the full IT Estate, measured against impactful KPIs for performance monitoring and security. Actionable insights for IT Teams reveal new value streams that generate business results.



#### Instana

(IT Observability)

De-risk change management and ensure compliance through visibility. Automatically ingests and contextualizes observability metrics, traces, and events for performance to understand change impacts to the ecosystem. This helps IT make proactive decision and ensures Business continuity planning through planning backup and alternate service routes

#### **Turbonomic**

(Application Resourcing)

Optimize resource performance in real time by continuously monitoring application resources for activity, bandwidth, and utilization, thus optimizing both resources and costs

#### Watson AIOps

(Automated IT Ops)

Drive continuous performance and maintain compliance synthesizing and analyzing disparate datasets from correlation, ITSM and execution data fed into ML helps to get actionable insights. Helps to drive costs down and ensure seamless availability of IT Operations

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Establish a governance model for accelerated transformation and transparency, led by a Lean CoE to promote alignment between stakeholders

- A single source of truth for all data and development processes - The CoE develops common solutions and best practices that are then spread throughout the enterprise
- Effective Change management CoE accelerates the enterprise-wide adoption of Devops by promoting close collaboration between Business, IT, Vendors and Operations team
- Effective Governance Managed entity with real priorities and deliverables, and is not a 'think tank', helps to bring effective governance around the DevOps adoption program



Executive Leadership
CIT, CTO, CISO, C-level
Stakeholders



#### **Transformation Teams**



IBM SMEs (Service Management, DevSecOps, Agile, Quality, Security, Platform)



Method and Tooling Experts

#### Project Based Onboarding Team



Project/Vendor Specific SMEs Security, DevOps, ITSM, Quality Engineering



**SRE Lead** 



**DevOps Engineer**DevSecOps Platform &
Pipeline Engineering



**SME Team** 

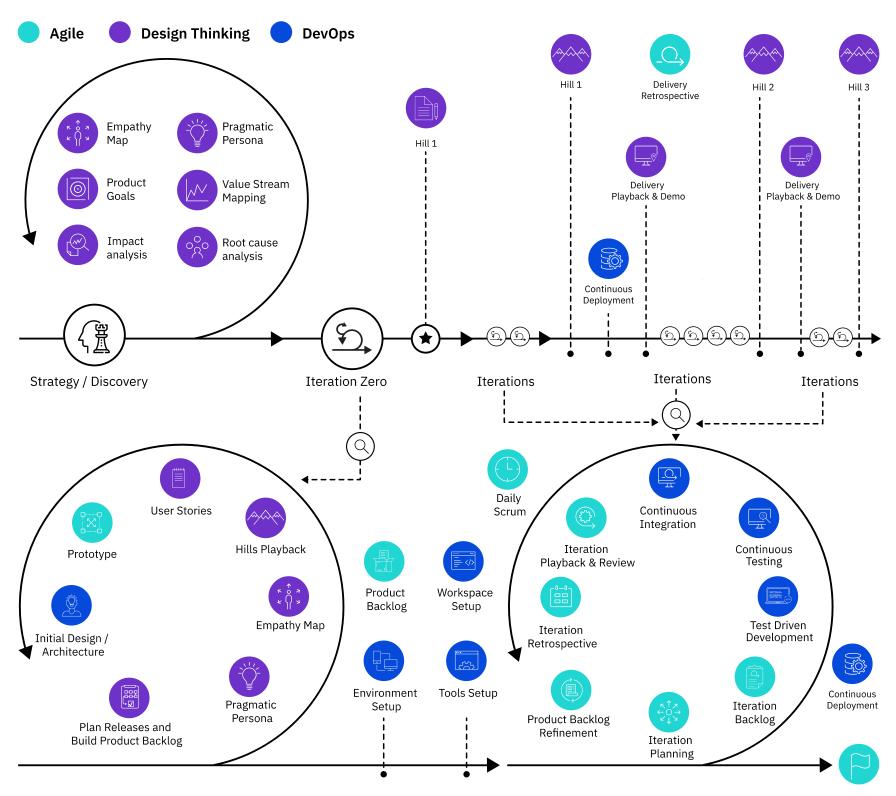
Test Automation Engineer, Service Management SME, Security & Compliance SME, Application SME/Architect

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Promote and incorporate the best practices from Agile, Design Thinking, & DevSecOps

Every software development life cycle starts with the design phase, where the product goals are detailed out. This results in a Product backlog which are taken through multiple sprints and releases to finally deliver the end product. DevOps process and tools are used for the development and release of every increment.



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Enterprise IT

Governance and CoE Stand-up



IT Operations Leader

#### **SCENARIO**

The organization has a mission critical application running on a multicloud environment that needs to be enabled by AIOps with end-toend management and monitoring to maximize uptime.

#### GOAL

"I need full visibility across my IT Operations and to improve the performance of my systems, applications and networks. I need actionable insights and minimized downtime, and to fully realize the value of a transparent view of my IT Operations."

#### **Application Growth**

#### **Crossroad of Complexity and Management**

#### **Full Visibility Across IT Operations**

#### **Actionable Insights**

Growth in Sarah's company has led to a proliferation of upgrades in her IT Operations. She is excited by the prospect of being able to do more with her IT Estate but balancing that with being laser focused on business value.

application failure, causing Sarah to have to work arduously on fixing the issue with the rest of her team. She is realizing that growth in what she must manage is creating exponential more complex IT Operation.

Would I really be able to reduce tech. debt and tools, shift left, and maintain uptime?

An incident triggers an 3 The extent of her team's involvement in solving these issues is problematic as she does not feel there is an adequate amount of infrastructure in governance, security, automation, and endto-end not enough observability of her operations to effectively sustain growth.

> I need secure and reliable visibility of my IT Estate; can I achieve this alone?

Sarah needs a single trusted partner to manage her application workloads running across her complex multicloud environment. Sarah gets approval to bring in IBM to help solve her IT Operations issues.

Is there a single solution to solve my problems? I need to call on someone who has done this before.

IBM includes security forethought and built into their DevSecOps approach to application management. The immediate response from IBM is to move towards the "5 9's" of availability and uptime.

> The unique capabilities of IBM's AIOps are allowing me to gain an advantage I did not think I would have.

The infusion of AIOps

support growth and

allow for optimization

that was not possible

embedded security

incident resolution.

from constant hands-

on to Zero Touch Ops.

Sarah has moved

engineering practices,

into Sarah's

operations will

previously. With

and automated

and quality

End-to-end observability and built automation is allowing Sarah to look across her IT Operations, and not only gain more insight into what is happening, but the action she can take to further innovate. decrease Opex, and look forward to more growth.

I can move forward leading, rather than responding, and enable my teams to continuously innovate.

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I can rely on IBM to set up a secure management solution to my problem.

Do I have the right infra..

sustained app. growth?

plat., and arch. to achieve

#### Large Automobile Manufacturer

#### **Insight**

- Implement successfully the high profile 'Connected Cars' project to enhance the safety, security and convenience of their customers
- Increase the lifetime revenue from cars
- Harness the data from cars for service innovation, optimization of product quality and develop product strategy

#### **Our Solution**

- Design, build and manage a scalable solution that will leverage the capabilities of IoT for Automotive platform and integrate the data from a third-party device to collect and transmit data from the car
- The transmitted data is recorded at IBM's IoT for Automotive platform on IBM Cloud for real time action and Big Data analysis
- DevOps-as-a-Service for tracking day-to-day tasks, improve code quality and automated deployment
- Middleware management and support services for tools like Node JS, MySQL, Kafka,
   Zookeeper
- Solutions Operations center for first responder incident management, L1.5 support and reporting
- Security services for access management, change governance and vulnerability assessments

#### **Impact**

- Low Cost, High Availability & Scalable Solution to support **0.825M** cars at peak.
- Complete Connected car solution
- End to End Solution on SaaS model
- Automation through DevOps has improved productivity, speed, reusability.
- Integrated Dashboards for Monitoring OS and network



IBM partnered with our client to launch connected cars to enhance customer experience, drive brand recognition & loyalty through Cloud Application management and DevOps services

#### **Principles of Engagement:**

Measure and Enhance Value Sustain Transformation Preserve and Utilize Data



Achieve scale and sustain transformation through a skilled, empowered workforce



## 1. Sustainable Visibility

6-8 months

- Instrument intelligent IT workflows across the application value stream
- Enhance IT Control tower to achieve full-stack visibility and Promote a single pane of glass view across multi-partner IT ecosystems
- Generate AI driven actionable insights to accelerate business value, provide continuous feedback, and optimization



## 2. Talent and Cultural Transformation

8-12 months

- Operationalize a talent strategy and roll-out enablement programs
- Enable sustainable Cultural transformation
- Enable a conducive environment for agility and shared responsibility across business and IT



## 3. Ecosystem Scaling

8-12 months

- Achieve continuous innovation and optimization to generate tangible outcomes
- Enable Application Reliability engineering through AI insights
- SRE driven inclusive & federated transformation

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# IBM DevSecOps and Service Management Drives value realization to IT Operations

There is a need for a consistent method to build and manage applications across a complex hybrid cloud ecosystem at scale and speed to be able to foster growth in resiliency, security, flexibility, portability, scalability, and sustainability.



Upgrades deployed first through canary testing mitigate risk, validate the new components, and allow the CIO to have full visibility and actionable insights across operations.

The CIO now has full visibly across the organization, and IT Operations.

The CIO and their team are now able to fully realize the target TCO savings and improvements of 30% that they were expecting to see in the organization's modernization to cloud. Furthermore, they feel their team is being properly skilled for future transformation.

The CIO is now noticing reduction in overall TCO. They are feeling great about building the skills and cultural shift in the organization's future.

Emboldened by achieving the set committed goal of lowering TCO to leadership, the CIO can now pursue the other guidance provided by IBM to further improve on their operations.

The CIO can rely on the thought-leadership from IBM to pave the way for future growth and optimization.

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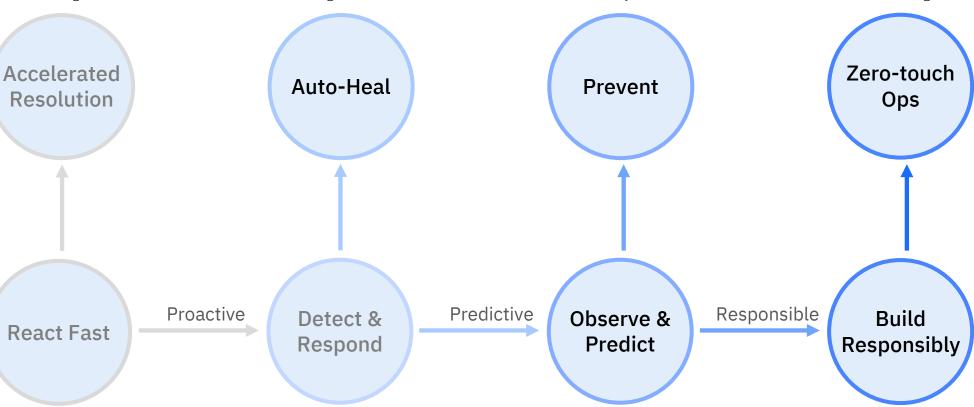
Based on the disposition of each application across your IT estate, Scale AI and MI adoption to increase transparency and reliability

#### IT Control Tower with dashboards for SREs

#### Advanced Collaboration (ChatOps, Digital Workers)

- Iterative development, Learn-fast and recover with SME support
- Automated Incident Mgmt. (Virtual Dispatcher, Chat Bots & Cog Assist)
- DevSecOps pipeline automation, test & release automation
- Auto-heal (RBA, RPA) Event correlation, Noise reduction Alerting & Escalation

- Automate Process, Quality & Security Controls, VSM
- Pre-emptive autoremediation, Resolution recommendation
- AI assisted RCA, Blast radius analysis, localization
- Self-healing and autonomous solutions, Chaos architecture
- Advanced Capacity and resource management



- Code build failures, manual test defects, deployment failures
- User identified incidents, downtime

- Proactive Monitoring, Log aggregation, Batch & Queue monitoring
- Test Driven & Behavior Driven Development, Automated Releases

- Anomaly Detection, Correlation and Outage prediction
- Observability contextbased analysis with AI

- AI assisted testing, Release management to avoid most outages
- AI assisted coding, scan for vulnerabilities & policy adherence

Legacy

Cloud Native



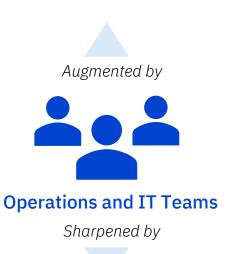
## Empower your IT teams to resolve issues before they occur

Use of Watson AIOps backed up by the SRE principles are poised to use a backbone of AI insights and platform accelerators across disparate channels, and development, security, and operations processes to speed up issue resolution, optimize cost, minimize risk and maximize value for your companies and users.

40%

Reduced cost of operations





- Pre-built AI models tuned by your app data
- Monitors logs, alerts, metrics, topologies, and tickets
- ML and NLP to correlate data
- Single source of truth for problem resolution
- Detects hidden anomalies
- Integrates with 3<sup>rd</sup> party tools and dashboards

- High resiliency and elastic architecture
- Reduction in errors and service requests
- Optimized saturation ensuring resources are not constrained
- Reduced latency by identifying hotspots and providing feedback to the development squads to automate the fixes
- Engineering automation into the operations process

#### **SRE Principles**

- Durable Focus on Engineering
- Pursuing Maximum Change Velocity Without Violating a Service's SLO
- Monitoring, Alerts, Tickets and Logging
- Emergency Response
- Change Management
- Demand Forecasting & Capacity Planning
- Provisioning
- Efficiency & Performance

- SRE teams see a holistic view of apps and environments as siloed data becomes synthesized
- SRE teams get new, valuable, proactive insights and recommendations within team's ChatOps workflow
- SRE efforts are streamlined through powerful filtering and triaging
- SREs can view reports with external tools and dashboards integrated

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## Empower your IT teams to resolve issues before they occur

Through the course of DevSecOps & Service Management, many initiatives with unique objectives are running concurrently. Diverse and deep skillsets are required for success, but they are not easy to form or maintain.

IBM will leverage predefined T-shaped skill models to modernize the teams that are working together to solve challenges as we Innovate Rapidly, Accelerate transformation, Scale & Sustain. We will help your teams build the appropriate skillsets – achieving depth and breadth of skills in your practitioners.



Jim is focused on resolution of issues and IT automation. He is learning to better understand automation and ways of working with IBM Garage in order to drive efficiency and resiliency into his workflow.

## This is **Tina**, a data scientist.

Tina is taking up work from Jim, and she is learning to use inputs from Instana, WatsonAIOps and Turbonomic to predict and resolve the incident proactively.

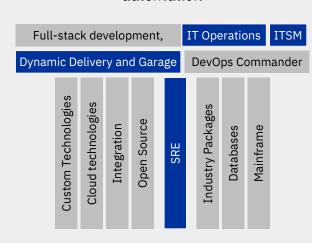
## This a cor

## This is **Diana**, a consultant.

Diana learning to transform the ways that her teams are working, leveraging AIOps toward greater resiliency, understanding objectives of value streams, and modernizing the team's skillsets. She needs to drive adoption of AIOPs for scale and sustained transformation.

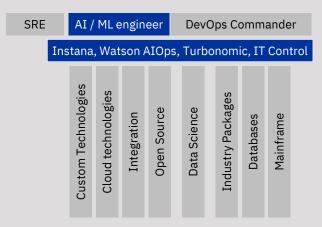
#### **Innovate Rapidly**

Team focused on efficiency and automation



#### **Accelerate Transformation**

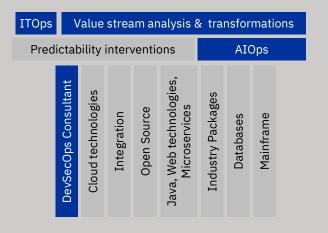
Team focused on AI, insights and process improvement



**IBM Garage T-Shaped Teams** 

#### Scale & Sustain

Team focused on strategic transformation in your estate



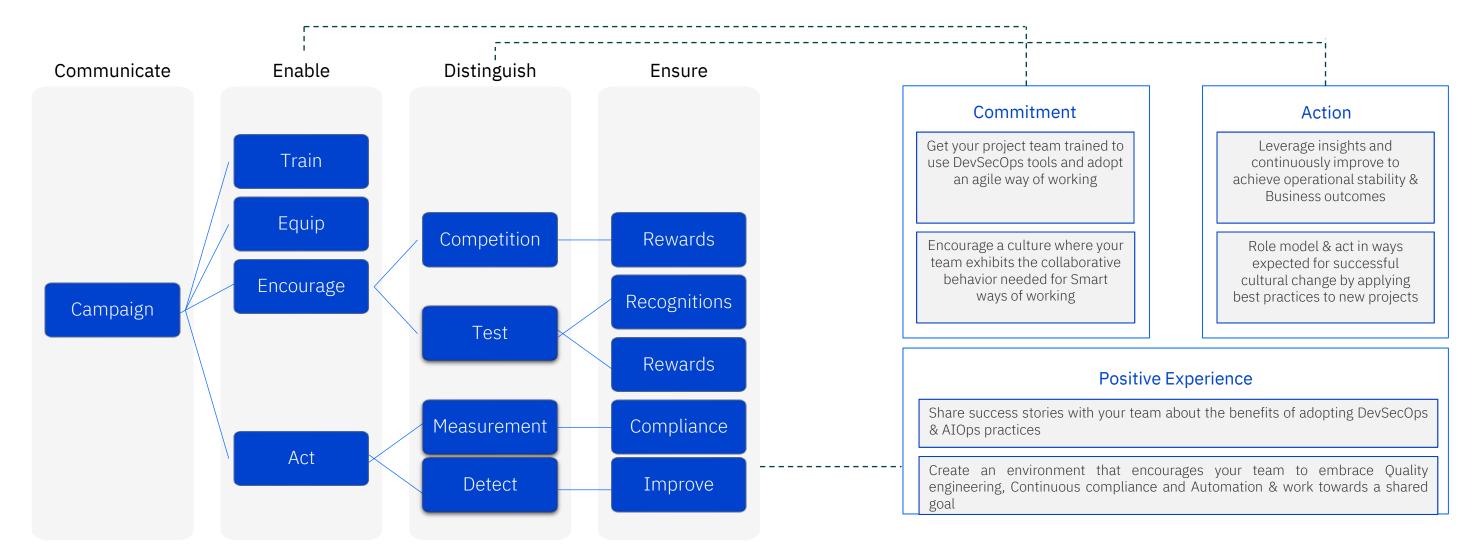


## Sustained transformation requires a **cultural shift** - enabling teams to carry forward smart ways of working

#### Current Mindset needs to shift ....

There is no real need for collaboration, Current ways of working are fine, DevOps is something extra that the team must do, not sure about the benefit that DevOps can add

- .... to ensure sustainability and continued success of transformation
- Collaboration and an attitude of shared responsibility between Development, Quality, Security & Operations teams, Team enabled to generate value from smart ways of working, Increase speed & quality of delivery by embracing Best practices from DevSecOps & AIOps





Scale across your ecosystem to drive sustained value, retaining core principles while adopting the local flavors of your enterprise

#### **ISV Partners**

- ISV tool specific templates
- Specialized capabilities

#### **IT Ecosystem Partners**

- Partners' Internal tools
- Partners' internal processes
- Customized pipeline Templates
- Partners' data sources

#### Core Framework

- IT Value Stream
   Management Platform
- 2. Assets & Accelerators
- 3. Ecosystem Partnerships
- 4. Process Guardrails
- 5. 05 Talent & Culture

#### **Business Units**

- Customized pipeline Templates
- Legacy data sources
- Specialized processes
- Legacy tools
- Customized Dashboards

#### **Application profiles**

- Application specific pipeline Templates
- Specialized processes
- Specialized tools

#### Regions

- Regulatory requirements
- Specialized processes

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IBM Consulting | Offering Management

## Leading European tobacco products company

#### **Business challenge**

When this European tobacco products company wanted to transform their applications to create an open, agile digital platform and a consumer-centric operating model, they wanted to take advantage of the benefits of data analytics driven by AIOps. IBM developed and implemented a DevOps solution underpinned by AI and Automation uniquely tailored to their needs.

#### Our solution

- Infusion of AI/ML capabilities to establish visibility and insights across IT operations, using tools like PowerBI
- Configuration of Monitoring and Runbook Automation leveraging the client's existing infrastructure monitoring assets
- IBM's AIOps framework included pre-integrated toolchains for secure, orchestrated automation across workloads
- Orchestration of automated workflows using ChatOps to enhance collaboration
- Deploy pre-integrated toolchains with DevOps Commander for secure, orchestrated automation

#### **Impact**

- Established a single view of the health of the application estate
- Improved Mean-Time-to-Repair (MTTR) and Mean-Time-between-Failure (MTTF) through traceability and continuous feedback
- Early detection of performance degrades that could lead to outages
- Metrics correlation to drive early detection of performance degrades that could lead to outages
- Log Analytics insights powers real time problem determination



We are helping this client to improve transparency and efficiency across their complex IT operations by infusing **intelligence and automation** 

### Next Steps

#### Let us propel your transformation journey, with an MVP

1

1 Week

#### Schedule a Discovery Workshop

Conduct a data driven discovery and analysis of the current value stream capabilities and generate and visualize actionable insights.

2

1 Week

## IBM Visioning & Rapid Design Workshop

Establish a north star vision and application operations goals that are based on your unique challenges and business priorities.

Envision the art of the possible for your application portfolio.

3

#### 3-12 Weeks

### Test the hypotheses through an MVP

Get Rolling! Move quickly to initiate a cocreation engagement to implement a lean solution

Obtain proof of value, linking initiatives to business objectives and outcomes.

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