Unlock savings and new value through modernization with IBM WebSphere

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Organizations are facing an unprecedented convergence of technological, social, and regulatory forces

- o Time to market challenges

- o High operational costs

- o Managing complexity


Operational optimization is imp

Costs of maintaining existing infrastructure and estates continue to skyrocket.

"Our WebSphere operations are complex"

"Lack of cloud skills across infrastructure and architecture is a huge challenge"

"We can't even start innovation projects that would help the organization face challenging times like these"
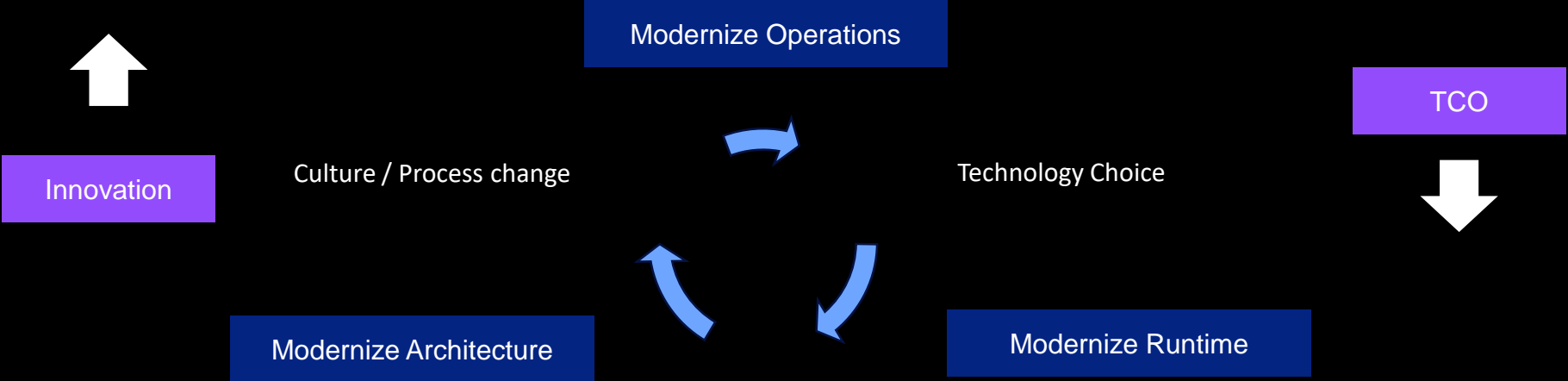
IBM WebSphere Customers, 2020
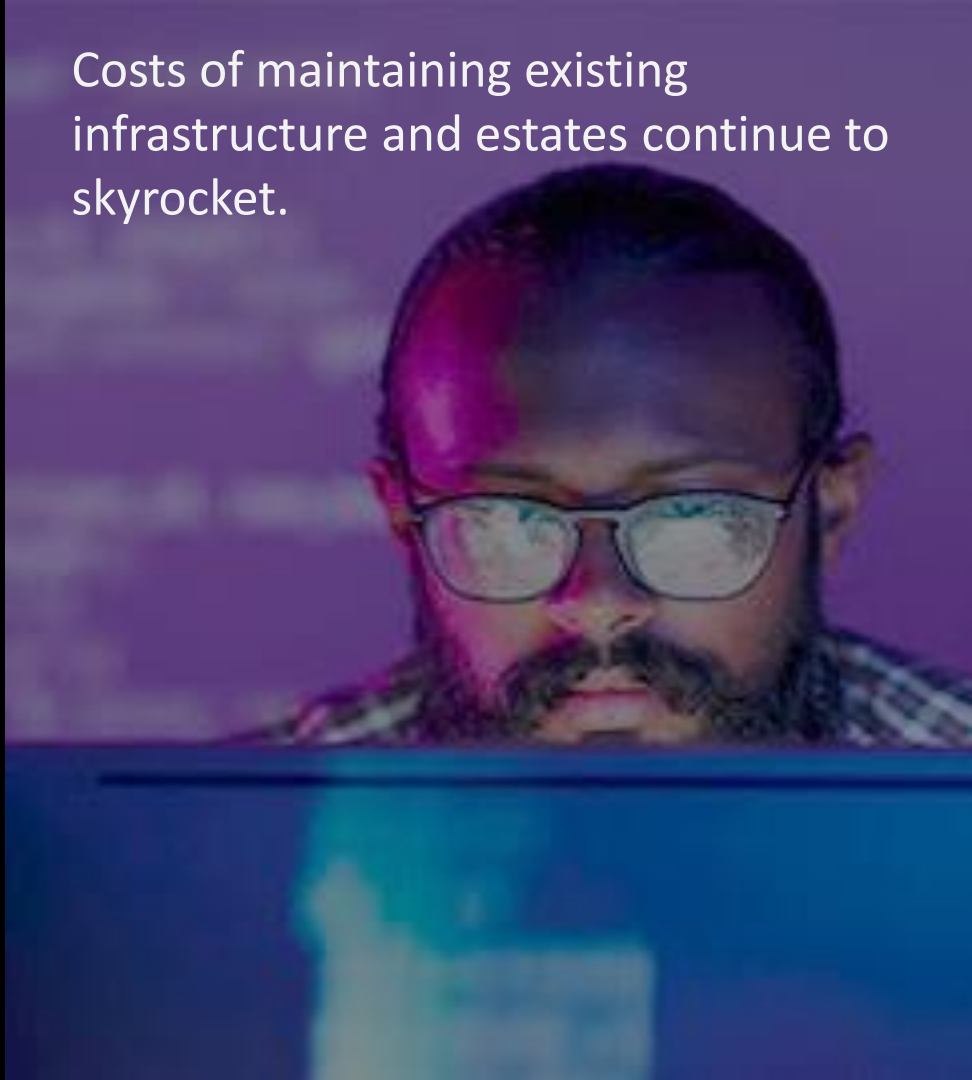
Left alone

40%

IT budget consumed by technical debt compounding through 2025 (Gartner)

Massive transformation programs are hard to greenlight and often fail to deliver quick results.

How do you break through to innovation?

Where do I start?

Modernize Operations

TCO

Innovation

Culture / Process change

Technology Choice

Modernize Architecture

Modernize Runtime

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Modernize to Optimize
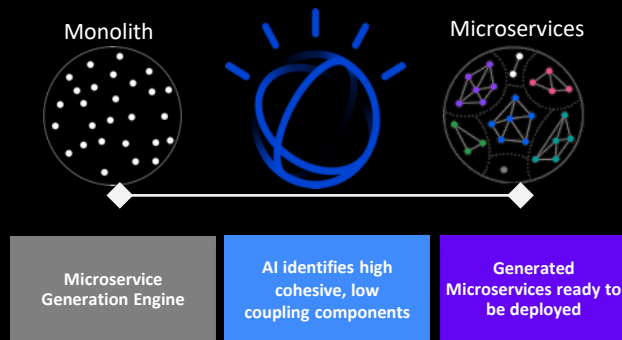
Transformation Advisor

- Accelerate deployment of Liberty or WAS Base in containers on private or public cloud with quickly evaluations of Java EE applications and messaging infrastructure

- Analyze deployments with ease to determine complexity of modernization, including z/OS

- Obtain detailed reports, generate artifacts, and automate deployments for simple application modernization

- Facilitate a familiar TA modernization experience for any middleware with SDK capability e.g. IBM Integration Bus

Mono2Micro
(beta)

Accelerate modernization by automating the process of application refactoring with AI-powered:

- Recommendations
- Semantic analysis
- Code portion needed for refactoring

Monolith   Microservices

| Microservice Generation Engine | AI identifies high cohesive, low coupling components | Generated Microservices ready to be deployed |

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Immediate optimization, achievable modernization steps, flexibility of licensing and deployment options across existing and future IT estates

This approach reduces costs immediately, extends the life of existing investments, and keeps the organization focused on maximizing ROI while setting them up for modernization success.

WebSphere standard support through 2030
Stability & Longevity for Existing Workloads

Run existing workloads	No need to migrate	More time to modernize
Stay the course on key priorities	From 8.5.5 to 9.0.5	Committing to broader transformation goals – data, cloud, agile

Version	Release Date	Standard Support (with IBM JDK 8)	Extended Support (with IBM JDK 8)
WAS 8.5.5	2012	2030	2033
WAS 9.0.5	2017	2030	2033

IBM will provide standard support for WebSphere Application Server versions 8.5.5 and 9.0.5, with IBM JDK 8, through at least 2030. For WAS 8.5.5 and WAS 9.0.5 - WAS ND, WAS (Base) and WAS Family Edition.

Rx For Immediate Savings Through Optimization

IBM Cloud Pak for Applications and WebSphere are the destinations for application workloads

- All of the capabilities and technologies needed for application and operational optimization, modernization and cloud enablement of your existing and future IT estates

- Simple, ratio-based deployment flexibility

- Run existing and new workloads side-by-side as you transition to containers

IBM Cloud Pak for Applications and WebSphere Platform

- WebSphere Application Server| WebSphere ND | WebSphere Base| Liberty Core | Open Liberty

- Red Hat OpenShift and Red Hat Runtimes

- IBM Modernization & Developer Tools: Transformation Advisor | Mono2Micro | Application Navigator | WebSphere Migration Toolkit

Benefits

- Protect existing WAS investment

- Mix and match programs needed and change the mix over time

- Subscription benefits include lower initial acquisition costs and customers pay for use rather than pay for support and updates

- Provides everything needed to begin or accelerate the modernization journey –recommendations, reports, artifacts

- Container deployments achieve 4X throughput and half the response time

- Deploy WAS VM and container-based workloads side-by-side with ratio-based flexibility

- Transition to cloud at your own pace!

6 Reasons Why WebSphere Liberty

Supports Java EE, great for monoliths and microservices

Just enough runtime	→	80% disk and 56% memory saving
Low operating cost	→	4x increased density over Tomcat & Spring Boot
Continuous delivery	→	Zero-effort security fixing & zero technical debt
Zero migration	→	100% v2v & fixpack migration saving
Kubernetes optimized	→	Self-tuned optimal perf, production-ready, kube-native
Developer experience	→	Container & kube-native experience, rapid inner loop

Higher scalability
Increased Security
Lower overhead

Potential 158% ROI over three years

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Optimize application management

IBM Application Navigator, available now in WAS 9.0.5

"I have too many views, from too many tools, with too many inconsistencies - making it difficult to determine the root cause of an issue or get the information I need to make decisions." – WAS customer

ICP Console and Resource

Liberty Admin Center

Grafana Metric Views

Kibana Log Views

WAS Admin Console

- Single Pane of Glass to see all your apps and environments across Cells, Collectives and Containers

- Easy to install, no-charge component of WAS ND

- Smart actions to access the tools you need

Modernize to Optimize

IBM Cloud Pak for Applications on containers can enable a **75% reduction** in annual infrastructure costs with minimal application changes

Transaction workloads driving 2,676 TPS

Virtual machines

IBM Cloud Pak for Applications on containers

Total 64 cores across 4 x86 servers

$148,277
(3 Year Cost Analysis)

Total 16 cores on 1 x86 server

$37,069
(3 Year Cost Analysis)

4X Core Reduction

75% Lower cost

Transaction workloads using containers run on fewer cores with lower infrastructure cost than classic virtualized environments

A major US healthcare provider

Modernization led to optimized resource usage by 75% and reduced infrastructure footprint by 50%

Achieving operational efficiency & cost benefits

Business Challenge:

A major US healthcare provider wanted to increase operational efficiency and cost benefits while improving application performance by moving closer to cloud native technologies and techniques and leveraging a lighter weight runtime.

Solution:
Migration Overview
- Moved to WebSphere Liberty & Java 8 on VMs
- Re-wrote some legacy pieces of the app

Next Steps:
- Analyze & move more traditional WAS ND apps to Liberty
- Adopt container management platform

Outcome:
- Lower licensing costs
- Infrastructure consolidation
- Streamlined deployment
- Dynamic scalability
- Improved application performance
- Cloud/Container ready

Solution Components:
- IBM WebSphere Liberty
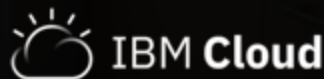
IBM Cloud

Next Steps

1. Try

- Transformation Advisor
  ibm.biz/cloudta

- Mono2Micro
  ibm.biz/Mono2Micro

2. Get Started

- Schedule a free 30-minute consultation
  ibm.com/cloud/websphere-application-platform

3. Register

- Weekly optimization, modernization and cloud enablement shows focused on WebSphere applications
  ibm.biz/ApplicationsThursdays

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Thank you

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WAS 9.0.5

- Simplified app-centric management for hybrid deployments
- Proactive problem determination with logging & monitoring
- Replaces the scheduled 9.0.0.12 fixpacks

WebSphere Application Server ND 9.0.5
Prepare for a container/cloud future and move when you are ready

Hybrid Deployment components:
- Operational and application navigation
- Logging and Monitoring
- Transformation Advisor
- Metering

Application Navigator
Visibility, problem determination, and contextual actions across VMs & containers

WAS 9.0 Service Clock Reset
Transitions take time, transform at your own speed with support through at least 2030
Standard support through at least 2030, with optional extended support for +3 years
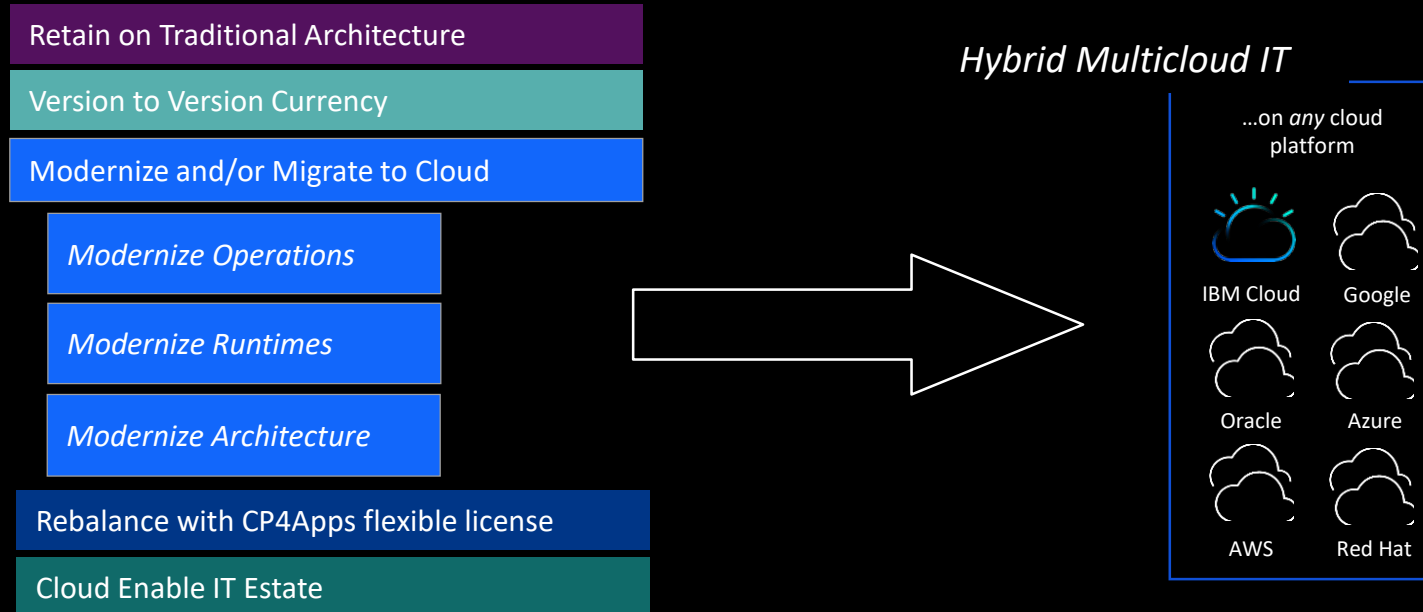
WebSphere Modernization Value Comparison

	Modernize Operations	Modernize Runtimes	Modernize Architecture
Value			Cloud Native
			Agile Delivery
		Cloud Enabled	
		Cost Savings	
		Technical Debt Reduction	
	Flexible Deployment		

	Modernize Operations	Modernize Runtimes	Modernize Architecture
Recommended End State	Application	Application	Microservices
	tWAS	Liberty	Liberty
	Containers	Containers	Containers

	Modernize Operations	Modernize Runtimes	Modernize Architecture
Mod Tools	Transformation Advisor		Mono2Micro (beta)

Legend:
- New
- Existing

Unlock: Modernize and leverage existing investments

How do you choose the optimum approaches for your organization's needs?

Retain on Traditional Architecture

Version to Version Currency

Modernize and/or Migrate to Cloud

Modernize Operations

Modernize Runtimes

Modernize Architecture

Rebalance with CP4Apps flexible license

Cloud Enable IT Estate

Hybrid Multicloud IT

...on *any* cloud platform

IBM Cloud

Google

Oracle

Azure

AWS

Red Hat

Right-Sizing and Modernization
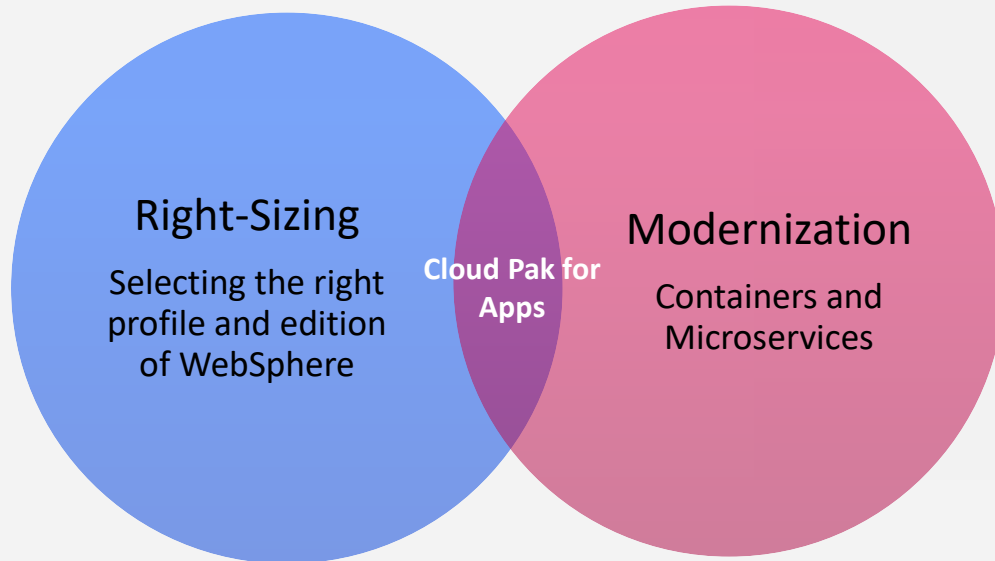## *Two Complementary Value Streams*

Right-Sizing	Desired Outcomes	Modernization

Cost Reduction through software license savings

Operational Efficiencies by moving to lighter-weight middleware offerings

Readiness for container-based architectures and microservice

Right-Sizing
Selecting the right profile and edition of WebSphere

Cloud Pak for Apps

Modernization
Containers and Microservices

Cost Savings through improved hardware density (Containers)

Application Portability (Containers)

Faster, more Consistent Deployments (Containers)

Improved Business Agility (Microservices)