



# Modernization Strategies as a Foundation for Digital Transformation (DX)

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# Enterprises Need DX + Modernization

Demand for new digital solutions will surge as the millennial and Gen Z populations mature.

Today's consumers expect a flawless digital experience when engaging with brands.



with growth in every industry driven by digitally enhanced offerings, operations, relationships and almost

**\$7 TRILLION**  
in IT-related spending in 2019-2022



Disruption has increased so fast that traditional enterprises find it hard to keep up. “Digital transformers” are also rapidly pulling away from competitors. Many enterprises are not leveraging their existing systems and systems of record (SOR) as industries transform.

SOR provides a strategic data reservoir for business execution with DX and innovation, yet the information tends to be locked up and difficult to leverage. DX demands modernization approaches that include existing systems so the “digitally distraught” can become “digitally determined” across software, processes, and platforms.

# The Path to DX and Application Modernization

Modernizing investments in core mainframe and other existing systems for DX and innovation is vital across applications, process strategies, and infrastructure.

Yet key systems and SOR are often neglected due to perceptions that DX is only about replacing existing systems and apps with new digital technologies.

Many organizations also struggle to make the paradigm shift to adaptive DevOps.

## To achieve application modernization and DX:

- Assess the maturity of your software portfolio, processes, and organizational levels
- Leverage adaptive approaches and automation across apps, processes, and infrastructure platforms
- Pursue app goals like supporting new markets and services to address competitive challenges and device variety, revitalize and broaden mainframe application assets, and integrate with .Net and Java frameworks
- Engage in process modernization to deliver apps faster, interweave DevOps processes with tooling and on-demand resources, and evolve existing software assets
- Evaluate infrastructure modernization to support new cost models, on-premises and/or cloud (or hybrid) options for flexibility, data security, and access.

# Transitioning to Modernization and Maturity

Modernization begins by understanding the organization's strengths, gaps, and opportunities – coordinating across teams and areas is key.

- › Assess existing organizational maturity including application architecture and portfolios, IT process, management and culture, and infrastructure
- › Improve processes for systems portfolio inventory analysis, operational and architectural design, DevOps, application rejuvenation, removal of platform dependencies, process modernization, API/SOA integration, and data modernization
- › Bridge core investments with modern technologies and practices, foster a culture of shared responsibility across domains, and leverage automation to optimize tasks and velocity

# Creating Practices for Enterprise Modernization

Organizations—depending on business requirements and priorities—can approach modernization through:

- › Process (adoption of CI/CD, ALM, DevOps, and agile methods)
- › Applications (code discovery and refactoring, REST or other APIs, and containerization)
- › Infrastructure (cloud/cloud native, mainframe, and distributed systems) extending existing application assets through modernization

Best practices include:

- › Evolving toward a hybrid “connected mainframe” strategy
- › Using mainframe as a service (MaaS) for application modernization
- › Delivering modern application access “anywhere” using APIs and SOA
- › Modernizing existing application assets to preserve/enhance existing investments (avoiding risky “rip and replace” projects)
- › Moving beyond rigid, manual processes to scale agile and DevOps approaches that encompass existing SOR

**Organizations must focus on reinvigorating and extending existing application assets through modernization.**

# Automation for Modernization Analysis, Development, Testing, and Deployment

Businesses are prioritizing modernization for improved quality, deployment consistency, and agility for existing systems, seeking modern development tools and approaches for COBOL and other SOR areas. Automation can enable modernization and migration partially or fully from mainframe to the cloud, as well as development, testing, and change management to allow strategic modernization for SOR.

Micro Focus can help drive distributed SOR app modernization, DevOps, and cloud adoption with modern development environments and usage via COBOL (e.g. Visual COBOL, COBOL Analyzer) and other products.

Its mainframe modernization portfolio with products like Enterprise Analyzer, Developer, Sync, Test Server, Server,

and Changeman ZMF can help with modernization for assessment, dev, test, redeployment, and change control. Host connectivity can support a broad SOR base via Micro Focus products like Reflection, Rumba, and other tools and use cases for areas like mainframe security; mobile and cloud access offer renewed value for core SOR systems at low risk.

A focus on container and cloud deployment models for CORBA, as well as JSON/REST interface for AI and BI enablement for CORBA, is an option with updates to VisiBroker, Orbix, OpenFusion, and Orbacus. Robotic Process Automation (RPA) can help increase business agility via automated, rule-driven processes for mundane tasks, creating efficiency with UFT and longer term potentially across the company's portfolio.

**Micro Focus capabilities set the stage for a flexible SOR modernization strategy.**

# Challenges

**Customer lack of recognition of the importance of modernizing existing SOR and other systems for competitive differentiation with DX and innovation presents a major challenge for those customers and providers.**

Micro Focus' Modernization portfolio is deep and broad across the DevOps pipeline and platforms for modern development and modernization. However, portfolio integration and messaging to engage prospects has been challenging due to product complexity, usability, and multiple acquisitions.

Modernization demands a mix of app assessment, processes, and organizational change along with automation benefits. Service partnerships are key, and this is an area in which Micro Focus has re-invested. The company's previous cloud strategy was challenging to understand and hindered engagement. It now offers a range of cloud options, from hybrid to deployment of modernized portfolio capabilities across major cloud platforms.

Market inhibitors include the need to educate customers/prospects about modernization and maturity, lack of intuitive product sets, and limited expertise for making a SOR transition.

**Micro Focus has continued to invest strongly in this solution portfolio and can help organizations establish a DevOps approach as a comprehensive modernization basis for DX and innovation.**

# An End-to-End Approach to DX and Application Modernization Success

**Modernizing to build out existing systems is becoming vital to DX and innovation. It demands process and organizational change as well as evaluation and adoption of automation for application and infrastructure.**

Organizations should evaluate and extend the value of so-called legacy applications and systems by removing obstacles, rather than viewing them as problems. IDC research shows organizations that regularly use digital measures for innovation, operations, and customer advocacy achieve improved competitive advantage.

## To get started:

- › Assess maturity for all aspects of modernization and the DevOps pipeline – from architecture and design through to development, quality, change management, and deployment for the handoff to operations. Bridge core investments with modern technologies and practices, and foster a culture of shared responsibility across domains.
- › IDC believes that SOR application modernization has a significant role for DX. Businesses that do not take advantage of its foundational capabilities sacrifice value and, potentially, key competitive opportunities.

# Message from the Sponsor

## **Micro Focus Application Modernization and Connectivity**

Accelerate delivery speed for core business systems by modernizing current technology, process and infrastructure.

### **With Micro Focus you can:**

- Modernize your application delivery process with new practices and tools for Agile and DevOps
- Redefine where and how applications are built and deployed
- Unlock and modernize access to mainframe applications and data
- Build next-generation services for integrating business processes and systems

<https://www.microfocus.com/modernization>

