Mainframe modernization:
Revamp your landscape for greater business agility

Make digital business a reality

Capgemini

IT organizations are tasked with not only reducing costs but driving greater value by harnessing breakthrough technologies, delivering new customer experiences, and helping the business innovate and pivot to new business models and ways of working. They need to embrace cloud and other emerging technologies.

Mainframes are a crucial part of many IT portfolios but, as companies shift to new technologies and ways of working, they can pose interoperability and integration challenges. The comparative lack of speed to market with mainframes and the associated traditional ways of working are serious concerns, especially when combined with the expenses associated to maintain mainframes.
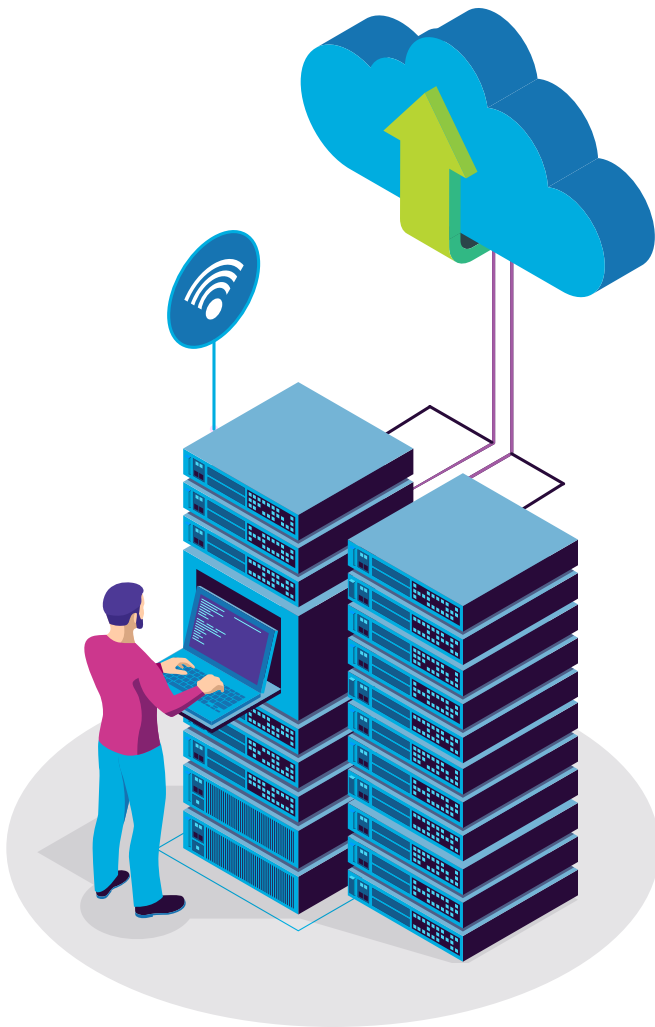
The modernization imperative

To move at the speed of business, mainframe-dependent companies need to modernize. The modernization process aligns legacy software to current business needs. It minimizes in-house server footprints and costs, making expenditures more predictable. Even more importantly, it allows for greater agility and a product-centric view by enabling a highly scalable and always-on IT ecosystem, getting teams out of the traditional development mindset and aligning more closely to the business, delivering automation and allowing applications to be released much more quickly.

Mainframe modernization means slow, multi-week developments become implementations completed in days or even hours.

Modernizing to improve sales and marketing at a CPG company

A Fortune 50 provider of consumer-packaged goods was facing redundancy and efficiency issues in its sales execution processes, limiting sales productivity, promotion effectiveness, and overall sales. Capgemini worked with the company on a modernization program that would enable a sustainable, integrated trade-engagement platform for sales and marketing applications. The scalable and future-proof solution included both field sales and sales-planning capabilities. It enabled the company to improve speed-to-market with faster implementation times, increase accuracy of payments processing up to 99.9 percent, and gain better insights and information for decision-making.

The benefits of modernization

- **Efficiency:** 25–70 percent reduction in platform support
- **Quality:** <1 percent production code with defects
- **Continuity:** Zero downtime and a serverless provisioning model
- **Self-healing:** 2–10 minutes average failure recovery
- **Speed:** 27–50x improvement in release velocity
- **Compatibility:** No cloud-provider lock-in
- **Flexibility:** Increased configurations and infrastructure as code
- **TCO optimization:** Optimize legacy apps to get more out of existing investments

The right approach for your needs

Modernizing mainframes can seem daunting but it's something that needs to be considered, now. The longer the process is delayed, the longer companies miss out on agility and long-term savings. There is no one-size-fits-all solution or strategy for mainframe modernization. Every company needs to develop its own strategy based on the size of its current mainframe footprint and its business objectives.

With that in mind, there are two key approaches:

1) **rehosting**, where an entire mainframe application is ported to cloud with no changes to the underlying business logic or is migrated to modern technology, leveraging tools like Microfocus

2) **rearchitecting**, where applications are re-written as cloud-native software.

- With rehosting, companies begin the journey to a modern landscape and can significantly cut mainframe hosting costs by migrating applications to an emulator hosted on cloud or an on-premises environment. This can save up to 70 percent in TCO. No change to the business logic means it's a very low-risk approach.

- With rearchitecting, businesses begin to enable the level of agility required today. In this stage, companies shift to cloud-native development and enable product-centric ways of working with DevOps methodologies and pipelines that can accelerate release times by 30 to 50 percent. Replacing the mainframe applications with COTS applications (SaaS or otherwise) is also a viable option.

It is rare for a company to leverage just one model. The path to modernization is a process, and we recommend a phased approach.

As a first step, many companies begin by optimizing their current mainframe environment by retiring unused applications, consolidating code, and rationalizing apps to free-up capacity and cost.

Speed up and maximize your modernization journey with tools and accelerators

Our engagements always start with **CAP360** code-analysis software. This automated tool suite analyzes mainframes to discover existing interdependencies and unused code. It helps determine which applications still belong on the mainframe and which would benefit more from transformation in the cloud. It also extracts business rules to aid the development of the apps you want to transform, and its decommission analyzer helps create a logical view of the applications, find candidates for sunsetting, and provide step-by-step instructions for decommissioning.

We provide tools and accelerators to help you on your modernization journey to transform across people, processes, and technology. Once you've modernized, we work with you to make the most of your environment. For example, we help enable the adoption of microservices-based architectures with Digital Cloud Platform, a Capgemini accelerator that includes industry blueprints, transformation roadmaps, and a library of pre-built software components to accelerate cloud-native development by 30 to 50 percent. Additionally, our DevOps Acceleration Platform drives DevOps maturity by bringing together all critical DevOps tooling in one easy-to-use interface with built-in compliance, monitoring, and reporting.

Why Capgemini?

Capgemini takes a holistic approach to modernization that considers architecture, technology, and your structure to maximize the value of your modernization approach. This in-depth assessment evaluates the entire ecosystem plus operational and technical peculiarities and brings a range of accelerators to maximize the value of your journey.

Reduce risk and see greater impact

- Align on the right strategy, quickly, with CAP360
- Jumpstart cloud-native development and accelerate by up to 50 percent with Digital Cloud Platform
- Achieve DevOps maturity, fast, with the DevSecOps Acceleration Platform's one-stop-shop of tools

Capgemini brings deep expertise and experience honed over thousands of projects. We've worked with all types of companies to enable unprecedented levels of agility with a comprehensive approach that includes strategy, modernization, and long-term transformation.

Let's get started today.

5,000+
cloud projects

Best-in-class
technology stacks assessed

Industry-leading
accelerators

Strong partnership
with **Microfocus**

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About Capgemini

Capgemini is a global leader in consulting, digital transformation, technology, and engineering services. The Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. A responsible and multicultural company of 265,000 people in nearly 50 countries, Capgemini's purpose is to unleash human energy through technology for an inclusive and sustainable future. With Altran, the Group reported 2019 combined global revenues of $20 billion.

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