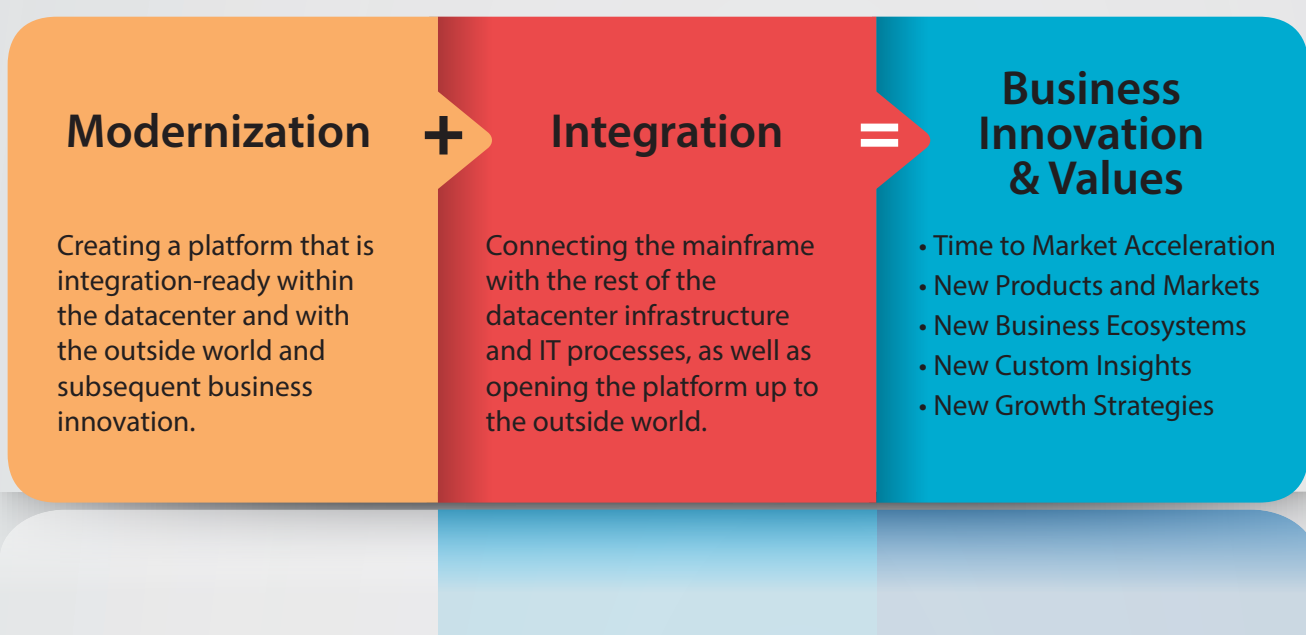


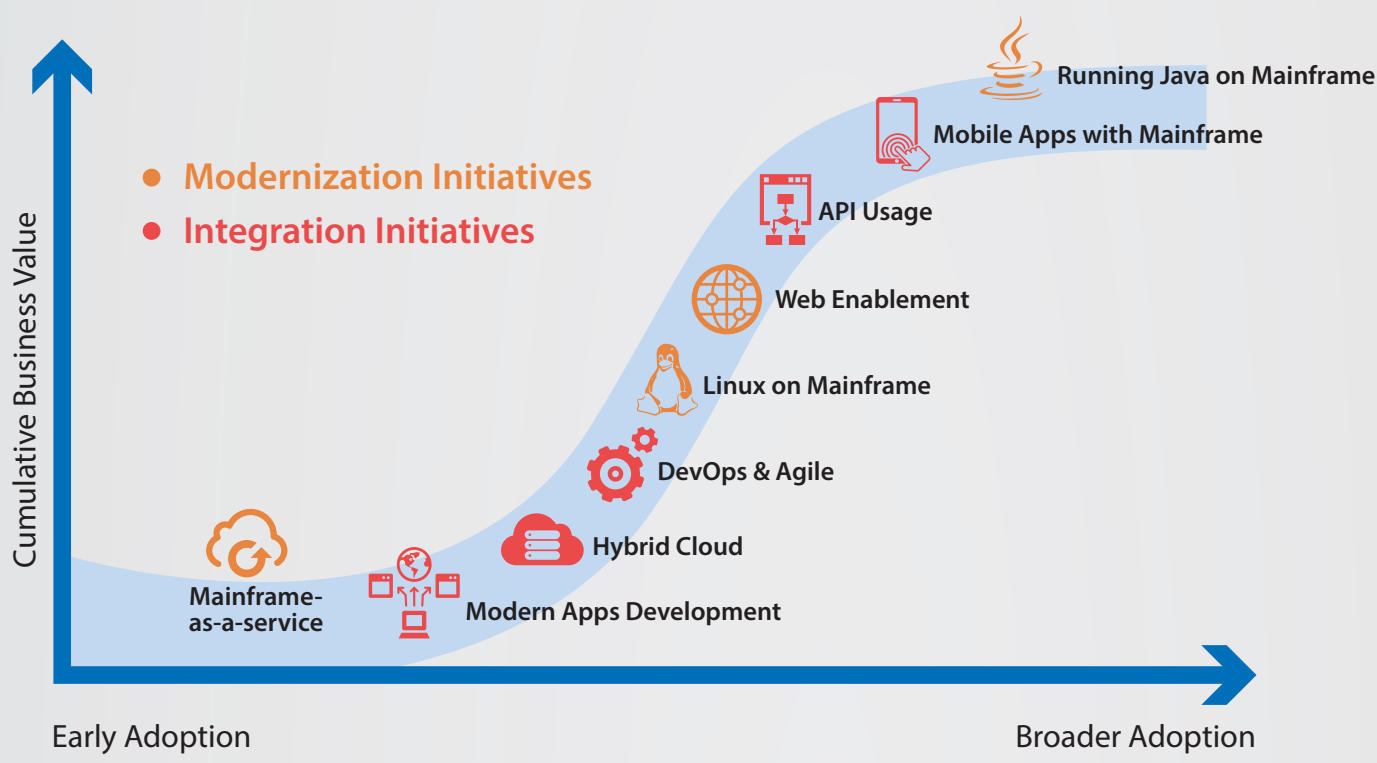
The Connected Mainframe

Organizations pursuing the "Connected Mainframe" strategy are engaged in two broad set of initiatives - modernization and integration to drive innovation and business growth



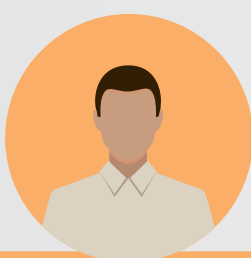
Connected Mainframe Adoption Among Study Participants

Study participants accumulate increasing business value as they adopt Connected Mainframe initiatives at different rates.



Participant Quotes

Modernization



"We have 600 or 700 mainframe based services in production right now."
(Web Enablement)

"We use the mainframe for DB as a service, File as a service and MQ as a service."
(Mainframe as a Service)

"The new environment, the modernization, the new applications have contributed to the firm's overall revenue. Also the scalability of the platform really helps — for example, we introduced new e-banking and we've had growth of four times more traffic without any cost impact."
(Scalability)

Integration



"By breaking up fixed deployment windows, a lot of features are much quicker to production. Now, we need about one to two weeks to build for a new service, a new capability."
(DevOps)

"When you look at all the mobile capabilities — you could make a case, why go to the distributed environment when you can run this on the mainframe right now, because you can do it cheaper and faster."
(Mobile)

We are participating in business ecosystems and the best way to interact with different parties in ecosystems is through APIs. [These ecosystems] provide revenue now. We expect revenue-generating opportunities from public APIs to grow."
(API Usage)

Business Value

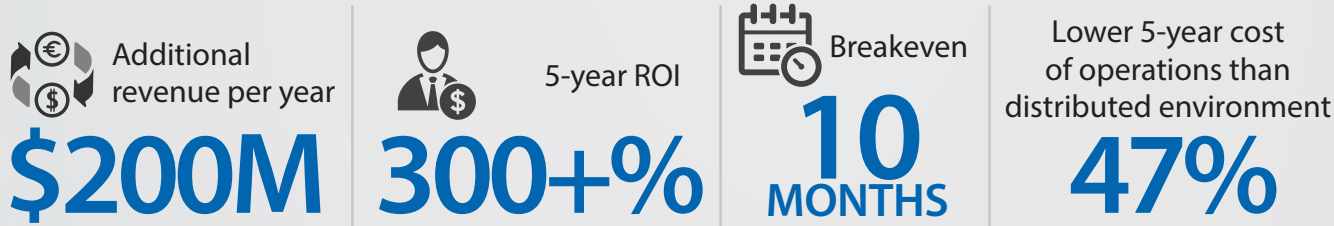


"To do the mainframe applications on distributed servers, we'd need another 5,000 servers in addition to what we have now."
(Hardware costs)

"We would probably need two times as many staff for managing a distributed environment... a lot more moving parts and significant time and effort in managing and patching a larger environment."
(Staff impact)

"Our mainframe is growing in that we have more legal entities on the same machines, but we've still been able to reduce staff resources for operating the whole system because there is a lot of automation and it is really standardized."
(Automation)

The Business Value of the Connected Mainframe for Digital Transformation



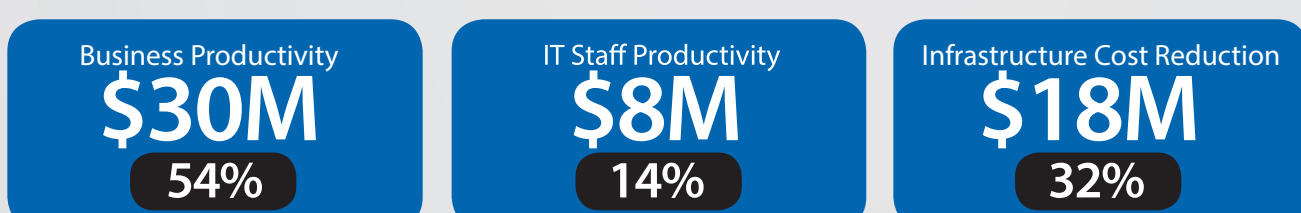
"The whole reason you modernize your mainframe is for integration to third party vendors and integration to partners, and to be able to have a consumable API framework to work on top of."

Key Performance Improvements Realized by Investing in the Connected Mainframe



"The mainframe is still the most cost effective platform we have both in terms of overall reliability, as well as the expense to run it."

Business Value Benefits per Organization per Year over Five Years



Source: The Business Value of the Connected Mainframe for Digital Transformation, IDC White Paper, sponsored by CA Technologies and IBM, December 2016