



THE PURSUIT OF TRUE TRANSFORMATION STARTS WITH THE MAINFRAME

"I'm stayin' above the flatline. I'm ahead of the curve. Take a piece of the sunshine with me. On a redeye flight to another world."

'Ahead of the curve,' a song by the American indie band Monsters of Folk, had little relevance to the world of business in 2009, when it was released. A decade later, these lines succinctly capture the aspirations of several organizations trying to stay ahead of the curve and transit to the world of digital.

Aspirations aside, transformative journeys are expensive, time-consuming, and complex, forcing organizations to make choices which may seem radical. But when banks and financial services firms plan such projects, they often choose to continue using legacy mainframe systems, to prevent risking the continuity and security of business processes. However, this means they end up spending nearly 80-90% of their IT budget on maintaining these systems and yet continue to be plagued by issues like high licensing and maintenance costs, non-compliance with changing regulatory requirements, and archaic user interfaces. This becomes a hindrance to delivering the efficiencies, cost optimization, innovation, and user experience the firms are looking for through their transformative journeys.

This is exemplified by a recent study conducted by Greyhound Research, a leading global analyst firm, that estimates 3 in 5 organizations currently struggling with legacy mainframes go ahead with implementing DevOps tools, in the hopes of achieving continuous delivery and faster project cycles, but end up with no significant outcomes, as the underlying problem of slow mainframes remain unresolved.

TESTING TIMES

Infosys helps organizations, particularly those engaged in providing banking and financial services, exploit the capabilities of Linux on IBM Z, DevOps, service-oriented architecture, and APIs to integrate mainframe applications with new user experience channels, improve agility, reduce time-to-market, and improve returns on existing environments.

A **UK-based bank**, an Infosys client, was struggling with legacy mainframes that couldn't keep up with the business need to **reduce project cycle times** to allow for faster delivery, drive business growth, and deliver enhanced user experience. While the client suggested implementing DevOps for the mainframe, Infosys first decided to perform an **agile maturity assessment** across various lines of businesses. The assessment found that about 50% of the overall project time was spent in the testing phase, of which waiting time to get the test environment provisioned was almost 75%.

“MOVING MAINFRAME OUT OF MAINFRAME”

Before implementing DevOps, the Infosys team recommended undertaking **mainframe environment containerization**, for which we built a customized and enhanced version of an IBM tool - z Systems Development & Test (zD&T). The tool enabled us to move ‘Mainframe out of Mainframe,’ that is, move the mainframe functions to Linux, which made the mainframe more flexible and enabled cloning - creating images of each of the applications and each of the platforms. Cloning enabled **decoupling the test environment**, breaking it into smaller pieces, with each team free to use a piece of it. This **resulted in environment containerization**, where each software application had a self-contained environment for doing testing and changes.

In addition to reducing waiting time in the provisioning of a test environment, this approach sped up the project cycle and encouraged the development teams to make changes and test them in quick succession freely. This was a stark change to the centrally controlled approach used by the client earlier.

To get the initial buy-in from the client, the Infosys team started with a quick **Minimum Viable Product (MVP) PoC**, followed by an 8-week PoC of the solution on the client’s complex mainframe environment delivered in Agile Scrum. Currently, the solution is being rolled out throughout the client’s organization, with benefits being reported.

Infosys is now implementing ‘**One Click Environment Provisioning**’ to enable test environment provisioning through a single click, by moving the hosting to cloud. Our solution is helping **reduce the time taken to provision test environments** from the previous 2-3 months to 8 hours. This impressive reduction in time has also helped the client **reduce project cycles by a significant 30%**.



THE PURSUIT OF TRUE TRANSFORMATION STARTS WITH THE MAINFRAME: THE FIVE KEY TAKEAWAYS

- 1 **Conduct** maturity assessment before implementing DevOps tools on legacy platforms to identify and resolve legacy issues at the offset
- 2 **Migrate** select mainframe application portfolio to a cloud platform to improve performance
- 3 **Exploit** the capabilities of Linux on z, DevOps, SOA, and API enablement for enhanced mainframe agility
- 4 **Run** quick PoCs to test viability of proposed solutions in complicated engagements
- 5 **Automate** testing and migration to reduce project cycle time and hence time to market

BIG LEARNING:

The last decade has been nothing short of a roller coaster ride for banks and financial services firms that have struggled on aspects like volatile market conditions, stricter regulations, increased cyber threats, and most importantly, competition from new entrants and startups. This has meant these firms are under tremendous pressure to transform and better still, be ahead of the curve. However, their heavy dependence on legacy mainframes put banks and financial services firms years behind their younger contemporaries who are built with latest technologies at their core. While the risk of migrating from legacy mainframe to a more modern technology architecture is almost always high and presents several challenges, organizations can overcome these difficulties by adopting proven best practices to plan their digital transformation journey.

WE DID THIS FOR THEM. WE CAN DO IT FOR YOU.

To learn more about our mainframe modernization solutions and DevOps for financial services firms, reach out to us at askus@infosys.com

For more information, contact askus@infosys.com

Infosys[®]
Navigate your next

© 2019 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/or any named intellectual property rights holders under this document.

[Infosys.com](https://www.infosys.com) | NYSE: INFY

Stay Connected     