

A Custom Technology Adoption Profile Commissioned By Compuware | November 2016

# Improve Application Development And Delivery With DevOps

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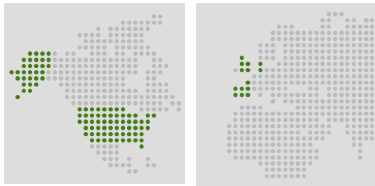
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## Improve Application Development And Delivery With DevOps

Meeting customer demands quickly is a requirement for survival in the digital world. Many large companies today rely on mainframe applications to run their business but struggle to deliver improvements at digital business speed. Therefore, they fail to meet growing customer demands.

In September 2016, Compuware commissioned Forrester Consulting to evaluate the challenges that exist as a result of not having an integrated application development approach, the current adoption of a holistic and integrated model, and the benefits derived as a result of this adoption.



### Demographics

182 US and EU IT, I&O, and app dev professionals at the director level and above who are responsible for application development and work in companies with mainframe systems of record



### Responsibility for application delivery processes

- › Primary decision-maker: 64%
- › Provides significant input: 27%
- › Influences decisions: 9%



### Company size by employees

- › 500 to 999: 8%
- › 1,000 to 4,999: 38%
- › 5,000 to 19,999: 25%
- › 20,000 or more: 29%



### Top five industries

- › Fin. services/insurance: 42%
- › IT: 16%
- › Healthcare: 9%
- › Retail: 9%
- › Government: 8%

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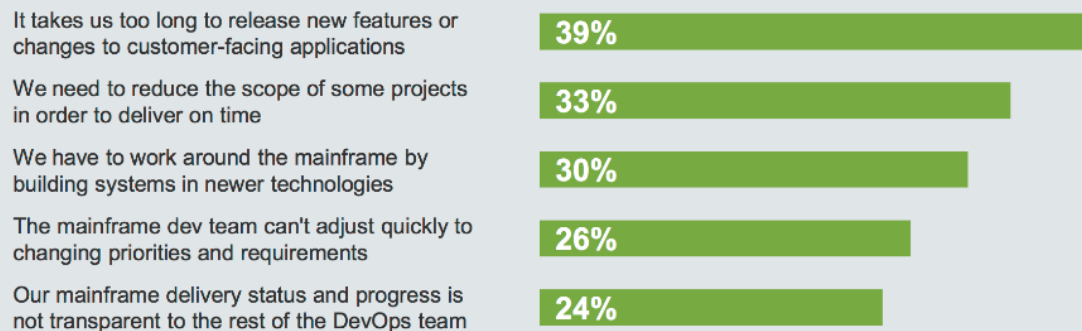
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## Mainframe Applications Hinder Innovation

Mainframe applications are the backbone for the majority of large enterprises, with 96% of companies involving the mainframe for new business initiatives. However, many of the tools, processes, and culture surrounding these applications prevent organizations from delivering great experiences, products, or services. In fact, 90% of IT professionals reported that their mainframe organizations are experiencing challenges with application development and delivery. The consequences? They experience long release cycles to customer-facing apps; reduced project scopes to deliver on time; and a need to work around the mainframe by building systems in newer technologies.

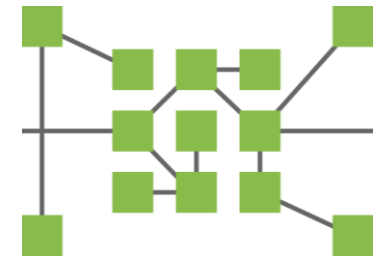
*Ninety percent of organizations are experiencing challenges with their mainframe application development and delivery.*

What challenges has your mainframe organization experienced with application development and delivery?  
(Select all that apply)



Base: 182 US and EU IT, I&O, and app dev professionals at the director level and above responsible for application development teams

Source: A commissioned study conducted by Forrester Consulting on behalf of Compuware, October 2016



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## Business And Technical Challenges Exist On The Mainframe

Application development and delivery teams face a variety of business challenges when developing mainframe applications. Ninety percent of respondents confirmed they are being hampered by organizational bureaucracy, internal silos that create bottlenecks, quality issues, and insufficient funding. At the same time, 92% of respondents in this survey experience technical challenges that impede mainframe applications. Compliance and security processes top the list, but additional issues include lack of application modularity, fragmented or manual processes, and variable speeds of development for teams supporting mainframe and new systems of engagement.

*Ninety percent of companies in this survey reported they face business and technical challenges when developing mainframe apps today.*

### What *business* challenges are you experiencing when developing mainframe applications today?



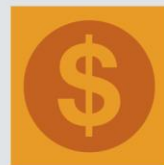
Decisions take too long



Organizational silos



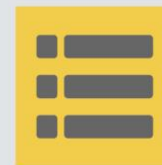
Quality concerns



Inadequate funding

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### What *technical* challenges are you experiencing when developing mainframe applications today?



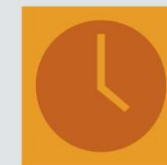
Compliance processes



Lack of app modularity



Manual processes



Inconsistent dev times

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## Attempts To Remedy Problems With The Mainframe Fall Short

Companies are leveraging a variety of tactics to solve their mainframe challenges:

- › Forty-eight percent are moving some applications off the platform, but doing so leaves apps unsecure (47%), increases costs (45%), degrades performance (44%), and extends project timelines (34%).
- › Forty-one percent are working around the mainframe. This introduces new issues, including increased complexity (55%), higher costs (49%), duplicate tooling (47%), and increased security risk (39%).
- › Forty percent are modernizing on the mainframe platform and struggling with the long time to transition (34%), programming software that is unable to meet performance expectations (22%), and lack of tools to understand business rules and program logic (21%).

*Companies run into more issues as they try to avoid issues with the mainframe.*



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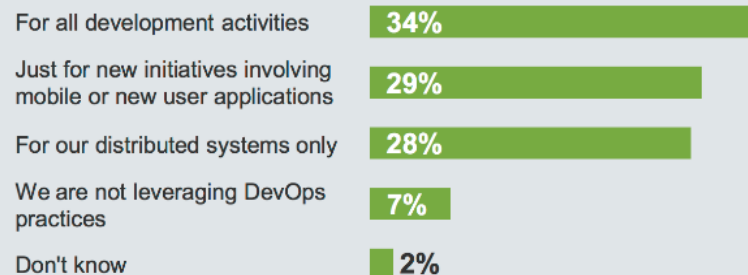
### Leverage DevOps For An Integrated App Development Approach

The benefits of DevOps are well proven. DevOps supports companies by addressing velocity for the business with shorter delivery cycles, responding faster to business needs, and delivering better quality. It also improves collaboration between silos, product or service quality, and customer experience.

It's no surprise that 91% of IT professionals surveyed in this study rely on DevOps practices to innovate products and services. It is surprising, however, that only 34% are using DevOps for all development activities.

*Ninety-one percent of App Dev professionals leverage DevOps practices, but only 34% leverage them across the enterprise.*

#### To what extent are you leveraging DevOps practices?



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#### What benefits has your organization experienced or does it expect to experience as a result of adopting DevOps? (Select all that apply)



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## Conclusions

Mainframes lack the flexibility that businesses require to succeed in the digital world. Organizations face both business and technical challenges on the mainframe, preventing them from innovating and transforming into a digital business. To avoid issues with the mainframe, organizations are working around it, replatforming, or modernizing. However, each of these tactics creates new issues. The good news is that those companies embracing DevOps deliver faster and at a higher quality, all while fostering collaboration.

## METHODOLOGY

This Technology Adoption Profile was commissioned by Compuware. To create this profile, Forrester leveraged its existing research on application delivery and development. Forrester Consulting supplemented this research with custom survey questions asked of US and EU IT, I&O, and app dev professionals at the director level and above responsible for application development and the mainframe. The custom survey began and was completed in October 2016. For more information on Forrester's data panel and Tech Industry Consulting services, visit [forrester.com](http://forrester.com).

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