IT Modernization: critical to digital transformation

March 2017

avanade

Introduction

Information technology must be modernized to address the emerging needs of the digital business. That's the overarching message from 800 senior IT decision makers in organizations across numerous countries and sectors.

Avanade commissioned independent technology market research specialist Vanson Bourne to investigate how closely senior IT decision makers believe IT modernization is linked to the success of large organizations' digital transformation journeys, the key reasons for modernizing and the barriers to doing so. The research further explores the impact cloud will have on IT modernization, along with the role of new technologies and approaches like process automation and modern software engineering in meeting the emerging requirements of the digital business

Key takeaways

There are huge benefits to be had from modernization.
- On average, senior IT decision makers believe it has the potential to boost annual revenue by over 14% – an increase of more than $1 billion a year.
- Business operating costs can benefit too – a reduction of over 13% is anticipated.
- Most (80%) believe that not modernizing IT systems will negatively impact the long-term growth of their organization.

Today's conventional systems and approaches are not fit for purpose.
- Around two-thirds (65%) believe that the conventional systems and approaches typically in use today are not fit for purpose for solving the emerging requirements of the digital business.
- To meet digital business needs, the majority (93%) agree that both a predictable approach (to optimize core systems) and an exploratory approach (to innovate the business) are needed.
- Around nine in ten believe that modernized IT systems are critical to both achieving these two distinct approaches (88%) and to addressing emerging digital business requirements (88%).
- Around nine in ten believe that modern software engineering approaches (89%) and process automation technologies (92%) are key to addressing emerging digital business requirements.

So why isn't everyone doing it?

A business-benefits focused business case is a must; IT benefits alone will not cut it.
- The majority (93%) believe business ROI benefits must be included alongside IT benefits to justify the need for modernization.
- However, most (87%) believe that their organization's executives don't fully appreciate the potential ROI of IT modernization projects.

Conclusion

Moving to modernized IT, the importance of a cloud-first approach is clear… for a hybrid world.
- Today, around half (47%) of respondents report that the majority of their organization's custom applications still run on-premises, but this will drop 22% in three years.
- Over the next three years organizations will move more and more from on-premises to cloud (IaaS from 14% today to 30%, and PaaS 8% today to 25%) creating a hybrid IT world.
- To support this hybrid world, almost nine in ten (87%) respondents agree that their organization is planning to implement vendor-provided cloud stacks (such as Microsoft Azure Stack) to integrate their on-premises data center with the public cloud.

For those not there yet – don't worry, you are not alone.
- On average, just 33% of organizations' systems are made up of modernized technologies.
- Interest in vendor support is high and the key elements desired in a vendor to support with IT modernization are a proven ability with modern software engineering practices (84%) and experience in cloud migration (81%)

IT modernization: critical for digital transformation
This study reveals that senior IT decision makers see huge benefit in modernizing their IT systems and approaches, both in terms of growing revenue and reducing the cost of business operations. They also predict a negative impact to the long-term growth of those organizations that don't modernize their IT systems and approaches.

Senior IT decision makers highlight three dimensions that prevent them from realizing these benefits:
- The IT systems and approaches they use today are not fit for purpose for solving the emerging requirements of the digital business.
- There is disconnect revolving around demonstrating the business case required to fund major modernization initiatives, and the business' ability to appreciate the potential return from these initiatives.
- The need to take a cloud-first approach is clear, so it's no longer a "why" question around cloud or even a "when," (it's happening), it's more the "how" in what clearly is becoming a hybrid world.

At the same time, the need to find the skills and experience not only to make the most of the technologies, but also the approaches to use them, has made senior IT decision makers realize they need to look outside their own organization.

Conventional IT systems and approaches are not fit for purpose
Senior IT decision makers realize that not only are legacy systems not up to the job, but importantly their conventional IT systems, the typical systems and approaches in use today, are not capable of meeting the emerging needs of the digital business. The vast majority of senior IT decision makers realize both the predictable and exploratory approaches to IT are required to drive and empower digital transformation to meet the expectations of the digital business. And both require new technologies and approaches like process automation and modern software engineering.

A strong business case is required. IT ROI alone isn't enough
The overwhelming majority of senior IT decision maker realize that the return the IT organization will get from a comprehensive modernization project, whilst significant, will simply not be enough to cover the cost of the investment. They recognize that the true return on investment of an IT modernization comes in empowering the digital business. However, senior IT decision makers don't think their executives appreciate the potential ROI of complex modernization projects, and given that these business executives increasingly hold IT budget themselves, this is clearly a major issue that needs to be addressed.

A cloud-first approach is clear … for a hybrid world
The journey to the cloud is happening. Senior IT decision makers know they need to consume more services from the cloud that do not differentiate their business rather than building them. They are starting to realize the benefits of modernizing their custom business applications to be cloud-first, using PaaS, rather than just migrating them (with a lift-and-shift mentality) to IaaS. But what's also clear is that a wholesale move of custom business applications to the public cloud isn't happening any time soon, with a proportion still running on-premises or in a hosted data center, even if that proportion is in steady decline.

It looks like a combination of factors are influencing this. From a business perspective, not being able to justify the business case has already been shown not to be a reason. From an IT perspective, security of cloud technologies is called out as challenge to IT modernization projects, with security and operational risk the top reasons for not using PaaS. It seems even with the major public cloud providers investing billions on cloud security, more still needs to be done to convince senior IT decision makers in this area. Also of significance is that nearly a third of senior IT decision makers surveyed are unclear about the value of PaaS. Whilst outside the scope of this research, it should be noted that our survey was completed between December 2016 and February 2017, not the most politically stable period in recent history for many of the countries involved.

Whatever the reason, what is clear is that senior IT decision makers have a strategy. To support this hybrid world, the vast majority agree that their organization is planning to implement vendor-provided cloud stacks (such as Microsoft Azure Stack) to integrate their on-premises data center with the public cloud.

Making it happen
Despite the benefits, senior IT decision makers are struggling to make major modernization projects happen. They recognize they need help, and interest in partner support is high. The key elements desired in a partner being a proven ability with modern software engineering practices and experience in cloud migration. Clearly help is also needed to create the business case for transformational IT modernization projects. The net of all of this is that IT modernization is viewed as essential to digital transformation, and the businesses that get it right will lead the way through the digital revolution.

Recommendations

It's not that IT modernization alone will directly enable the benefits highlighted by this research. IT modernization clearly isn't a business goal. But what is clear is that if organizations don't modernize their IT systems – and just as importantly the IT approaches used alongside these systems – they will not be able to address the emerging needs of the digital business. The digital business will need IT systems and approaches that can, for example, handle a multi-channel digital world that must receive, interpret and interact with data from wearables, IoT and AI (think Microsoft's Cortana or Amazon's Alexa).

Make a clear business case for IT modernization
This research has clearly highlighted that senior IT leaders have to deliver a business case for the investment required for comprehensive IT modernization that convinces their executives the business ROI is a given. Senior IT leaders need to think beyond the impact of the IT department to show how modernization can increase business productivity, empower faster time to market and drive business growth. It will be important to find executive champions who "get it" and can validate the qualitative benefits of modernization, supported by business-focused KPIs as well as independently validated ROI tools and methodologies that can demonstrate quantifiable business benefits from modernization projects.

Modernize to empower two distinct approaches to IT
A truly modernized organization is one where IT is optimized to deliver value in a way that can be predicted whilst at the same time delivering innovation through exploration. Both the predictable and the exploratory are required to drive and empower digital transformation to meet the expectations of the digital business, and both require new technologies and approaches. This includes modern ways of approaching software engineering, with agile and DevOps recognized as prerequisites. Similarly, new process automation technologies like robotics process automation, predictive analytics and machine learning will be needed to take business productivity and cost reduction to the next level.

Invest in a cloud strategy that works for your business
The journey to the cloud is happening, but it will be a hybrid mix for the foreseeable future. The cloud strategy that works for your organization will be impacted by your existing IT systems, your people, the business itself; what it does, where it operates, what its customers look like and your organization's business strategy. It begs the questions: What will you consume from the cloud and what will you create with the cloud?

It is important to have an integrated cloud strategy aligned with your organization's specific business goals to effectively capitalize on your IT modernization approach.

Look for the right partner
With the need to modernize both IT systems and approaches, investment in your own people will be required. But it doesn't make sense to do it all in-house; there's just too much to be done and time isn't on your side. Choose a partner that not only understands the need for modernization, but one that also has deep technical expertise in the areas you need, backed up with business and industry understanding, and the tools and methodologies to be your partner on this journey.

For more information, visit
https://www.avanade.com/thinking/new-economics-of-it

Scope of research and methodology

Avanade commissioned independent technology market research specialist Vanson Bourne to undertake the research on which this report is based. 800 senior IT decision makers were interviewed in December 2016 to February 2017. All came from organizations with $500 million or greater annual revenue, 500 or more employees and based in a range of private sectors.

The research was conducted in eight countries, with interviews split accordingly:

Country	Number of interviews
U.S.	200
U.K.	100
Germany	100
Italy	100
Brazil	100
Australia	100
Canada	50
Japan	50

The majority of interviews were conducted using a mixture of online and telephone interviewing. All were undertaken using a rigorous multi-level screening process to ensure that only suitable candidates were given the opportunity to participate. Unless otherwise indicated, the results discussed are based on the total sample.

About Vanson Bourne

Vanson Bourne is an independent specialist in market research for the technology sector. Our reputation for robust and credible research-based analysis is founded upon rigorous research principles and our ability to seek the opinions of senior decision makers across technical and business functions, in all business sectors and all major markets. For more information, visit www.vansonbourne.com

About Avanade

Avanade is the leading provider of innovative digital and cloud-enabling services, business solutions and design-led experiences, delivered through the power of people and the Microsoft ecosystem.
Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation and has 30,000 professionals in 24 countries.
Visit us at www.avanade.com

North America
Seattle
Phone +1 206 239 5600
America@avanade.com

South America
Sao Paulo
AvanadeBrasil@avanade.com

Africa
Pretoria
Phone +27 12 622 4400
SouthAfrica@avanade.com

Asia-Pacific
Australia
Phone +61 2 9005 5900
AsiaPac@avanade.com

Europe
London
Phone +44 0 20 7025 1000
Europe@avanade.com