The Business Benefits Of Improved IT Agility

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Executive Summary

To guide the evolution and success of changing businesses, a robust digital transformation strategy is in place at most organizations. But, these firms are still under pressure to meet rising customer expectations, increase security, and expand their digital business. This has led to a dramatic shift toward hybrid, multi-cloud environments built to drive greater agility and deliver on top priorities with speed and at scale.

Forrester surveyed 206 companies across industries in the US and found that efforts to improve agility led to significant business and IT benefits, including fewer defects, fewer cyberattacks, and increased speed-to-market of new products and services.

Improved IT agility increases speed-to-market of new products/services by 21% over three years.

In this study, decision makers in IT and business responded with the **actions they've taken** to overcome challenges to increase agility.

Base: 92 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
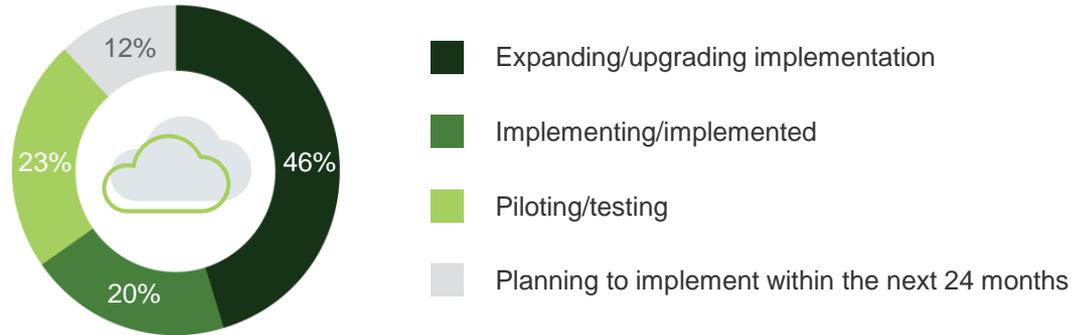
Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

To meet digital transformation goals, companies are turning to hybrid, multi-cloud environments — known for their ability to improve customer interactions and provide business agility.[1]

As a result, on average more than half of IT and business workloads are expected to be in the cloud — increasing as much as **17%** in just the next year. But companies aren't going it alone: More than half use **managed services** to some degree to manage their IT environments.
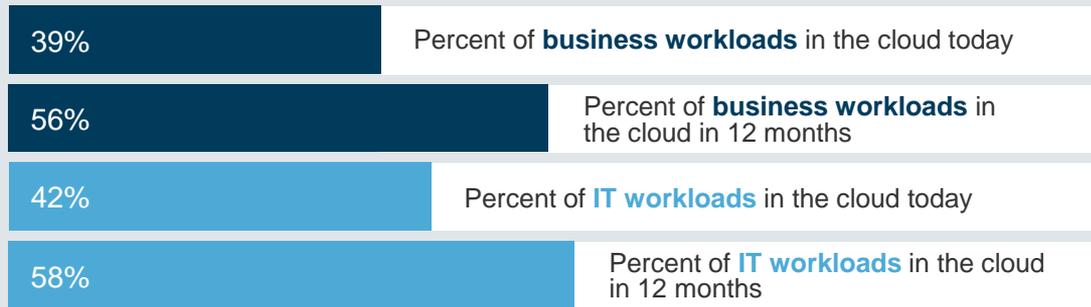
Two out of three organizations have implemented or are expanding their use of cloud. One-third are still in the early phases of planning and piloting.

- ■ Expanding/upgrading implementation
- ■ Implementing/implemented
- ■ Piloting/testing
- ■ Planning to implement within the next 24 months

Base: 206 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
Note: Percentages do not total 100 because of rounding.

"What percentage mix of IT workloads and business application workloads have you moved to the cloud?" (average shown)

39%	Percent of **business workloads** in the cloud today
56%	Percent of **business workloads** in the cloud in 12 months
42%	Percent of **IT workloads** in the cloud today
58%	Percent of **IT workloads** in the cloud in 12 months

Base: 129 to 132 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies

# Top five critical priorities overall

	Percent of companies where IT is expected to own this priority or contribute a high level
Meeting rising customer expectations — 48%	**78%**
Increasing security — 47%	**86%**
Building/expanding digital business — 42%	**86%**
Driving revenue growth and/or market share growth — 40%	**75%**
Deriving better data insights and predictive analysis on our customers — 36%	**83%**

As companies attempt to deliver on key elements of their digital transformation strategies, IT resources will be in high demand across critical priorities. Their high degree of involvement will require them to respond to business demands in real time, versus days or weeks.

As a result, **improved IT agility** is a high or critical priority at **more than three quarters** of firms.

Improving IT agility comes with significant technical challenges like securing critical data and managing workloads — but also cultural challenges like scaling to business and geographic need.
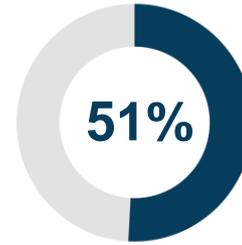
The most common action taken to overcome barriers to greater IT agility is improving **hybrid cloud management.**[2] But firms recognize the need to rethink the way that teams and processes work as well.

Top three most common challenges to improved IT agility
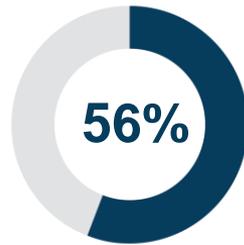
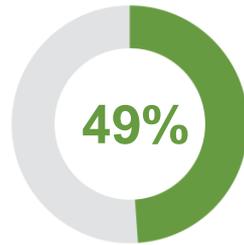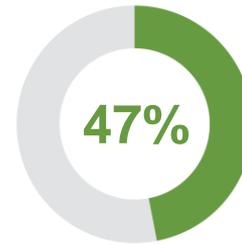| 56%	51%	50%
Securing critical data	Managing workloads	Scaling to business/ geographic need

Base: 206 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
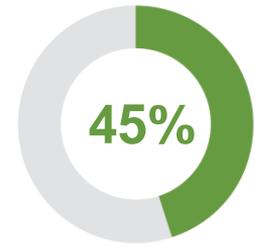
"What actions have you taken to overcome the challenges you've faced with efforts to increase agility?"

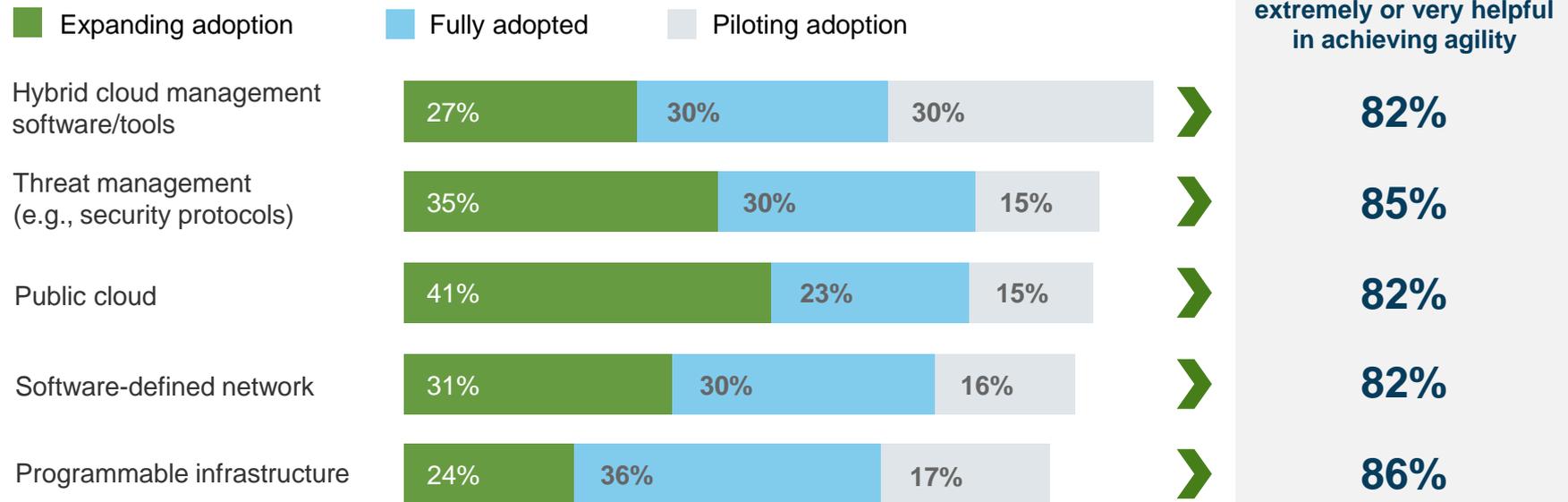| 49%	47%	45%
Improved hybrid cloud management	Collaborated across teams/locations	Brought in new employees skilled with hybrid technologies

Base: 206 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies

Hybrid cloud management technology is poised to become the most common technology adopted by hybrid, multicloud companies.[3]

82% of firms have found it extremely or very helpful in achieving agility.

Top five implemented or piloted technologies

■ Expanding adoption   ■ Fully adopted   ■ Piloting adoption

Percent of companies that say this technology is extremely or very helpful in achieving agility

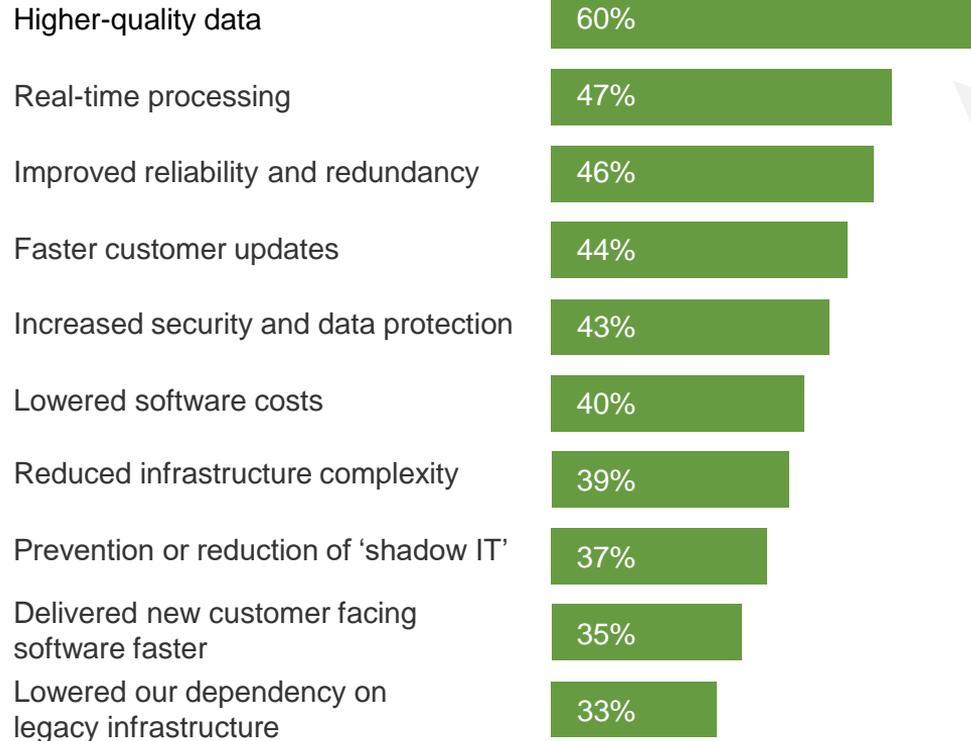| Technology	Expanding adoption	Fully adopted	Piloting adoption	Percent helpful
Hybrid cloud management software/tools	27%	30%	30%	**82%**
Threat management (e.g., security protocols)	35%	30%	15%	**85%**
Public cloud	41%	23%	15%	**82%**
Software-defined network	31%	30%	16%	**82%**
Programmable infrastructure	24%	36%	17%	**86%**

Base: 206 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

The benefits of increased agility are clear: Higher-quality data, real-time processing, and improved reliability are all common.

"What benefits have you experienced in your pursuit of increased agility?"

Benefit	Percentage
Higher-quality data	60%
Real-time processing	47%
Improved reliability and redundancy	46%
Faster customer updates	44%
Increased security and data protection	43%
Lowered software costs	40%
Reduced infrastructure complexity	39%
Prevention or reduction of 'shadow IT'	37%
Delivered new customer facing software faster	35%
Lowered our dependency on legacy infrastructure	33%

Higher-quality data due to increased agility empowers better decision making through insight, improved products/services, and customer experience.

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As a result of improved IT agility, companies report an average:

85.2%
improvement in defects captured prior to production deployment over three years

78.9%
improvement in application uptime/availability over three years

64.7%
decrease in the number of cyberattacks/threats over three years

64.7%
decrease in inventory carrying costs over three years

57.3%
decrease in the cost per app associated with running applications over three years

56.9%
decrease in overall defects over three years

55.3%
decrease in the cost per app associated with application development over three years

21.1%
decrease in time-to-market of new products/services over three years

18.8%
decrease in attrition of the development team/s over three years

Base: 46 to 109 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

Improved agility – through efforts like improved hybrid cloud management and improved cross-silo collaboration **– results in decreased risk due to the benefits of:**

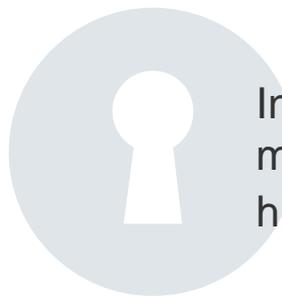Higher-quality data — **60%** of firms
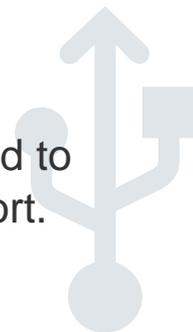
Improved reliability and redundancy — **46%** of firms

An average **20.9%** decrease in number of cyberattacks

Risk management is top of mind for today's firms.

Increasing security is as vital a priority as meeting rising customer expectations — a high or critical priority for **82%** of firms.

And **86%** of IT teams are expected to lead or highly contribute to the effort.

Base: Variable director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies

Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

Improved IT agility leads to an average 21.4% improvement in availability year over year.

Assuming an average of 3 hours of downtime, a company making $100M in revenue **loses an estimated $765,000 to downtime annually.** [4]

An improvement of 21.4% in availability would mean **adding $164,000 back on the balance sheet.**

Improved IT agility leads to less risk of expensive cyberattacks.

Improved IT agility leads to an average 20.9% decrease in the number of cyberattacks/threats year over year.

The price of a breach can extend well beyond directly incurred costs. Common breach costs include[5]:

|				
Customer notification and response: **up to $40 per customer**	Incident response and investigation: **hourly rates reach up to $550**	Public relations crisis management: **hourly rates reach up to $500**	Employee turnover — including recruiting for new C-level leadership: **at least 33% of annual salary per employee**	Legal fees and settlements: **some high-profile settlements have reached upwards of $145M**
1	**2**	**3**	**4**	**5**

Base: Variable director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
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Harness management tools to overcome the toughest barriers to improved agility.

Public cloud and software-defined networking are implemented and/or expanding at more than **60%** of firms.

Firms face major challenges to their efforts to improve agility, including:

- Managing workloads
- Scaling to business/regional need
- Increased technical complexity
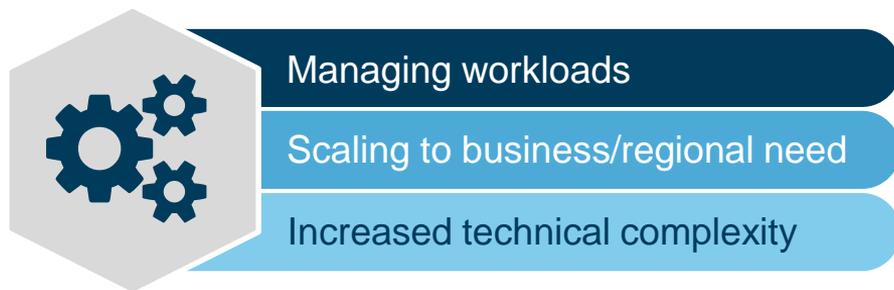
Hybrid cloud management tools with automation features will be key to overcoming these challenges in an increasingly hybrid world:

82% of firms using hybrid cloud management software/tools find them extremely or very helpful in achieving agility.

Base: Variable director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

More than any other KPI, firms measure improved agility by their application quality, in the form of defects and rework.

Efforts to improve agility have led to an average **16.2% decrease in overall defects year over year**.

Defects measure a failure of teams to build things right. Our study found that **improved agility leads to higher-quality output**.

Efforts to improve agility have led to an average **22.8% decrease in defects captured prior to production deployment year over year**.

Decreases in defects captured prior to deployment not only **directly benefit customer experience, but they also minimize rework**.

Improve quality, productivity, and velocity with greater IT agility.

Base: 46 to 109 director level and above IT and line-of-business US decision makers responsible for their companies' IT agility strategies
Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019

A US company making $100M in revenue,

going from making biannual releases of one application to releases four times per year,

**would gain an estimated $1.6M in revenue
as a result of improved IT agility.**

Equation:*

Increased
revenue =
$1.6M

=

$$\frac{\text{Gross yearly revenue} = 100,000,000}{\text{Total hours in a US business year} = 2,000}$$

✖

Cycle time
reduction as a
percentage of the
total year = -0.066

✖

Reduction in
cycle time
(number of
hours) = -480

Source: A commissioned study conducted by Forrester Consulting on behalf of CenturyLink, March 2019
*Source: "Make The Case For Agile And DevOps-Driven Digital Transformation," Forrester Research, Inc., May 29, 2018

Key Recommendations

Step 1: Go beyond your existing management tools. Many organizations try to manage new environments with old consoles. Seek out integrated management platforms that provide visibility and automated functionality to deploy, orchestrate, and manage a multi-cloud environment. Engage with third parties that have expertise in network, cloud services, security, and IT services.

Step 2: Build a hybrid cloud operating model. Even if you implement the tools above, chances are your existing operating model still needs to evolve. Consider product-centric teams that focus on applications, combining the best skills from I&O, your developers, the security team, and the business. Explore services that are configurable, so you can address your unique needs.

Step 3: Continuously innovate. With the sheer scale involved, it is impossible to update applications and infrastructure-as-code manually in hybrid environments. Instead, leverage continuous integration and delivery release automation tools to move code from test to production. Make sure to focus on operational excellence, optimization, governance, and change management, so you can reduce complexity and cost while enabling a faster application lifecycle.

Methodology

In this study, Forrester conducted an online survey of 206 cross-industry organizations in the United States to evaluate how organizations can leverage hybrid cloud management and infrastructure automation to better navigate and address the evolving needs of enterprise agility. Survey participants included decision makers in IT and business with responsibility for agility strategy. Questions provided to participants asked the goals of efforts to improve agility, toolsets used to improve agility, and benefits of improved agility. The study began in January 2019 and was completed in March 2019.

Endnotes

[1] Source: "Understanding The Cloud Services Provider Landscape," Forrester Research, Inc., January 17, 2019.

[2] Hybrid cloud management technology provides cloud platform resource support through automation and orchestration, administration and governance, optimization, monitoring, integrations, and additional support services. Source: "The Forrester Wave™: Hybrid Cloud Management, Q2 2018," Forrester Research, Inc., June 8, 2018.

[3] Ibid.

[4] Source: "Identify And Estimate The Costs Of Downtime On Your Business," Forrester Research, Inc., October 12, 2017.

[5] Source: "Estimate Breach Impact And Costs To Drive Investments," Forrester Research, Inc., December 3, 2018.

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