THE ENTERPRISE GUIDE TO IMPROVING BUSINESS OUTCOMES WITH HYBRID CLOUD, CLOUD CONNECTIONS, AND MANAGED CLOUD SERVICES
IDG research shows enterprises are significantly improving business outcomes such as increased agility, speed to market, productivity, and customer experiences thanks to modern cloud/hybrid cloud infrastructure.

Enterprises have greatly improved business outcomes since migrating applications and workloads to the cloud — in particular, by deploying a hybrid cloud infrastructure and direct cloud connections combined with managed cloud services, according to a new survey by IDG (see About the Survey box).

The IDG research, among more than 400 IT leaders in the U.S. and Europe, demonstrates for example that companies are achieving:

- **Up to 24%** faster connections between data centers and/or apps to public cloud
- **Up to 23%** improvements in: applications’ time to market; and in delivering projects on time
- **Up to 18%** savings on total IT annual budget, excluding staffing costs

The improvements impact strategic business objectives, with the top four among U.S.- and European-companies being:

**Global Prioritization of Strategic Objectives**

- Improving agility in service delivery, production, and scale
- Delivering apps (new or updated) that solve evolving business needs
- Improving productivity through automation and cloud management
- Improving customers’ experiences (satisfaction and lifetime value)
Business Outcomes
TRACKED BY CRITICAL KPIs

So, what does this do and mean for your organization? This report offers evidence of success where companies have tracked critical KPIs to help improve business outcomes in 10 different areas.

Improve IT Agility

Agile = the ability to move with strength, speed, balance, control, and fluidity. For the enterprise, this means IT is becoming more complex. Yet, adaptability must have scalability, accuracy, and seamless integration with new technologies to quickly respond to changes in business demand.

That’s why 82% of IT leaders say a modern cloud infrastructure is critical or very important to provide agile development, deployment, and management, as well as a scalable environment. Automated orchestration is reducing defects and failed integrations, which in turn escalates the volume of app releases. IDG respondents tracking relevant agility KPIs say they’ve achieved:

✔ Up to a 24% improvement in code quality
✔ Up to a 22% increase in app releases/updates per year; the same percentage of fewer escaped defects, and fewer failed code merges/integrations
✔ Up to 21% fewer defects per sprint

POINTERS: Time-killing reworks are the result of orchestration without expertise, lack of build standards, and poor governance. Consider using a hybrid cloud management platform to improve IT agility by reducing complexity and cost, while increasing visibility and governance across any cloud environment.

It’s important to address these issues now, because hybrid is how the complexity bubble starts, and it grows as companies add more locations, multiple cloud providers, hybrid deployments, and moving applications to edge locations. As that complexity continues to ratchet up, organizations tend to have multiple tools rather than one tool or one central portal for visibility. A hybrid cloud management platform offers a single pane of glass across all locations for holistic visibility, governance, security, and cost control.
**Delivering Apps to Solve Evolving Business Needs**

Competitive pressures will never go away. Businesses must continually innovate and accelerate application delivery to remain relevant. IT leaders agree that the cloud is helping their organizations do this in an efficient way: **73% say it’s very important to have a modern cloud infrastructure to accelerate applications and services for their business.**

Overwhelmingly, the majority of companies that have a modern cloud infrastructure can demonstrate that application development has accelerated with:

- **Up to 23%:** faster project delivery; and faster time to market
- **Up to 22%:** faster app deployment; and more SLAs that meet defined service standards
- **Up to 21%** fewer defects

**Pointers:** Organizations should balance hybrid cloud infrastructure to improve the performance of apps and workloads. This starts with understanding each application — who uses it, how it performs, its seasonality, and its future use, including business goals such as whether it’s a cost, growth, or performance play. Also, consider the skills you have in-house, SLAs, security, and data sovereignty. Then, evaluate all execution venues with these factors in mind.

**Providing Insight Tools**

The data explosion demands tools to better manage it — for visibility, productivity, and innovation. As companies adopt emerging technologies such as artificial intelligence/machine learning, they require an infrastructure that can handle these big data workloads to quickly glean business insights. That’s why **70% of IT leaders say hybrid/modern cloud is critical or very important to their business intelligence strategies.**

Of those respondents who are tracking whether their hybrid cloud infrastructure improves business insight generation, a whopping **88%** have said it does. Specifically, they rate the following improvements:

- **89%** have improved data capture accuracy
- **88%** cite: less time spent on big data initiatives; and less wait time for the availability of data for analysis
- **85%** have enhanced their query-to-report conversion rate

**Pointers:** Acquiring and analyzing data from IOT devices and key distributed applications or systems requires highly responsive networks and hosted infrastructure to support massive compute and storage. This means the enterprise must have the vision and plan how to manage data and performance with the potential to go where the data is created or used. That’s why companies should turn to modern/hybrid cloud infrastructure — including a platform-as-a-service approach and data lakes — to deliver high-quality insights from business data. It’s more efficient and cost-effective to work with partners that already have these services in place, as well as the expertise in the latest technologies.

**Automating and Network**

Many companies are turning to the automation of network instances, such as firewalls, load balancers, and switches that deliver networking services instead of networking hardware appliances. Doing so not only reduces the burden on IT staff, but also increases accuracy and security.

The next natural step is to automate cloud processes and connections across the network, which **74% of IT leaders say is critical or very important.** Those respondents who have deployed a cloud infrastructure and track relevant productivity KPIs report an average time savings of 23% due to built-in automation and direct cloud connections. Other successes include:

- **23%:** more cost-effective project development; and improved timely project delivery
- **Up to a 21%** improvement in governance and reporting
- **Up to a 20%** improvement in support costs

**Pointers:** Consider hybrid cloud orchestration tools and managed services, which reduce the need to continuously tap into heavily burdened internal resources, while improving visibility and network performance. Have the right network, toolsets, operational and deployment capabilities. For example, an orchestration platform provides the necessary visibility across locations for governance and security, and can be managed in-house or by a managed services provider for greater flexibility.
Achieving Cost Efficiencies

Reducing IT expenses enables enterprises to invest toward achieving any of the other business outcomes listed in this report. IT leaders might expect, when it comes to cloud, that cost efficiencies are table stakes. However, infrastructure type and decisions around workload placement matter.

That’s why leaders cite the critical importance of hybrid cloud for efficiencies such as improved use of IT staffing and infrastructure resources, as well as the ability to reduce total cost of ownership. The KPIs they’re tracking, and the successes achieved, support their faith in being able to achieve cost savings:

✔ Up to an 18% improvement in: total annual IT budget, excluding staffing costs; and annual infrastructure costs due to automation in hybrid cloud
✔ Up to a 16% improvement in weekly time savings
✔ Up to a 16% better average IT department savings by deploying/orchestrating apps to the cloud

Improving Customer Experiences

It’s the Era of the Customer Experience. IT leaders have made it a top strategic goal to improve customer-facing apps and services.

Cloud infrastructure — with its availability, scale, and speed — is crucial. In fact, 82% of respondents track customer experience-related metrics that tie back to their adoption of hybrid cloud environments. And of those, the majority — from 76-84% — report improvements across all of these KPIs:

✔ Up to a 24%: better customer lifetime value; and customer effort score
✔ Up to a 23% improvement in customer satisfaction
✔ Up to a 21% improved churn rates

POINTERS: To boost overall customer experiences, enterprises should consider edge computing. It enables data to be distributed, processed, and consumed closer to users’ locations, where latency issues really matter. Edge can accelerate customer-facing application delivery and consumption, and lead to faster decision making. However, there are caveats.

“You have to ask yourself if you can really scale for this,” says Scott Brindamour, CenturyLink’s Senior Director of the U.S. Architect Team, “because with edge you have to create lots of little execution venues — public cloud, private cloud, a few virtual machines, or a few containers in particular locations. That can quickly go from just a couple of locations to tens to hundreds or even thousands of locations. Can you really scale at that level? And is that your core competency? This is a case where the right partners can help.”

88% of respondents say hybrid cloud infrastructure improves business insight generation.
Data Center Operations

The volume of big data, along with requirements for its velocity and veracity, have placed pressures — such as capacity, connectivity, and storage — on the data center.

IT leaders say their investments in cloud and hybrid cloud infrastructure have helped to ease these burdens: 85% cite improvements to migrating and managing workloads and connecting applications to the cloud. Among the specific KPIs tracked, companies report:

- Up to 23-24% improvements in: speed connecting data center to cloud; and the reliability of these connections
- Up to 22% improvements in: storage utilization; and in storage service availability
- Up to a 21% improvement in uptime

POINTERs: Organizations should seek to use the right balance of hybrid cloud infrastructure to improve data center performance, which will also increase application speed. This starts with an understanding of requirements and skill sets, then evaluating for the best workload location fit. Develop a strategy that accounts for automated connections, network resiliency, availability, bursting, business needs, and scalability.

Grow Revenue

In the not-so-distant past, IT was considered a cost center and its sole contribution to the bottom line was to reduce costs. Today, 90% of CIOs say their role is more digital and focused on innovation, according to IDG’s 2019 State of the CIO. They are increasingly identifying customer needs, seeking opportunities for competitive differentiation, and working on go-to-market strategies.

And the cloud is better at enabling them to do so. For example, 83% of IDG respondents said their hybrid cloud deployments have netted them an average 20% contribution to revenue growth in the last fiscal year. They define this growth in terms of:

- Freeing investment funds from IT for growth areas
- Meeting new IT demands rapidly
- Freeing IT to spend time on improvements and innovation

POINTERs: Organizations should align their cloud and digital business strategies to achieve growth outcomes. This is where a robust hybrid cloud infrastructure and the right partners matter, enabling companies to decrease time to market, meet new IT demands rapidly, free up cash and time, and grow the business.

Gaining Visibility into Network Performance

As the IT environment becomes more complex, visibility across the network becomes more challenging. Network admins must be able to monitor traffic across clouds, trust connectivity, and ensure appropriate access.

The vast majority of companies (87%) say deploying hybrid cloud can help create real-time visibility into end-to-end network performance. Those who track relevant KPIs are looking at several factors and finding success:

- Up to a 23% improvement in the reliability of cloud and data center connections
- 88% cite improvements in the time necessary for data availability for analysis
- Up to a 21% improvement in governance and reporting using cloud management tools

POINTERs: Consider using hybrid cloud management tools and managed services to increase visibility. A single pane of glass platform improves governance, while saving time, money, and headaches. Combined with managed services, it enables companies to visualize by execution venue, workload, department, and business units, looking at utilization, network performance, and cost trends to offer recommendations. The ability to do this in the hybrid world is critical, especially as companies move toward adoption of edge computing.
Securing Critical Business Data and Applications

As companies scramble to stay ahead of the latest cybersecurity challenges, 90% of IT leaders say cloud security has improved since deploying hybrid cloud.

In tandem, a modern cloud infrastructure offers increased trust. For example, IT leaders report better protection of business-critical apps and customer data, and improved integration of security in all data services, as well as:

✔ 86% cite better response to security threats
✔ 85% say system/technology downtime has decreased
✔ 84% cite better recovery time from an attack

POINTERS: Seek infrastructure providers with embedded security and fast, private cloud connectivity, as well as data protection and cloud security expertise, coupled with tools for increased visibility and governance.

“It’s a measured approach that depends on the sensitivity of the data that you have, and creating the right priorities,” Brindamour advises. “It involves classifying data, understanding risk tolerance and access to the data, making sure the right controls are in place, and then ongoing diligence around monitoring and management. So, it’s a combination of auditing and having the expertise to build it in from day one rather than trying to bolt it on later. If you don’t have the know-how in-house, then that’s where the right partner can make a difference.”

NEXT STEPS: A Guide to Improving Business Outcomes

The IDG results demonstrate that companies are achieving significant business outcomes as a result of their cloud deployments. However, that doesn’t negate the need to plan well, no matter where your company is on its hybrid cloud journey.

For those at the early stages, consider looking at the cloud platforms used so far and asking several questions:

► What has worked and what has failed? Look at specific outcomes.
► Where are the gaps?
► Were failures due to lack of expertise or not having the right skill sets? Was it a governance or configuration problem?

“You don’t become a master of hybrid cloud overnight,” Brindamour says. “It’s a constant lifecycle of planning, implementation, migration, configuration, operation with automation and governance, then patch-update-manage as the wheel goes around again.”

Once you’ve tackled one public and private cloud combination, think about the next cloud — including expected outcomes and challenges. Now, ask questions like:

1. What are the lessons learned?
2. What is your ability to scale infrastructure capacity and staff?
3. Do you have the right tools and the right people to manage across multiple locations?
4. What’s your plan for maturity, and how long will it take?

Finally, find the right partner. Most companies realize they can’t do everything on their own because hybrid cloud is hard, and the technology is always changing. The skills gap compounds the complexities.

“Initially, you may want to experiment and do things on your own, but when you hit a point where you really need to scale, understand that acquiring talent is difficult,” Brindamour says. “Cloud and security talent is expensive, they may not be familiar with your business, and especially certified people — like AWS, Azure, or Google-certified folks with specific skills sets — are really hard to find. So make sure you have the safeguards in place and pick the right partner.”

The Bottom Line

The evidence is here that a modern cloud infrastructure helps achieve many different business outcomes. No matter where your company is on the hybrid cloud journey, the right planning, tools, resources, and partner can ensure success.
ABOUT THE SURVEY

To better understand the critical business outcomes that organizations have achieved from their cloud investments, IDG surveyed 444 IT leaders in France, Germany, the United Kingdom, and the United States. Respondents work at companies with 500+ employees across multiple sectors.

To qualify, respondents had to be working at the manager level or above and be involved in purchasing IT products and services. CenturyLink sponsored the survey, which was conducted online from June-July 2019.

RESEARCH RESPONDENT PROFILE BY INDUSTRY

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THE INHERENT VALUE OF A ROBUST HYBRID CLOUD STRATEGY

CenturyLink has the backbone and IT expertise to support hybrid cloud strategies for increased business responsiveness to customer needs — no matter your company’s maturity level. Our global enterprise networking includes approximately 450,000 route miles of fiber and direct connectivity to 2,200 public and private data centers and private connectivity to all the major cloud providers.

“CenturyLink supports companies no matter where they are on their hybrid cloud journey,” says Scott Brindamour, Senior Director, U.S. Architect Team, CenturyLink. “We can help securely build, scale, move faster, standardize, and automate — all to get them to a level where they can meet their business objectives.”

CenturyLink products and services help companies secure global connections, achieve faster application delivery, and holistically manage multiple clouds in a single pane of glass:

✔ **CLOUD APPLICATION MANAGER**: A powerful, best-of-breed automation platform that orchestrates and automates the delivery of infrastructure, applications, and services across public and private clouds.

✔ **BIG DATA AS A SERVICE**: Includes storage, processing, and management deployed on bare-metal cloud servers for a flexible, scalable environment to process near-unlimited resources in a high-performance computing cluster.

✔ **CLOUD CONNECT DYNAMIC CONNECTIONS**: Provides real-time capability and flexibility to enable secure connectivity between the cloud and data center. It also offers a consistent, predictable cost model with a pay-as-you-go option.

✔ **MANAGED SERVICES ANYWHERE**: For companies that want the power of Cloud Application Manager as well as management of all cloud environments. This service simplifies governance, speeds application delivery, and reduces costs for operational flexibility.

✔ **CLOUD APPLICATION MANAGER FOR PRIVATE CLOUD**: Get both public-cloud and private-cloud benefits including security and compliance with this hosted model. Rapidly build, customize, and deploy a private cloud with flexibility and control.

✔ **CONTENT DELIVERY NETWORK (CDN) EDGE COMPUTE**: A comprehensive, customizable solution enabling high performance, security, and scalability to gain complete control over edge workloads.

✔ **IT STRATEGY AND CONSULTING SERVICES**: Modernize your IT infrastructure while optimizing IT costs, increasing agility, and freeing your IT team to focus on developing and supporting new business models.

Learn how to improve your business outcomes by visiting CenturyLink at [www.centurylink.com/it-agility](http://www.centurylink.com/it-agility) or contact a CenturyLink Expert.