

BetterCloud

2016

# State *of* Cloud IT

BetterCloud



# The Cloud Changes Everything

**Work as we know it is transforming.** Today, all businesses are technology enabled, regardless of size, industry, or location. But merely using technology no longer guarantees that you remain competitive. As digital natives flood the global workforce, businesses are met with a decision: resist new norms or provide the latest technology to their employees.

**We are in the midst of a technological shift not seen since the launch of Microsoft Office and the invention of the Internet.** The world of IT is at a tipping point, and at the center are IT professionals experiencing once-in-a-career shifts in their roles and responsibilities. For years, IT has been mischaracterized as solely an internal support team; if something breaks, IT is there with the fix. In 2016, IT professionals are beginning to offload their routine work to cloud software and service providers, giving them more time to focus on strategic work.

**The skills required to be a successful IT professional in the modern, cloud-first workplace are far different than they once were.** Cloud IT is coming of age, and it's going to affect every organization and IT professional in the world, much faster than you think.

David Politis, Founder & CEO at BetterCloud



What type  
of workplace  
will the next  
generation  
of workers  
experience?



# Why is BetterCloud the authority in Cloud IT?





Our research has been  
featured in publications like:

THE WALL STREET JOURNAL.



The New York Times

Forbes

**FierceCIO**  
THE EXECUTIVE IT MANAGEMENT BRIEFING

BUSINESS INSIDER

*Analyst groups cover a broad spectrum of industries and provide useful predictions for their clients and readers. We go a step further. By interviewing and surveying the IT professionals responsible for moving their organizations to the cloud we can paint a clear picture of how the shift to cloud IT is taking place, and how it is affecting the role of IT.*

More than

**230,000**

IT professionals from around the world, who work in all industries, from startups to the largest enterprises on the planet, belong to the BetterCloud community. We routinely—and thoroughly—survey these individuals to draw valuable insights about the state of cloud IT.



JOIN US AT THE

sponsored by: **BetterCloud**

# 2016 CloudIT Summit

September 2016

"Great summit! Very valuable and was one of the better conferences I've ever been to."

"Just a great event, i feel like the direction you are headed in is spot on."

LEARN MORE ➞

[www.clouditsummit.com](http://www.clouditsummit.com)



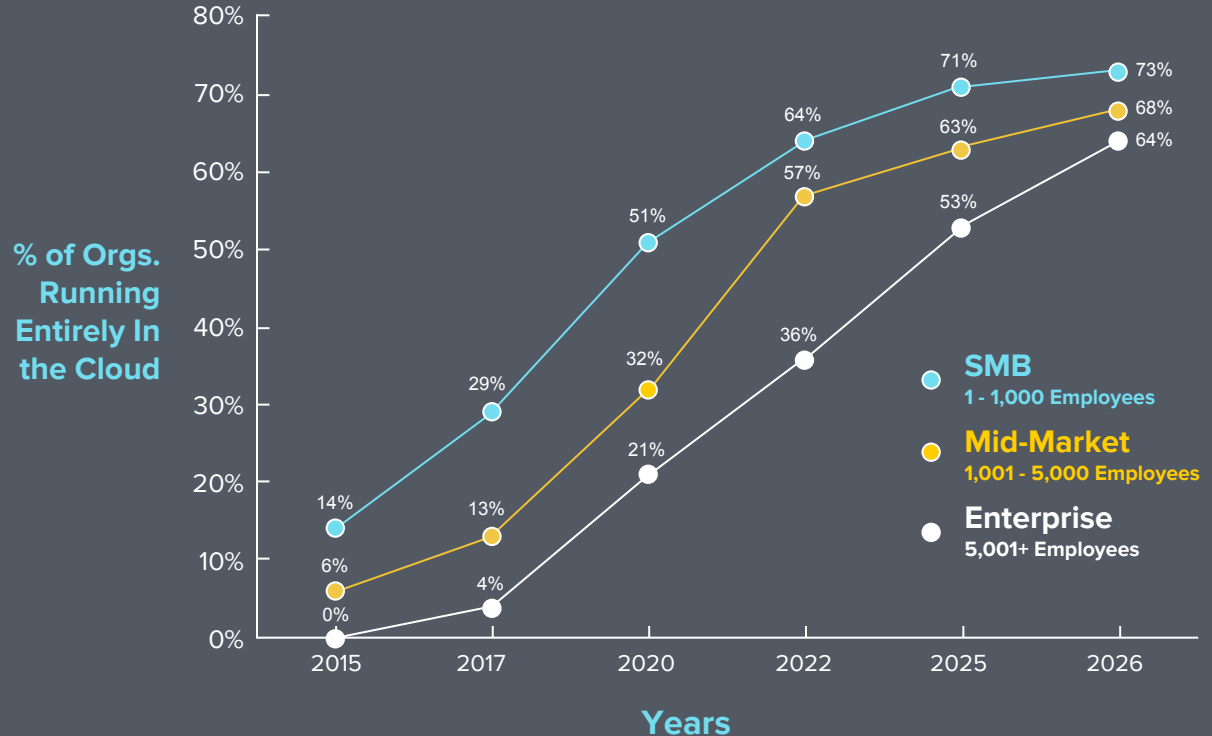
# Cloud IT

(n.) An approach to IT where technology is powered through remote servers and consumed as a service (IaaS, PaaS, and SaaS), enabling organizations to offload infrastructure and end-user applications



# When will 100% of your organization's IT run in the cloud?

Cloud adoption is only beginning. We are on the cusp of the biggest IT shift in more than 20 years.



Source: [Trends in Cloud IT](#)



According to Gartner, “By 2020,  
a corporate ‘no-cloud’ policy will  
be as rare as a ‘no-Internet’  
policy is today.”



%



As organizations shift to cloud IT...

more *digital natives* enter the working world.





By 2020, millennials will form  
50% of the global workforce.





# *Digital Native*

(n.) A person who is born in the  
information age that is comfortable  
using technology

— Digital natives expect a  
modern workplace.



# Modern Workplace:

(n.) A professional environment where employees are enabled and encouraged to use the latest technology to stay engaged and productive







# Why are companies adopting a modern workplace?

## To keep up with competition

*46% of working adults feel more productive because of the internet, email, and cell phones.<sup>1</sup>*

## Technology is easily accessible

*Today, it takes as little as 55 seconds to deploy a cloud server<sup>2</sup> and even less time for an end user to browse a marketplace and download a cloud application.*

<sup>1</sup>Source: [Pew Research Center](#) <sup>2</sup>Source: [DigitalOcean](#)



There are two types of IT environments  
powering today's workplaces.

1 Homogenous  
Environments

2 Heterogenous  
Environments





## ***Homogenous Environment:***

(n.) An IT environment whose infrastructure and enterprise application needs are powered by one or very few vendors

















# Homogenous Environments

*In a perfect world, IT departments could meet all their organization's needs through a single vendor.*

	EMAIL	CHAT	STORAGE	PRODUCTIVITY	VIDEO CONFERENCING
Google for Work					
OR					
Office 365	 Exchange	 Skype for Business	 SharePoint	 OneDrive	 Skype for Business



But in reality, cloud IT is increasing infrastructure complexity as more solutions enter the market and technology becomes easier to access. This is leading to the rise of heterogeneous environments.





## ***Heterogenous Environment:***

(n.) An IT environment whose needs are fulfilled by a wide variety of best-in-breed cloud applications from many vendors












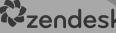



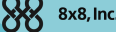
















# Heterogenous Environments

In a heterogenous environment, organizations are free to pick and choose their cloud applications.

EMAIL	CHAT	STORAGE	PRODUCTIVITY	TICKETING	TELEPHONY	VIDEO CONFERENCING	HR MANAGEMENT	PROJECT MANAGEMENT	CRM
 	  	    	   	   	    	   	   	   	   

....AND MORE



# Homogenous Environment

Organizations choose from only a few market leaders and adapt their businesses to fit vendor capabilities.



&

# Heterogenous Environment

Organizations choose from a far greater number of vendors to find best-in-breed cloud applications that closely fit their needs.







Cloud application adoption is exploding as more companies shift to heterogeneous environments and cloud applications become easier to procure.

**8**  
(per org.) { Average number of cloud applications under IT control in  
**2015**

**17**  
(per org.) { Average expected number of cloud applications under IT control in  
**2017**



But because cloud applications are easy to buy and install, end users are acting without the assistance of IT.

This is known as shadow IT.





# Shadow IT

*(n.) Devices, software, and services outside the ownership or control of IT organizations<sup>1</sup>*

Only 8% of companies say they know the scope of shadow IT at their organizations.<sup>2</sup>



# The IT community has differing views on shadow IT. — “

“The dangers of shadow IT”

— InformationAge

“Shadow IT: It’s Much Worse Than You Think”

— InformationWeek

“It’s Time To Embrace, Not Fear, Shadow IT”

— TechCrunch

“The Real Dangers of Shadow IT”

— ITA TechnologyAdvice

“Insider Threat, Shadow IT Concerns Spur Cloud Security”

— InformationWeek  
**DARK**Reading

“Bring Shadow IT Out of the Dark, Gartner Tells Tech”

— ENTERPRISETECH  
INSIDE EXTREME SCALE CHALLENGES

“The security and risk management of shadow IT”

— COMPUTERWORLD

“Don’t fear shadow IT — exploit it and prosper”

— InfoWorld

“Shadow IT: 8 Ways To Cope”

— InformationWeek

“6 ways ‘shadow IT’ can actually help IT”

— NETWORKWORLD



Regardless, IT professionals agree that cloud application growth is **inevitable**.

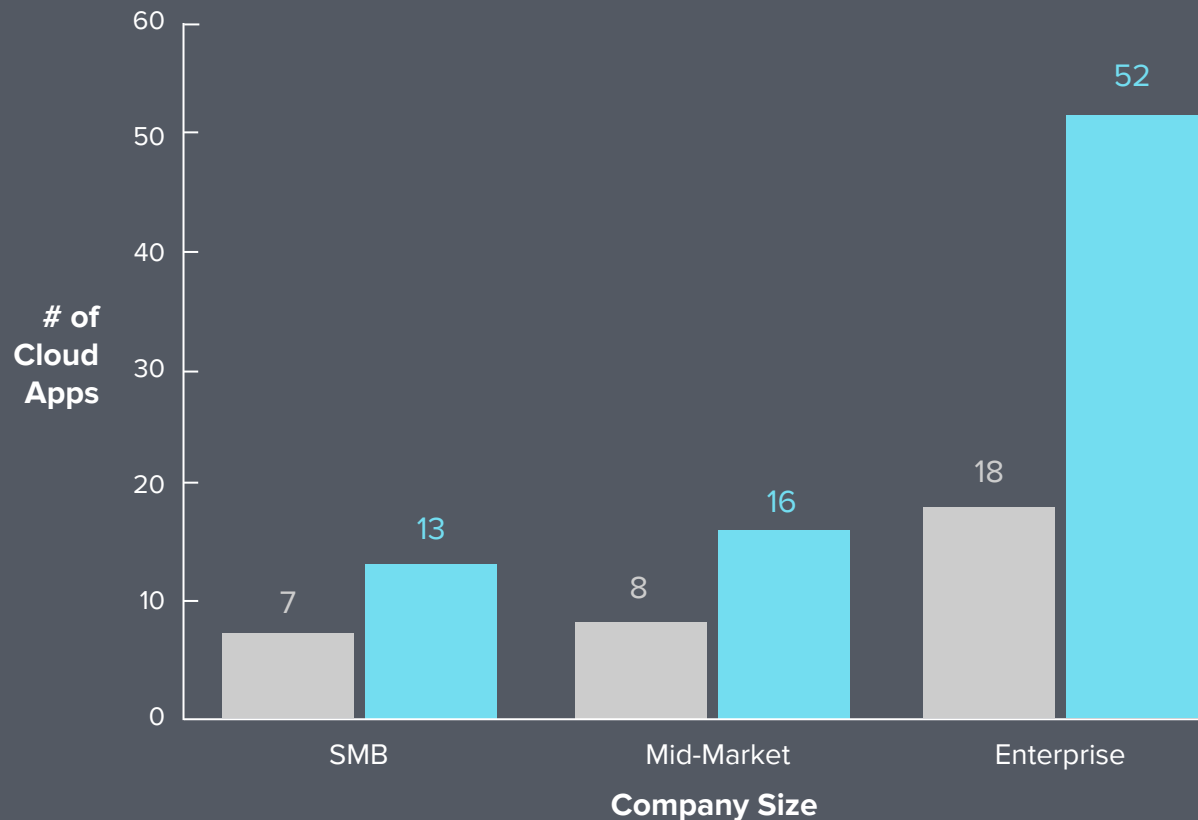






# Cloud Applications Growth

by size segment



No matter a company's size, IT professionals expect to use more cloud applications in the coming years.

Cloud Applications Used Today (per org.)

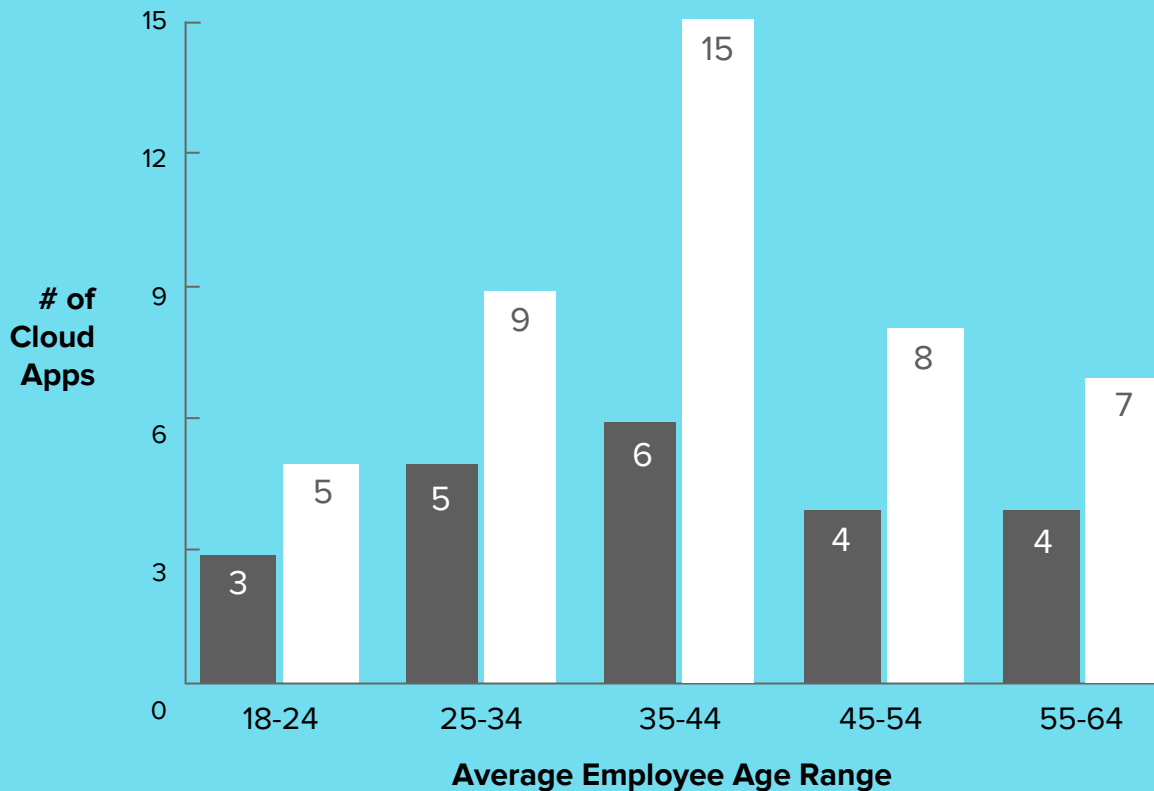
Expected Cloud Applications Used in Two Years (per org.)





# Cloud Applications Growth

*by average employee population age range*



Whether a company consists of young or more experienced employees, IT professionals expect cloud application growth across the board.

Cloud Applications Used Today (per org.)

Expected Cloud Applications Used in Two Years (per org.)



# Cloud Office System

“

The long-expected surge in adoption of cloud office systems has been underway since mid-2014. Very soon, the question facing enterprise collaboration and communications leaders will not be whether to move these workloads to the cloud, but **how painful will it be to remain on-premises?**”

(n.) A suite of email, collaboration, messaging, calendaring, and video conferencing applications that let employees work where, when, and how they want

Source: Gartner, Cloud Office Questions Begin the Shift From 'If' to 'When', Jeffrey Mann, 21 April 2015







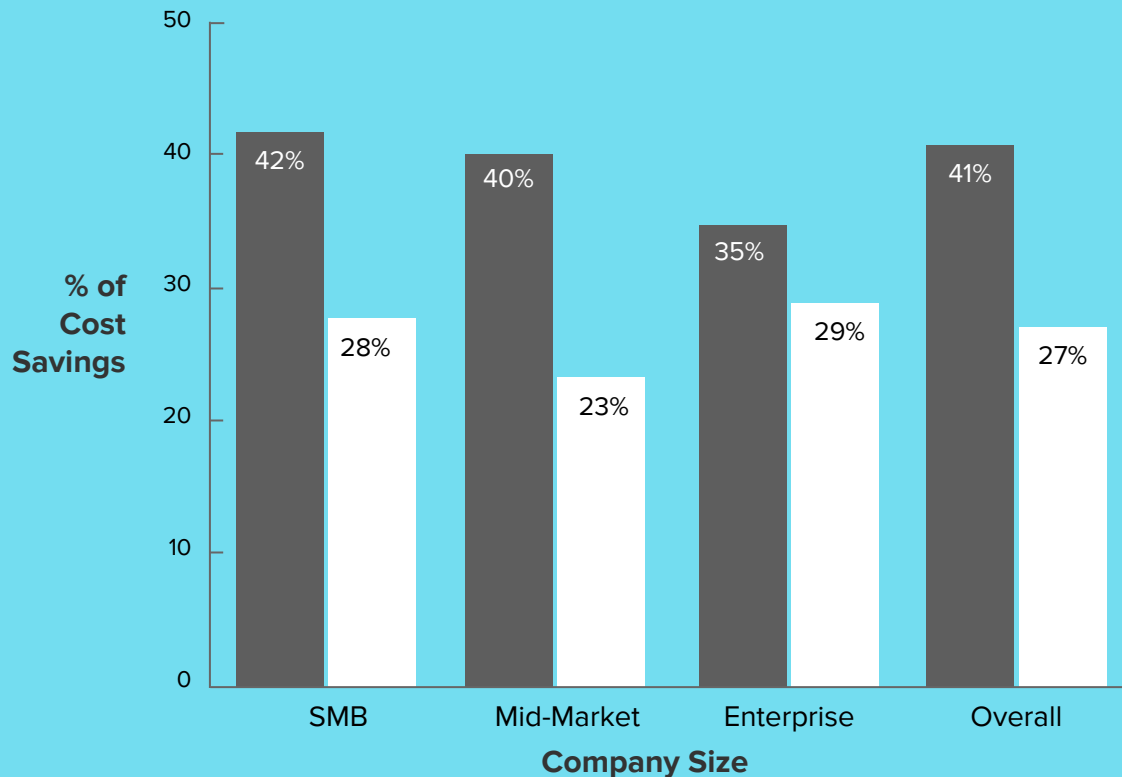
When organizations adopt cloud office systems, they save **money** and increase **productivity**.





## Cloud Office Systems

# Cost Savings



Organizations clearly see cost savings after moving to a cloud office system.

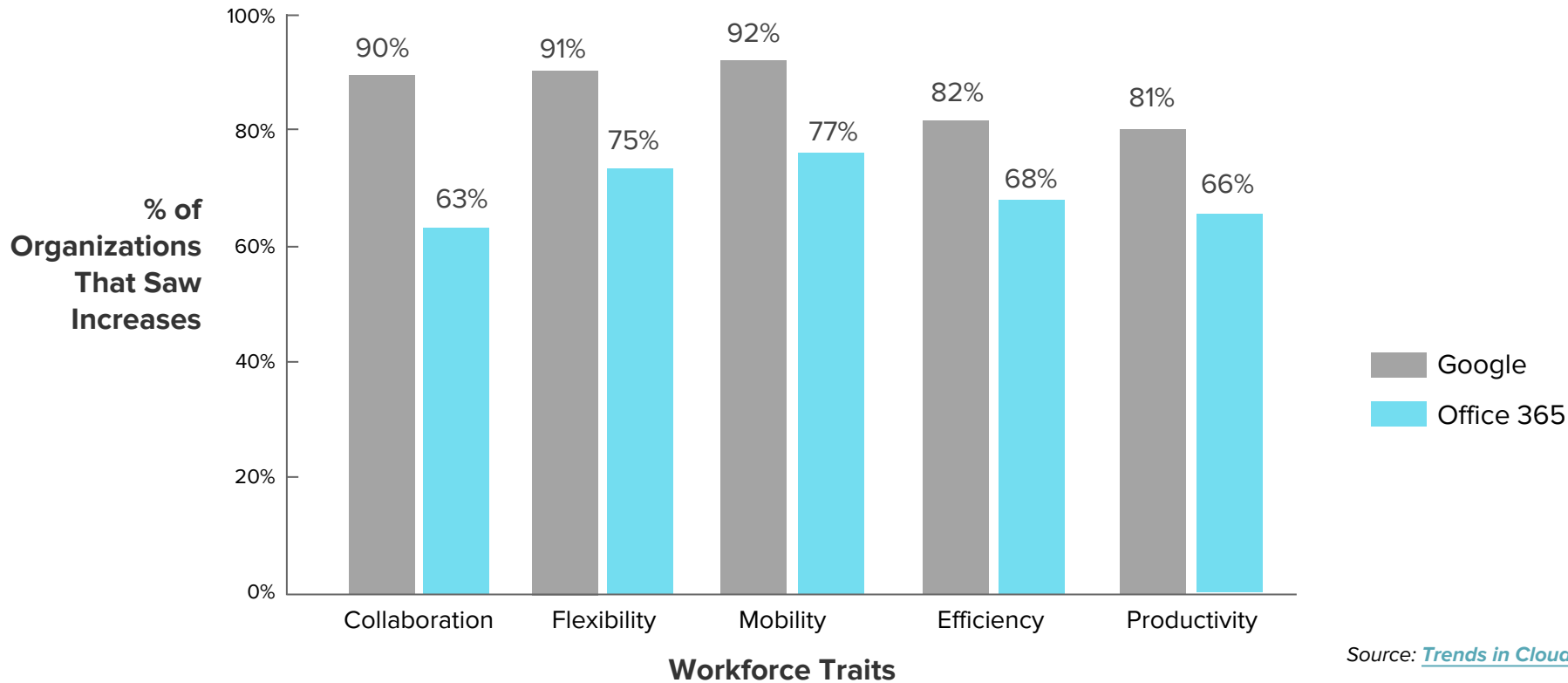
■ Google    ■ Office 365





## Cloud Office Systems

# Workforce Traits





The two primary cloud office systems  
come from two different worlds.

## Google for Work

Google for Work grew out of Gmail, a consumer product.

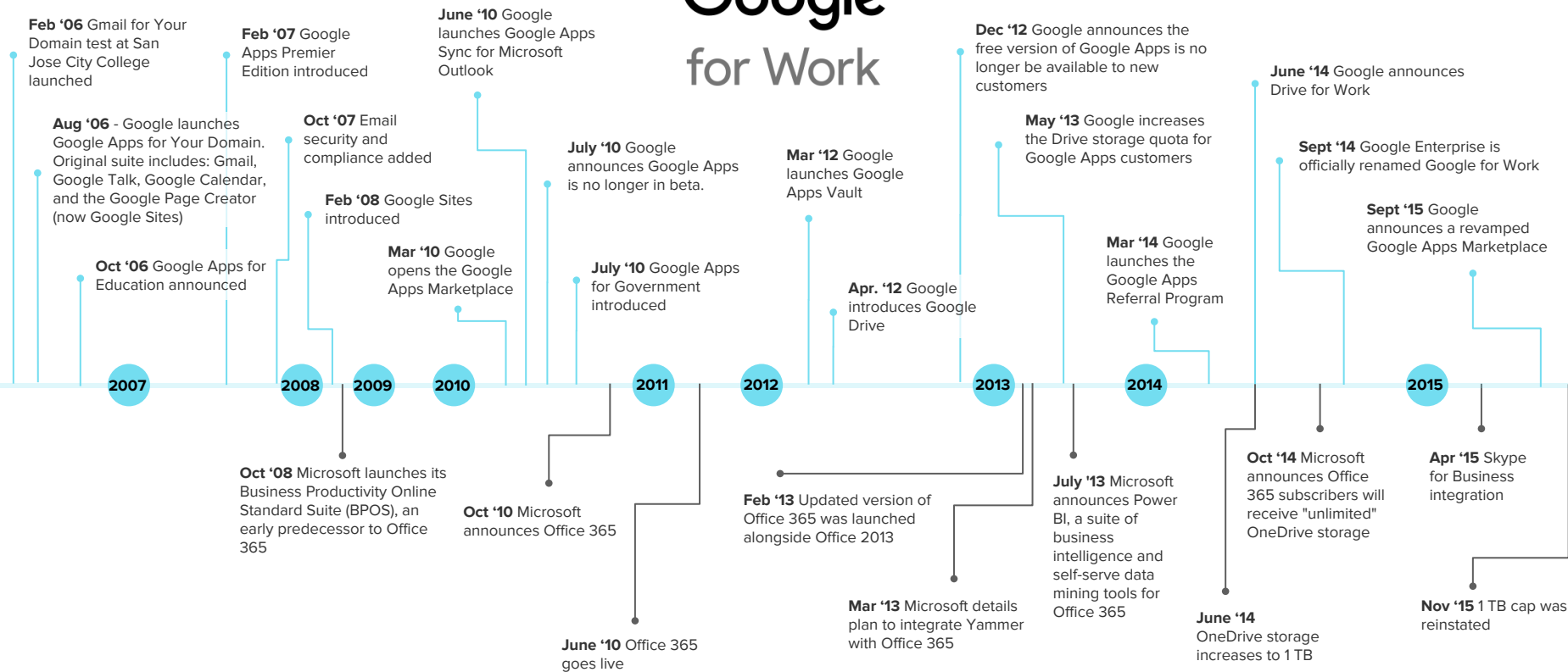
## Office 365

Office 365 is the evolution and culmination of products that were designed specifically for the enterprise.





# Google for Work





# Google for Work

vs

# Office 365

BetterCloud

Customers are typically newer companies with fewer employees and smaller IT teams.

Customers are typically older companies with more employees and larger IT teams.

**120**

Median  
Company  
Size

**600**

**3**

Median  
IT Team  
Size

**15**

**20**

Median  
Years of  
Operation

**30**





## Both Google and Microsoft want to dominate the cloud office space.

“

There are a few other efforts we do, and I've been very clear about those efforts and why they exist and why we are proud of them.

But, there are three products in all of this. There is Windows, there is Office 365, and there is Azure. That's it. Everything else to me is, of course, you can call them features, you can call them parts of that...



**Satya Nadella,**  
CEO, Microsoft, [Nov. 2014](#)

“

...but it's really just the beginning. In fact, only a tiny fraction of the world's data is currently in the cloud – most businesses and applications aren't cloud-based yet. This is an important and fast-growing area for Google and we're investing for the future.



**Sundar Pichai,**  
CEO, Google, [Nov. 2015](#)

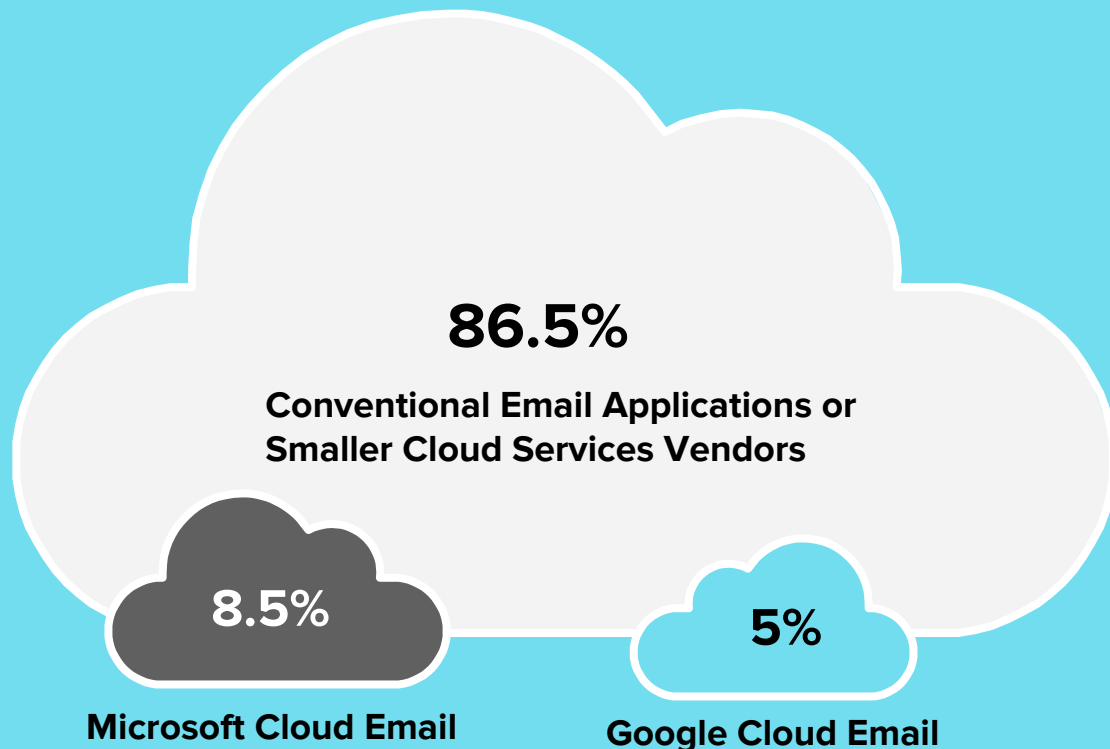




After the analysis of  
**40,000 public organizations,**

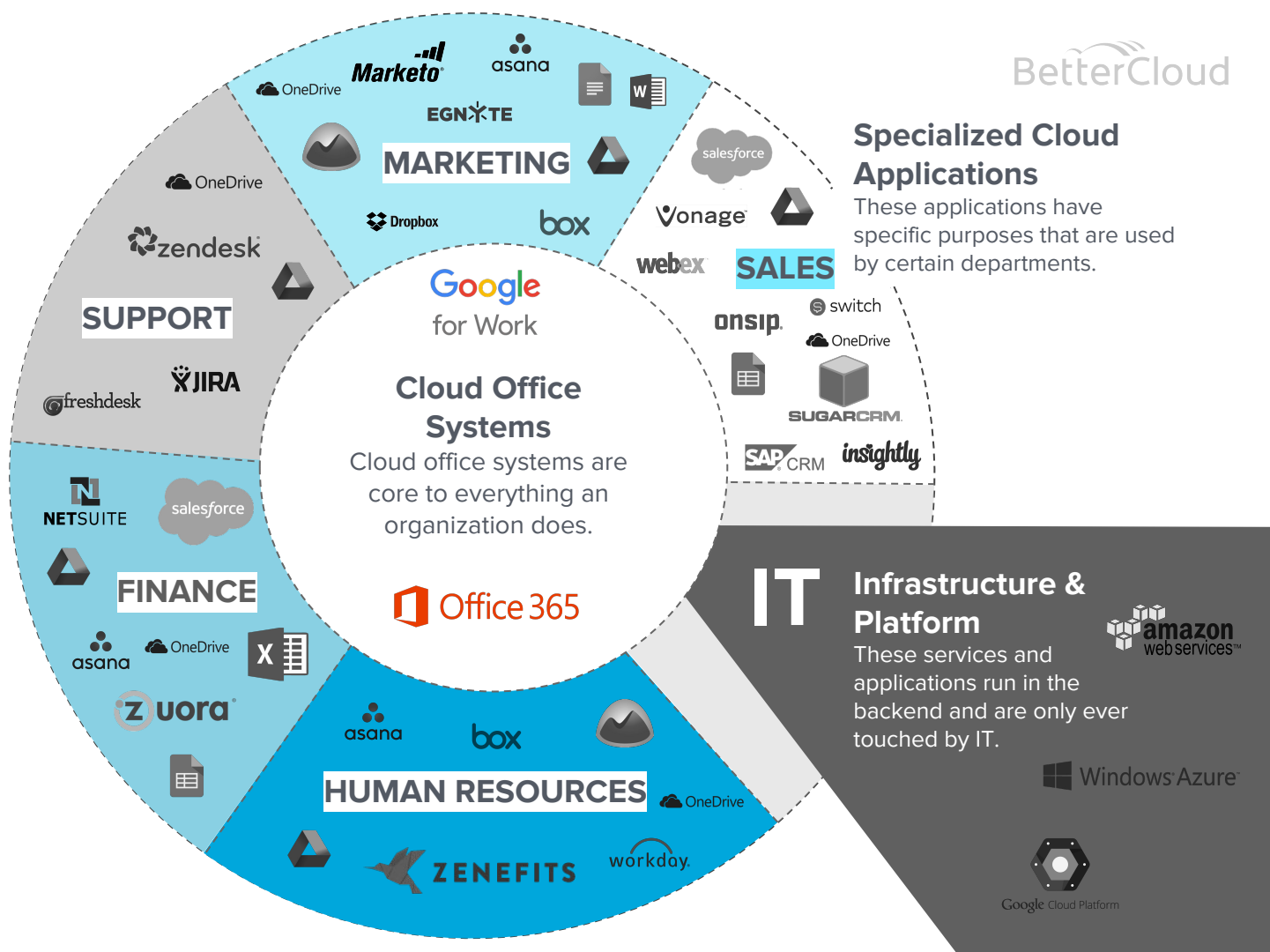
Gartner found that  
13.5% currently use  
Google for Work or  
Office 365 for email.

There is tremendous room  
for growth for both  
Microsoft and Google.





Cloud office systems are the **ONLY** types of cloud applications that **EVERY** employee in an organization works with on a daily basis.





Once an organization decides to  
adopt a cloud office system,  
the work has only just begun.





For organizations that have been around for years, executives and IT professionals have many important factors to consider.

## Technical Debt

Some organizations have existed for more than 100 years, which makes their infrastructures incredibly complex.

## End User Adoption

Companies with more experienced employees may find moving to the cloud extremely difficult because employees resist or even reject change.

## Scale

Some organizations have more than 100,000 employees and terabytes of data. Moving this amount of data to the cloud is difficult.



# IT must reevaluate everything.

## **Data migration**

Which data, and how much of it, will an organization migrate to the cloud?

## **Authentication**

How will end users access their data? Through single sign on? Two-factor authentication?

## **Access**

How does IT want users to access work information? From any device, any location, at any time? Not always.

## **Mobility**

Mobile has become a critical aspect of nearly all major business decisions. Will employees be able to access data from any mobile device or only from approved or corporate-owned devices?

## **Policy and Procedures**

All IT policies and procedures must be dramatically altered and even rewritten when an organization operates in the cloud.

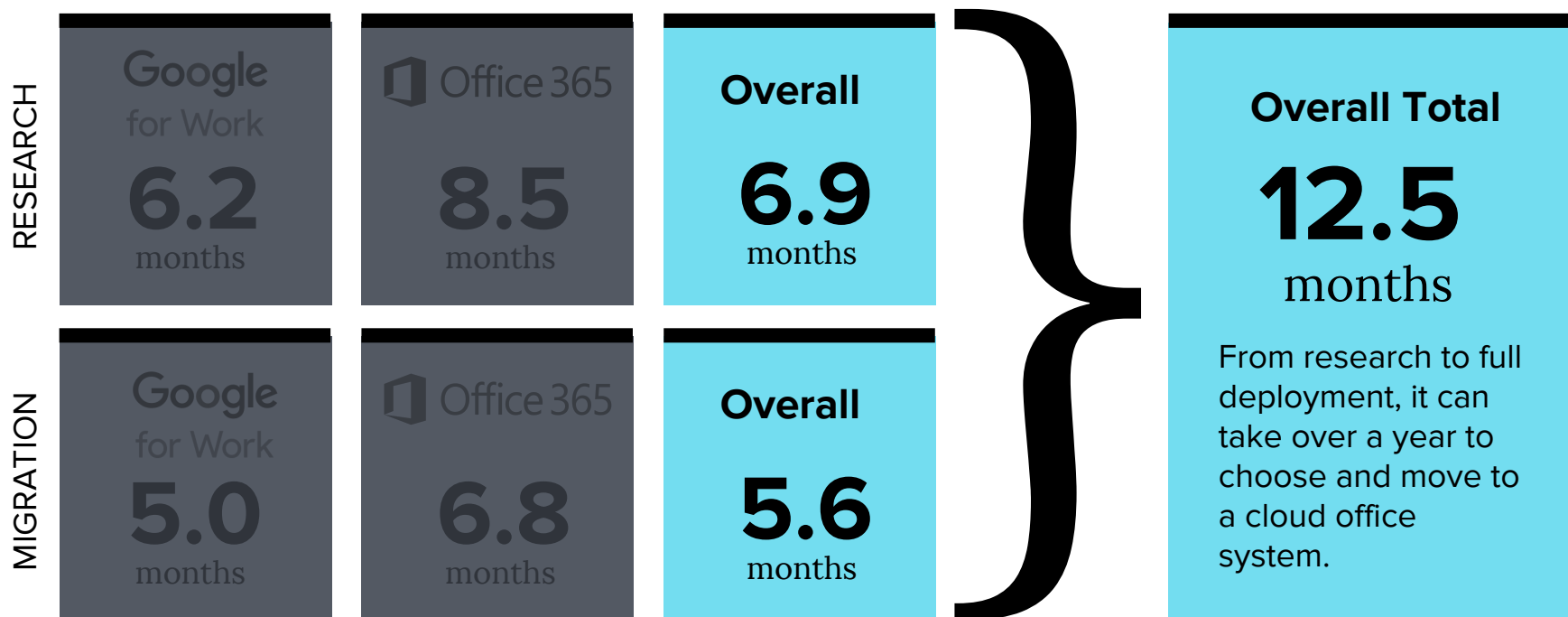
## **Disaster Recovery**

If something goes wrong, what precautions have been taken to ensure data doesn't go missing?





The process of moving to a cloud office system is an enormous endeavor.

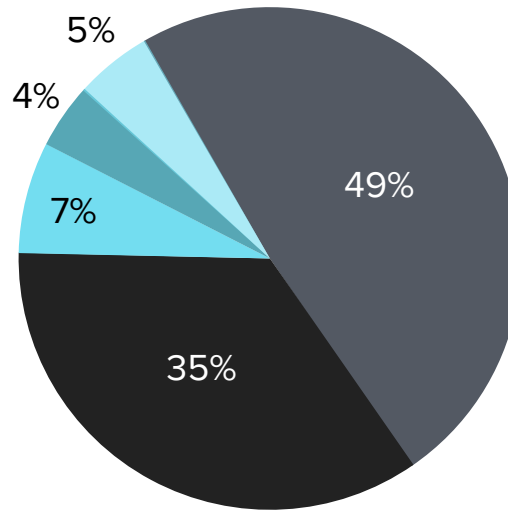




How organizations move to the cloud depends on factors like organization size, infrastructure complexity, whether or not they use a partner, industry regulations, prior platform, and more.

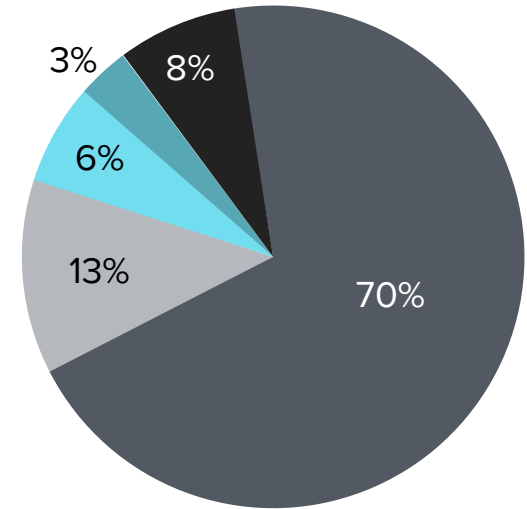
## Prior Platforms

Before moving to  
**Google**  
for Work



Before moving to

 **Office 365**



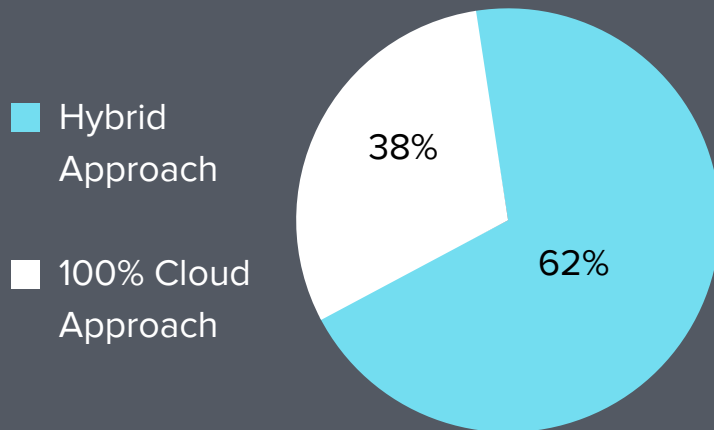


As for how IT rolls out cloud office systems to end users, there's no one-size-fits-all approach.



**Office 365 customers are more likely to take a hybrid deployment approach.**

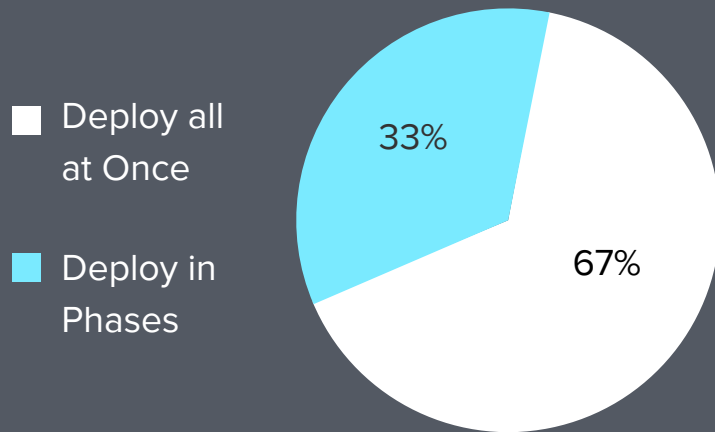
## Office 365





**Customers that choose Google for Work are more likely to deploy all at once.**

## Google for Work





For startups, the decision to start in the cloud is becoming the norm.

61%

of organizations founded in the last two years were born in the cloud.





With lower upfront costs, cloud office systems make startup expenses more manageable.



## Office 365

Office 365  
Business  
Essentials

**\$5.00**

user/month

Office 365  
Business

**\$8.25**

user/month

Office 365  
Business  
Premium

**\$12.50**

user/month

## Google for Work

Google  
Apps

**\$5.00**

user/month

Google  
Apps with  
unlimited  
storage and  
vault

**\$10.00**

user/month



The cloud presents new and unique challenges to all companies, **from large enterprises to startups.**

Organizations often enlist the help of partners when moving to the cloud.

Partners such as:

- ❖ Cloud Services Brokerages
- ❖ Consultants
- ❖ Managed Service Providers
- ❖ System Integrators and more...





Companies that work with partners are larger, have existed longer, and are more likely to be satisfied with their cloud office system.

## Cloud Office System Satisfaction

More than

**80%**

of large enterprises were satisfied when working **with** a partner

Only

**60%**

of large enterprises were satisfied **without** a partner

### Partners provide value by offering:

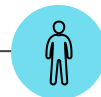
- cloud expertise
- professional services
- consolidated billing and more...



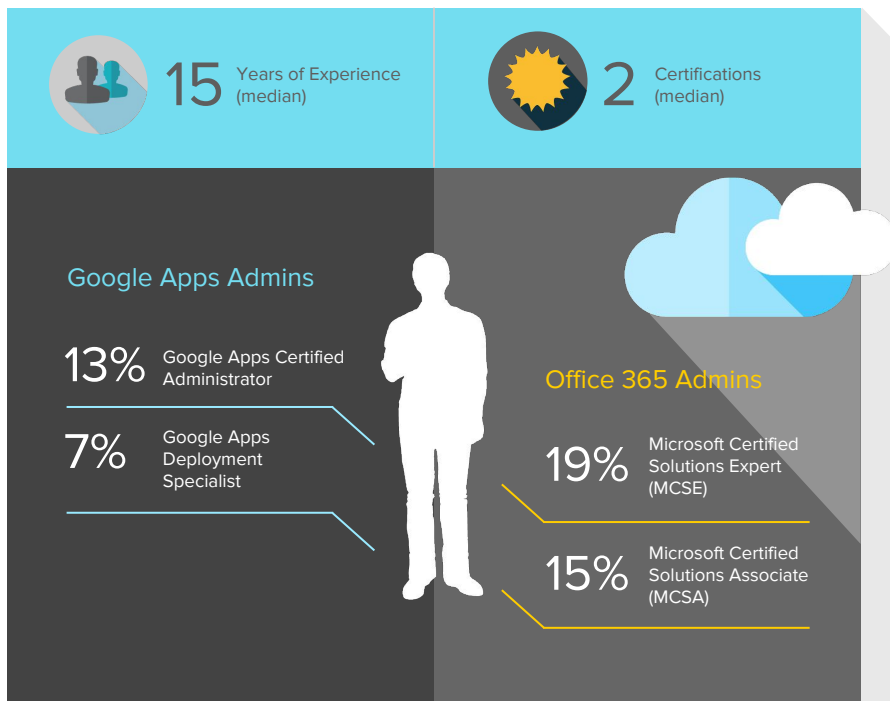
The move to cloud IT is affecting  
*one* person more than anyone else:  
the modern IT professional.







# The Modern IT Professional



## Highest Priority Projects of 2016

- **14%** - Cloud Computing
- **12%** - Security Technologies
- **10%** - Legacy Systems Modernization/Replacement
- **9%** - Application Development, Upgrades or replacement (includes mobile apps)
- **9%** - Business Analytics



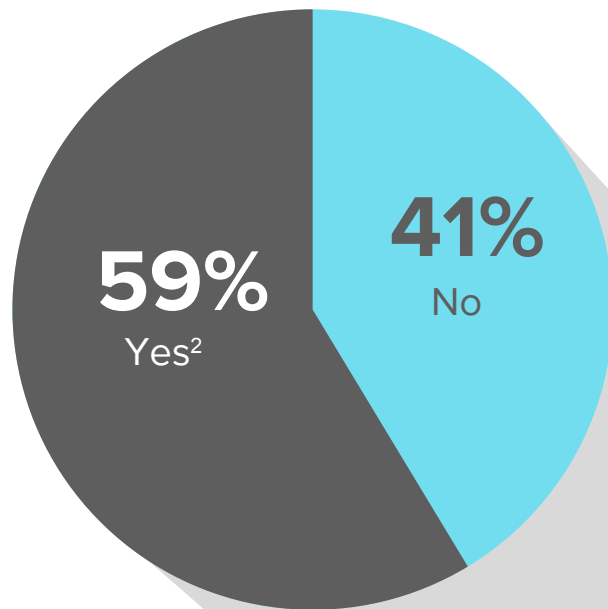


# IT organizational structures and responsibilities are changing.

The top 3 factors driving an increase in IT headcount:<sup>1</sup>

- **63%** - New Systems/Projects
- **45%** - Corporate Growth/Systems Expansion
- **42%** - Need for staff with technology and business background to articulate IT's value to the business

In the past 12 months, has the structure and responsibilities of your IT team changed?





# How are IT teams adapting to cloud IT?

We surveyed our community to see exactly how their organizational structures have changed in the last 12 months. We let respondents keep their anonymity to encourage them to freely speak their minds.



“

“With the move to cloud IT it has become easier for me to support my users.”

“We have reorganized to focus on cloud services.”

“There is a lot more responsibility for IT since we have a lot of new technology.”

“Less technical ‘firefighting,’ more service management tasks, and more training.”

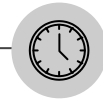
“More focused on business tech trends and training than day-to-day administration.”

“More online work. Reduced paperwork. Greater dependability on online storage. Scope for more possibilities.”

“I’ve outsourced hardware and major windows management, internal team is spending more time in the cloud and on apps.”

“More strategic responsibilities. More work around policy creation and management. Also ongoing training and support.”





**In typical on-premises environments, IT spends most of their time on routine tasks.**

**Scheduled  
Maintenance**

**Unscheduled  
Maintenance**

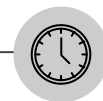
**Storage & Quota  
Management**

**Data  
Recovery**

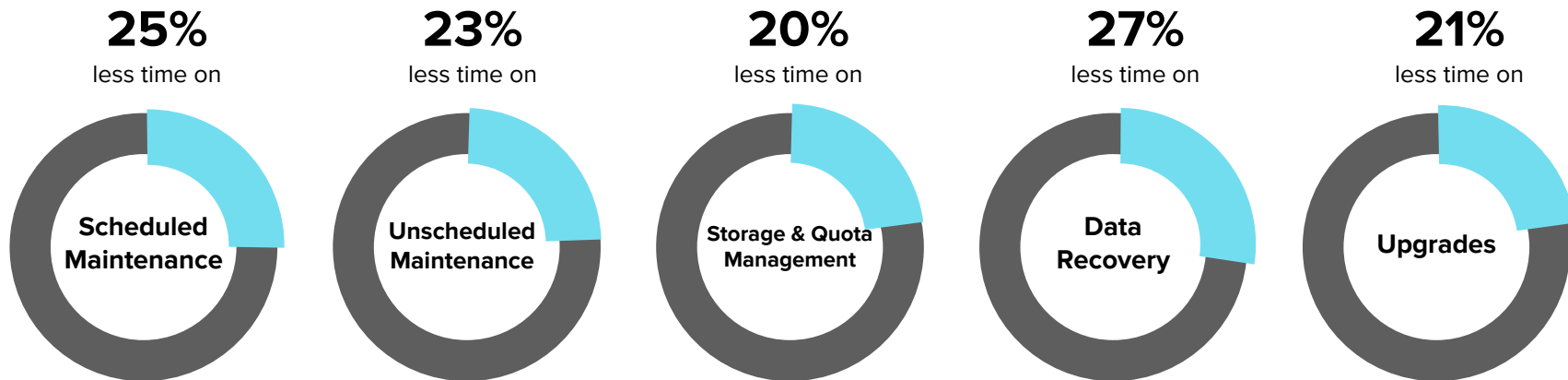
**Upgrades**



As organizations adopt more cloud applications, IT professionals save time by automating or offloading routine tasks.



The quickest cloud adopters are spending:







The shift away from routine work signifies the beginning of the Golden Age of IT.

# Golden Age of IT

*(n.) The time period when the IT profession evolves beyond focusing primarily on routine tasks; because of the shift to cloud IT and advancements in automation technology, IT is able to contribute to their organization at a more strategic level*



Old tasks

vs

New tasks

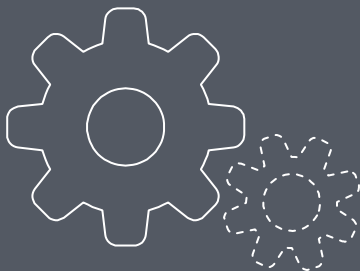
# ROUTINE

Maintenance

Storage and Quota Management

Data Recovery

Upgrades



# STRATEGIC

Change Management and End-User Training

Security Improvements

Cloud Application Selection and Vetting

Integrations

Data Analysis

Strategic Planning





We asked 1,500 IT professionals one question...

Since moving to the cloud, what  
can you now focus on that you  
previously didn't have time for?

“





In 2016, IT professionals will...

# Focus more on change management and end-user training.

Just 10% of workers say they are very proficient with the digital tools they use at work.

Source: [The Harris Poll: The Digital Skills Gap](#),  
Harris Interactive Inc., (May 14, 2014)

What can you now focus on that you previously didn't have time for?

“End-user training is more of a requirement now especially as the platform evolves and changes far more rapidly than legacy solutions did (where we could more or less completely control change rates.”

**12 years IT experience**

Mid-Market



“I now have time to work more directly with our users and help them improve the efficiency of their work.”

**Tom Long**

Clarion Forest VNA & Hospice



“Trying to improve the way users can easily work and collaborate.”

**7 Years IT experience**

SMB





## How to Effectively Train Users and Manage Change

### **Develop stronger relationships**

By working closer with department heads and power users, you can keep your ear to the ground, allowing you to understand your users' wants and needs. This will help you get honest feedback.

### **Involve the business**

Don't lose sight of the business context. You need to ensure that the tools you are rolling out solve a business problem.

### **Take a phased approach**

Many IT professionals are moving away from big bang rollouts and taking phased approaches. This will help you catch small issues in addition to business-wide problems during rollouts.

### **Evolve training techniques**

Simply storing training documents on an intranet is becoming an inadequate approach. Many IT organizations are evolving their training to meet different learning styles like interactive classroom sessions or self-paced video training.



In 2016, IT professionals will...

# Proactively select and vet new technology.

90% of Infrastructure Managers and 84% of IT Architects are either influencers or primary decision makers when selecting cloud services.

Source (451 Research): [Beyond Infrastructure: Cloud 2.0 Signifies New Opportunities for Cloud Service Providers](#)

What can you now focus on that you previously didn't have time for?

“

Evaluating and developing new systems for automating workflow and replacing manual processes.”

**10 years IT experience**

SMB



“

Focusing on the end-user experience rather than just the infrastructure.”

**20 Years IT experience**

SMB



“

Focus on business requirements and solutions rather than infrastructure.”

**16 years IT experience**

Mid-Market





## How to Become Business Enablers

### Challenge the status quo

Don't accept processes and tools for what they are, always challenge the business. "That's how we've always done it," is not a viable answer.

### Pick the right technology

New technology should be evaluated across four requirements: save time, save money, reduce risk, and improve productivity.

### Find and Leverage Your Peer Group

Moving to the cloud, is an enormous change for your organization. Find IT professionals that are in similar industries and on the same cloud adoption trajectory as you. They've likely seen and/or solved issues similar to the ones you face on a daily basis.



In 2016, IT professionals will...

# Become cloud application integration experts.

From Nov. 2012 to Dec. 2015 the number of public APIs has nearly tripled from 5,018 to 14,368.

Source: [Programmable Web](#)

What can you now focus on that you previously didn't have time for?

“

The focus has moved to growing the business by adding new capacities. I now spend more time on these products integration and the change management associated because I do not spend any time on maintaining existing systems.”

**30 Years IT experience**

SMB



“

Integrating new solutions to improve productivity of organization.”

**Veshant Chettiar**

Stansfield College



“

Better integration of devices, files, and apps.”

**20 Years IT experience**

SMB





## How to Take Advantage of Integrations

### Find the gaps

If a painpoint exists between two cloud applications, there's a strong possibility you can solve it through an integration. Sometimes integrations can solve problems that individual solutions can't.

### Don't accept applications at face value

Through APIs, which are becoming increasingly more accessible to IT, you can supercharge an application's capabilities to make it work as you wish.

### Pick your core applications wisely

When it comes to choosing applications that persist throughout your organization, whether it be messaging and collaboration, support, sales, or marketing automation, choose wisely and consider extensibility. Often times, swapping these applications out can be painful.

### Stay up to date

Regularly check your applications' releases and stay up to date with industry news; if you don't, you could be seriously left behind.



In 2016, IT professionals will...

# Take on a new approach to securing their company's data.

"Nine out of ten organizations are very or moderately concerned about public cloud security."

Source: [Cloud Security Spotlight Report](#)

What can you now focus on that you previously didn't have time for?



“

Policies/Rules and Control.”

**Scott Eaton**

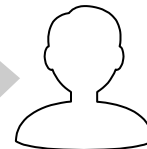
Impact Community Church

“

I can focus more on strengthening our network security.”

**18 Years IT experience**

Enterprise



“

Improving the infrastructure for our other services.”

**Jim Rispin**

Fuller Theological Seminary



## How to Tackle Security in the Cloud

### Approach security differently

Security in the cloud requires a completely different approach. You're going to need to update your policies and procedures to meet security challenges.

### Create a culture of security

As an IT admin, you need to trust your users, but in doing so, make sure they're aware of the security risks. Educate your users on the importance of security and you'll be better off for it.

### Strengthen passwords

Passwords are breakable. Every modern business should enlist two-factor authentication and single sign on (SSO) wherever possible.

### Delegation is key

Not every admin in your organization should be a super admin. You need to ensure your delegating responsibilities to the right individuals to keep your organization safe and secure.



In 2016, IT professionals will...

# Serve as strategic advisors to map out a long-term cloud strategy.

Only 25% of organizations have repeatable, managed, or optimized cloud strategies. IT administrators will need to step up to ensure their organizations succeed in the cloud.

Source: [IDC](#)

What can you now focus on that you previously didn't have time for?



“I am able to focus more on strategic planning and worry less about day-to-day issues on an operations level. It's fantastic!”

**Andrew Robinson**

Gilt Groupe

“More time for research and planning of IT roadmap technologies.”

**23 Years IT Experience**

Enterprise



“Long-term strategy for cloud services.”

**Dave Monk**

ArcSource Consulting Inc.



## How to Take On a More Strategic Role

### Shadow your users

Spend more time with your users by shadowing them to find out how they work and why. This will help you identify where more efficient processes are needed.

### Consult with department heads

Take time once a quarter, or as often as possible, to speak with your department heads. A stronger relationship will help you identify team-specific needs and applications operating outside the control of IT.

### Don't be afraid to introduce disruptive technology

As an IT professional, you can affect your organization's bottom line. Don't be afraid to make a strong case for introducing disruptive technology; the last thing company leaders want is to be left behind.

### Show off your knowledge and skillset

To gain influence, you need to make yourself well known within your organization. Setting up internal trainings, hosting webinars, writing blog posts, or speaking at events are all ways to make a name for yourself.



In 2016, IT professionals will...

# Develop a business analyst mindset.

Google's Chief Economist Hal Varian said, "The sexy job in the next 10 years will be statisticians. People think I'm joking, but who would've guessed that computer engineers would've been the sexy job of the 1990s?"

Source [Harvard Business Review](#)

What can you now focus on that you previously didn't have time for?



“Collecting data at a scale I'd have laughed at five years ago. I'm able to generate business-critical insights in minutes instead of days.”

**Tim Burke**  
BetterCloud

“Collecting and analyzing data across the spectrum of users and departments.”

**20 Years IT experience**  
SMB



“Data manipulation and analysis.”

**28 Years IT experience**  
SMB





How to

# Leverage Data to Gather Meaningful Insights

## Data, data, data

It's becoming increasingly important for IT professionals to draw insights from the data their cloud applications collect. This data should be analyzed and used to help organizations work more efficiently.

## Quantify impact and business value

Are your end users effectively using the applications you've given them? Data can help you answer this question, allowing you to intelligently report back to key stakeholders like never before.

## Uncover opportunities with data

For instance, if your employees' inboxes are flooded, it's likely time to look for a project management or text-based chat system. Looking to data for answers can help immensely when selling applications internally.



In 2016, IT professionals will...

Place greater emphasis on preparing themselves for a cloud-based future.

“There's a way to do it better - find it.”

-Thomas Edison

What can you now focus on that you previously didn't have time for?

“

I have more time to spend on professional development.”

9 Years IT experience

SMB



“

Focusing on how to maximize the usage of capabilities of such systems as Google Apps.”

15 Years IT experience

SMB



“

Researching better ways to run IT.”

12 Years IT experience

SMB





## How to Prepare for The Golden Age of IT

### Get certified

In the coming months and years, new certifications will emerge around cloud technology. Take the time to get you--and your team--certified. This can help further your career and put you in a better position to succeed as more companies turn towards the cloud.

### Be adaptable

All evidence points towards organizations shifting towards the cloud. The more adaptable you make yourself to change, the better prepared you'll be.

### Understand your business

To ensure you're positioning your organization for success, you need to understand your business. What are your executives' goals? What drives top line growth? How do your teams operate and communicate? Ask yourself, is there a better way?



We are witnessing the birth of the next generation of IT. There is an opportunity for IT to revolutionize how end users work and organizations operate.

IT is more important today than at any other time in history. In five year's time, we'll be able to say the same thing.

