

K2's Optimizing Your Tech Stack

Major Topics



- Conducting a tech stack assessment, including an inventory of current tools and applications
- Identifying essential and redundant tools
- Exploring cost-effective alternatives
- Calculating your total cost of ownership

Learning Objectives



- Accurately assess the technology tools used in your business environment
- Identify common feature overlaps in tech stacks that lead to unnecessary costs
- Discover affordable and efficient alternatives to conventional tech tools
- Analyze and calculate the total cost of ownership for various technology solutions

My Stack? Think About Yours!



Today

- Microsoft Teams/365/Adobe
- Grammarly/Cal.com/Bitwarden
- Copilot/Gemini/ChatGPT/Claude
- Defender/Sophos/CrowdStrike
- HP Dragonfly Gen4/ViewSonic
- ConnectWise for NMGI Management
- Zoho One for K2 Management
- iPhone/Apple Watch
- Stream Deck/Camtasia

Retiring

- Zoom/GoToWebinar
- Calendly/LastPass/YubiKey
- Cortana
- Webroot
- iPad
- QuickBooks
- ShareFile
- Citrix?

SaaS Management



Costs

- Service scalable on demand
- Variable performance for users
- SaaS licensing tools
 - <u>Privacy.com</u> (Virtual Card for SaaS payment restrictions)
 - Josys
 - Productiv
 - <u>StackShine</u> (now owned by FinQuery(formerly LeaseQuery))
 - Spendflo
 - Substly (SMB)
 - Zylo

Security

- Distributed Endpoints
- Security risk increase
 - EDR/MDR
 - Unified Endpoint Management
- Security risk decrease
 - Cloud usually more secure
 - Silos isolate risk by application



WHAT DO WE MEAN BY "TECH STACK"



Defining "Tech Stack"



- In the simplest of terms, your tech stack is the collection of all the technologies you use, including hardware, and software, along with services and subscriptions
- It includes traditional applications, but increasingly relies on Cloud-based solutions and mobile apps
- Notably, although many users in an organization will use many of the same technologies – Microsoft Office, for example – not every team member's tech stack will be the same
 - For example, accounting applications in use only by accounting department team members

Tech Stacks At A "Macro" Level



- Some refer to "tech stack" only in the context of building a website, web app, or mobile app
- While that is a valid use of the term "tech stack," our use of "tech stack" in this session will be at the "macro" level
- That is, we'll consider a tech stack to be all the software and hardware you use to run your business

Managing Your Tech Stack Matters!



- Can't we let our tech stack evolve naturally? Why do we need to manage and control it?
- If you don't manage your tech stack, it could manage you!
- Consequences of an unmanaged tech stack could include increased expenses, lack of integration, ineffective information technology controls, compromised security, reduced productivity, and too many manual processes and procedures
- Therefore, you and your team will benefit from adopting a strategy of proactively managing your tech stack



GETTING STARTED WITH YOUR TECH STACK



In Simple Terms, For End Users, It Could Look Like This



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• Microsoft, Google, Zoho

Line-of-Business Apps

Connectivity

• Wired, Wi-Fi, Cellular

Hardware

• Desktop, Laptop, Tablet, Mobile

End User Operating System

- Windows or Mac (or both)
 - Android or iOS (or both)

A Note On Operating Systems



- Windows continues to dominate the market for desktop operating systems in North America
- However, MacOS continues to increase its presence, slowly but steadily
- Note that these are not mutually-exclusive options...you can install Windows alongside MacOS on a Mac

Linux Back?



- If everything is Cloud/SaaS, can we lower cost/risk locally?
- Parallels <u>DaaS</u>
- Inuvika
- CrossOver Codeweavers
- The LAMP Stack (Linux, Apache, MySQL, PHP)is a classic opensource stack that's versatile and cost-effective and ideal for basic web applications
- Licensing costs frequently approach zero with improved security

A Note On Hardware



- Most professionals use multiple devices to perform their jobs
- Desktops, laptops, tablets, and mobile devices are all frequently in use by the same person; therefore, the availability of data is very important in these environments
- Also, the multi-device environment increases data security issues and concerns
- To <u>simplify</u> and <u>economize</u> your tech stack, <u>attempt to reduce</u> the number of devices in use by getting rid of superfluous and unnecessary devices

The March To The Cloud



- While operating systems and end-user hardware remain critical considerations, their importance will likely diminish over the coming decade
 - Why? The incessant march to the Cloud continues
- At some point in the coming decade, the majority of all our apps and services likely will be Cloud-based
- At that time, many of the issues we need to manage today will be outsourced to our service providers

What Apps Do You Currently Use?

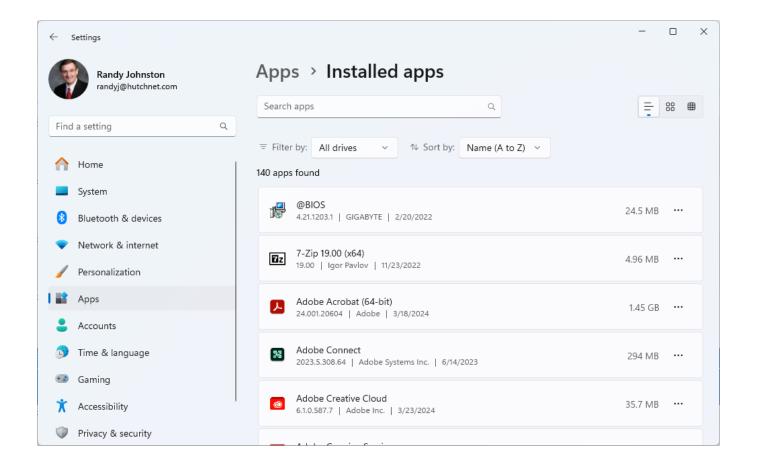


- A good place to start managing your tech stack is to inventory all the apps presently installed on your computer
 - What's installed may be quite different from what you use
- It is common to find duplicated apps, services, and subscriptions, all of which can increase costs and risk, particularly when considering Cloud-based tools
 - Flexara estimates the average company wastes 35% of its Cloud budget on duplicated functionality
 - Browsers, email clients, PDF tools, desktop productivity, and maintenance tools are common examples

How To Inventory Your Device



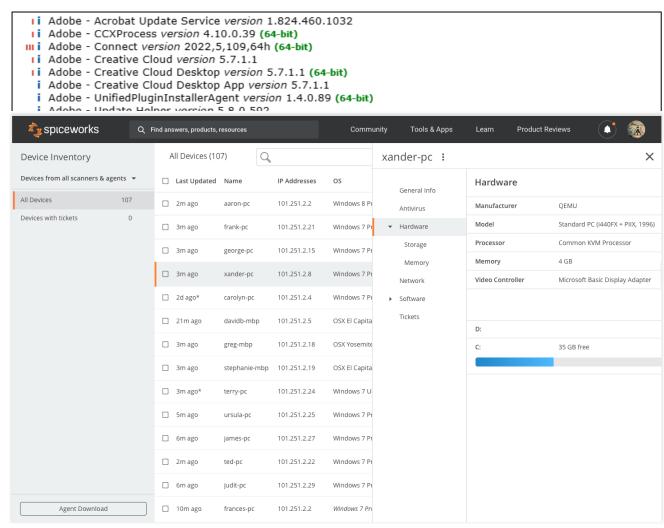
 One quick way to inventory a Windows device is to right-click
 Start and choose
 Installed Apps



Consider Belarc Or Spiceworks



- Belarc Advisor is a great tool for identifying all installed apps on a device
 - Note, the free tool is for personal use only; in business environments, you must purchase a license
- Spiceworks inventory is free



CCleaner: A Maintenance Option



- CCleaner is another option for managing and maintaining your device(s)
- You can use CCleaner to tune and update your PC and also help keep all your installed applications updated
- CCleaner also helps to keep drivers updated

Is Your Stack Personal or Business?



Personal

Price-sensitive

Few decision makers

- Compatibility with social circles
 Customer and supply chain
- Soft and changing needs
- Ease of use

Business

- Likely a group decision
- ROI matters
- Align with business goals
- Governance

What Needs To Consider?



Personal

- Personal Finance
- Communications
- Only you, or more
- Just "want it"
- Fun
- Security

Business

- Accounting
- Communications
- Team, suppliers, customers
- Business need
- Practical
- Security

Home Network Security Is A Must



Function	Unifi	Bitdefender	SonicWALL	Firewalla		
	Provider Compatibility list (or from your ISP) - remember changing this					
Router	may mess up your TV					
Firewall	<u>Ubiquiti Unifi Dream</u> <u>Machine Pro</u>	Bitdefender BOX 2	SonicWall TZ270W	Firewalla Gold		
Switch	Ubiquiti Networks Unifi Switch		HP ProCurve 24 Port PoE Managed Switch			
Wireless Access Point	<u>Ubiquiti Networks</u> <u>U7 PRO</u>	Google Nest		TP-Link Deco M9 Plus Mesh Wi-Fi System		
Anti-virus	Sophos Home	Webroot	<u>Vipre</u>	<u>Bitdefender</u>		

Strategies To Determine Best Stack



- 1. Define Business Objectives and Requirements
- 2. Consider the Product's Future Growth
- 3. Analyze the Skills and Expertise of Your Team
- 4. Assess the Technology Ecosystem
- 5. Consider Time to Market

- 6. Evaluate Costs
- 7. Review Security Implications
- 8. Look at Case Studies and Competitors
- 9. Perform a Proof of Concept
- 10. Seek Expert Consultation

For Your Business Stack



- 1. Productivity
- 2. Line of Business (LOB) and operations
- 3. Sales
- 4. Accounting
- 5. HR/payroll
- 6. Meeting spaces/approaches

- 7. Use of artificial intelligence
- 8. Productivity "gadgets"
- 9. Separation or allowance of personal stack
- 10.Training
- 11.Security
- 12.Hosting/SaaS/MSP/IT

Cloud Considerations



- Single cloud vs. multiple cloud options
- Cost of leaving the cloud a hot topic recently with the data transfer needs

- Benefits and drawbacks of migrating to cloud-based services
 - Assessing an organization's readiness for cloud adoption
 - Evaluating cloud service providers and their offerings

Other Considerations



- Hardware options Windows vs. Apple vs. Chrome
- Long term technology planning and creating a technology roadmap

- Strategies for Eliminating Technology Redundancies
 - Methods for identifying overlapping features and functionalities across different tools
 - Techniques for consolidating similar tools into a single solution
 - Best practices for retiring or phasing out redundant technologies

Has Our Work Culture Changed?



Individual View

- People want to avoid commute times
- Work/life balance may not improve, but it is under greater control with more remote work
- Some attributes like attention to detail, finishing a job, and concerns about meeting a deadline are changing, too

Company View

- Since there wasn't much choice, the COVID-19 pandemic accelerated remote work, proving remote work is possible to upper managers and business owners
- More willing to outsource
- Remote tools improved rapidly

Or Perhaps It Is The Technology



Convenience

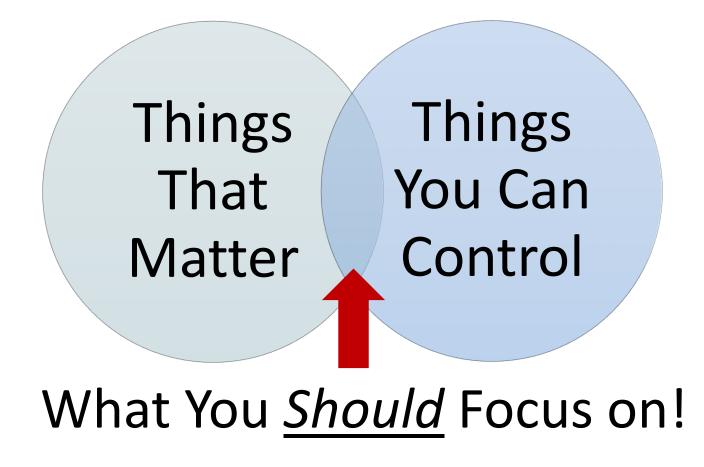
- Internet access has become more ubiquitous and faster
- Reliability is improving
- Speed is improving
- Mobile functionality is better
- Centralized Administration

Tools

- Collaborative suites like Microsoft 365, Google Workspace, and Zoho One have become more powerful AND browser enabled
- Apps have become silos of information, and digital plumbing tools are connecting many of these effectively

Focus Delivers Productivity







ESTIMATING YOUR TECH STACK COST



What Goes Into The TCO Calculation



- Initial purchase price of technology or subscription
- Implementation, installation, configuration costs
- Annual update, support, and maintenance cost, if any
- Cost of workarounds and manual efforts when technology platform does not provide necessary functionality
- See the TCO calculator at https://k2e.fyi/softwaretco

OR Use A Platform To Do The Audit



- Privacy.com (Virtual Card for SaaS payment restrictions)
- Josys
- Productiv
- <u>StackShine</u> (now owned by FinQuery(formerly LeaseQuery))
- Spendflo
- Substly (SMB)
- Zylo

Most of these products claim to provide greater return on your SaaS subscription audit than you pay the company for access to their platform



DESKTOP PRODUCTIVITY TOOLS

Desktop Productivity Tools



- Desktop productivity tools are those applications that are common to most end users, including
 - Spreadsheets
 - Word processors
 - Presentation tools
 - Email apps
- Microsoft 365 dominates this space, but you do have other options, both Cloud-complimented and locally-installed

What Is Microsoft 365?



Microsoft 365 is a collection of Microsoft products and services available to individuals and businesses. Some of the components of Microsoft 365 are cloud-based, and some are traditional desktop solutions. Microsoft 365 subscribers can choose from à la carte options and bundled packages to create a solution tailored to their specific needs. Additionally, subscription-based pricing helps Microsoft 365 users manage cash flow without requiring any significant up-front investments in software licenses

What Is Microsoft 365?



- Microsoft 365 is a collection of products and services that combines familiar desktop apps such as Excel, Word, and PowerPoint with Cloud-based services such as SharePoint Online, Teams, OneDrive, and numerous ancillary services
- Microsoft 365 subscriptions are available for individuals, businesses of all sizes, governmental, educational, and not-for-profits
- Generally, subscribers can license an entire suite of apps and services, or they can choose to license individual components on an a la carte basis, providing for tremendous flexibility

Microsoft 365 And Your Tech Stack



- Where does Microsoft 365 fit into your tech stack, if at all?
- Almost all information workers require at least some of the functionality offered in various 365 subscriptions
- Because you can mix-and-match 365 subscriptions underneath your 365 "umbrella," you can ensure each team member has access to the tools they need, without overpaying

Microsoft 365 adds Windows Enterprise, core security, identity and access management, information protection, cyberthreat protection, and device & application management to Office 365

An Example: Office 365 E3



- Microsoft 365 Apps for Enterprise (Access, Excel, Word, PowerPoint, OneNote, Outlook)
- Exchange Online, Teams,
 SharePoint Online, Yammer
- Power Apps, Power Automate, Power Virtual Agents, Forms, Planner, To Do

- Device and App Management
- Identity and Access
 Management
- Threat Protection
- Information Protection
- Advanced Compliance
- Cost is \$23 per user, per month

A Potential 365 Licensing Issue



- Be careful when licensing Microsoft 365
 - The "Home" versions of the platform are not licensed for business use
 - Thus, if you use a Home version for business use, you are potentially in violation of the license agreement

Subscription vs. Perpetual Licenses



- The most visible difference between the two options **but not necessarily the most important -** is how you pay for the license
 - A one-time payment for "forever" use, compared to
 - Monthly payments that establish your term of usage
- A less-noted but perhaps more important difference for many
 - is the addition of features, functions, and utility that software publishers add to the subscription models
 - Generally, the new utility provided to subscription users is not available right away in perpetual licensing models
- So, what's the potential impact on team member productivity?

Microsoft 365...You Have Choices!



- Both Google Workspace and Zoho One are very good and viable options to Microsoft 365
- These platforms provide Cloud-based spreadsheets, word processing, presentation, and email management tools, like their competitors in Microsoft Office
- Additionally, you can access Cloud storage options, communication platforms, and a strong suite of line-ofbusiness apps and services

What Are These Tools?



- These services provide a set of Cloud-based business productivity and communication apps
- They provided in a Software-as-a-Service (SaaS) environment where the provider is responsible for all technical operations
- Unlike the other two, Office 365 is provided as both a Cloud-based and desktop-based productivity suite
- They include traditional office tools such word processing, spreadsheet and presentation
- They include hosted communication services such as email, instant messaging, shared calendars, and storage
- They are all high configurable and scalable. They can grow with your business from start up to Fortune 500











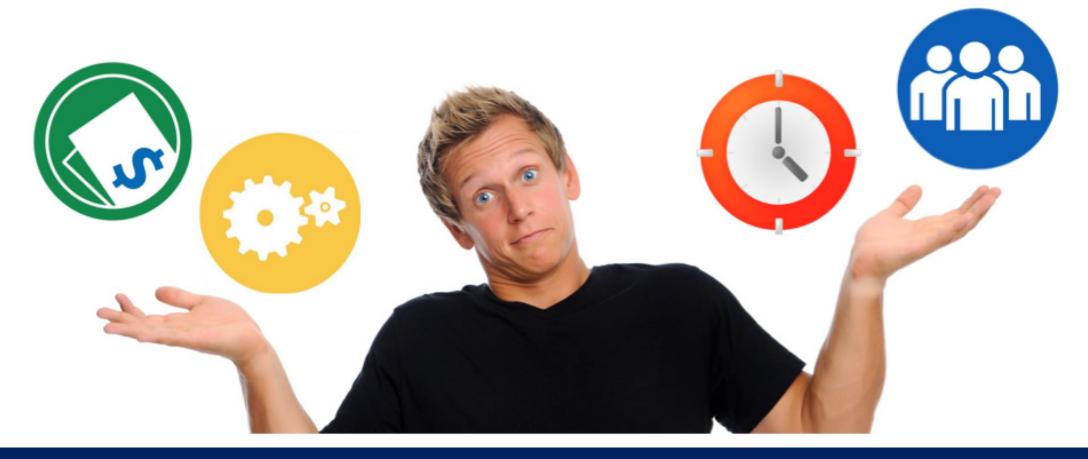


Google vs. Office 365 vs. Zoho

	Google Workspace	Office 365	Zoho
Entry Price	\$5 per user per month or \$50 per year (plus tax)	\$6 per user per month with a full-year commitment	\$3 per user per month
Storage Options	30 GB per user, or unlimited for premium accounts	1TB per user, regardless of plan	10GB per user
Plan Choices	Two options; \$5 or \$10 per user per month	Seven options ranging from \$6 per user per month to \$38 per user per month	Many options ranging from \$3 per user per month to \$90 per user per month
Featured Apps	Gmail, Hangouts, Drive, and Docs	Word, Excel, Outlook, PowerPoint	CRM, Documents, Reports, Customer Support
Commitments	Flexible month-to-month or annual commitment	All plans require an annual commitment	Flexible month-to-month or annual commitment
Integrations	Just about everything	Pretty good	Pretty good
Ease of Use	Very easy	Pretty good	Good

Which One Is Right For You?











Google Workspace Plans



Business Starter

\$6 usp / user / month

Get started

- Custom and secure business email
- 100 participant video meetings
- 30 GB cloud storage per user
- Security and management controls
- Standard Support

Business Standard

\$12 USD

/ user / month

Get started

- Custom and secure business email
- 150 participant video meetings + recording
- ✓ 2 TB cloud storage per user
- Security and management controls
- Standard Support (paid upgrade to Enhanced Support)

Business Plus

\$18 usp

/ user / month

Get started

- Custom and secure business email + eDiscovery, retention
- 250 participant video meetings + recording, attendance tracking
- ✓ 5 TB cloud storage per user
- Enhanced security and management controls, including
 Vault and advanced endpoint management
- Standard Support (paid upgrade to Enhanced Support)

Google Workspace











Google Workspace



Business Starter

- \$6/month
- Email
- 100 participant video meetings
- 30GB storage

Business Standard

- \$12/month
- Fmail
- 150 participant video meetings + recordings
- 2TB storage

Business Plus

- \$18/month
- 500 participant video meetings + recordings and tracking
- 5 TB storage
- Enhanced security

Enterprise

- Custom pricing
- 1,000 participant Advanced video meetings
- Unlimited storage
- Advanced security





























Spotlight On Google Workspace



Everything you need to get anything done.

- Fantastic tools for communication, storage, desktop productivity, administration, and collaboration
- Does not include any financial tools, but there are many integrations to other products and services
- Great migration and support tools to get you going and keep you going. Natively built for the Cloud and mobile devices
- Perfect option for all business sizes, but particularly good for small businesses that don't want the headache of configuration or the need for additional enterprise applications (e.g., CRM, ERP, etc.)
- From \$6/user/month \$18/user/month. The only major difference between plans is the amount of storage. The functionality and apps are the same
- Learn more at https://workspace.google.com/



Gmail

Business email for your domain

- Unified Inbox. All emails, voicemails, faxes, and notifications are delivered to a single location
- Anytime. Anywhere. Location, computer, and service provider independent. The same excellent service on all your devices
- Secure. Constantly backed up, completely secure, available all the time, and managed on your behalf by a managed service provider
- Superior Spam Protection. Gmail is the best at blocking spam, solicitations, and unwanted messages
- The best search in the business. Quickly find any message in your mailbox using Google's famous search capabilities
- Zero Ads and targeted advertising. Unlike the free Gmail service,
 your email is private and will not be used for advertising purposes
- Learn more at https://workspace.google.com/products/gmail/



Gmail

It's bigger than you think!

- Gmail remains the most popular email platform with over 1.8 billion users worldwide. There are about 4.03 billion email users in total worldwide
- As of May 2021, Gmail owns 18% of the email service market share worldwide, 53% in the USA
- Google Workspace has over 2.6 billion monthly active users
- 61% of 18-29-year-olds use Gmail
- An average Gmail account is worth around \$3,588.85
- 306.4 billion emails sent and received daily in 2020
- Read more at https://bit.ly/3aRk6Lb



Calendar

Your schedule. Everywhere.

- Different ways to view your calendar. Quickly switch between month, week, and day view
- Events from Gmail. Flight, hotel, concert, restaurant reservations, and more are added to your calendar automatically
- To-dos. Use Reminders to create and view to-dos alongside your events
- Goals. Add personal goals—like "run three times a week"—and Calendar will schedule time for them automatically
- Quick event creation. Smart suggestions for event titles, places, and people save you time when creating events
- All your calendars in one place. Google Calendar works with all calendars on your phone, including Exchange and iCloud
- Learn more about Google Calendar at https://workspace.google.com/products/calendar/

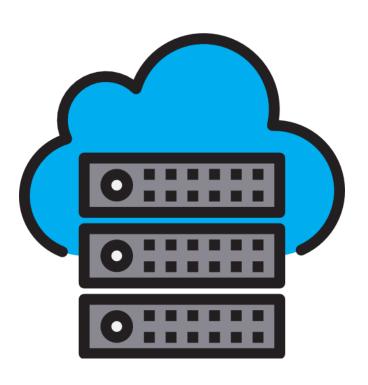


Drive



Securely store files and share with your team

- Store, sync, and share files with ease. Safely store all of your company's data in one place. Access it easily from desktop and mobile devices and control how teams share files
- Safe. Drive has the tools to keep your company data safe and secure. With a central admin panel, Data Loss Prevention (DLP), and Vault for Drive, managing users, and file sharing is easy while meeting your organization's data compliance needs
- Get as much storage as you'll need. Workplace business plan offers unlimited storage
- Built for teams. With Team Drives, you can rest easy knowing that all your team's work is stored in safe, easy-to-manage shared spaces
- Integrations. Not only can you open 40+ different file types with Drive, but you can also work on Word files straight from Drive
- Learn more about Drive at https://workspace.google.com/products/drive/



Docs



Collaborate real-time with your colleagues

- Google Docs brings your documents to life with clever editing and styling tools to help you quickly format text and paragraphs.
 Choose from hundreds of fonts, and add links, images, and drawings
- Get to your documents anywhere, anytime. Access, create and edit your documents wherever you go — from your phone, tablet, or computer — even when there's no connection
- Natively integrates with Word, Excel, and PowerPoint. You can continue to use the applications you love, but with the power of Google
- Do more together. With Google Docs, everyone can work together on the same document simultaneously
- Create meaningful, impactful, and powerful documents with your entire team. https://workspace.google.com/products/docs/



Sheets

Simple browser-based spreadsheets

- Google Sheets is a browser-based spreadsheet application
- It is not intended to replace Microsoft Excel, but it is still pretty powerful and easy to use. It is an excellent option for small non-complex spreadsheets or spreadsheets which will require collaboration with other people
- Google Sheets makes your data pop with colorful charts and graphs.
 Built-in formulas, pivot tables, and conditional formatting options save time and simplify everyday spreadsheet tasks. All for free
- Get to your spreadsheets anywhere, anytime. Access, create and edit your spreadsheets wherever you go — from your phone, tablet, or computer — even when there's no connection
- You can import your existing Excel documents and convert them to Google Sheets. You can also easily export your Google Sheet back to Excel. It would help if you never worried about file formats again
- Up to 50 people can simultaneously edit a spreadsheet!



Slides

Tell impactful stories, with Google Slides

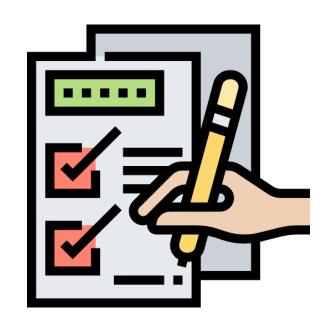
- Create, present, and collaborate on online presentations in real-time and from any device
- Make beautiful presentations together. Stay in sync in your slides with effortless sharing and real-time editing. Use comments and assign action items to build your ideas together
- Present slideshows with confidence. With an easy-touse presenter view, speaker notes, and live captions, Slides make presenting your ideas a breeze. You can even contribute to Google Meet video calls directly from Slides
- Learn more at https://www.google.com/slides/about/



Forms

Collect information with Forms

- Get answers fast. Plan your next camping trip, manage event registrations, whip up a quick poll, collect email addresses for a newsletter, create a pop quiz, etc.
- Survey with style. Use your photo or logo, and Forms will pick just the right colors to complete your unique form or choose from a set of curated themes to set the tone
- Create or respond on the go. Forms are responsive, so it's easy (and beautiful) to make, edit, and respond to conditions on screens big and small
- Organized & analyzed. Responses to your surveys are neatly and automatically collected in Forms, with real-time response info and charts. Or take your data further by viewing it all in Sheets
- Get started at https://workspace.google.com/products/forms/



Meet



Secure video meetings for teams and businesses

- Meet takes the headaches out of joining a video call at work. Just set up a meeting and share a link. No worrying about whether teammates, clients, or customers have the right accounts or plugins
- With a fast, lightweight interface and smart participant management, multi-person video calls are a breeze
- Join meetings directly from a <u>Calendar</u> event, an email invite, or directly from Gmail. All of the event details are right there when you need them, whether you're joining from a computer, phone, or <u>conference room</u>
- Easily view all your scheduled meetings for the day and join the meeting with just a tap, directly from the Gmail mobile app or the dedicated Meet app.
- Meetings organized by Google Workspace users also create a <u>dialin phone number</u> for each meeting, so every guest has a great experience even on the go without Wi-Fi or data

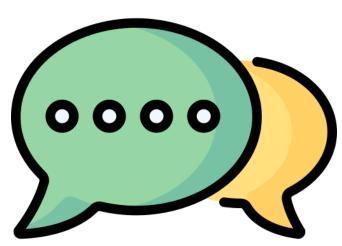


Chat



Simplify 1:1 and group messaging

- From direct messages to group conversations, Google Chat helps teams and businesses collaborate fluidly and efficiently from anywhere
- Securely connect with anyone you work with, and take group work to the next level with shared chat, files, and tasks
- Use Chat as a standalone app or right in Gmail. Seamlessly integrated tools help you keep track of all your work communications and choose the right channel for every conversation
- Easily create dedicated virtual rooms to keep projects organized and on track
- Learn more at https://workspace.google.com/products/chat/



Currents

Engage employees. Have meaningful discussions

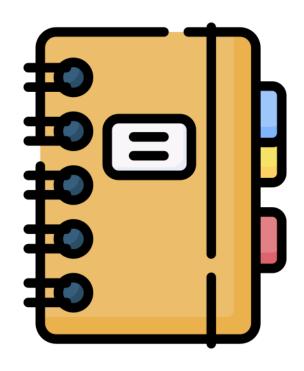
- Previously known as Google+ for G Suite
- Communicate your ideas and get instant feedback.
 Share ideas with employees and gather input through meaningful, focused discussions on topics that matter to your organization
- Work more efficiently with personalized content. Find previously siloed content and resources that are relevant to your work with customized help from Currents
- Great way to build engagement with your team wherever they happen to be in the world
- Learn more at https://workspace.google.com/products/currents/



Keep

Notes and lists right inside Google

- Capture, edit, share, and collaborate on your notes on any device, anywhere
- Add notes, lists, photos, and audio to Keep
- Organize your notes with labels and colors
- Set and forget. Get reminded about a note at the right time or place
- Record a voice memo and have it automatically transcribed
- Grab the text from an image to help you quickly find that note again through search
- Learn more at https://workspace.google.com/products/keep/



Other Fantastic Workspace Tools



It just keeps getting better!

- Cloud Search. Search insight your company
- Endpoint. Manage employee devices.
- Work Insights. Learn work patterns
- App Scripts. Low-code automation
- Sites. Simple website builder
- Just scratching the surface of Google's business tools. They have products for virtually all business needs



Google Voice

The best way to mange your phone

- Unified Voice Platform. All voice and text messages are delivered to a single location
- You can provide people with a single number that can simultaneously notify multiple phones. The call is instantly routed to that location wherever you pick up the phone
- Set up calling rules to route numbers based on caller id or times/date
- Central inbox for voicemail and text messages
- Free tool for individual accounts and a \$10-30/user/month add-on for Google Workspace accounts
- Learn how Google Voice will make your phone 1000% better
- Learn more at https://cloud.google.com/voice





Vault



Archiving and eDiscovery for email, files, and chats

- Protect business data with email archiving & legal holds. Safely set retention policies on supported content for an entire domain or specific organizational units with date ranges and query terms. Vault enables you to track and keep logged data for legal audits
- Audit reports to keep track of activity. Track user activity within Vault. Full audit trails let you see searches, content views, exports, etc.
- Learn more at https://workspace.google.com/products/vault/





Admin Tool



Easily manage your google workspace deployment

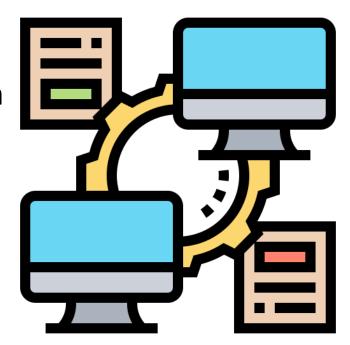
- Security and control. Centralized administration makes setup and management fast and easy. Add and remove users, set up groups, and add security options like 2-step verification and SSO
- Manage all users, applications, and integrations. You can easily add or change anything about Workspace for your organization
- Mobile device management. Distribute apps to employees and keep data secure on employees' iOS and Android devices
- Archiving and compliance. Manage, retain, search and export your organization's email and on-the-record chats
- Easily add users, manage devices and configure security and settings, so your data stays safe
- Learn more at https://workspace.google.com/products/admin/



Migrating To Google Apps

Easily bring your teams to Google Workspace

- Start a free trial. No commitment and no credit card are required to get started with Google Workspace
- Set up your apps. Choose which apps to get started with
- Train your team. Google has excellent resources to help train and teach your team how to their services. You can train your team before they must use the services
- Transition your team. When you're ready, you can easily switch your team over. Google provides several migration tools to bring your historical email, calendars, and contacts to their service
- Workspace has a migration tool to automatically and selectively move email, contacts, and contacts from Outlook to Workspace



Zoho





Zoho One



- Zoho One takes a more holistic view of the tech stack an organization might need
- It includes services like those offered by Google Workspace and Microsoft 365, but adds many additional apps, including apps for accounting, CRM, inventory, human resources, marketing emails, password management, and others
- Further, there is tremendous integration between these apps and services, facilitating productivity and efficiency in businesses of all sizes
- Pricing for Zoho One is \$37 per user, per month

Spotlight On Zoho



Everything you need to manage all day-to-day activities





Learn more about the awesome Zoho tools https://www.zoho.com/

- ✓ A robust set of tools to manage everything from communication to sales to customer service to financial accounting
 - ✓ All the services your business needs, under one roof
- ✓ They have over 60 tools to help organizations better communicate, sell more, help customers better and simplify business processes
- ✓ Zoho is sold as a bundled solution or on an app-by-app basis
- ✓ Their tools are all Cloud-based and platform independent so you can work anywhere and on any device of your choosing
- ✓ Great option for small organizations as the first ten accounts are free

Zoho Apps

There are apps to run every aspect of your business



Human Resources

Recruit





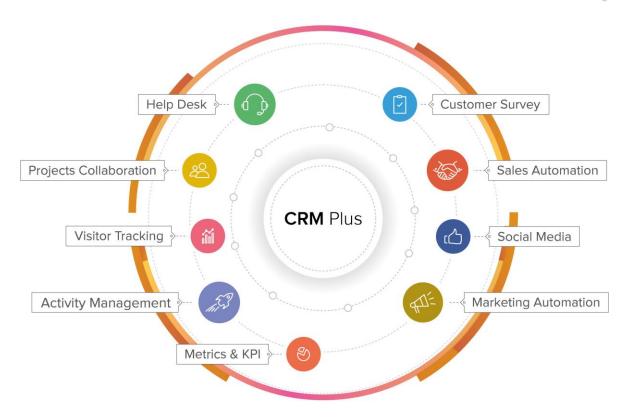


- ✓ Sales and marketing
- ✓ Email and collaboration
- Business process
- ✓ Finance and accounting
- ✓ IT & help desk
- ✓ Human resources

Zoho CRM Plus



Customer-centricity in one package



The only end-to-end Customer Engagement Suite https://www.zoho.com/crm

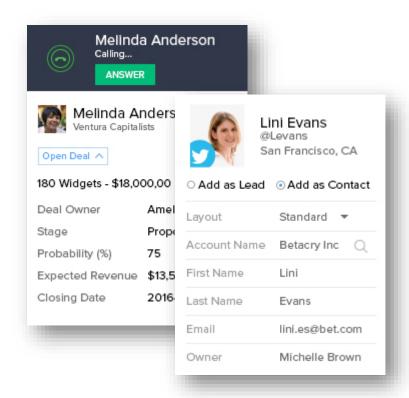
\$57 per user per month. Includes:

- ✓ CRM
- ✓ Social
- ✓ SalesIQ
- ✓ Motivator
- ✓ Desk
- ✓ Campaigns
- ✓ Reports
- ✓ Projects
- ✓ Survey

Zoho CRM



Get ready to sell Smarter, Better, Faster



CRM software that lets you close more deals in less time https://www.zoho.com/crm

- ✓ **Multiple channels, one conversation.** Meet your customers, no matter the medium
 - ✓ Connect via phone, live chat, email, social media, and in person
- ✓ **Shift your team into high gear.** Use analytics and reports for detailed metrics about your team's performance and your customers' life cycle
- Break sales records without breaking a sweat. A good sales process leads to great sales
 - ✓ Generate more sales with sales process automation, workflows, and advanced reporting
- ✓ Enterprise ready and ready to go. Zoho CRM is secure, scalable, and packed with advanced features to keep your business growing

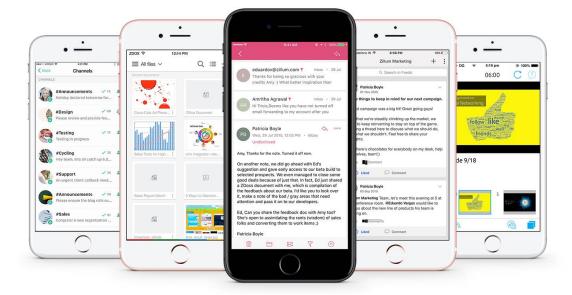
Zoho Workplace



All the essential tools for work in one integrated suite

From \$1 to \$6 per user per month. Includes:

- Mail
- Chat
- Connect
- Docs
- Writer
- Sheet
- Show
- Sites
- Showtime



Empower your users to be at their productive best with an integrated suite of apps for your Workplace https://www.zoho.com/workplace

Create



Collaborate



Communicate





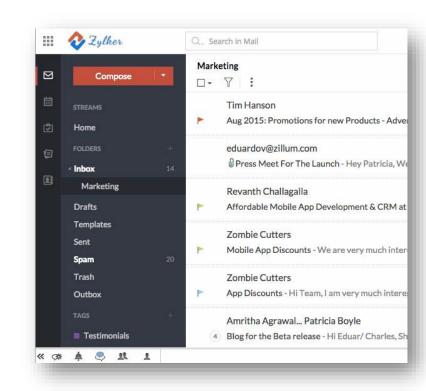


Zoho Mail



Take control of your mailbox

- ✓ The Best of Both Worlds. Experience a clean, fast Webmail with features matching or superior to those found in desktop email clients
 - ✓ Take control of your Inbox, and free yourself from software upgrades
- ✓ No Ads, Privacy Guaranteed. They never display ads, even in our free plans, and your email exchanges are never scanned for keywords
- ✓ Email plus Online Office. The Zoho Mail suite includes Zoho Docs.
 - ✓ Your team can create, edit and collaborate on text, presentation and spreadsheet documents using the most sophisticated online editors
- ✓ Smooth setup and management

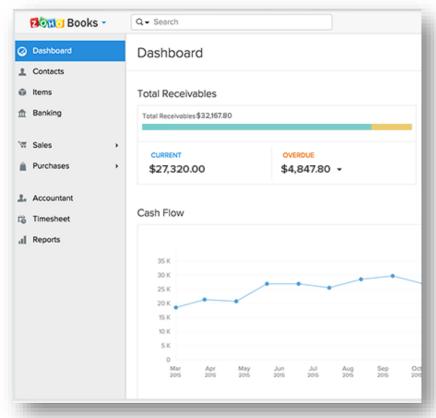


Email Designed with Business Users in Mind https://www.zoho.com/mail

Zoho Books



Accounting software for growing businesses



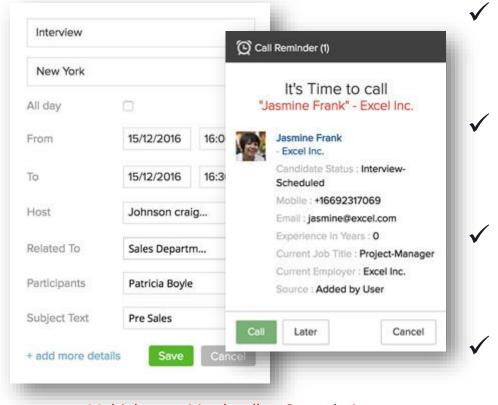
Easy-to-use cloud accounting software for businesses https://www.zoho.com/us/books

- ✓ Get paid faster. Send professional invoices to clients and start accepting online payments
- ✓ Track expenses better. Know the ins and outs of your expenses and save money in the future
- ✓ Automated banking. Connect Zoho Books to your bank account and get a real-time update on your cash flow
- ✓ Collaborate using Client Portal. Share recent transactions, expedite estimate approvals, accept bulk payments and capture customer feedback with the portal
- ✓ Powerful reporting. Stay on top of your finances with powerful accounting reports like P&L, Balance Sheet, and Cash Flow Statement
- ✓ Track inventory in real-time. Enable inventory tracking and manage goods as they come in and go out

Zoho Recruit



Applicant tracking system for ambitious recruiters



Multiple recruiting hurdles. One solution https://www.zoho.com/recruit

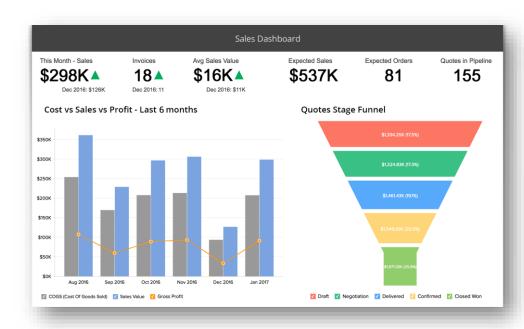
- Let talent find you. Get the word out about your jobs by posting them to job boards, social media or creating your own careers page
- **Track and beyond.** Juggle your daily tasks, from parsing resumes from your Inbox, tracking applications, updating your spreadsheets
- **Keep candidates in the know.** Calls, emails and text messages help track every aspect of your team's communication right from Recruit's database
- Automate your recruitment. Customize every aspect of your workday and automate tasks like sending emails, updating interview status, and more

Zoho Analytics



Transform raw data into valuable insights

- ✓ **Connect to any data source.** Connect to your data in the Cloud or in-house
 - ✓ Analyze data from files, feeds, databases, Cloud drives, popular business applications and in-house apps
- ✓ Visual analysis. Visually analyze your data and create beautiful reports and dashboards, with an easy drag-and-drop interface
 - ✓ Wide range of reporting components to choose from
- ✓ **Collaborate online, securely.** Develop & analyze reports together with your colleagues.
 - ✓ Share with each other privately. Embed reports anywhere or email them periodically
- ✓ **Data blending.** Combine data from different sources easily to create cross functional reports
 - For example, combine your marketing spend data in Excel files and sales data in CRM to create a spend vs sales report



Analyze and track key business metrics. Be empowered.

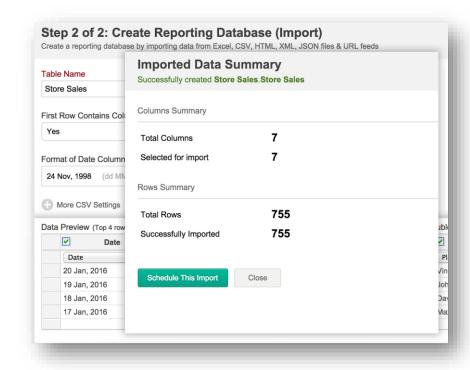
https://www.zoho.com/analytics/

Integrating And Migrating To Zoho



Easily bring your data, email and more to Zoho

- ✓ Zoho can integrate with hundreds of different services including Salesforce, Google and more
- ✓ Zoho allows you to easily import your records or existing email to their services
- ✓ Each tool has their own import process, but they have great tools and documentation to help you along the way
- ✓ You can engage with Zoho to do the migration process for you



Easily import your existing records and emails right into Zoho https://goo.gl/5gA59B







Spotlight On Office 365



Office when and where you need it

- ✓ The largest, most powerful, and most configurable selection of tools and services
- Contains the same great applications (e.g. Word, Excel, Exchange, etc.) that your organization has been using for years
 - ✓ No need to learn something new
 - Mixture of both Cloud-based, desktop applications and mobile applications
 - ✓ You get the best of all worlds
 - A great option for personal use or any size business, but particularly good for organizations already utilizing other Microsoft products









Learn more about Microsoft's fantastic and useful Office 365 https://www.microsoft.com/enus/microsoft-365/enterprise/office365plans-and-pricing

Office 365 Home & Personal **Plans**

Compare Office 365 home and personal plans https://goo.gl/fA5ivK

\$99.99 per year

(annual commitment)

Office 365 Home

Or buy for \$9.99 per month (+)

Best for households. Includes Office applications for up to 5 users.

Office applications















OneNote



Excel





Services

OneDrive

OneNote





\$69.99 per year

(annual commitment)

Office 365 Personal

Or buy for \$6.99 per month (+)

Best for individuals. Includes Office applications for 1 user.

Office applications







PowerPoint









Access (PC

Services



OneDrive



Skype



\$149.99

(one-time purchase)

Office Home & Student 2016 for PC

Best for individuals with basic needs. Includes Office applications.

Office applications









Services

(Not included)



Microsoft 365 **Business Plans**

Compare Microsoft 365 business plans https://goo.gl/zqHvh7

Microsoft 365 Business Basic

\$6.00 user/month (Annual subscription-auto renews)

Try free for one month >

See trial terms2

Apps and services to kick-start your business,

- Identity, access, and user management for up to 300 employees
- Custom business email (you@yourbusiness.com)
- Web and mobile versions of Word, Excel. PowerPoint, and Outlook
- Chat, call, and video conference with Microsoft
- 1 TB of cloud storage per employee
- 10+ additional apps for your business needs (Microsoft Bookings, Planner, Forms, and others)
- Automatic spam and malware filtering
- Anytime phone and web support

Secure cloud services:























Microsoft 365 Business

Copilot for Microsoft 365 available as an add-on.

Standard

\$12.50 user/month (Annual subscription-auto renews)

Try free for one month >

See trial terms2

Everything in Business Basic, plus:

- Desktop versions of Word, Excel, PowerPoint,
- Webinars with attendee registration and
- New: Collaborative workspaces to co-create using Microsoft Loop
- New: Video editing and design tools with Microsoft Clipchamp

Copilot for Microsoft 365 available as an add-on.

Desktop, web, and mobile apps and secure cloud























Copilot for Microsoft 365 available as an add-on.*

Microsoft 365 Business Premium

\$22.00 user/month (Annual subscription-auto renews)

Try free for one month >

See trial terms²

Everything in Business Standard, plus

- Advanced identity and access management
- Enhanced cyberthreat protection against viruses and phishing attacks
- Enterprise-grade device and endpoint protection
- Discover, classify, and protect sensitive information

Copilot for Microsoft 365 available as an add-on.

Desktop, web, and mobile apps and secure cloud





















Microsoft 365 Apps for business

\$8.25 user/month (Annual subscription-auto renews)

Buy now

Try free for one month >

See trial terms2

- Desktop versions of Word, Excel, PowerPoint, and Outlook
- 1 TB of cloud storage per user
- Anytime phone and web support

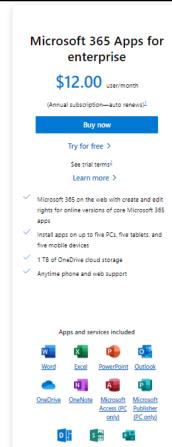
Desktop, web, and mobile apps and secure cloud



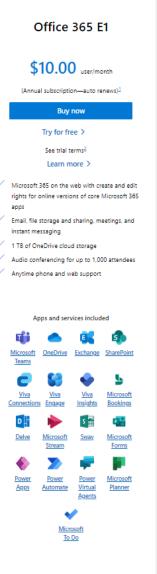


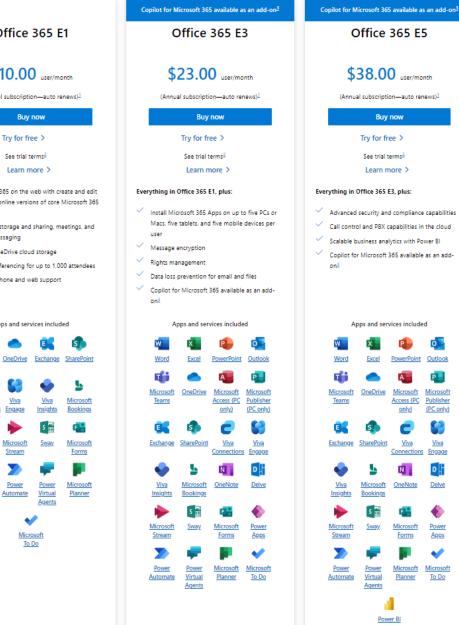


Compare Office 365 enterprise plans https://www.microsoft. com/en-us/microsoft-365/enterprise/office36 5-plans-and-pricing



Office 365 E1 \$10.00 user/month (Annual subscription—auto renews) **Buy now** Try for free > See trial terms² Learn more > Microsoft 365 on the web with create and edit rights for online versions of core Microsoft 365 Email, file storage and sharing, meetings, and instant messaging 1 TB of OneDrive cloud storage Audio conferencing for up to 1,000 attendees Anytime phone and web support Apps and services included Viva Microsoft

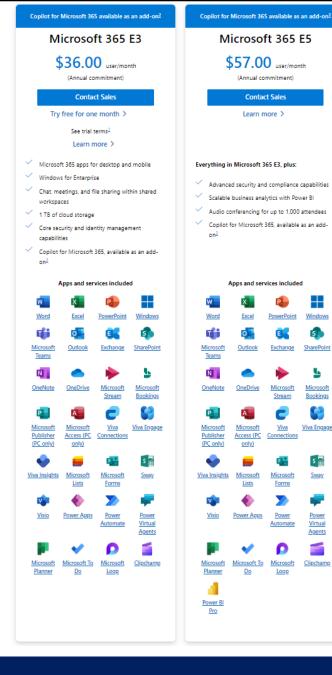


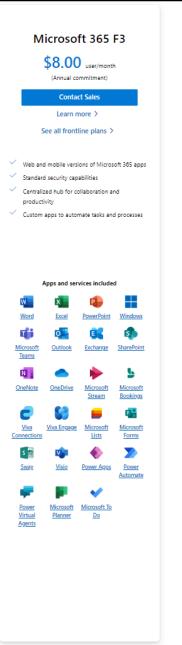




Compare Microsoft 365 enterprise plans

https://www.microsoft. com/en-us/microsoft-365/enterprise/microso ft365-plans-and-pricing







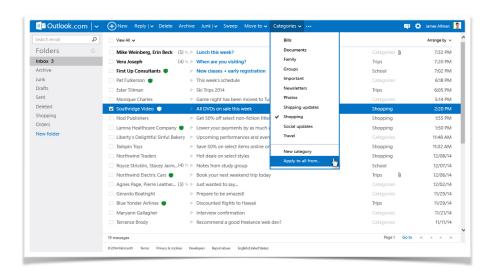
Outlook



Work smarter, anywhere, with hosted email for business

- Utilizes a Microsoft hosted version of Exchange server
- Corporate email services can be hosted with Office 365
 - Users get all the benefits of being Cloud hosted without having to give up their favorite email client
- Easily integrates into existing Microsoft applications. You can concurrently use Outlook.com and its desktop counterpart
- Fantastic tools and features including mail filtration, search, and message organization





Love Outlook, but want something web based? Consider Outlook.com

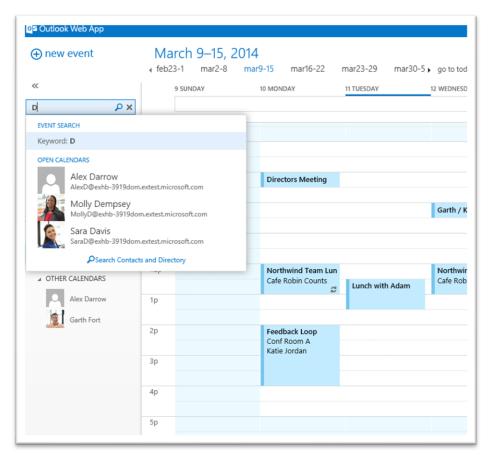
http://www.outlook.com

Outlook Web App



Contacts, calendar, tasks and more

- Contact functionality to manage all your personal, department and company contacts in one central place
- Calendar functionality to keep track of all your appointments and functionality
 - Easily create meetings and share details with your colleagues
 - ✓ You can even share a calendar with a colleague so they can follow your schedule
- Create list of tasks and manage your productivity



OneNote



The digital note-taking app for all your devices

- ✓ Create your way. Type, write or draw with the free form feel of pen to paper
 - ✓ Search and clip from the web to picture ideas
- ✓ **Collaborate with anyone.** Your team is conquering the idea of the century
 - ✓ Your family is planning the menu for a big reunion
 - ✓ Stay on the same page and in sync wherever you are
- ✓ Access from anywhere. It's easy to pull up your content from anywhere, even if you're offline
 - ✓ Start on your laptop then update notes on your phone
 - ✓ OneNote works on any device or platform
- ★ Think with ink. Ready. Set. Draw. A stylus or fingertip is the only tool you need
 - ✓ Take handwritten notes and convert them to typed text later



Ideas take shape in OneNote.

Download today and start organizing your ideas and projects

http://onenote.com

OneDrive



Get to your files and photos from anywhere, on any device











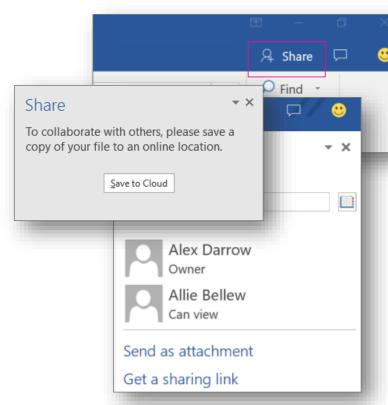
- ✓ Any device, anytime. OneDrive is pre-installed on Windows 10 and Windows 11. It works great on all your devices
 - Access and share files and photos on PC, Mac, Android, and iOS
- ✓ Work together and share files and photos. Collaborate with Word, Excel, PowerPoint, and OneNote from your desktop, mobile device, and the web
- ✓ OneDrive for Business. Give your employees all the benefits of OneDrive for their work files backed by tools to allow IT to protect important company data
- ✓ **Security.** OneDrive always encrypts user data while in transit, but OneDrive for Business also encrypts user data at rest in their infrastructure for added protection

Document Sharing



Share your document via OneDrive or SharePoint

- ✓ Open your Word document, and choose the Share tab on the right side of the menu bar
- ✓ If you haven't saved your document to OneDrive or SharePoint Online for Office 365, you'll be prompted to do so now
- ✓ Once your document is saved to a shared location, you can invite others to work on it
 - ✓ In the Invite people box, enter the email address of the person you'd like to share to
 - ✓ If you already have the person's contact info stored, you can just enter their name
- ✓ Once the document is saved to OneDrive or SharePoint the document can be collaborated in real-time



Learn how to collaborate on an Office document in real-time

https://goo.gl/Y35Vvt.

Teams Houses Your Apps

Teams becomes a doorway to where you want to go and who you want to visit





Every Team Has Channels









ADD UP TO 200 CHANNELS



EVERY **MEMBER**BECOMES MEMBER OF
CHANNELS



PRIVATE OR SHARED



TOPIC BASED



Every Channel Has...

Posts area

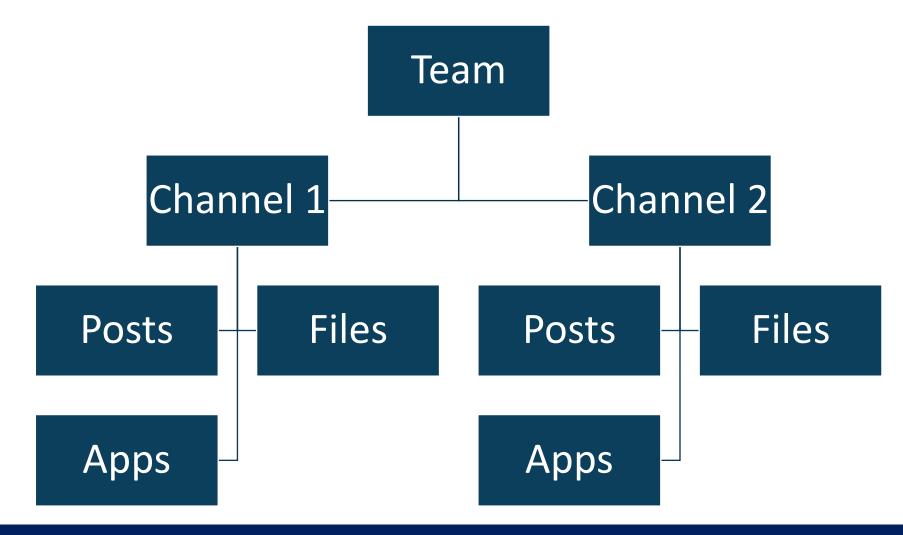
- For conversations
- For meetings

Files area

- Files and folders
- SharePoint site

Layout Of Teams







Get Started Now On Teams...





1

Set up the Teams right

2

Create new filing system

3

Manage Tasks 4

Utilize Lists

5

Automate with flows

6

Utilize Forms

Microsoft 365 Loop

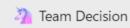
- Loop helps you accomplish projects by helping your team collaborate more effectively in real time in Teams across mobile, web, or PC environments
- Workspaces for projects, customizable pages to support the project, and components like lists, tables, and paragraphs
- There are also polls and other "apps" to help you and your team communicate
- Page templates are available to help you use Loop for effectively
- Only available in a Microsoft 365 subscription
- Learn more at loop.microsoft.com



Template Gallery

All templates (10)

Project Brief













Stand-Up Meeting



🤒 Problem Framing

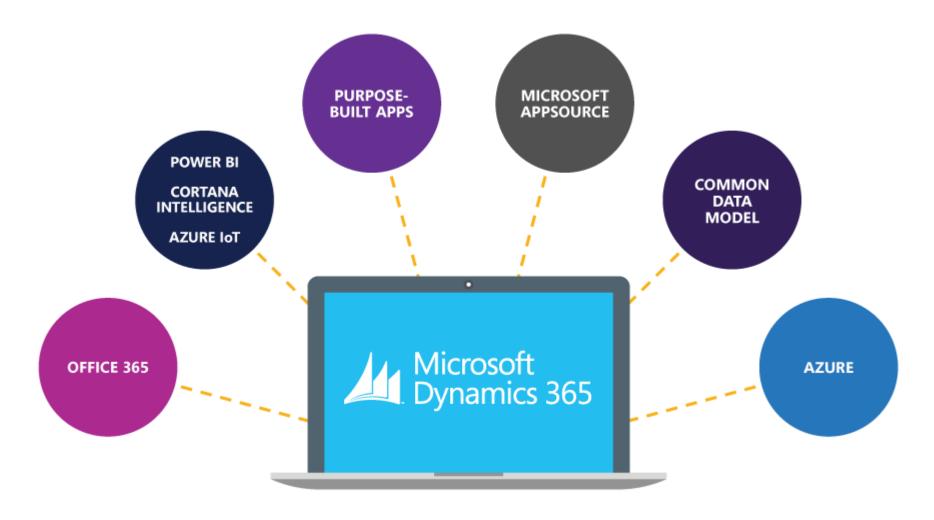
Microsoft 365 Loop





Microsoft Dynamics 365



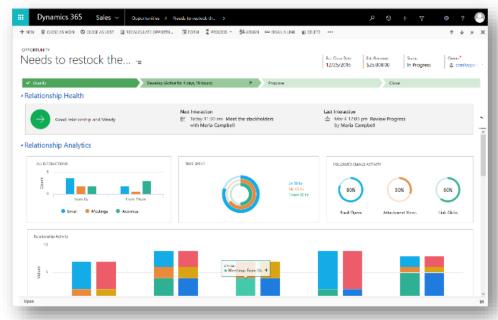


Dynamics 365



Apps that work together seamlessly in the Cloud





Evolve your business on your terms

https://goo.gl/qs0GJ2

Seven integrated enterprise applications built for the Cloud that help you run your business

- ✓ Purpose-built. Get individual apps that work brilliantly on their own or together
- ✓ **Scalable.** You're covered from a few employees to thousands
- ✓ Adaptable. Give your teams easy-to-use applications that provide a single view of your data—and a single platform for business growth
- ✓ Intelligent. helps you and your employees turn big data into actionable plans

Dynamics 365



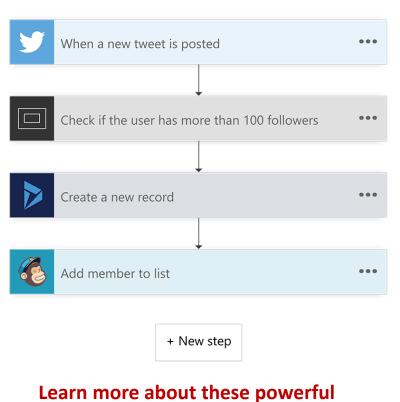
Start with just what you need to run your business. Add apps when you grow.

- ✓ Sales. Turn relationships into revenue with digital intelligence in every deal
- ✓ Customer Service. Earn customers for life with world-class customer service
- ✓ **Operations.** Make data-driven decisions for smarter, more efficient operations
- ✓ Financials. Grow your company with a comprehensive, intelligent app for financials and business management
- ✓ Field Service. Optimize your scheduling and use predictive tools to master the service call
- ✓ Project Service Automation. Create more profitable customer relationships using intelligent tools
- ✓ Marketing. Deliver powerful customer experiences using Adobe Marketing Cloud

PowerApps And Power Automate



Powerful automation between robust business apps



Learn more about these powerfu new tools

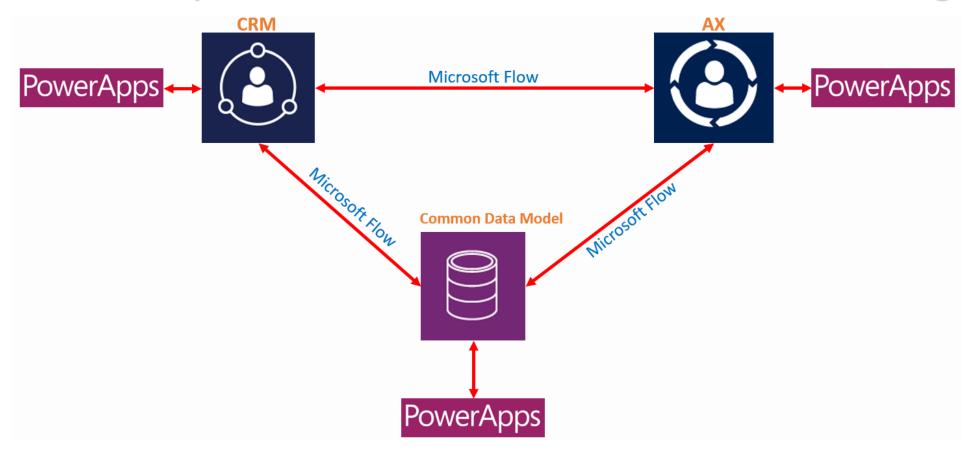
https://goo.gl/PM3qrq

- **PowerApps** connects to Cloud services and data sources you're already using, giving business analysts and specialists the ability to quickly build apps that suit their specific needs—without writing code or struggling with integration issues
- **Power Automate** allows you to create automated workflows between your favorite apps and services to get notifications, synchronize files, collect data and more
 - Business users can connect their accounts, take advantage of pre-built templates, and create their own flows in an easy visual designer that works anywhere on the web

PowerApps And Power Automate Flows



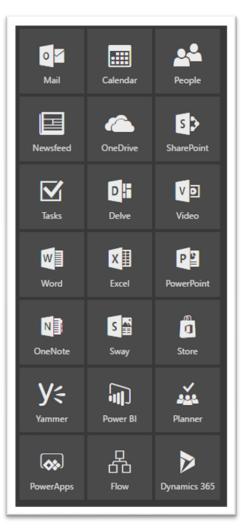
An example Flow between CRM and Accounting



All Under One Roof

Part of the Office 365 Platform

- ✓ SharePoint for an internal company intranet
- ✓ OneDrive for Cloud documents and file storage
- ✓ Web versions of your favorite Office applications
- ✓ **Dynamics 365** for CRM, sales, customer service, financials and more
- ✓ Planner for organizing your team's projects and tasks
- ✓ Loop for enterprise project management
- ✓ Many, many, more!

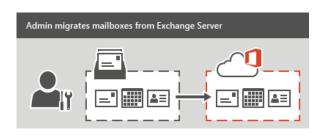


Migrating To Microsoft 365

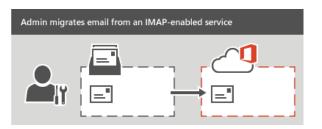


Migration from Exchange server is a snap

- ✓ Migrate all mailboxes at once (cutover migration) or Express migration
- ✓ Migrate mailboxes in batches (staged migration)
- ✓ Migrate using an integrated Exchange Server and Microsoft 365 environment (hybrid)
- ✓ Use Microsoft 365 Import Service to migrate PST-files
- ✓ Migrate email from another IMAP-enabled email system
- ✓ Have users import their own email







PDF Functionality: A Necessity



- Portable Document Format (PDF) functionality is a necessity in today's business environment
- The "gold standard" for PDFs is Adobe Acrobat Pro at \$19.99/mo.; however, many other options are available
- For example, you can create PDFs using Microsoft Word, Excel, and PowerPoint, without reverting to a PDF tool
- Your choice of PDF platform should depend on the features you (and your team) need

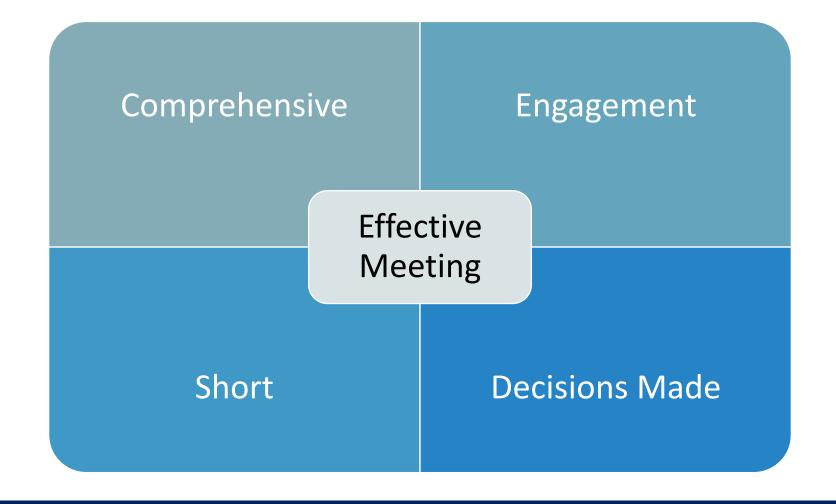
Examples Of Alternative PDF Tools



- **PDF Pro** (\$192 or \$15/mo.)
- Soda PDF Editor Pro (\$7.25/mo.)
- Nitro PDF Pro (\$179.99 or \$14.99/mo.)
- Nuance Power PDF (\$99.99)
- **PDF Pro 10** (\$49.97)

What Makes An Effective Online Meeting?





What Makes Virtual Meetings Effective?



Great

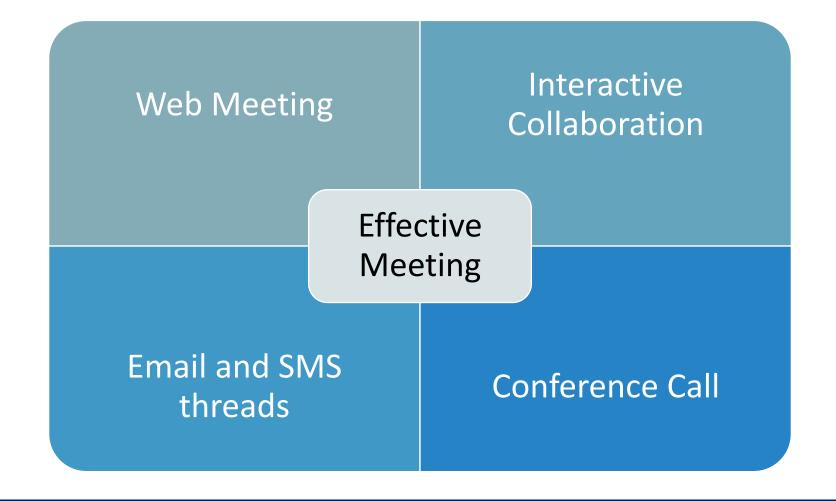
- Items accomplished
- Minimal time wasted
- Relationships improved
- Productive discussion
- Prepared, Organized
- Effective follow-up
- Information available
- Minimum distractions

Awful

- Nothing decided
- Waste of time
- Conflict, interpersonal damage
- Rambling
- Random
- Same as last meeting
- Info wrong or unavailable
- All sorts of issues (tech, noise)

Are You Choosing The Right Approach?





Eight Steps To Conduct An Effective Virtual Meeting



Preparation

- 1. Nail down the details
- 2. Send virtual meeting invitations
- 3. Send virtual meeting reminders
- 4. Conduct pre-meeting checks

The Meeting Itself

- 5. Kick off your virtual meeting in style
- 6. Be the best virtual meeting host ever
- 7. Don't just end your virtual meeting—close it
- 8. Follow up immediately

Costs



Organization

- Service subscriptions
- Hardware infrastructure
- Setup and maintenance
- Security and compliance
- Training

Individual

- Internet service
- Technology setup
- Workspace
- Stipend or self-funded?
- Frustration or expertise

Benefits



Organization

- Recruit from anywhere
- Scalable infrastructure
- Distributed backup
- Performance measurement
- Workflow standardization

Individual

- Work from anywhere
- Ease of connection
- Files needed readily available
- Tools accessible
- Easier to focus on key tasks

Risks



Organization

- Competition from everywhere
 Easier to replace
- IP leaks
- Productivity
- Culture
- Starting new initiatives
- Mobilizing teams

Individual

- Can work on other items
- Impact
- Isolation
- Exhaustion
- Distraction

What It Takes To Meet & Collaborate Online



Software

- Web Meetings
- Productivity
- Collaboration
- Portals?
- Project Management
- LOB/CRM/DMS/Workflow

Hardware

- Connectivity
- Computer/Smartphone/VOIP
- Sound
- Camera
- Lights and background
- Scanner

Web Conferencing And Meetings



- Google Chat
- Google Meet
- GoToMeeting
- Microsoft Teams
- WebEx
- Zoho Meeting
- Zoom











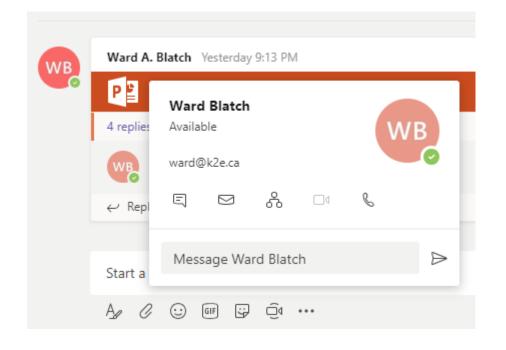


Teams Web Conferencing



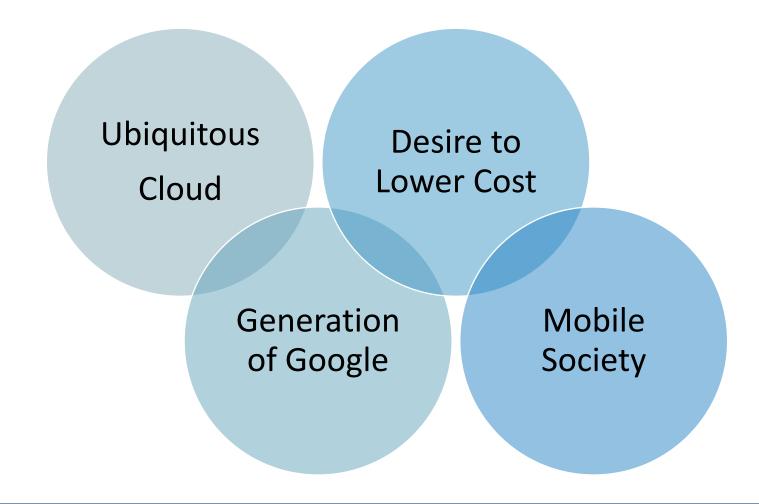
- Audio
- Video
- Whiteboard
- Desktop/App sharing
- Meet with Team or individuals
- Schedule meetings/Calendar
- Chat/Activity





What Is Driving Adoption?





Collaboration Tools



- Chanty
- Flock
- Google Chat
- Microsoft Teams
- Slack
- Zoho Connect
- 25 more alternatives





Project Management



- Asana
- Celoxis
- <u>Liquid Planner</u>
- Microsoft Project
- Monday.com
- Smartsheet
- <u>TeamWork</u>
- Trello
- Wrike
- Zoho Projects
- <u>11 more</u>







teamwork.



Recommendation



- Create a "standard" tech stack for each team member based on their job description
- Ensure the stack provides all needed functionality for the job the team member is engaged to perform
- Question situations where a team member indicates the stack is insufficient, particularly if other team members do not indicate the same
 - Are the other team members engaging in manual, inefficient workarounds due to not having the necessary tools?



Action Plan For Implementation



Questions To Ask Your Team



- ✓ Do we want to do the migration ourselves?
- ✓ Do we have the available resources to do the migration?
- ✓ Do we need to do everything at once or can we make the change overtime?
- ✓ Does our staff have enough technical competency to do the migration well and properly utilize the new platforms?





The Risks Of Going On Alone



A substantial percentage of IT projects fail for one reason or another. Major reasons include:

- ✓ Poor project planning
- ✓ Insufficient communication
- ✓ Ineffective management
- ✓ Failure to align with constituent and stakeholders
- ✓ Lack of soft skills or the ability to adapt
- ✓ Poor or missing methodology and tools



Seven reasons why IT projects fail https://asana.com/resources/why-projects-fail

Consider Hiring A Migration Consultant

- A migration consultant can take a majority of the headache of moving your firm to one of these solutions
- They will ensure that all your data is moved completely and securely
- They will ensure that the new services are properly configured and that your users are trained to use it
- This is a good solution for organizations with limited resources or high compliance requirements
 - This helps you get it done right the first time, ontime and budget







The Steps To Move To The Cloud

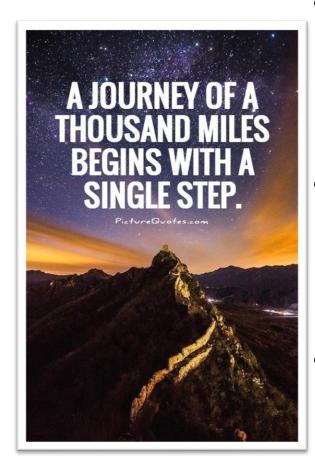




- ✓ Step 1: Assess your goals
- ✓ Step 2: Find your vendors / platforms
- ✓ Step 3: Check office compatibility
- ✓ Step 4: Develop a timeline
- ✓ Step 5: Implement
- ✓ Step 6: Train, train, train!!!
- ✓ Step 7: Migrate
- ✓ Step 8: Security audit
- ✓ Step 9: Deploy to users
- ✓ Step 10: Follow Up and fine tune

Moving Your Firm To The Cloud





- Moving to one of these services isn't an overnight transition and requires diligent planning
 - From inception to execution, plan on anywhere from a week to a year
- Requires owner's/management's full support
 - Typically, employees are resistant to change and sometimes backlash against the changes. Stay the course and reinforce the change.
- Your business practices will have to be updated
 - Just because you have been doing the same thing for 20 years, doesn't mean it is the best way of doing it

Step 1: Assess Your Goals



- ✓ This is the perfect opportunity to change aspects of your firm
 - ✓ Reconsider your personnel, vendors, clients, etc.
 - ✓ Great time to update to today's standards
- ✓ Use metrics to determine your success
 - ✓ Use monetary as well as productivity metrics
- ✓ Talk to the people actually doing the work
- ✓ Consider what processes you want to move to the Cloud
- ✓ Consider why you are making these changes



Step 2: Choose Your Vendor





✓ The vendor will be the actual provider of the service



- ✓ They will be responsible for the operation of the data, security of the system, and retention of the data
- ✓ Choose wisely



- ✓ Consider their reputation, price, features, reliability, service level agreement, migration tools, customer service, etc.
- ✓ Consider getting trial accounts with multiple providers before making your final selection

Step 3: Check Compatibility



To make sure your office(s) meet the basic requirements, consider:

- ✓ Current Office Software & Licensing
- ✓ Broadband Speeds
- ✓ Hardware Requirements & Office Set-Up
- ✓ Employees' Technology Ability
- ✓ Financing



Slow or poor-quality Internet can be devastating to an IT project entirely dependent on regular access to the Internet

Step 4: Plan And Timeline



- ✓ Begin with the end in mind. Use your goals you established to have a clear idea of what you want to accomplish
- ✓ Take small steps, Rome wasn't built in a day
- ✓ It will take longer than you expect, and unexpected issues will occur
- ✓ Know where you are in the calendar. Do not forget about busy season...
- ✓ Each step should build off the last
- ✓ Make sure all solutions are compatible with each other
- ✓ Document your progress at every step
- ✓ Allow for time between projects... don't forget about training...

The 8 Steps for Implementing a New Technology Plan at Your Company https://goo.gl/5kTJF7

Step 5: Implement



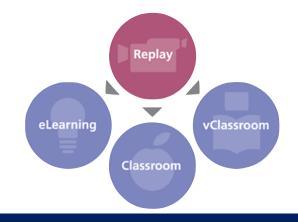
- This step brings the technology into the organization, but it is not put into production
 - ✓ The service/technology should be tested against environmental variables
- ✓ Cloud applications are installed and configured
- ✓ All last-minute adjustments are made
- ✓ Inform your employees of the changes
- ✓ Allow for some downtime to your systems

Step 6: Train, Train, Train!!!





- This step is vital, crucial, and monumental to the success of your project
- ✓ Invest time in teaching your staff how to fully utilize applications, processes, and services
- ✓ Your Cloud network is only as good as the people using it
- ✓ Consider doing on-going regular training sessions or user meetings
- ✓ Seriously... training is extremely important



Step 7: Migrate The Data

- ✓ Extreme caution should be used when moving data
 - ✓ Avoid creating different versions or copies of your data
 - ✓ Get it right the first time
 - ✓ Use tools to complete the transfer to preserve metadata don't copy and paste!
- ✓ Once the data is moved, it cannot be easily moved back
 - ✓ This is the point of no return
- ✓ Best if transferred over a weekend or holiday when there is little demand for IT services
- ✓ ALL users must be locked out while data is in transit
 - ✓ This will prevent data from being modified while in transit



Data migration best practices

https://www.techrepublic.com/ article/data-migration-bestpractices/

Step 7: Migrate The Data





Using a standard DSL connection, it would take approximately 9 hours to transfer 1 gigabyte of data

- Be aware of your Internet upload speed. Depending on the amount of data, it could take days to transfer on a slow connection
 - ✓ Consider transferring from a different connection
- ✓ Send your files in batches to ensure correct transfer (e.g. .zip/.rar archives)
- ✓ Double check when completed. Compare the total number of files
 - ✓ Ensure everything transferred correctly and is useable
 - ✓ Special caution should be used for databases, sensitive files, and encrypted files

Step 8: Security Audit





- Once the data is transferred to the new Cloud, the security settings need to be double checked
- ✓ **Double check your user permissions.** Most likely the permissions did not transfer when the data was moved
- ✓ Assign permissions on an "as needed" basis Avoid blanketing permissions
 - ✓ Give the right access to the right individual
- ✓ **If possible, perform a security audit.** If still unsure, inquire with a subject matter expert



Step 9: Deploy To Users

- ✓ This is when your staff begins using the new technology
 - ✓ The applications have been set up, the staff have been trained, data has been migrated... back to work!
- ✓ There will be follow up issues
 - ✓ Document problems and fix as quickly as possible
 - ✓ Popular issues will be printer, shortcuts, permissions, favorites, etc.
 - ✓ Almost all will be directly related to an individual





Step 10: Follow Up





- ✓ Follow up with the end-users to discuss any outstanding issues
 - ✓ Discuss any problems, difficulties, or troubles they might be having
 - ✓ Nothing is a small issue
- ✓ Follow up 1 week, 1 month, and 6 months after the implementation
- ✓ After implementation, evaluate the established metrics to judge the success of the project



Summary



- Technology expenditures can get out of control easily, particularly when we don't have a plan
- Likewise, using manual workarounds to compensate for missing technology can be costly and prone to error
- Accordingly, we should act now to simplify and economize our tech stacks so that team members can work as efficiently, effectively, and securely as needed