

FORRESTER®

The Total Economic Impact™ Of Microsoft 365 E3

Cost Savings And Business Benefits
Enabled By Microsoft 365 E3

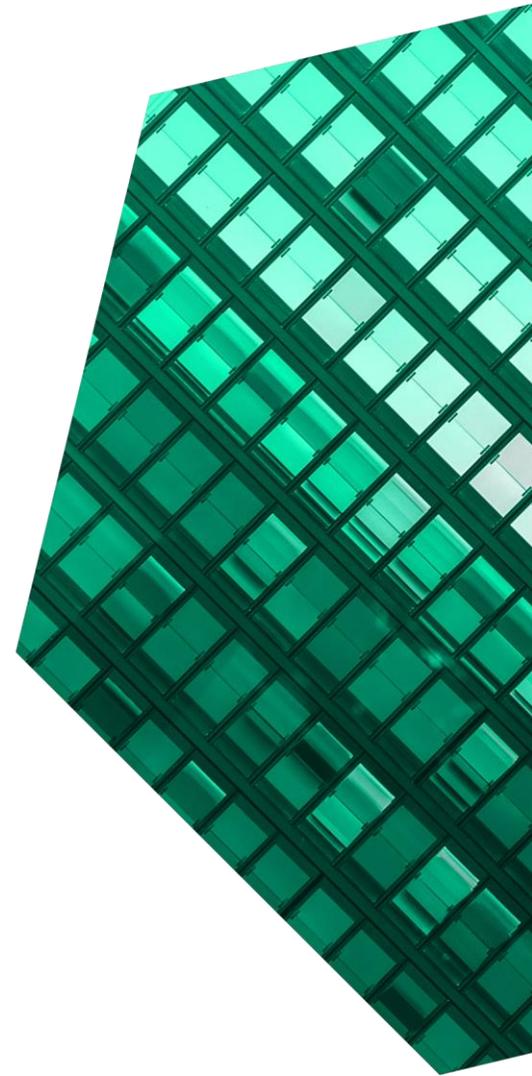
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ABOUT FORRESTER CONSULTING

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Executive Summary

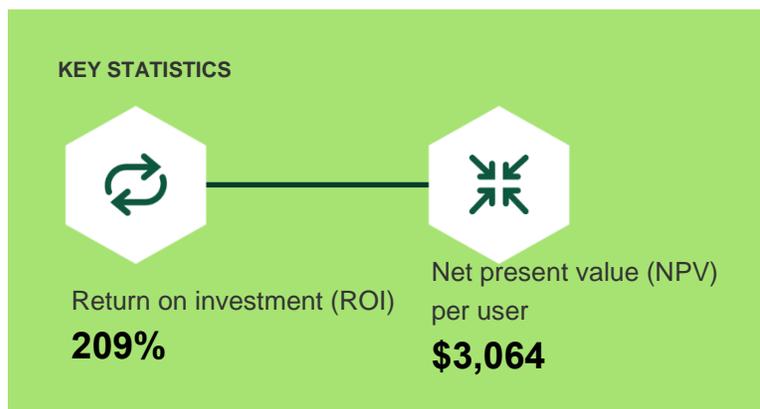
Enabling remote work enhances workforce continuity and improves employee satisfaction, affording organizations and employees the choice to work fully remote, or in a hybrid environment. But remote work raises a new set of challenges that traditional, on-premises solutions are ill-equipped to meet. To maximize their remote work programs, organizations need to update their technology stack to mitigate new security concerns and alter the way they communicate and do business.

Microsoft commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying [Microsoft 365 E3](#). The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Microsoft 365 E3 on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed 10 customers with experience using Microsoft 365 E3. For this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single [composite organization](#).

Prior to using Microsoft 365 E3, the majority of interviewed customers had a hybrid environment with Office in the cloud and the remainder of their deployment on-premises. Additionally, interviewees relied on a myriad of third-party tools to address their needs with a different vendor to provide each one of the following services: communication, file sharing, and device management. Their prior environments also made it difficult to support remote work. Users had limited access to important applications and files, which made them less productive. Meanwhile, IT teams lacked the tools necessary to support remote workers effectively.

The interviewees knew their environments were inefficient. Managing their on-premises environments was costly and time-consuming, as was managing all



of their different vendors. Decision-makers believed that moving to the cloud and consolidating their solution sets would reduce costs, free up resources to focus on more important tasks, and make employees more productive.

By moving to Microsoft 365 E3, the interviewed customers were able to retire their on-premises solutions and now-redundant third-party applications, which freed up IT resources and reduced costs. Additionally, the new features and functionality provided by Microsoft 365 E3 made it easier for IT teams to manage their environments and remote workers. At the same time, users gained access to a new suite of solutions that made them more effective working both in the office and remotely.

Based on the customer interviews, Forrester found that the [composite organization](#) recognizes benefits of \$128.8 million over three years versus costs of \$40.4 million by moving its 30,000 employees to

Microsoft 365 E3. This adds up to a net present value (NPV) of \$88.4 million, or \$2,947 per user, and an ROI of 219%.



Per user monthly license and support savings

\$54

KEY FINDINGS

Quantified benefits. Forrester modeled \$4,293 in three-year benefits per user for the composite organization.

Modern Endpoint Management:

- **Reduced the time spent deploying and managing new software by 24%.** By moving applications to Azure AD, enabling single sign-on (SSO) and multifactor authentication (MFA), IT teams reduced the effort required to support new software. Deploying software, managing updates, troubleshooting, and supporting end users all became much easier with Microsoft Endpoint Manager — the unified management platform that includes Microsoft Intune and Configuration Manager.
- **Decreased endpoint configuration times by 75%.** The low-touch endpoint configuration capabilities provided by Windows Autopilot saved IT administrators significant amounts of time
- **Reduced the time required to set up a user on a new endpoint by 75%.** By leveraging Microsoft’s modern application stack, the interviewed organizations were able to fully set up a user on a new device in a fraction of the time it took before. Connecting apps to Azure

Active Directory (Azure AD) reduced the extra work IT needed to do to set up a user on a new device.

The modern management capabilities offered by Microsoft Endpoint Manager enables the composite organization to reallocate almost seven FTEs to other tasks, saving it \$482 per user over three years.

- **Eliminated 15% of help desk calls and decreased the average resolution time by 10%.** The organizations reduced annual calls with self-service options and automated fixes for common issues, such as password resets and software installs. The enhanced management capabilities offered through Microsoft Endpoint Manager enabled IT teams to address issues more quickly than before. These reductions save the composite organization \$67 per user over three-years.

“[Microsoft] restructured the latest version of Edge. They rewrote all of that. And from a performance standpoint, some of the browsing that used to really lag runs very nicely now. So, because we are on the latest and greatest platform and we are leveraging the cloud-based environment, we are able to take advantage of more productivity with quicker response, and we can quickly be able to service a vendor, service a client’s needs, and be reasonably sure that the environment they’re working in is secure.”

Managing director, financial services

Cost Savings:

- **Decreased licensing spend by an average of \$54 per user per month.** The interviewees

consolidated their solution sets under Microsoft 365 E3. This enabled them to cancel third-party licenses for communication, collaboration, file sharing, and endpoint management solutions. The associated move to the cloud also reduced hardware and support fees. The composite organization saves a total of \$1,545 in licensing and support costs per user over three years.

- **Reduced spending on employee devices by 28%.** Multifactor authentication and device management tools allowed the organizations to transition employees to bring-your-own-device (BYOD) models and retire corporate devices. The organizations recognized savings in devices, calling plans, back-office invoicing, and vendor management. The composite organization saves \$57 per user over three years.
- **Improved end user productivity, saving users an average of 50 hours per year.** End users became more productive by combining the communication features of Teams with the collaboration and document-sharing capabilities afforded through Microsoft 365 Apps, Teams, OneDrive, and SharePoint. For the composite organization, enhanced collaboration makes end users more productive, saving them 48 minutes per week. Additionally, Azure AD SSO provides fast authentication for users, saving them an additional 10 minutes per week. These time savings are valued at \$1,592 per user over three years.
- **Saved on travel and expenses by 32% by Year 3, saving \$1,388 per user.** The interviewees reported that they could shift onsite meetings to Teams without affecting quality. By conducting these meetings remotely, the interviewed customers saved substantial amounts of money on airfare, meals, insurance, and other costs.

- **Increased the percent of remote workers by 15%, reducing real estate costs.** The interviewees reported that their organizations will increase their remote workforce after the stay-at-home orders are lifted in their regions. They learned that the security and collaborative features provided by Microsoft 365 E3 help make remote workers just as productive as office workers, and that enabled them to rethink and reduce their real estate investments.

Security:

- **Reduced the risk of a data breach.** Microsoft 365 E3 has a number of features that enhance organizational security and improve an organization’s ability to identify, investigate, and remediate threats. Organizations can reduce exposure with granular conditional access policies, detailed and integrated security logs, multifactor authentication, and the overall security of Azure. For the composite organization, the reduction in risk is valued at \$18 per user over three years.

Unquantified benefits. In addition to the quantified benefits, interviewees mentioned several benefits represented qualitatively that are not quantified for this study. They include:

- **Enabling an agile workforce.** Moving applications to the cloud made it easier for employees to work from anywhere. Meanwhile, Microsoft 365 Apps (including Teams, SharePoint, Word, Excel, PowerPoint, Outlook, and other applications) enabled employees to collaborate effectively from anywhere. These changes enabled the organizations to quickly adapt to sudden changes like the stay-at-home orders instituted in response to the COVID-19 pandemic with minimal interruption.
- **Transitioning from capex to opex.** Microsoft 365 E3 is a pure software-as-a-service (SaaS) offering, affording the flexibility to scale

deployment without major investments in support hardware or up-front licensing. Recurring monthly charges also offered a cash flow benefit over up-front licensing.

- **Enhanced security and compatibility benefits.** The components of Microsoft 365 E3 are designed to work together with on-premises counterparts, reducing the risk of disruption and the learning curve for IT. Additionally, Windows 10 has enhanced security and compatibility features to reduce the impact of malware and system resource strain, and to improve device usability.

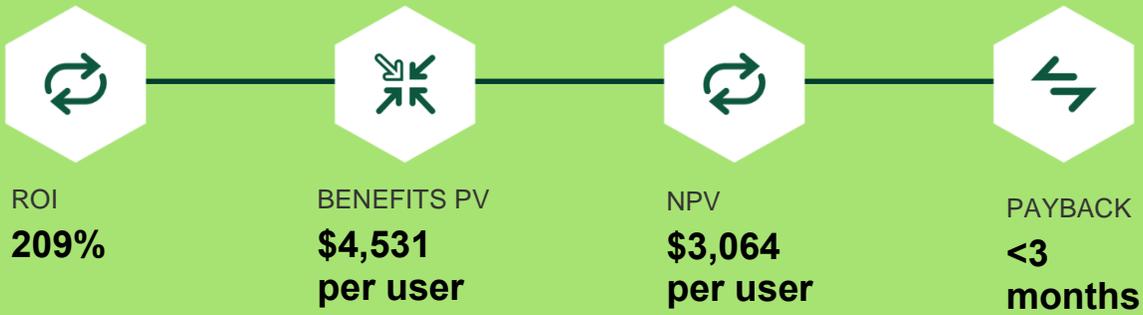
Costs. Risk-adjusted PV costs include:

- **Initial implementation and planning costs of \$3.3 million.** The composite organization dedicates internal resources to migrate existing applications to the cloud and to implement new features offered by Microsoft 365 E3. The organization works with a Microsoft partner to create a project roadmap, to assist with the implementation and migration efforts, and to create adoption and change management materials.
- **Microsoft licensing costs of \$30.1 million.** The organization pays \$32 per license per month for its 30,000 E3 users.
- **Ongoing management costs of \$5.7 million.** The organization incurs labor costs for internal resources managing its deployment.
- **End-user training costs of \$1.1 million.** The organization initially trains its existing users on new features and functionality and will train new hires annually.
- **Device refresh costs of \$1.3 million.** The composite organization adopts modern endpoint management principles as part of its E3 rollout. As part of this shift, the organization shortens its device refresh cycle.

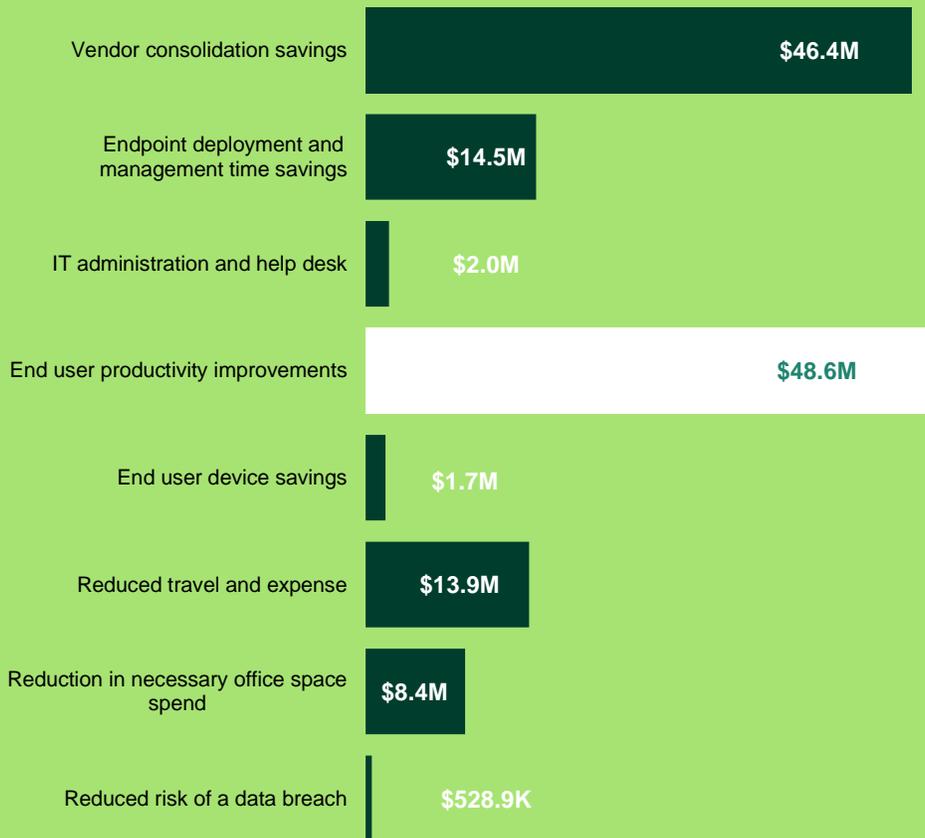
VOICE OF THE CUSTOMER

Interviewed customers shared:

- “The business case for [Microsoft 365 E3] goes up every year because we keep finding more products to replace with E3. So, every year, our cost savings go down while our [Microsoft 365 E3] costs stay constant.”
— Senior director of IT, ISP
- “With Intune and Microsoft Endpoint Manager, it’s a lot easier to maintain a standard build — especially with a largely mobile workforce or a work-from-home workforce. The amount of automation and the ability to synchronize endpoints is significantly enhanced.”
-- CTO, professional services
- “Everyone loves Teams.”
— SVP global technology, restaurant
- “Our employees wanted a more robust set of collaborative tools than what we had. Microsoft 365 [E3] offers just that.”
— CIO, financial services
- “We’ve had infrastructure and help desk people go out on their own and help users solve business problems using things like Forms and Power Apps.”
— CIO, nonprofit
- “This has gotten us out of the whole idea of having to maintain desktops. We used to have people running around taking care of desktop problems. Now it runs off the cloud, and everyone has the same version. I can manage that with one person.”
— CIO, financial services
- “From a collaboration perspective, [Microsoft 365 E3] changed the game altogether.”
— CIO, professional services
- “[Microsoft 365 E3] has done more than save us time: It’s enabling us to do more and different things than we could do in the past. For example, integrating SharePoint with Teams means you don’t have to switch between tools to collaborate and communicate. Data isn’t scattered in different places. This also means that collaboration is safer. The application security, data protection, and collaboration [offered by Microsoft 365 E3] are all new for us.”
— CTO, professional services
- “Microsoft 365 E3 has had a profound impact on our productivity. We’ve seen a measurable impact in productivity since we switched to remote work. So, now, people are asking the logical question: ‘Why do we need offices?’”
— CISO, professional services
- “There’s a substantial amount of value that we get from Microsoft 365 E3 that we didn’t get from just licensing individual Office applications.”
— CISO, professional services
- “Security-wise, it has become much simpler to manage endpoints with Defender and other tools.”
— SVP global technology, restaurants



Benefits (Three-Year)



End users are **2% more productive** with Teams, OneDrive, SharePoint, and Microsoft 365 apps.

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in Microsoft 365 E3.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that the Microsoft 365 E3 can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Microsoft and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in the Microsoft 365 E3.

Microsoft reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

Microsoft provided the customer names for the interviews but did not participate in the interviews.



DUE DILIGENCE

Interviewed Microsoft stakeholders and Forrester analysts to gather data relative to Microsoft 365 E3.



CUSTOMER INTERVIEWS

Interviewed 10 decision-makers at organizations using Microsoft 365 E3 to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewed organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Microsoft 365 E3 Customer Journey

Drivers leading to the Microsoft 365 E3 investment

| Interviewed Organizations | | | |
|---------------------------|---------------|---------------------------|----------|
| Industry | Region | Interviewee | E3 Users |
| Food service | North America | CFO | 10,000 |
| Restaurant | Global | SVP, global technology | 20,800 |
| Financial services | North America | Managing director | 1,500 |
| Biotechnology | United States | Head of IT | 1,100 |
| Nonprofit | Global | CIO, North America | 75,000 |
| Professional services | United States | CISO | 17,000 |
| ISP | Canada | Senior director of IT | 5,000 |
| Automotive | Europe | Senior systems developer | 37,000 |
| Professional services | North America | CTO | 135,000 |
| Financial services | United States | SVP, information security | 20,000 |

KEY CHALLENGES

Interviewees said their organizations faced the following common pressures:

- **Legacy solutions were expensive to maintain and cumbersome.** Legacy on-premises solutions were expensive to maintain, both from infrastructure and personnel perspectives. The interviewed customers often had redundant applications that each handled communication and collaboration. Many interviewees reported having two or more conferencing applications and chat apps. These redundant applications bloated software and support costs.
- **Shadow IT ran rampant.** The interviewees' organizations offered standardized tool sets that often failed to meet the needs of many departments. Consequently, many

departments purchased additional solutions without informing IT. This posed a serious security concern and further increased the number of tools the IT organization needed to support.

- **Diminishing returns in user productivity.** End users had hit the limits of productivity with their existing toolsets. Many demanded better tools, and their organizations sought a means to enhance collaboration and improve productivity.

“The TCO [total cost of ownership] of the IT organization has gone down. The more homogenous it is, the easier it is to manage centrally and stop users from buying one-off things.”

CFO, food service

KEY CHALLENGES (CONT'D)

“We’d much rather have server administrators working on administering the infrastructure for our software and the service apps for our customers than having them maintain exchange servers for email.”

CTO, professional services

- **Aging infrastructure.** Some of the interviewees’ organizations were nearing end of life with their existing on-premises infrastructures, and decision-makers used it as an opportunity to upgrade and move to the cloud.
- **Meeting organizational mandates.** The interviewees’ organizations had mandates to enhance — or at least maintain — their current security postures while updating and adding new functionality for their workforces.
- **Inability to support mobile or hybrid workforce.** Decision-makers wanted to enable fully mobile or hybrid workforces where employees are empowered to work on the devices of their choosing.
- **Mounting security concerns.** As workforces pushed for mobile flexibility and as shadow IT expanded, decision-makers grew increasingly worried about their security postures.

“The video quality of Teams is way better than what we were using. We have it integrated with email and SharePoint. Our meetings and collaboration are really good.”

SVP, global technology restaurant

SOLUTION REQUIREMENTS/INVESTMENT OBJECTIVES

The interviewees’ organizations searched for a solution that could:

- Replace disparate solutions with a single, easy-to-use product suite.
- Recognize cost savings and IT efficiencies by being on the cloud.
- Provide employees with robust collaboration tools to enhance work.
- Provide employees with the ability to access applications and files anywhere.
- Consolidate license spending.
- Enable a BYOD work environment.
- Improve security.

“The things that attracted us to Microsoft 365 [E3] were the Windows 10 upgrade, the licensing model, and tools like BitLocker. We had similar third-party tools, but having fully integrated offerings is more attractive.”

Senior systems developer, automotive

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the 10 companies that Forrester interviewed and is used to present the aggregate financial analysis in the next

section. The composite organization has the following characteristics:

- The organization is based in the United States, and it has global operations. It employs 30,000 users with Microsoft 365 licenses.
- Prior to using Microsoft 365 E3, the organization had a hybrid deployment with Office in the cloud and the rest of its applications on-premises. It also used numerous third-party chat and video applications, file-sharing services, and basic antivirus and mobile device management tools.

Deployment characteristics. The organization has deployed and is recognizing benefits from the full suite of Microsoft 365 E3 capabilities.

Key assumptions

- **30,000 E3 users**
- **\$120,000 average IT support salary**
- **\$125,000 average IT security salary**
- **\$65,000 average knowledge worker salary**
- **2% annual inflation in salaries**
- **10% of workforce is mobile with a corporate device and multiple Microsoft licenses**
- **\$25 million annual travel and expense budget**

Deployed Capabilities And Solutions Of Composite

| Capability | Solution(s) |
|------------------------------------|---|
| Operating system | <ul style="list-style-type: none"> Windows 10 Enterprise |
| Microsoft 365 apps | <ul style="list-style-type: none"> Word, Excel, PowerPoint, OneNote, Outlook, Access, and Publisher on up to five PCs, tablets, and smartphones per user |
| Email and calendar | <ul style="list-style-type: none"> Exchange |
| Social and intranet | <ul style="list-style-type: none"> SharePoint Yammer |
| Meetings, voice, and collaboration | <ul style="list-style-type: none"> Teams |
| Files and content | <ul style="list-style-type: none"> OneDrive for Business Microsoft Stream Sway for Office 365 |
| Business apps | <ul style="list-style-type: none"> Microsoft Forms To Do Planner |
| Power platform | <ul style="list-style-type: none"> Power Apps for Office 365 Power Automate for Office 365 |
| Device and app management | <ul style="list-style-type: none"> Microsoft 365 Administration Microsoft Endpoint Manager Microsoft Intune Microsoft Endpoint Configuration Manager Windows Autopilot Fine-tuned user experience Windows Analytics Device Health Mobile Device Management for Office 365 |
| Security | <ul style="list-style-type: none"> Windows Hello Credential Guard and Direct Access BitLocker Microsoft Defender Antivirus and Device Guard Azure Active Directory Plan 1 Microsoft Advanced Threat Analytics Microsoft Information Protection Plan 1 |
| Compliance | <ul style="list-style-type: none"> eDiscovery content search Manual sensitivity and retention labels Office 365 Data Loss Prevention for email and files eDiscovery Export eDiscovery Hold Litigation Hold In-Place Hold Basic audit Email archiving |
| Analytics | <ul style="list-style-type: none"> MyAnalytics Delve |

Analysis Of Benefits

■ Quantified benefit data as applied to the composite

| Total Benefits | | | | | | |
|--|---|--------------|--------------|--------------|---------------|---------------|
| Ref. | Benefit | Year 1 | Year 2 | Year 3 | Total | Present Value |
| Vendor License Cost Consolidation | | | | | | |
| Atr | Vendor consolidation savings | \$18,639,000 | \$18,639,000 | \$18,639,000 | \$55,917,000 | \$46,352,434 |
| IT Admin And Deployment Savings | | | | | | |
| Btr | Endpoint deployment and management time savings | \$5,711,729 | \$5,825,963 | \$5,942,483 | \$17,480,175 | \$14,472,002 |
| Ctr | IT administration and help desk | \$803,700 | \$803,700 | \$803,700 | \$2,411,100 | \$1,998,683 |
| Savings On Automation And Process Improvement | | | | | | |
| Dtr | End-user productivity improvements | \$18,600,000 | \$19,584,000 | \$20,592,000 | \$58,776,000 | \$48,565,289 |
| Physical And Travel And Expense Cost Displacement | | | | | | |
| Etr | End-user device savings | \$684,000 | \$684,000 | \$684,000 | \$2,052,000 | \$1,701,007 |
| Ftr | Reduced travel expense | \$3,800,000 | \$5,700,000 | \$7,600,000 | \$17,100,000 | \$13,875,282 |
| Gtr | Reduction in necessary office space spend | \$0 | \$0 | \$11,232,000 | \$11,232,000 | \$8,438,768 |
| Reduced Total Cost Of Risk | | | | | | |
| Htr | Reduced risk of a data breach | \$187,568 | \$214,363 | \$241,159 | \$643,090 | \$528,862 |
| Total benefits (risk-adjusted) | | \$48,425,997 | \$51,451,027 | \$65,734,341 | \$165,611,365 | \$135,932,327 |

VENDOR CONSOLIDATION SAVINGS

Evidence and data. By replacing aging and disparate tools under Microsoft, the interviewees' organizations reduced their per-user license spend and support costs. The composite organization eliminates an aggregate of \$33 per user on third-party licensing and an additional \$21 per user in on-premises hardware and software costs related to supporting legacy solutions.

- Interviewees said their organizations were using as many as three separate communication and chat applications in addition to email.

Modeling and assumptions. Factors impacting savings for the composite organization include:

- The average per-user monthly security tools licensing savings are \$8. Organizations

primarily replace existing master data management (MDM) solutions.

- The average per-user monthly file sync license cost is \$12.50. Organizations replace this functionality with OneDrive and SharePoint.
- Interviewees said their organizations used a number of different chat and video applications, with the average enterprise price being \$12. Microsoft Teams replaced these applications.
- Interviewees said their organizations saved \$21 in hardware and software related to on-premises tools. For example, retiring older email systems brought significant savings from retired on-prem storage.
- Microsoft 365 E3 comes with Microsoft 365 Apps, which includes the ability to install Office applications on up to five PCs, five tablets, and five smartphones per user. Older on-premises licenses did not come with this functionality, leading interviewees to purchase additional licenses for a portion of their workforce, like sales representatives who possess multiple work devices. By moving to Microsoft 365 E3, the composite organization eliminates this redundant licensing for the 10% of its workforce that it applies to. Legacy licenses are valued at \$12 per user.

“We had people using a combination of web-only apps and then doing one-off purchases for desktop when they wanted that too. And then, at a team level, we had different departments using different chat or video applications. We decided it was far easier to just have everyone on a level platform.”

Head of IT, biotechnology

Risks. Forrester recognizes that vendor license consolidation savings may vary from organization to organization. Specific considerations include:

- Existing legacy solutions and average cost. This may be impacted by organization size and the ability to negotiate discounts.
- Industry and workforce makeup will dictate the likelihood of knowledge workers requiring multiple legacy Microsoft licenses.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$46.4 million.

| Vendor Consolidation Savings | | | | | |
|---------------------------------------|--|------------------------------|---|--------------|--------------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| A1 | Number of users | Composite | 30,000 | 30,000 | 30,000 |
| A2 | Per-user monthly security tools license cost | Based on customer interviews | \$8 | \$8 | \$8 |
| A3 | Per-user monthly file sync license cost | Based on customer interviews | \$12.50 | \$12.50 | \$12.50 |
| A4 | Per-user monthly communications tools license cost | Based on customer interviews | \$12 | \$12 | \$12 |
| A5 | Third-party vendor license consolidation | $A1 * (A2 + A3 + A4) * 12$ | \$11,700,000 | \$11,700,000 | \$11,700,000 |
| A6 | Per-user monthly on-premises costs (hardware and software) | Based on customer interviews | \$21 | \$21 | \$21 |
| A7 | Redundant license savings | $(A1 * 10\%) * 10 * 12$ | \$360,000 | \$360,000 | \$360,000 |
| At | Vendor consolidation savings | $A5 + (A6 * A1 * 12) + A7$ | \$19,620,000 | \$19,620,000 | \$19,620,000 |
| | Risk adjustment | ↓5% | | | |
| Atr | Vendor consolidation savings (risk-adjusted) | | \$18,639,000 | \$18,639,000 | \$18,639,000 |
| Three-year total: \$55,917,000 | | | Three-year present value: \$46,352,434 | | |

ENDPOINT DEPLOYMENT AND MANAGEMENT TIME SAVINGS

Evidence and data. Microsoft 365 E3 includes Microsoft Endpoint Manager, a unified endpoint management tool for organizations to deploy, manage, and secure all of their corporate and BYOD devices. Endpoint Manager includes both Microsoft Intune and Configuration Manager. With Microsoft Intune, interviewees easily deploy and manage new software, security updates, and operating systems to managed devices. And with Windows Autopilot, organizations can procure, preconfigure, and ship Windows devices that are enterprise-ready and fully secure from their OEM or reseller partner directly to the end user.

- Connecting applications with Azure AD, enabling SSO and MFA, and migrating to SharePoint enabled end users to get up and running on new devices much faster than they could before, reducing the frequency of additional support tickets. Meanwhile, Conditional Access and the configuration capabilities within Microsoft Endpoint Manager reduced the extra configuration work IT administrators had to perform to address department or user-specific needs.
- Interviewees said their organizations reduced the resources required to manage and support new software.
- The North American CIO for a global nonprofit told Forrester that increased IT efficiency

allowed their organization to reassign employees to new modernization or support tasks. They said: "We redeployed a lot of people who used to do server maintenance to support. The routine tasks are all cloud-based and standardized, so we are able to script it, and one person becomes so productive in administration. It's consistent, it's self-documented, and one person can do the job that used to take five, six, seven, or eight people."

- Faster boot times, fewer crashes, and faster performance of the devices managed by Microsoft 365 E3 enabled users to be more productive than they were with their previous devices.
- Interviewees said their organizations recognized time savings regardless of device, noting the ease of managing a myriad of mobile devices, PCs, and Macs. The CTO of a professional services firm stated: "There are large time savings from a software management perspective. It used to be a big pain to upgrade or keep applying the patches and upgrades for all the Office components across all our endpoints and devices. For the most part, that is now completely automated with Microsoft 365 E3."
- The CISO of a professional services firm told Forrester: "Prior to our upgrade, we had Office 2016 and a few other versions because of customizations and dependencies. It was becoming a nightmare to manage and standardize and patch. To be standardized on Windows 10 and Microsoft 365 [provides] great cost savings. We are able to get rid of wasted time spent managing older tech, and we save time accommodating any new users."

Modeling and assumptions. Factors impacting savings for the composite organization include:

- With its legacy solutions, the composite organization would spend an average of 0.55 hours per user, managing new software. Admins would spend an additional 0.68 hours on user support related to new software and spend 0.32 hours of troubleshooting during updates. Furthermore, admins would spend 0.32 hours per user on general IT. In total, IT would spend 1.87 hours per user per year in new software deployment.
- Administrators use Microsoft Endpoint Manager to manage the configuration and deployment of software and updates to end users. These tools save administrators 24% of their time managing new software.
- One-third of employees require a new endpoint configuration annually, which averages 1 hour of required labor. With Microsoft 365 E3, this time is reduced by 75%.
- Prior to deploying Microsoft 365 E3, the average required time for a new laptop setup was 6 hours for both IT and end users. With Microsoft 365 E3, this time is reduced by 90%.
- The composite organization pays its IT resources \$120,000 annually with 2% annual increases due to inflation.
- The average end user salary is \$65,000 annually with 2% inflation.

Risks. Forrester recognizes that IT software deployment savings may vary from organization to organization. Specific considerations include:

- Benchmark effort required for management and deployment.
- IT salaries.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$14.5 million.

| Endpoint Deployment And Management Time Savings | | | | | |
|---|---|------------------------------|---|-------------|-------------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| B1 | Hours dedicated to new software deployment and management | $A1 \times 1.87$ | 56,100 | 56,100 | 56,100 |
| B2 | Reduction due to efficiency gains provided by Microsoft 365 | | 24% | 24% | 24% |
| B3 | Hours reallocated from software management | $B1 \times B2$ | 13,464 | 13,464 | 13,464 |
| B4 | Hours spent configuring new endpoints | $A1/3 \times 1 \text{ hour}$ | 10,000 | 10,000 | 10,000 |
| B5 | Reduced endpoint configuration due to Microsoft 365 (hours) | $B4 \times 75\%$ | 7,500 | 7,500 | 7,500 |
| B6 | Time required to set up a user on a new laptop before Microsoft 365 (hours) | | 6 | 6 | 6 |
| B7 | IT end-user setup time savings (hours) | $B4 \times B6 \times 90\%$ | 54,000 | 54,000 | 54,000 |
| B8 | End-user setup time savings (hours) | $B4 \times B6 \times 90\%$ | 54,000 | 54,000 | 54,000 |
| B9 | IT salary (growing at 2% YoY) | Forrester assumption | \$120,000 | \$122,400 | \$124,848 |
| B10 | End-user salary (growing at 2% YoY) | Forrester assumption | \$65,000 | \$66,300 | \$67,626 |
| B11 | Total IT time savings | $(B3+B5+B7)/2,080 \times B9$ | \$4,324,846 | \$4,411,343 | \$4,499,570 |
| B12 | End-user savings | $B8/2,080 \times B10$ | \$1,687,500 | \$1,721,250 | \$1,755,675 |
| Bt | Endpoint deployment and management time savings | | \$6,012,346 | \$6,132,593 | \$6,255,245 |
| | Risk adjustment | ↓5% | | | |
| Btr | Endpoint deployment and management time savings (risk-adjusted) | | \$5,711,729 | \$5,825,963 | \$5,942,483 |
| Three-year total: \$17,480,175 | | | Three-year present value: \$14,472,002 | | |

IT ADMINISTRATION AND HELP DESK

Evidence and data. Interviewees highlighted that a major benefit of upgrading to Microsoft 365 E3 was a reduction in help desk calls and shortened ticket resolution times. Prior to having Microsoft 365 E3, organizations typically did not provide employees with self-service password reset capabilities. This was the highest volume issue that organizations dealt with by far. Organizations also had the ability to build robust corporate intranets with SharePoint, providing solutions to common problems for users to help

themselves. In some cases, organizations also built Teams bots that quickly provided links to these resources when prompted. Furthermore, organizations found it much easier to resolve issues for a diverse ecosystem of devices (mobile, PC, Mac) with Microsoft Endpoint Manager.

- The North American CIO for a global nonprofit told Forrester: “One of the biggest help desk requests always has been password resets. Now we have self-service password resets, and that’s pretty much gone away as a

category. In any given year, it would have been between 15% to 20% of tickets, and within the Windows family, that's now largely irrelevant.”

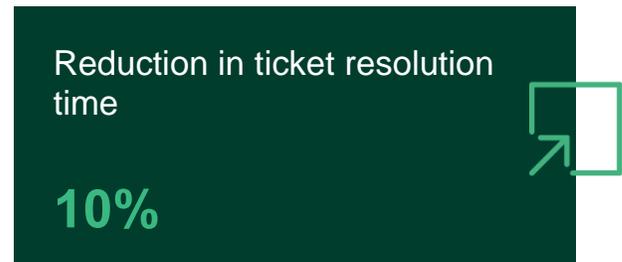
- Interviewees stated that having Microsoft 365 E3 deployed as a SaaS offering allowed their organizations to easily ensure users were up-to-date on updates and stay current on upgrades. Having users on a consistent and current platform further reduced IT administration time. The SVP of global technology for a restaurant chain said: “I’m a big fan of software as a service. We avoid customizations, we simplify deployments, and users get upgrades automatically. When you have everyone on the same version, it’s a big saving in administration. Everything runs much smoother without having people on old versions; we cannot even test properly anymore. Overall, we got a 40% to 50% reduction in tickets from our corporate users.”
- The CISO for a professional services firm stated, “Users can just go read four or five steps on how to do it themselves instead of having to talk to someone.”

“Having everyone on Windows 10 first and foremost is less of a headache. Not having different operating systems and supporting them is a lifesaver.”

CTO, professional services

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- Each user makes an average of six help desk calls a year, and 15% of those calls are about issues fixed through self-service tools.
- Non-self-service issues are less time-consuming on SaaS deployments. In addition to tools like Intune, this allows the help desk to resolve tickets 10% faster.
- The average help desk call costs \$20 in help desk labor and end user productivity. The 10% reduction in resolution time effectively makes this cost \$18.



Risks. IT administration and help desk savings may vary, and specific considerations include:

- Preexistence of self-service tools.
- Benchmark IT productivity.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$2 million.

| IT Administration And Help Desk | | | | | |
|--------------------------------------|---|--|--|-----------|-----------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| C1 | Annual help desk calls | $A1 \times 6$ | 180,000 | 180,000 | 180,000 |
| C2 | Percent of calls eliminated with automation | | 15% | 15% | 15% |
| C3 | Reduction in ticket resolution time for remaining tickets | | 10% | 10% | 10% |
| C4 | Average cost per call | | \$20 | \$20 | \$20 |
| Ct | IT administration and help desk | $(C1 \times C2 \times C4) + ((C1 \times (1 - C2) \times C3 \times C4)$ | \$846,000 | \$846,000 | \$846,000 |
| | Risk adjustment | ↓5% | | | |
| Ctr | IT administration and help desk (risk-adjusted) | | \$803,700 | \$803,700 | \$803,700 |
| Three-year total: \$2,411,100 | | | Three-year present value: \$1,998,683 | | |

END-USER PRODUCTIVITY IMPROVEMENTS

Evidence and data. Microsoft 365 E3 includes a wide range of collaboration and communication solutions to improve worker efficiency. Interviewees underscored the importance of users being able to communicate and collaborate anytime and anywhere in a secure manner.

- Interviewees spoke glowingly of Teams, and how enterprise chat has become an integral part of day-to-day work within their organizations. While email remains an important communication channel, the immediacy of chat ensures that work can be done in real time. The CFO in food service said: “It’s very easy to get in touch with people. You don’t have to make or wait for a formal meeting, and you can get a quick response from someone who is committed to another call.”
- The senior systems developer for an automotive firm stated: “Using Teams, it’s not only about being able to work from anywhere.

It’s what it allows you to do and how fast you can communicate with each other.”

- Prior to having Teams, users and business units within the interviewees’ organizations used alternative chat applications. Different units would often use different applications. Having multiple chat applications in use created communications silos and hindered cross-team collaboration. Having the entire organization on a single chat platform ensures that everyone can communicate and collaborate.
- Collaborative document sharing was also a major productivity booster for the interviewees’ organizations. Using Microsoft 365 Apps with OneDrive and SharePoint, multiple users could work simultaneously on important documents, all while ensuring strict version control. Work groups created channels for enhanced document and knowledge sharing. The CTO for a professional services firm stated: “The online collaboration features were a major catalyst for our investment. Our work is

completely reliant on the ability to collaborate, so the ability to do so online is a key functionality for us.”

- User productivity was not limited to internal work. Interviewees highlighted the ability to create groups within Teams and include outside vendors or clients. The CISO for a professional services firm stated: “The concept of having a shared communication channel within the application and integrated with SharePoint is a completely new capability for us. You’re moving everything from multiple tools to one place where the data is secured, and everyone can collaborate.”
- Microsoft 365 E3 provided end users with productivity benefits outside of collaborative tools. With Azure Active Directory, users experienced seamless single sign on from any device or location. Azure Active Directory has over 3,000 Microdot and third-party SaaS applications pre-integrated and allows organizations to configure them for single sign-on with just a few clicks.
- Interviewees highlighted the stability of Windows 10 and said that having the whole organization on the same platform reduced crashes, stability, and security issues, which would otherwise cause downtime for end users. The SVP of information security for a financial services firm explained: “You’re running with current technology that’s more stable than any prior release that’s ever been on anybody’s desktop. It’s a reliable environment that interplays with security and provides us with a tighter integration with the level of security that we offer across our network.”

“It takes [users] one-fifth less time to get the same job done because they’re not exchanging documents via email or having update and version control issues.”

CTO, professional services

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- Interviewees said their organizations averaged an end user productivity improvement of 2% with fully integrated, cloud-based chat and file sharing solutions. This amounts to a weekly savings of 48 minutes per worker.
- Seamless single sign-on saves end users 10 minutes per week.
- The average knowledge worker using these tools has a fully loaded salary of \$65,000 which grows at 2% each year.
- A 50% productivity capture rate is included since not all time savings translate into additional value-add work.

Improved user efficiency with collaborative document sharing and chat

2%

Risks. End-user productivity improvements may vary, and specific considerations include:

- The number of users and average labor rates.
- Cultural and organizational change management barriers.
- Preexisting solutions and benchmark productivity.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$48.6 million.

End-User Productivity Improvements

| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
|---------------------------------------|--|---|---|--------------|--------------|
| D1 | End users | A1 | 30,000 | 30,000 | 30,000 |
| D2 | Improved efficiency with collaborative document sharing and chat (in weekly minutes) | 2% annual efficiency gain | 48 | 49 | 50 |
| D3 | Weekly time savings from Azure AD SSO | | 10 | 10 | 10 |
| D4 | Efficiency gain per user (in hours) | $((D2+D3)/60)*52$ | 50 | 51 | 52 |
| D5 | Average hourly knowledge worker rate | $(\$65K \text{ with } 2\% \text{ inflation})/2,080$ | \$31 | \$32 | \$33 |
| D6 | Productivity recapture | | 50% | 50% | 50% |
| Dt | End-user productivity improvements | $D1*D4*D5*D6$ | \$23,250,000 | \$24,480,000 | \$25,740,000 |
| | Risk adjustment | ↓20% | | | |
| Dtr | End-user productivity improvements (risk-adjusted) | | \$18,600,000 | \$19,584,000 | \$20,592,000 |
| Three-year total: \$58,776,000 | | | Three-year present value: \$48,565,289 | | |

END-USER DEVICE SAVINGS

Evidence and data. Microsoft 365 E3 provided the interviewees' companies with the security and management tools they needed to feel confident in a BYOD environment. Giving employees the choice to use their own device increased mobile productivity and reduced corporate expenditures on hardware, device plans, and back-office labor.

- With Microsoft Endpoint Manager, MFA, Azure Active Directory, and Conditional Access, organizations can manage applications that contain corporate data and enforce policies to keep data protected. Interviewees said MFA for Microsoft 365 is particularly useful in reducing end-user risk, and it's a primary element in allowing employees to use their own devices.

- Prior to having Microsoft 365 E3, the interviewees' organizations were limited in how many devices on which they could install their Microsoft 365 applications. A Microsoft 365 E3 license includes installs on up to five PCs, tablets, and smartphones. This allows end users to have a seamless and secured BYOD experience without the additional cost of acquiring and integrating disparate licenses and tools.
- The CISO for a professional services firm said: "Intune really helps with BYOD. Folks can deploy our commonly used mobile apps in a secure manner via Intune containers, and every employee has five devices they can put our standard container on. That's really helping us roll out and manage BYOD. We ended up

cutting off every corporate device below director and replacing it with BYOD. That was about 80% of our mobile device fleet.”

- The CFO in food service said: “The security is what gives us the confidence to enable BYOD. [For] all the salespeople and all the managers in the field, all those devices just go away. Also, think about the back-of-the-house administration. An individual can now just spin up an expense report. And, I hate to say it, but we’re a big organization. You know how many times someone leaves and forgets to shut off that number?”

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- 10% of the workforce has a preexisting corporate device and mobile plan. This primarily includes salespeople, managers, and other mobile workers.
- Prior to enabling BYOD, the organization spent \$70 per user per month on corporate mobile devices, including hardware, phone and data plans, and back-office administration.

- As part of its BYOD plan, the organization reimburses users \$50 per month.



Per user monthly corporate device savings

\$20

Risks. End-user device savings may vary, and specific considerations include:

- The percentage of workforce issued corporate devices.
- The corporate BYOD reimbursement plan.
- The organization’s security posture and willingness to adopt BYOD.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$1.7 million.

| End-User Device Savings | | | | | |
|--------------------------------------|---|-------------|--|-----------|-----------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| E1 | Number of users with corporate devices | A1*10% | 3,000 | 3,000 | 3,000 |
| E2 | Per-employee monthly plan and device cost | | \$70 | \$70 | \$70 |
| E3 | Per-employee monthly BYOD reimbursement | | \$50 | \$50 | \$50 |
| E4 | Per-employee monthly savings | E2-E3 | \$20 | \$20 | \$20 |
| Et | End-user device savings | E1*E4*12 | \$720,000 | \$720,000 | \$720,000 |
| | Risk adjustment | ↓5% | | | |
| Etr | End-user device savings (risk-adjusted) | | \$684,000 | \$684,000 | \$684,000 |
| Three-year total: \$2,052,000 | | | Three-year present value: \$1,701,007 | | |

REDUCED TRAVEL EXPENSE

Evidence and data. The COVID-19 pandemic forced most organizations to cease all business travel. In the short term, this led to a significant temporary reduction in travel expenses. But decision-makers have also realized their organizations can conduct many meetings remotely without any loss in productivity.

- Even before the COVID-19 pandemic, many organizations were looking to the features of Teams to reduce travel. For example, the restaurant SVP explained: “We have a mandate to reduce our travel spending by 5% to 10%. [Microsoft Teams] has been amazing because it’s enabled us to drive down our travel costs without investing in additional tools or infrastructure.”
- The food service CFO said: “We expect to reduce our spending on travel and entertainment as we make many of our internal meetings remote. Some of these meetings can very expensive. For example, one of our big meetings could cost us millions of dollars when you factor in the cost of a

venue, entertainment, and travel and lodging for thousands of employees.”

- Some of the interviewees are excited about the environmental benefits associated with reducing travel. The automotive senior systems developer stated: “We’ve reduced our travel [thanks to Teams], which is good from an environmental point of view. This is possible because the features in [Teams] make it easier for our users to collaborate remotely.”

Modeling and assumptions. Forrester modeled the composite organization based on the following assumptions:

- It has an annual travel expense budget of \$25 million. That’s 10% of the organization’s annual budget.
- Post-pandemic, when organizations will be able to resume normal business activities, the composite organization will not resume activities that accounted for 40% of travel expenses. These savings come from multiple changes,

including reduced internal and regional meetings, fewer sales calls, and fewer conferences.

- Not all savings are attributed to Microsoft 365 E3. As such, Forrester applied a 40% attribution factor in Year 1, increasing to 80% in Year 3. This is to acknowledge that a portion of savings and reduced travel is tied to macro changes, like COVID-19 related travel restrictions.

Risks. Travel expense savings will vary based on:

- Location enterprise size.
- The industry and the ability to conduct work remotely.
- The workforce makeup and benchmark travel expenses.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$13.9 million.

| Reduced Travel Expense | | | | | |
|---------------------------------------|--|----------------|---|--------------|--------------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| F1 | Total travel and expense budget | | \$25,000,000 | \$25,000,000 | \$25,000,000 |
| F2 | Percent reduction due to increased remote work | | 40% | 40% | 40% |
| F3 | Attribution percentage | | 40% | 60% | 80% |
| Ft | Reduced travel expense | $F1 * F2 * F3$ | \$4,000,000 | \$6,000,000 | \$8,000,000 |
| | Risk adjustment | ↓5% | | | |
| Ftr | Reduced travel expense (risk-adjusted) | | \$3,800,000 | \$5,700,000 | \$7,600,000 |
| Three-year total: \$17,100,000 | | | Three-year present value: \$13,875,282 | | |

REDUCTION IN NECESSARY OFFICE SPACE SPEND

Evidence and data. The COVID-19 pandemic forced many of the interviewees' organizations to shift to a 100% remote work model. Many were surprised to see their workers were as productive if not more than they were in the office, leading decision-makers to reassess their remote work policies and real estate investments.

Expanding remote work policies comes with several benefits, including increasing employee engagement, retention, and broadening the recruitment pool for organizations.

As the COVID-19 pandemic has shown, enabling remote work is a critical element to ensure business continuity. Organizations with a robust remote work framework will be better positioned to address future natural disasters, helping them stay competitive during turbulent times.

- Before the pandemic, many firms were unwilling to have a large remote workforce. Conventional wisdom said that remote workers were less productive than their office counterparts, and traditional communication tools made it difficult to collaborate remotely. Security was another concern: IT teams lacked the tools to effectively

manage remote workers, leading to increased support costs and decreased productivity for remote workers. Before moving to Microsoft 365 E3, users were unable to access important applications and data while working remotely, limiting their productivity.

- Organizations using Microsoft 365 E3 found it significantly easier to support remote workers while keeping their environments secure. Remote workers can collaborate effectively with their peers using Teams, SharePoint, and OneDrive.
- Connecting applications to Azure AD for SSO and MFA makes it easier for remote users to access important business applications, which increases their productivity while working remotely. At the same time, IT teams experience fewer support tickets.
- Because of the endpoint management features within Microsoft 365 E3, remote workers require no more support than their office counterparts.
- The professional services CISO stated: “We have 160 offices in North America and Europe. We’re planning on closing 80 of those offices permanently. Microsoft M365 E3 — especially Microsoft Endpoint Manager — is a major reason we’re able to do this.”
- In the near term, firms will not recognize substantial savings as most organizations have long-term office space leases. However, firms do intend to assess and downsize expenses when possible.

Modeling and assumptions. In modeling the composite organization, Forrester makes the following assumptions:

- The average monthly lease expense per customer is \$780. This is based on survey responses for US corporate real estate. This expense, and subsequent savings, does not include utilities and employee insurance.
- Prior to the pandemic, 10% of the organization’s workforce was remote. Post-pandemic an additional 25% of the workforce will transition out of offices to remote working. Forrester assumes that certain roles will return to an office setting. For the composite, Forrester assumes that one third of the workforce are in roles suited for mobile work.
- The composite organization recognizes benefits beginning in Year 3. Prior long-term lease commitments forestall it from reducing spend in Years 1 and 2 regardless of how many employees move to remote work.

Risks. Real estate savings will vary by:

- Industry, location, and workforce size.
- Benchmark spending per office-based employee.
- Existing remote work programs.
- Preexisting lease commitments.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$8.4 million.

| Reduction In Necessary Office Space Spend | | | | | |
|---|---|----------------------------|--|--------|--------------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| G1 | Number of employees | A1/3 | | | 10,000 |
| G2 | Average lease expense per employee per month | | | | \$780 |
| G3 | Percent of workforce who were remote before moving to E3 (pre-pandemic) | | | | 10% |
| G4 | Percent of workforce that will be remote in future | | | | 25% |
| Gt | Reduction in necessary office space spend | $G1 * G2 * (G4 - G3) * 12$ | | | \$14,040,000 |
| | Risk adjustment | ↓20% | | | |
| Gtr | Reduction in necessary office space spend (risk-adjusted) | | \$0 | \$0 | \$11,232,000 |
| Three-year total: \$11,232,000 | | | Three-year present value: \$8,438,768 | | |

REDUCED RISK OF A DATA BREACH

Evidence and data. Each of the interviewees highlighted Microsoft’s reputation for providing secure solutions as a key part of their investment. Microsoft 365 E3 provides organizations with robust access management tools, reduces shadow IT, and secures remote work.

- The North American CIO for a global nonprofit stated: “The ability to deploy multifactor authentication was worth the entire cost, and it made a huge impact on our vulnerability. It is deployed not just to our Office apps, but all of our apps are authenticated with Azure Active Directory.”
- Decision-makers gained visibility into what was deployed and being used across their organizations and discovered that users were adopting unsanctioned apps to meet needs — especially in chat and document sharing. Microsoft 365 E3 provided users with the tools to meet user needs, giving IT the insights and justification to stamp out shadow IT.

- By securing all applications with Azure AD, the interviewees’ organizations were able to improve visibility, implement password strength rules, implement granular risk-based policies to ensure that employees only had access to the applications that they needed, and prevent specific types of attacks from penetrating the network (with MFA) even if a user’s account was compromised.
- The CTO of a professional services firm stated: “Azure AD has become our default tool, with basically every app using single sign-on and MFA. We’ve significantly improved our security by having accurate authentications for everything through Azure AD. We saw a significant volume of account takeover attempts before integrating everything with Azure AD. Once we integrated our third-party CRM with Azure AD and turned on MFA, almost all those cases disappeared.”
- While streamlining their tool sets under a single, integrated set of offerings, the interviewees’ organizations also streamlined

their security teams to use their time more effectively in combating security threats. The SVP of global technology for a restaurant chain explained: “I used to have a team for antivirus. We had a team for identity management. We had a team for incident management. All these teams were using different tool sets and operating independently. I don’t have those teams anymore. What I have now is a SOC [security operations center] that manages all of this in a more strategic way by using a set of tools from Microsoft.”

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- The average data breach value for an organization of the composite’s size (30,000) is \$4.25 million.¹ For further guidance on how to calculate the cost of a breach, please see Appendix B.
- The average likelihood of a data breach of 10,000 records or more is 29.6% over two years, or 14.8% per year.²

- By deploying Azure AD and enabling SSO and MFA, the composite organization significantly reduces its risk exposure. This benefit ramps up over time as the organization integrates more applications and builds security capabilities around Azure AD.

Risks. Data breach avoidance savings may vary, and specific considerations include:

- The average cost of a data breach for the organization.
- The inherent risk of a data breach.
- The extent to which the organization is able to improve security posture and capabilities through the investment in Azure AD.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$528,862.

| Reduced Risk Of A Data Breach | | | | | |
|------------------------------------|---|-------------|--|-------------|-------------|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
| H1 | Average cost of data breach (\$142/employee) | Ponemon | \$4,260,000 | \$4,260,000 | \$4,260,000 |
| H2 | Average likelihood of data breach | Ponemon | 14.8% | 14.8% | 14.8% |
| H3 | Reduced likelihood of a breach | | 35% | 40% | 45% |
| Ht | Reduced risk of a data breach | $H1*H2*H3$ | \$220,668 | \$252,192 | \$283,716 |
| | Risk adjustment | ↓15% | | | |
| Htr | Reduced risk of a data breach (risk-adjusted) | | \$187,568 | \$214,363 | \$241,159 |
| Three-year total: \$643,090 | | | Three-year present value: \$528,862 | | |

UNQUANTIFIED BENEFITS

Interviewees discussed the following benefits their organizations experienced but could not yet quantify:

- **Additional security enhancements with Windows 10.** Windows 10 Enterprise comes with several advanced security features to help organizations combat malware. Organizations using Windows 10 security features instead of third-party point solutions or legacy versions of Windows experienced improved system resource usage and device performance.
- **Transitioning capex to opex.** Microsoft E3 is a pure SaaS offering, affording the flexibility to scale deployments without major investments in support hardware or up-front licensing. Organizations pay a monthly per user fee instead of paying for a large, up-front license. They can easily scale by adding more licenses without investment in support infrastructure. The CISO in professional services said: “For us, the opex model is more advantageous. It reflects the true number of users we have onboarded and are using. Plus, we are not paying up front, so that’s preferred.”

BUSINESS RESILIENCE DURING THE COVID-19 PANDEMIC

Interviewees highlighted that Microsoft 365 E3 was a key factor in business continuity during the COVID-19 pandemic. When offices shut down and workers transitioned to working from home, Microsoft 365 E3 allowed them to collaborate and work as they had when they were physically together in an office.

- The senior systems designer for a European automotive company stated: “Workers have access to their files and can work against the cloud. If we did not have this, we never would have been able to cope with the load on our VPN services. [Microsoft] Teams also made it easier to keep in touch. It was quite interesting when we sent people home. We went from having around 1,700 Teams meetings a day to around 11,000.”
- The CFO of a food service firm said: “The biggest benefit of Microsoft 365 is helping collaboration. People were used to working in an office with their colleagues and dropping into people’s offices to chat. [Microsoft] Teams is helping some with that now with [the pandemic] when you can’t do that.”

- The managing director at a financial services firm said: “We don’t have to put our employees at risk. You can work from home with a fully vetted platform and set of tools.”
- The senior director of IT at an ISP stated: “We sent everyone home and we saw that they were better at home. [They were] more productive than before.”

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement Microsoft 365 E3 and later realize additional uses and business opportunities, including:

- **Future reduction of office space.** A few interviewees said their firms will explore downsizing their corporate real estate footprints in the near future. A key factor in this decision was the ability for workers to conduct normal business activities with no loss in productivity while working from home and using Microsoft 365 E3 tools during the COVID-19 pandemic.
 - The CFO for a food service firm stated: “We had a high population of remote workers before. But, moving forward, we will see less office space and lower travel costs because we’re not going to have meetings in these headquarter offices.”
 - The SVP of global technology for a restaurant chain said: “We’re never going to have a no-office policy. However, you cannot have everyone back, and we are looking at creating tiers of employees who need to be in an office and some who will be home workers by default. Then they can go back to the office if they choose. We are not going to push them to go back, and we will probably cap [office capacity] it at about 75% of what it was before.”

- **Moving to the cloud at your own pace.** Many customers are at various stages of their cloud journey due to existing dependencies (e.g., tools, existing contracts, policies) of other stakeholders. Microsoft 365 E3 gives them the flexibility to adopt cloud while still on-premises.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in [Appendix A](#)).

Analysis Of Costs

■ Quantified cost data as applied to the composite

| Total Costs | | | | | | | |
|-------------|-------------------------------------|-------------|--------------|--------------|--------------|--------------|---------------|
| Ref. | Cost | Initial | Year 1 | Year 2 | Year 3 | Total | Present Value |
| Itr | Initial planning and implementation | \$3,346,875 | \$0 | \$0 | \$0 | \$3,346,875 | \$3,346,875 |
| Jtr | Microsoft licensing cost | \$0 | \$12,096,000 | \$12,096,000 | \$12,096,000 | \$36,288,000 | \$30,080,962 |
| Ktr | E3 ongoing management | \$0 | \$3,248,438 | \$3,297,656 | \$3,347,859 | \$9,893,953 | \$8,193,757 |
| Ltr | End-user training | \$976,500 | \$48,825 | \$50,400 | \$51,975 | \$1,127,700 | \$1,101,589 |
| Mtr | Device refresh | \$1,260,000 | \$0 | \$0 | \$0 | \$1,260,000 | \$1,260,000 |
| | Total costs (risk adjusted) | \$5,583,375 | \$15,393,263 | \$15,444,056 | \$15,444,056 | \$51,916,528 | \$43,983,183 |

INITIAL PLANNING AND IMPLEMENTATION

Evidence and data. Interviewees said their organizations incurred several months' worth of planning and implementation labor costs before deploying Microsoft 365 E3. Firms worked with professional services partners to plan and execute their deployments. Those organizations coming from legacy on-premises deployments required time and effort to migrate files and decommission hardware.

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- The composite organization engages with a professional services firm for three months of planning and design.

- The composite organization dedicates 15 FTEs to implementing Microsoft 365 E3, migrating files from legacy solutions, and decommissioning legacy software and hardware. The team allocates 50% of its time over six months to this process.

Risks. Initial planning and implementation costs will vary based on size of deployment and the solution components deployed. Organizational agility and internal IT capabilities will also impact speed. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$3.3 million.

Initial Planning And Implementation

| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 |
|--------------------------------------|---|-------------------------------|--|--------|--------|--------|
| I1 | FTEs involved in implementation | | 15 | | | |
| I2 | Average annual salary | | \$125,000 | | | |
| I3 | Percent of time dedicated to implementation | 6 months | 50% | | | |
| I4 | Professional services | | \$2,250,000 | | | |
| I _t | Initial planning and implementation | $(I1 \cdot I2 \cdot I3) + I4$ | \$3,187,500 | | | |
| | Risk adjustment | ↑5% | | | | |
| I _{tr} | Initial planning and implementation (risk-adjusted) | | \$3,346,875 | | | |
| Three-year total: \$3,346,875 | | | Three-year present value: \$3,346,875 | | | |

MICROSOFT LICENSING COST

Evidence and data. Microsoft 365 E3 is priced as a monthly as-a-service license.

Modeling and assumptions. For the financial analysis, Forrester made the following assumption:

- The composite organization has 30,000 users paying a monthly list price of \$32 per user.

Risks. While Forrester used a standard list price, a risk adjustment of 5% has been applied to account for any regional or inflationary impacts yielding a three-year, risk-adjusted total PV of \$30.1 million.

Microsoft Licensing Cost

| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 |
|---------------------------------------|--|-------------|---|--------------|--------------|--------------|
| J1 | Number of users | A1 | | 30,000 | 30,000 | 30,000 |
| J2 | Monthly license cost per user | List price | | \$32 | \$32 | \$32 |
| Jt | Microsoft licensing cost | J1*J2*12 | \$0 | \$11,520,000 | \$11,520,000 | \$11,520,000 |
| | Risk adjustment | ↑5% | | | | |
| Jtr | Microsoft licensing cost (risk-adjusted) | | \$0 | \$12,096,000 | \$12,096,000 | \$12,096,000 |
| Three-year total: \$36,288,000 | | | Three-year present value: \$30,080,962 | | | |

E3 ONGOING MANAGEMENT

Evidence and data. For the interviewees' organizations, the ongoing management of Microsoft 365 E3 is significantly less labor-intensive than prior legacy solutions, but it still requires some administrative support.

Modeling and assumptions. For the financial analysis, Forrester made the following assumptions:

- The composite organization engages 15 FTEs who spend 75% of their time supporting the Microsoft 365 E3 suite of products. However, this is 6.5 FTEs fewer than the previous deployment (Office in the cloud with the remainder of Microsoft solutions on-premises and eliminated third-party solutions).

Interviewees said their organizations frequently redeployed FTEs previously assigned to managing the deployments to other valuable projects, such as security enhancement and modernization efforts.

- The composite organization engages with professional services firms for two months per year working on new development and roadmapping.

Risks. Ongoing management costs will vary based on the number of users and solution components in use. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$8.2 million.

| E3 Ongoing Management | | | | | | |
|--------------------------------------|--|-------------|--|-------------|-------------|-------------|
| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 |
| K1 | Internal management staff | A1/1,200 | | 25 | 25 | 25 |
| K2 | Percent of time spent managing E3 deployment | | | 75% | 75% | 75% |
| K3 | Average annual salary | | | \$125,000 | \$127,500 | \$130,050 |
| K4 | Internal costs | K1*K2*K3 | | \$2,343,750 | \$2,390,625 | \$2,438,438 |
| K5 | Ongoing professional services | | | \$750,000 | \$750,000 | \$750,000 |
| Kt | E3 ongoing management | K4+K5 | | \$3,093,750 | \$3,140,625 | \$3,188,438 |
| | Risk adjustment | ↑5% | | | | |
| Ktr | E3 ongoing management (risk-adjusted) | | | \$3,248,438 | \$3,297,656 | \$3,347,859 |
| Three-year total: \$9,893,953 | | | Three-year present value: \$8,193,757 | | | |

END-USER TRAINING

Evidence and data. While the interviewees’ organizations found Microsoft 365 E3 to be intuitive and easy to use for most employees, decision-makers dedicated a limited amount of time to train them on new features and tools. Some of the organizations created materials for self-guided learning, like webinars, instead of offering formal training.

Modeling and assumptions. In modeling the composite organization, Forrester assumes:

- All users attend a 1-hour training session during the initial rollout of Microsoft 365 E3 to understand the new tools and capabilities.
- The organization has 5% turnover, with new hires going through the 1-hour training process.

Risks. Training costs may vary based on company size and existing knowledge of Microsoft solutions. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$1.1 million.

End-User Training

| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 |
|--------------------------------------|--|--|--|----------|----------|----------|
| L1 | Number of users trained | Initial: A1 Y1 through Y3: A1*5% for churn | 30,000 | 1,500 | 1,500 | 1,500 |
| L2 | Time allocated for directed training (hours) | | 1 | 1 | 1 | 1 |
| L3 | Average hourly rate | D5 | \$31 | \$31 | \$32 | \$33 |
| Lt | End-user training | L1*L2*L3 | \$930,000 | \$46,500 | \$48,000 | \$49,500 |
| | Risk adjustment | ↑5% | | | | |
| Ltr | End-user training (risk-adjusted) | | \$976,500 | \$48,825 | \$50,400 | \$51,975 |
| Three-year total: \$1,127,700 | | | Three-year present value: \$1,101,589 | | | |

DEVICE REFRESH

Evidence and data. Interviewees said their organizations assessed which computers did not meet the minimum specifications for their move to Windows 10. While this upgrade coincided with the device refresh cycle at most firms, some had to refresh a small portion of devices outside cycle.

Modeling and assumptions. In modeling the composite organization, Forrester assumes:

- 5% of users have a device that is not on the current refresh cycle and does not meet minimum specifications.
- The average device is valued at \$800.

Risks. Device refresh costs will vary based on current refresh rates and the size of organization. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$1.3 million

Device Refresh

| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 |
|--------------------------------------|---|----------------|--|--------|--------|--------|
| M1 | Number of users | A1 | 30,000 | | | |
| M2 | Percent of user devices requiring upgrade | | 5% | | | |
| M3 | New device cost | | \$800 | | | |
| Mt | Device refresh | $M1 * M2 * M3$ | \$1,200,000 | | | |
| | Risk adjustment | ↑5% | | | | |
| Mtr | Device refresh (risk-adjusted) | | \$1,260,000 | | | |
| Three-year total: \$1,260,000 | | | Three-year present value: \$1,260,000 | | | |

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Financial Analysis (risk-adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

| | Initial | Year 1 | Year 2 | Year 3 | Total | Present Value |
|----------------|---------------|----------------|----------------|----------------|----------------|----------------|
| Total costs | (\$5,583,375) | (\$15,393,263) | (\$15,444,056) | (\$15,495,834) | (\$51,916,528) | (\$43,983,183) |
| Total benefits | \$0 | \$48,425,997 | \$51,451,027 | \$65,734,341 | \$165,611,365 | \$135,932,327 |
| Net benefits | (\$5,583,375) | \$33,032,734 | \$36,006,970 | \$50,238,507 | \$113,694,836 | \$91,949,144 |
| ROI | | | | | | 209% |
| Payback | | | | | | <3 months |

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendix B: Endnotes

The cost of a data breach. According to the Ponemon Institute, the average total cost of a security³ breach can cost:

- \$2.35 million for organizations with fewer than 500 employees.
- \$2.53 million for organizations with 500 to 1,000 employees.
- \$3.78 million for organizations with 1,001 to 5,000 employees.
- \$4.72 million for organizations with 5,001 to 10,000 employees.
- \$4.61 million for organizations with 10,001 to 25,000 employees.
- \$4.25 million for organizations with more than 25,000 employees.

¹ Source: “2020 Cost of a Data Breach Report,” Ponemon Institute, 2020 (ibm.com/security/data-breach).

² Source: “2019 Cost of a Data Breach Report,” Ponemon Institute, 2019. Forrester used the 2019 study for the likelihood of a breach, as Ponemon did not publish this statistic in the 2020 version of the study.

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