

A Forrester Total Economic Impact™
Study Commissioned By Microsoft
August 2019
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The Total Economic Impact™ Of Microsoft 365 Apps for enterprise

Cost Savings And Business Benefits
Enabled By Microsoft 365 Apps

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Executive Summary

Benefits And Costs



Cost savings from Microsoft 365 Apps licensing change:

\$144 saved from second device license avoided per user



Time savings from collaboration, communication, and file-sharing tools:

1.5 hours per week per FTE



License costs:
\$1,880,060

Businesses that have been content with using Microsoft Office 2010 will have to consider upgrading their software soon as the product's support will reach end of life in October 2020.

Many businesses have yet to upgrade due to familiarity with Microsoft Office products that have worked well for them thus far. Businesses would rather wait until end of service to continue on with their current work environments. Meanwhile, businesses that have yet to adopt cloud storage systems for Office's cloud features are hesitant due to the cost and risk related to migrating on-prem storage to a cloud or hybrid system.

Microsoft 365 Apps for enterprise* introduces new features to Outlook, OneDrive for Business, Word, Excel, PowerPoint, and Microsoft Teams aimed at improving productivity, collaboration, and security, including:

- Real-time document coauthoring and collaboration.
- AI-powered creativity features like Designer and 3D animation tools for visualization in PowerPoint, and intelligent insights and data analytics in Excel.
- Cloud storage through OneDrive for Business.
- App access across mobile, PC, and Mac devices and on the web.

Most critically, businesses adopting Microsoft 365 Apps will no longer have to pay on a "per-device" model, but on a "per-user" basis, enabling multidevice access per user. Microsoft 365 Apps stays always up to date as well with new feature updates pushed onto devices. As a result, organizations no longer have to interrupt users while going through a wave of updates with the latest Office releases.

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 Apps. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Microsoft 365 Apps on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed eight customers with years of experience using Microsoft 365 Apps.

The interviewed organizations upgraded to Microsoft 365 Apps after primarily using Office 2010 for several years. Since upgrading, they have noticed a direct benefit toward employee time savings from collaboration, communication, and service-connected AI features added to Word, Excel, and other applications. Specifically, employees have reduced time spent on the back-and-forth of emails reviewing documents, designing and building presentations or spreadsheets, and waiting for feedback.

Although it took some time and money for businesses to integrate cloud storage to their systems to use OneDrive for Business, they have justified their investments thus far by making employees more mobile. Microsoft 365 Apps' flexibility for device usage has provided employees with full access to Office applications and documents on secondary mobile devices while on the go. Meanwhile, the Click-to-Run feature has allowed IT to minimize downtime for users by downloading recent updates in the background to Office-enabled devices.

For further analysis of the AI features offered and Microsoft Teams, please see the studies, "New Tech TEI: The Total Economic Impact Of Microsoft



ROI
127%



Benefits PV
\$15.2 million



NPV
\$8.5 million



Payback
16.0 months

365 AI For Knowledge Workers” and “The Total Economic Impact of Microsoft Teams.” This study only includes benefits related to office productivity tools found in Microsoft 365 Apps and excludes broader collaboration and productivity tech (e.g., Exchange and SharePoint) found in Microsoft 365 Business.

**March 2020 Update: All references to Office 365 ProPlus in this document, including quotes, have been updated to appear as its current name Microsoft 365 Apps.*

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the companies interviewed:

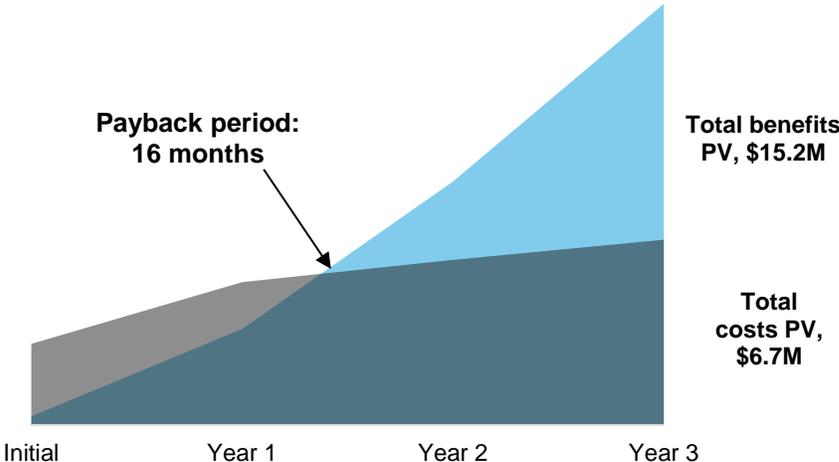
- › Microsoft 365 Apps’ collaboration, communication, design, and file-sharing tools have helped employees to create time savings of 1.5 hours per week. Employees have used OneDrive for Business to coauthor and share links to files, reducing the amount of time spent reviewing documents individually and then chains of emails going over feedback. Workers have become more active at using new design tools and sharing feedback in real time to move projects along and save time.
- › Regular access to Microsoft 365 Apps via the mobile app and the web while on the go has improved mobile worker productivity by 2.5 hours. Through OneDrive for Business cloud storage and Microsoft’s licensing change to access on a per-user basis, workers have become capable of picking up where they left off on their work PC by using compatible mobile devices to continue being productive.
- › **Organizations have saved on average \$144 annually for every user’s secondary device with Office access.** Since the licensing change, organizations no longer have to pay for every device that employees use to access Office applications.
- › **Organizations have avoided paying for 100 business trips traveled in a year.** Although organizations already had video and phone conferencing solutions, the usage of Microsoft Teams with coauthoring tools has improved productivity in meetings. As a result, organizations have been able to scale back some business travel costs.

Costs. The interviewed organizations experienced the following risk-adjusted PV costs:

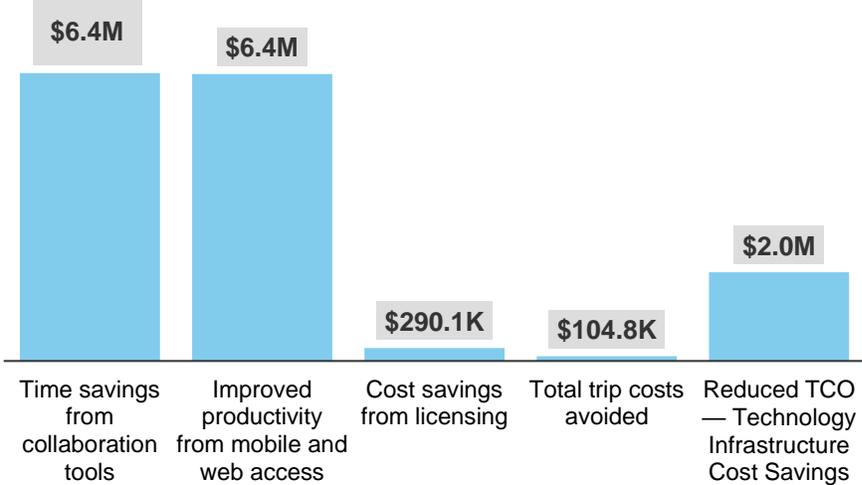
- › **Subscription licensing for Microsoft 365 Apps.** Organizations pay \$144 per user on average annually for the Microsoft 365 Apps license. Organizations can reassign licenses among users every three months.
- › **Planning, implementation, and deployment costs for Microsoft 365 Apps.** Interviewed organizations varied in their adoption of Microsoft 365 Apps. On average, adoption took place over two years, and one FTE was needed for ongoing administration and management.

Forrester’s interviews with eight existing customers and subsequent financial analysis found that an organization based on these interviewed organizations experiences benefits of \$15,205,826 over three years versus costs of \$6,693,234, adding up to a net present value (NPV) of \$8,512,592 and an ROI of 127%.

Financial Summary



Benefits (Three-Year)



The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Microsoft 365 Apps.

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 Microsoft 365 Apps can have on an organization:



DUE DILIGENCE

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



CUSTOMER INTERVIEWS

Interviewed eight organizations using Microsoft 365 Apps 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 impact of Microsoft 365 Apps: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

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 Microsoft 365 Apps.

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.

The Microsoft 365 Apps Customer Journey

BEFORE AND AFTER THE MICROSOFT 365 APPS INVESTMENT

Interviewed Organizations

For this study, Forrester conducted eight interviews with Microsoft 365 Apps customers. Interviewed customers include the following:

INDUSTRY	REGION	INTERVIEWEE	PREVIOUS OFFICE SOFTWARE USED
IT services	Western Europe, global presence	Head of unified communication and messaging	Office 2010
IT services	Western Europe, global presence	Director, business management	Office 2010
IT services	North America, global presence	IT operations manager	Non-Office service
Financial services	North America, global presence	Senior VP of customer-facing technology	Office 2016
Utilities	North America	Capability owner	Office 2013
Healthcare	North America	Enterprise IT architect	Office 2010
Financial services	Worldwide	Operations and technology manager	Office 2010
Utilities	North America, global presence	End user computing design lead	Office 2010

Key Challenges

The interviewed organizations shared several challenges they faced prior to adopting Microsoft 365 Apps:

- › **Outdated collaboration tools for workforce.** The interviewees recognized that their organizations might have been losing an edge on having the most up-to-date office technology when compared to competitors. A few interviewees referenced internal feedback from employees who had worked at other companies with new third-party tools encouraging collaboration. “Sending documents by email, waiting for changes, and then sending back was time-consuming. Especially when dealing with offices in different time zones, which would sometimes delay progress until the next morning,” said the director of business management at a European IT organization.

For the IT company that used a non-Office service, the interviewee said: “Millennials’ concerns at our company tagged us as stagnant to collaboration. They wanted something where they could work together and not just send each other notes on.” The head of unified communication and messaging at an IT organization echoed the sentiments, “There was a perception among users that they were just using an older product [Office 2010], and there was an increasing familiarity with new tools from employees’ previous experiences at other companies.”

“We definitely were afflicted by some of the classic Office licenses’ inefficiencies. We had people onboarding and offboarding at our company, and there was no way to routinely vanish those device licenses.”

Senior VP of customer-facing technology, financial services



- › **Inability to work effectively while on the go.** Business administrators noted that workers were limited by previous business solutions that didn't enable mobile functionality beyond checking email. With employees increasingly seeking to work remote and when traveling, organizations needed a new solution.
- › **Increasingly expensive Office licensing.** A majority of the business administrators reported that they renewed their Office licensing every three to five years, coinciding with the release of a new version of Office. The licensing was on a per-device basis, which had become more expensive for interviewees as more employees worked remote. "From a cost-control perspective, we have an increasing number of mobile users and home small-office users. We needed to bring those costs to a more manageable rate," said the operations and technology manager at a financial services company.

Key Results

The interviews revealed that key results from the Microsoft 365 Apps investment include:

- › **Greater efficiency in sharing and receiving updated documents.** Employees began using links to documents in OneDrive for Business in place of attaching documents to emails. By having the same shared link, employees could make edits to the same document that automatically saved to the project folder. As a result, workers no longer had to wait for the updated document to be sent back to them.
- › **Greater productivity from employees having more flexibility by accessing Office via the web or on mobile devices.** Microsoft 365 Apps' licensing model change from a per-device basis to per-user has enabled employees to work on additional compatible devices at no extra cost to their organizations. Tablet usage of Word and PowerPoint has increased; employees also use tablets to view documents that aren't accessible over email.
- › **Cost savings from per-user Microsoft 365 Apps licensing instead of per-device licensing.** Organizations have reduced their annual spending on Office because they no longer have to pay an additional fee for employees using a secondary device for Office-related activities. These savings are especially beneficial for organizations with a highly mobile workforce.
- › **Cost savings in business trips avoided.** Organizations have slightly reduced their spending toward business travel because of increasing collaboration over applications like OneDrive for Business and Microsoft Teams. Workers can stay in better alignment on the status of projects, reducing the need to meet in person to catch up.
- › **Tools that enabled businesses to decommission usage of third-party tools.** Specifically, organizations were able to use OneDrive for Business to decommission some third-party storage services, and Microsoft Teams to retire conferencing applications.

"The people in the field are really benefitting from these collaboration tools. They don't have time for back-and-forth and want documents readily available, which [Microsoft 365 Apps] has helped with."

Head of unified communication and messaging, IT services



"I think that Microsoft Teams can replace hosting some video bridges. Especially if it's a collaboration effort between a smaller group between two to eight people."

IT operations manager, IT services



Composite Organization

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

the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

Description of composite. The composite organization is a global organization with most of its business operations in North America and Europe. The organization has 5,000 knowledge workers who use Microsoft 365 Apps.

Deployment characteristics. The organization typically upgrades its Office suite with the release of a new iteration every five years. The organization upgrades from Office 2010 by deploying Microsoft 365 Apps to all users over the first 12 months. Microsoft 365 Apps is deployed and provides immediate access to Outlook, Word, Excel and PowerPoint. OneDrive for Business is not completely available in Year 1 as the organization migrates from on-premise to cloud storage. The organization completes its migration in Year 2. Microsoft Teams is added for usage in Year 2 as well.



Key assumptions

5,000 Microsoft 365 Apps users

Previously used Office 2010

Rollout over 12 months

Analysis Of Benefits

QUANTIFIED BENEFIT DATA AS APPLIED TO THE COMPOSITE

Total Benefits							
REF.	BENEFIT	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Time savings from collaboration tools	\$0	\$1,334,678	\$2,669,355	\$4,004,033	\$8,008,065	\$6,427,711
Btr	Improved productivity from mobile and web access	\$0	\$1,441,452	\$2,882,903	\$3,603,629	\$7,927,984	\$6,400,435
Ctr	Cost savings from licensing	\$0	\$116,640	\$116,640	\$116,640	\$349,920	\$290,066
Dtr	Total trip costs avoided	\$0	\$0	\$45,000	\$90,000	\$135,000	\$104,808
Etr	Reduced TCO — technology infrastructure cost savings	\$315,000	\$585,000	\$720,000	\$720,000	\$2,340,000	\$1,982,806
	Total benefits (risk-adjusted)	\$315,000	\$3,477,769	\$6,433,898	\$8,534,302	\$18,760,969	\$15,205,826

Time Savings From Collaboration Tools

Among Microsoft 365 Apps' collection of products, interviewed business administrators said workers were most taking advantage of OneDrive for Business and its feature for coauthoring documents. Under previous versions of Office, workers would email each other documents to refine and edit. Time spent waiting for a colleague to send over their feedback on documents would often stall project workflow and delay final delivery. "The emailing back and forth of a document between people became a nuisance when the changes to the document were small. It was adding unnecessary wait time to projects," said the IT operations manager at an IT services company.

OneDrive for Business enables workers to click a shared link to a document, make any changes needed, and then exit. "It changes the mode of work; it changes what teams expect the turnaround time to be," said the senior VP of customer-facing technology at a financial services company. "It's probably safe to say there's a 50% faster turnaround on file collaboration."

Several interviewees noted that users being able to enter and edit a document at the same time was not possible at all previously. The operations and technology manager at a financial services company explained: "If we're looking at traders making changes to a pricing sheet in Excel, the pricing may change, or they feel the risk factor has to be updated. They can have multiple people providing different views into what needs to be done in real time. I'm seeing 20% in time savings from that real-time collaboration alone."

Most interviewed organizations had not yet used Microsoft Teams, as at the time of the interviews, the application was not officially included with the software. The product became available to Microsoft 365 Apps users in July 2019. The interviewees whose companies had access to

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of more than \$15.2 million.

Microsoft Teams through their other licensing agreements noted that it was an improvement over Skype in that they could create group chats for projects and save their conversations for later reference. “Our previous messaging platform didn’t allow you to save conversations in the way Teams does. This is particularly helpful since [Microsoft 365 Apps] doesn’t have SharePoint, and Teams kind of creates a place where colleagues can address what they’re doing,” said an IT operations manager.

Other features that some interviewees have taken advantage of are: @mentions, for tagging colleagues in emails or messages; PowerPoint Designer, which provides automatically generated slide deck designs; and 3D Builder, for adding animations to presentations. However, these features are still early in the adoption life cycle at the companies.

For the composite organization, Forrester assumes that:

- › Among the 5,000 Microsoft 365 Apps users, the collaboration tools assist workers in creating a half hour of weekly time savings in Year 1, 1 hour in Year 2, and 1.5 hours in Year 3. The time savings increase is based on workers becoming more familiarized with Microsoft 365 Apps’ new features like @mentions and PowerPoint Designer.
- › Workers recapture 25% of time saved from Microsoft 365 Apps’ collaboration features to rededicate toward labor activities. They spend the remaining time saved on nonwork activities like socializing or breaks from the office.
- › The average knowledge worker fully burdened cost (including all benefits and taxes) is \$45.63 per hour, or \$94,940 annually.

The following risks can affect this benefit estimate:

- › Worker time savings from Microsoft 365 Apps collaboration tools will vary based on the previous state of the organization. Businesses that already use third-party office communication tools or file-sharing services may not realize as dramatic of an improvement in time savings than one not currently using third-party services.
- › Given the variety of new features that are regularly introduced as part of Microsoft 365 Apps, organizations may have to educate employees on their benefits for them to understand the potential value of the collaboration tools.
- › Time savings for organizations will vary depending on the office culture and whether work tasks are more siloed than collaborative.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$6,427,711.



Time savings increase from 0.5 hours to 1.5 hours a week per employee over the three-year period.

Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.

Time Savings From Collaboration Tools: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Number of Microsoft 365 Apps users		5,000	5,000	5,000
A2	Weekly time savings (hours)	Interviews	0.5	1.0	1.5
A3	Productivity capture	Assumptions	25%	25%	25%
A4	User fully loaded hourly compensation		\$45.63	\$45.63	\$45.63
At	Time savings from collaboration tools	$A1 \cdot A2 \cdot 52 \text{ weeks} \cdot A3 \cdot A4$	\$1,482,975	\$2,965,950	\$4,448,925
	Risk adjustment	↓10%			
Atr	Time savings from collaboration tools (risk-adjusted)		\$1,334,678	\$2,669,355	\$4,004,033

Improved Productivity From Mobile And Web Access

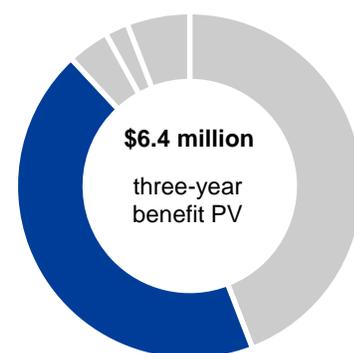
The change in Microsoft’s licensing structure for Office from payment per device to per user helped the interviewed organizations to improve productivity among mobile workers. Office applications that were previously unavailable on mobile devices to many employees at a company are now available. “Our workers are more effective by using the mobile and web versions of [Microsoft 365 Apps]. They feel like they are not as disrupted as much and can leave the office and pick up their mobile device to keep going,” said the operations and technology manager at a financial services company.

The benefit of remote access is supported by OneDrive for Business, which makes documents available for access from the cloud on any device. In addition, the Microsoft Click-to-Run service is an alternative to Windows Installer, enabling IT to stream Office applications to users, reducing downtime. “The mobility of documents and applications makes a big difference for us in being able to pop up a document on any device. If you got a care provider moving from workstation to workstation all day, you’re eventually saving 5 to 10 minutes a day from having the same tools readily available on all your machines,” said the enterprise IT architect for a healthcare services company.

For the composite organization, Forrester assumes that:

- › Among the composite’s 5,000 Microsoft 365 Apps users, 900 workers use Microsoft 365 Apps from mobile devices.
- › Mobile workers at the composite earn 1 hour in time savings per week in Year 1, 2 hours in Year 2, and 2.5 hours in Year 3.
- › Mobile users recapture 75% of their time spent on mobile devices for work activities. This high rate is due to end users having access to their work tools from their mobile devices and on the web, thus allowing them to work outside of their offices when they otherwise couldn’t. Therefore, this productivity is mostly net new.
- › The average knowledge worker fully burdened cost (including all benefits and taxes) is \$45.63 per hour, or \$94,940 annually.

The following risks can affect this benefit estimate:



Improved productivity from mobile and web access: **42%** of total benefits

- › A few of the interviewed organizations noted the potential security risks attached with making documents available on multiple devices. “Our compliance had concerns about having data sitting in the cloud, especially in light of GDPR (General Data Protection Regulation). But it’s a short conversation over what data we plan to have sit on the cloud and what we don’t,” said one interviewee.
- › A couple of the business administrators said young employees have embraced mobility more in the office. “There’s still an older group of people who prefer to have their data miles away from them when they’re away from work, while others want to keep it close to them,” said an interviewee.
- › The productivity capture rate may be affected by workers relying on smartphone and tablet devices for work, while also using these devices for leisure activities like watching video or checking social media.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$6,400,435.

Improved Productivity From Mobile And Web Access: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Number of mobile users	Interviews	900	900	900
B2	Weekly time savings (hours)	Interviews	1.0	2.0	2.5
B3	Productivity capture		75%	75%	75%
B4	User fully loaded hourly compensation		\$45.63	\$45.63	\$45.63
Bt	Improved productivity from mobile and web access	$B1*B2*52*B3*B4$	\$1,601,613	\$3,203,226	\$4,004,033
	Risk adjustment	↓10%			
Btr	Improved productivity from mobile and web access (risk-adjusted)		\$1,441,452	\$2,882,903	\$3,603,629

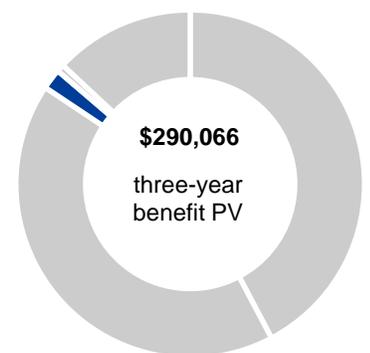
Cost Savings From Microsoft 365 Apps Licensing

In addition to increased mobile productivity, Office’s licensing change to payment per user helped organizations realize cost savings from not having to pay for workers’ usage of additional devices. “Instead of having multiple licenses, covering different types of users, they are now consolidated, which is a relief from a license management standpoint. I would say we’re seeing about a 10% to 15% in savings since the change in licensing structure,” said a product manager.

Bringing employees with different work responsibilities into a license that was the same across the board made sense to businesses. “While it’s nice for some employees to have access to email or pop into a quick Word document, it’s certainly not necessary to have the full license for them. So, we’ve seen a major change in being able to right-size the license against usage,” said another interviewee.

For the composite organization, Forrester assumes that:

- › For each mobile Office user, there’s at least one secondary device with access to Office.
- › The average cost of Microsoft 365 Apps per user annually totals \$144.



Cost savings from Microsoft 365 Apps licensing: **2%** of total benefits

- › Under the per-user licensing agreement, the organization does not have to pay for 900 secondary devices among employees, saving a risk-adjusted \$116,640 per year.

The following risks can affect this benefit estimate:

- › If the organization does not have many mobile workers, the savings from this benefit will be much more limited.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$290,066.

Cost Savings From Microsoft 365 Apps Licensing: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Total number of additional devices per user	Interviews	900	900	900
C2	Average Office license per user annually		\$144	\$144	\$144
Ct	Cost savings from Microsoft 365 Apps licensing	C1*C2	\$129,600	\$129,600	\$129,600
	Risk adjustment	↓10%			
Ctr	Cost savings from Microsoft 365 Apps licensing (risk-adjusted)		\$116,640	\$116,640	\$116,640

Total Trip Costs Avoided

A few of the interviewed organizations mentioned that employees were able to avoid some travel through the use of Microsoft 365 Apps — specifically, the usage of Microsoft Teams videoconferencing capabilities and the availability of coauthoring tools. The capability owner at a utilities organization said: “We had a group of one of our manufacturing companies that would go out twice a year and do meetings with different divisions around the world. Through Teams and OneDrive, we were able to do that with virtual conference rooms and collaboration tools. We saved like \$200,000 or \$300,000 in travel cost alone.” The interviewee also reported minor time savings from not having to book flights and manage travel.

For the composite organization, Forrester assumes that:

- › Employees avoid 50 trips in Year 2 once the organization has migrated to OneDrive and begun rolling out Microsoft Teams to more users. By Year 3, the total number of trips avoided by employees reaches 100.
- › Each trip has an average cost of \$1,000.
- › The cost savings come to \$45,000 in Year 2 and increase to \$90,000 in Year 3.

The following risks can affect this benefit estimate:

- › The amount of time saved will vary based on how much business trips factor into business operations and if there have already been travel reductions made for cost savings.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$104,808.

Total Trip Costs Avoided: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Total number of avoided trips		0	50	100
D2	Average cost per trip		\$1,000	\$1,000	\$1,000
Dt	Total trip costs avoided	D1*D2	\$0	\$50,000	\$100,000
	Risk adjustment	↓10%			
Dtr	Total trip costs avoided (risk-adjusted)		\$0	\$45,000	\$90,000

Reduced TCO — Technology Infrastructure Cost Savings

Several of the interviewed organizations said they were able to retire some third-party conferencing and storage platforms because of Microsoft 365 Apps. “We are retiring third-party conference providers as we move to cloud voice across the organization, with Microsoft Teams being a solution that is part of that shift,” said the end user computing design lead at a utilities company.

According to the interviewees, while they retired on-premise servers for storage, they could not retire third-party storage systems entirely. “There’s valid business use for previous storage solutions, especially for external sharing of files,” said the enterprise IT architect at a healthcare company. “However, in the day-to-day for regular storage, OneDrive is being used most often. We’ve saved several hundred thousand dollars a year in reducing our reliance on those solutions.”

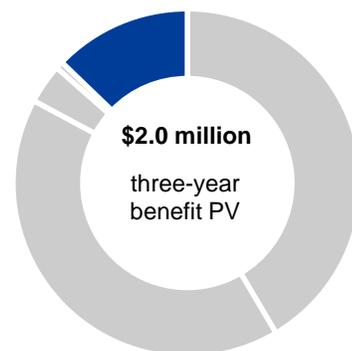
For the composite organization, Forrester assumes that:

- › The composite replaces three third-party tools with functionality in Microsoft 365 Apps. On average, each third-party tool costs the organization \$30 per user per year in license and infrastructure costs. The organization gets 66% of this benefit in Year 1 as it completes its phased rollout.
- › The organization avoids \$350,000 in on-premises infrastructure purchases and resulting maintenance costs by migrating to the cloud in Year 1.
- › By simplifying the overall environment, moving to the cloud, and increasing automation, the organization reduces its IT administration effort. In the previous environment, four FTEs maintained the platform. In the new environment (in the cost section below), three FTEs are needed, resulting in a savings of one FTE. The average IT fully burdened compensation (including all benefits and taxes) is \$143,000 annually.

The following risks can affect this benefit estimate:

- › This benefit will vary based on the previous third-party solutions that can be replaced or pricing can be negotiated.
- › License and infrastructure costs will vary from organization to organization based on company size and business use.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$1,982,806.



Reduced TCO —
technology infrastructure
cost savings: **13%** of
total benefits

Reduced TCO — Technology Infrastructure Cost Savings: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
E1	Cost savings from replacing prior third-party tools	3 tools replaced, average \$30 per user per year per tool		\$300,000	\$450,000	\$450,000
E2	Eliminated on-premise costs	Assumption	\$350,000	\$70,000	\$70,000	\$70,000
E3	Prior ongoing IT administration (FTEs)	Interviews		4	4	4
E4	IT fully loaded annual compensation	Interviews		\$70,000	\$70,000	\$70,000
Et	Reduced TCO — technology infrastructure cost savings	$(E1+E2)+(E3*E4)$	\$350,000	\$650,000	\$800,000	\$800,000
	Risk adjustment	↓10%				
Etr	Reduced TCO — technology infrastructure cost savings (risk-adjusted)		\$315,000	\$585,000	\$720,000	\$720,000

Unquantified Benefits

- › **OneDrive for Business and Microsoft 365 Apps' updated licensing structure is making the business environment more flexible.** In one case, company culture was changing around being able to work on any desktop in the office. The senior VP of customer-facing technology at a financial services company said: "I wouldn't be surprised if 50% of our office desktops are made available for anyone to work on. I don't want to comment on the pros and cons of that, but an attitude is forming among employees where they don't have an attachment to their physical desktop and will instead grab whichever is available to be closer to certain colleagues or teams."
- › **Productivity savings assist in improving the employee experience.** Improvements from collaboration, file sharing, and having a full feature set in Office can potentially contribute to improved quality of life at work. Due to improved file-sharing and collaboration tools, employees may feel relief at not being included in another long email chain. Meanwhile, PowerPoint Designer may drive creativity for improved slide layouts. The director of business management at an IT company stated: "The improvement to the visualizations of PowerPoint are helping me to illustrate my points in new ways. Whereas previously I'd sometimes scour for third-party templates, it's nice to have it right there."

Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement Microsoft 365 Apps and later realize additional uses and business opportunities, including:

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the "right" or the ability to engage in future initiatives but not the obligation to do so.

› **Upgrading Microsoft 365 Apps license for additional features.** The business administrators interviewed for this study had different service tiers of Office running at their organizations, including Office 365 E3 and Office 365 E5 — which include Microsoft 365 Apps. Interviewees that had Office 365 E1 and Office 365 E3 spoke to the benefits of Exchange, which integrates business-class email with other applications and services for improved scheduling and file sharing. Meanwhile, SharePoint and Yammer helped users create hubs for project collaboration. Office 365 E5 license users had full access to security features like Cloud App Security, Threat Intelligence, Customer Lockbox, Office Advanced Threat Protection, Advanced Compliance, and Advanced Data Governance, which enabled them to decommission third-party security applications. Here's what some business administrators considered when choosing their Office plan:

- “We went with E5 because we’re big users of SharePoint, Exchange, and their servers. Previously, we had to install each product separately, and now they’re all a part of [Microsoft 365 Apps]. That all of the new Microsoft security features can be included with the license is a bonus.”
- “We went with E3. We were looking at E5 but have a lot to do right now in terms of migrating SharePoint sites and making sure all of our employees are on [Microsoft 365 Apps], then seeing how things are running with the software.”

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
Ftr	License costs	\$0	\$756,000	\$756,000	\$756,000	\$2,268,000	\$1,880,060
Gtr	Planning, implementation, and deployment costs	\$2,931,063	\$1,695,100	\$216,200	\$216,200	\$5,058,563	\$4,813,174
	Total costs (risk-adjusted)	\$2,931,063	\$2,451,100	\$972,200	\$972,200	\$7,326,563	\$6,693,234

License Costs

The composite organization purchases 5,000 Microsoft 365 Apps licenses over the three-year period; the costs per user total \$144 annually. Installations of 365 apps occur across the organization in Year 1.

The following risk factors may affect costs incurred by organizations:

- › Microsoft 365 Apps licensing costs vary based on service plan type and volume-related discounts.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of \$1,880,060.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of nearly \$6.7 million.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

License Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
F1	Number of Microsoft 365 Apps users		0	5,000	5,000	5,000
F2	Office license cost per user annually		\$144	\$144	\$144	\$144
Ft	License costs	F1*F2	\$0	\$720,000	\$720,000	\$720,000
	Risk adjustment	↑5%				
Ftr	License costs (risk-adjusted)		\$0	\$756,000	\$756,000	\$756,000

Planning, Implementation, And Deployment Costs

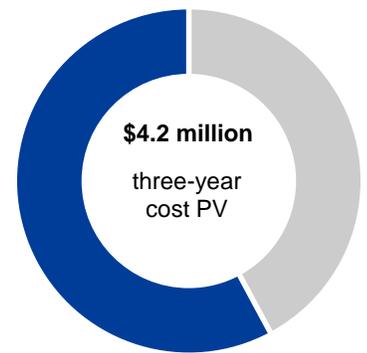
Costs related to planning, implementation, and deployment vary significantly based on the timeline for rollout, professional services used for migration, types of solutions deployed, and the number of devices. Organizations often use professional services to accelerate deployment time and to assist with configurations and integrations.

- › The composite has a 10-month initial deployment period. During this time, the organization stands up the solutions and completes early testing and deployments.
- › The composite uses \$1.8 million in professional services during the initial period and \$1 million in professional services to complete the rollout during Year 1.
- › The organization needs six FTEs for implementation and deployment in Year 1. After completing testing, two FTEs oversee finalizing integration in Year 2. The composite needs one FTE going forward for management and administration of the systems.
- › The average IT fully burdened cost (including all benefits and taxes) is \$143,000 annually.
- › Additional technology costs for moving and backing up data total \$33,750 in Year 1 and \$45,000 in Years 2 and 3.

The following risks can affect this cost estimate:

- › The organization may already have cloud storage or plan to create a hybrid environment where it doesn't fully decommission its on-premise services.
- › Costs will vary based on the size and scope of the deployment, the number of FTEs required, and the amount of professional services support needed.

To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year risk-adjusted total PV of \$4,813,174.



Planning,
implementation, and
deployment costs: **58%**
of total costs

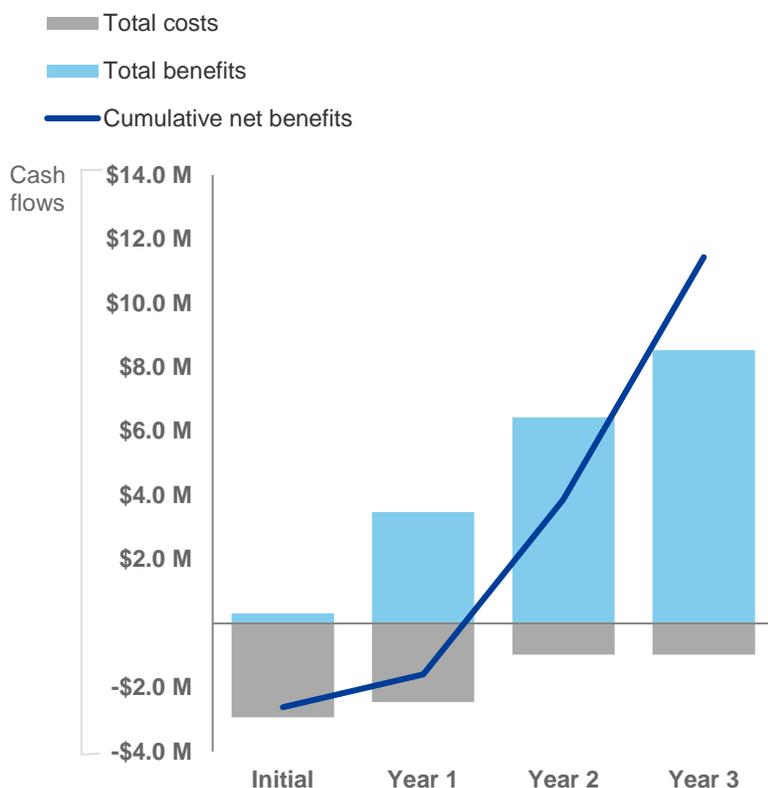
Planning, Implementation And Deployment Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	Number of months	Interview	10	12		
G2	Internal FTEs for planning and implementation	Interview	6	2		
G3	Professional service costs	Assumption	\$1,800,000	\$1,000,000		
G4	Additional technology spend	Assumption	\$33,750	\$45,000	\$45,000	\$45,000
G5	Internal FTEs for ongoing management and administration	Interview		1	1	1
G6	IT fully loaded annual compensation	Assumption	\$143,000	\$143,000	\$143,000	\$143,000
Gt	Planning, implementation and deployment costs	$((G1/12)*(G2+G5)*G6) + G3+G4$	\$2,548,750	\$1,474,000	\$188,000	\$188,000
	Risk adjustment	↑15%				
Gtr	Planning, implementation and deployment costs (risk-adjusted)		\$2,931,063	\$1,695,100	\$216,200	\$216,200

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (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 Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$2,931,063)	(\$2,451,100)	(\$972,200)	(\$972,200)	(\$7,326,563)	(\$6,693,234)
Total benefits	\$315,000	\$3,477,769	\$6,433,898	\$8,534,302	\$18,760,969	\$15,205,826
Net benefits	(\$2,616,063)	\$1,026,669	\$5,461,698	\$7,562,102	\$11,434,407	\$8,512,592
ROI						127%
Payback period						16 months

Microsoft 365 Apps: Overview

Microsoft 365 Apps is the always up-to-date suite of desktop apps that includes Word, PowerPoint, Excel, Outlook, and Teams, available as a subscription. Microsoft 365 Apps includes exclusive intelligent capabilities like Ideas in Excel and Researcher in Word, real-time collaboration, Microsoft Teams as the hub for teamwork, and advanced security features. As a user-based license, you can deploy Office on up to five PCs or Macs, five tablets, and five mobile devices. And with 1 TB of OneDrive cloud storage, you can access and collaborate on your files from anywhere.

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."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



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: Supplemental Material

Related Forrester Research

“The Total Economic Impact Of Microsoft 365,” Forrester Consulting report prepared for Microsoft, July 2019

“The Total Economic Impact Of Microsoft Teams,” Forrester Consulting report prepared for Microsoft, April 2019

<https://www.microsoft.com/en-us/microsoft-365/blog/wp-content/uploads/sites/2/2019/04/Total-Economic-Impact-Microsoft-Teams.pdf>

“New Tech TEI: The Total Economic Impact Of Microsoft 365 AI For Knowledge Workers,” Forrester Consulting report prepared for Microsoft, February 2019

<https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RWrZsV>