A Forrester Total Economic Impact™ Study Commissioned By Microsoft September 2017

Improving Firstline Worker Performance With Microsoft Office 365

A Forrester Total Economic Impact™ Analysis



Table Of Contents

| Executive Summary | 1 |
|---|----|
| Key Findings | 1 |
| TEI Framework And Methodology | 4 |
| The Office 365 For Firstline Workers Customer Journey | 5 |
| Interviewed And Surveyed Organizations | 5 |
| Key Challenges | 5 |
| Key Results | 6 |
| Composite Organization | 6 |
| Financial Analysis | 7 |
| + Improved Firstline Worker Performance | 7 |
| + Improved Firstline Manager Performance | Ş |
| + Reduced Employee Turnover Onboarding Costs | 10 |
| + Reduced End User Security Breaches | 11 |
| + Modernized Firstline Worker Processes | 12 |
| + Lower TCO | 13 |
| + Unquantified Benefit — Improved Business Outcomes | 14 |
| Flexibility | 15 |
| - Incremental Implementation | 16 |
| - Incremental Ongoing IT Support | 16 |
| - Office 365 License Costs | 17 |
| - Firstline Worker Hardware | 17 |
| Financial Summary | 19 |
| Microsoft Offce 365 For Firstline Workers: Overview | 20 |
| Appendix A: Total Economic Impact | 21 |

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Key Benefits



Total time saved each year per firstline worker:

116.7 hours



Reduction in firstline worker turnover rate:

8%



Increased firstline manager productivity from using Office 365:

16.6%

Executive Summary

Microsoft provides a teamwork and communication solution that helps its customers make firstline workers more productive and better integrated into the broader organization. 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 Office 365 for Firstline Workers (Office 365) with the F1 SKU. This is renamed from previous the K1 SKU. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of expanding Office 365 to firstline workers.

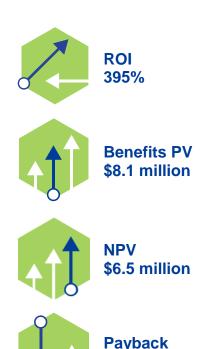
To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four customers with experience offering Office 365 to firstline workers. Forrester also surveyed an additional 92 organizations. The consistent theme that Forrester heard was that Office 365 made firstline workers and their managers more productive and that firstline workers were more satisfied and integrated into the entire organization.

Prior to using Office 365, the customers typically offered greatly scaled back tools to firstline workers compared to office/knowledge workers. This meant that many tasks, such as scheduling, were inefficient; valuable insights acquired by firstline workers did not make it to management; and firstline workers did not feel like valuable contributors to the organization and overall company mission.

Key Findings

Quantified benefits. The following risk-adjusted, present value (PV) quantified benefits are representative of those experienced by the companies interviewed and surveyed, as realized by the 10,000-employee composite organization that was built for this study (discussed in detail later):

- Firstline worker performance and productivity improved. Firstline workers did better in their jobs and saved time by having timely access to tools and information. On average, these workers saved 28 minutes per day. Over three years, this added up to a total savings of \$6.7 million in time, which could be spent on higher-value activities.
- Managers of firstline workers were more efficient and could better lead their teams. These managers could provide better oversight to their direct reports while saving time on these activities — 25 minutes per day. They also reported higher job satisfaction. The time savings added up to \$385,979 over the three-year study, which could be spent on higher-value work or a potential reduction in the number of managers.
- > Firstline workers were less likely to leave the organization, which reduced the time and cost to hire and onboard replacements. The turnover rate for firstline workers was reduced by 8%, which meant that 26 fewer people quit each year. This reduced the cost of hiring and onboarding new employees by \$115,323 over three years.



6 months

- > End user security breaches for firstline workers were reduced by two-thirds. By providing the same secure Microsoft email and file-sharing solutions used by knowledge workers, firstline workers were less likely to fall victim to phishing and other attacks. For attacks that were successful, the remediation costs were reduced by 80% per event. The total savings over three years was \$394,251.
- > Modernizing firstline worker-related business processes streamlined operations and reduced costs. In today's business landscape, many processes associated with supporting firstline workers have still not been modernized with digital tools. Office 365 allows these processes to be digitized. One simple example was included in the financial analysis. Printed quarterly updated employee handbooks were almost entirely eliminated. Instead, employees could access them from shared computers and/or mobile devices. The total savings over three years was \$140,333.
- > The solution total cost of ownership (TCO) was lower because of reduced IT effort, eliminated solutions, and a reduction in onpremises hardware. This benefit looks at the incremental savings from moving firstline workers to Office 365. There are many more TCO savings that organizations realized by moving knowledge workers to Office 365. The total savings associated with firstline workers was \$439,215 over three years.

Unquantified benefit. The interviewed organizations experienced the following benefit, which is not quantified for this study:

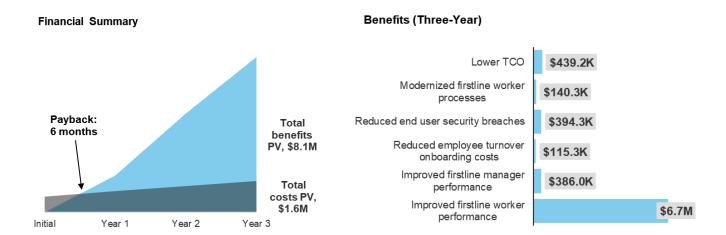
> Better engaged firstline workers improved business outcomes. Interviewed companies said that providing Office 365 to firstline workers helped to increase sales, provide management with valuable insights to improve products and services, and streamline business processes.

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

- There was some incremental effort to roll out Office 365 to firstline workers. Office 365 was often rolled out to firstline workers as a second phase after the rollout to knowledge workers. For some organizations, this could require additional professional services to migrate SharePoint files and email and to provide the necessary training to a new class of workers. The composite organization spent \$455,000 moving 3,300 firstline workers to Office 365.
- The additional effort to manage firstline workers in Office 365 is minimal. By moving firstline workers to Office 365, the IT organization does not have to manage a separate set of applications and infrastructure. Forrester assumed that one IT full-time equivalent (FTE) was required to handle the additional administrative effort, and the three-year total cost was \$261,119.
- Office 365 F1 licenses were required for 3,300 firstline workers, and 132 managers were using E3 licenses. Forrester used standard license pricing for these, and the three-year total cost was \$472,701.
- Shared computer and mobile device hardware was added to support firstline workers. Fifteen kiosks were added at facilities, and 20% of the firstline workers were given mobile devices. The total cost over three years was \$452,336.

Forrester's interviews with four existing customers, a survey of 92 others, and the subsequent financial analysis found that an organization based on these interviewed organizations experienced benefits of \$8.1 million over

three years versus costs of \$1.6 million, adding up to a net present value (NPV) of \$6.5 million and an ROI of 395%. This equates to an NPV of \$1,965 per firstline worker.



TEI Framework And Methodology

From the information provided in the interviews and survey, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing the Office 365 for Firstline Workers (F1 SKU).

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 Office 365 for Firstline Workers can have on an organization:

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



DUE DILIGENCE

Interviewed Microsoft stakeholders and Forrester analysts to gather data relative to Microsoft Office 365 F1 SKU.



CUSTOMER INTERVIEWS AND SURVEY

Interviewed four and surveyed 92 organizations using Office 365 for Firstline Workers 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 Microsoft Office 365 for Firstline Workers' impact: 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 Office 365 for Firstline Workers.

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.



The Office 365 For Firstline Workers Customer Journey

BEFORE AND AFTER THE OFFICE 365 F1 INVESTMENT

Interviewed And Surveyed Organizations

For this study, Forrester conducted four interviews and 92 surveys with Microsoft Office 365 customers. Interviewed customers include the following:

| INDUSTRY | REGION | INTERVIEWEE | NUMBER OF USERS TOTAL/FIRSTLINE | FIRSTLINE WORKER TO MANAGER RATIO |
|--------------------------------|---------------|-------------|---------------------------------|-----------------------------------|
| Healthcare | US | СТО | 8,700/3,000 | 20 to 1 |
| Manufacturing and distribution | Global | IT director | 3,000/1,000 | 35 to 1 |
| Airline | North America | IT manager | 20,000/~17,500 | 60 to 1 |
| Media and publishing | Global | СТО | 5,000/500 | 30 to 1 |

For the surveyed organizations, the average total number of employees was 34,337, of which 43% were firstline workers. The average firstline worker to manager ratio was 24 to 1.

Key Challenges

The interviewed and surveyed organizations shared several challenges and frustrations that led them to look for a teamwork and communication solution for firstline workers.

- Backend infrastructure for firstline worker tools was out of date and did not perform well. The burden of providing solutions to firstline workers who are often distributed across many locations and geographies caused performance problems and was expensive to maintain. One interviewee said: "We had uptime problems because of the stresses on our backend systems. This caused us to look at a model with the infrastructure burden not being on us. Since we are a Microsoft shop, Office 365 made the most sense."
- Firstline employees did not have the tools they needed to fully do their jobs. Firstline employees often lacked the real-time teamwork and communication tools they needed to be fully contributing members of the organization. They also often did not have the latest information they needed and felt separate from the rest of the organization. "The night shift always felt they were left out of everything. Now they can communicate back with senior managers."
- > Valuable information was not making it to managers who could act on it. Firstline workers are the face of the organization to customers. Because they have the most interaction, they often learn of issues that would be useful for managers to know. By lacking the communication and team capabilities making this possible, these valuable insights could be lost. "Without the level of collaboration we get with Office 365, we weren't getting the input we needed or seeing the full value of customer issues and opportunities."

"Our firstline employees didn't have access to the most up-to-date information. It is never good when the customer knows more than the person working for the company."

IT manager, airline



Key Results

The interviews and survey revealed that key results from the Office 365 for Firstline Workers investment include:

- > Firstline workers and their managers are more productive. Many activities that used to be manual or repetitive were streamlined and automated with Office 365. This saves time for firstline workers and managers that can be better applied to higher value-activities. "We try to enable people to get to the next level. That means giving them the tools they need to do it. We don't want to limit them in their capabilities or progress because of their current role."
- Valuable information is making it from customers to senior management. Firstline workers now have a means of sharing valuable customer insights with senior management. This has resulted in product and process improvements. "Firstline workers are the folks who, from a bottom-up and cross-organizational standpoint, bring a lot of insight for their roles and other roles. They help us to determine what we may need to do differently and what new products and services we may need to add."
- > Solution costs have come down while performance has increased. Overall solution reliability and response time have improved, and firstline workers have a much richer solution set. At the same time, the TCO has come down because solutions are hosted in the cloud, and other solutions such as webconferencing can be retired. "Users can access productivity applications, and the communication is so much better for those who do not have dedicated computers. They no longer feel left out."
- > Business results improved in terms of increased sales and customer satisfaction. Organizations saw real business improvements because firstline workers were more integrated into the organization, and teamwork improved. "Giving Office 365 to firstline workers has helped us retain key customers. We can ensure that customers are getting better solutions. They may not know it, but they are having fewer problems."

Composite Organization

Based on the interviewed and surveyed companies, Forrester constructed a TEI framework, a composite organization, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of these companies and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews and survey has the following characteristics:

Description of composite. The composite organization is a US-based manufacturer with 10,000 employees. Of these, one-third of them are firstline workers. Office 365 was rolled out to firstline workers in a second phase deployment several months after rolling out Office 365 to knowledge workers. Firstline workers are on F1 licenses, and their managers are on E3 licenses.

"Office 365 made our firstline workers more productive. It allows them to become part of the organization and to have a voice."

CTO, healthcare







Financial Analysis

QUANTIFIED BENEFIT AND COST DATA AS APPLIED TO THE COMPOSITE

| Total Benefits | | | | | | | | |
|----------------|--|-------------|-------------|-------------|-------------|------------------|--|--|
| REF. | BENEFIT | YEAR 1 | YEAR 2 | YEAR 3 | TOTAL | PRESENT VALUE | | |
| Atr | Improved firstline worker performance | \$1,636,250 | \$3,272,500 | \$3,272,500 | \$8,181,250 | \$6,650,723 | | |
| Btr | Improved firstline manager performance | \$94,961 | \$189,922 | \$189,922 | \$474,805 | \$385,979 | | |
| Ctr | Reduced employee turnover onboarding costs | \$28,373 | \$56,745 | \$56,745 | \$141,863 | \$115,323 | | |
| Dtr | Reduced end user security breaches | \$158,534 | \$158,534 | \$158,534 | \$475,602 | \$394,251 | | |
| Etr | Modernized firstline worker processes | \$56,430 | \$56,430 | \$56,430 | \$169,290 | \$140,333 | | |
| Ftr | Lower TCO | \$139,500 | \$198,000 | \$198,000 | \$535,500 | \$439,215 | | |
| | Total benefits (risk-adjusted) | \$2,114,048 | \$3,932,131 | \$3,932,131 | \$9,978,309 | \$8,125,825 | | |

+ Improved Firstline Worker Performance

By moving to Office 365, firstline workers were both more effective and efficient. They had the tools and information required to do their jobs better, and they also reduced the time spent on low-value tasks such as shift scheduling.

The survey of 92 companies that were using Office 365 for Firstline Workers revealed the following time savings on common tasks:

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 \$8.1 million.

| Frontline worker activities | Average time per week | Average percent decrease with Office 365 |
|--|-----------------------|--|
| View and check schedule | 1.2 hours (73 min) | 15.6% |
| Change or adjust schedule with a coworker | 1 hour (60 min) | 16.8% |
| View or check assigned tasks | 1.2 hours (69 min) | 16.6% |
| Communicate with manager | 1.5 hours (87 min) | 15.2% |
| Review company updates, information | 1.6 hours (96 min) | 16.5% |
| Peer communication within immediate team | 2.5 hours (152 min) | 14.6% |
| Peer communication outside immediate team | 2.4 hours (143 min) | 16.2% |
| Participate in training or onboarding activities | .9 hours (57 min) | 19.2% |

From the interviews, Forrester heard:

"Our previous on-premises solution only provided operating manuals. Adding the collaboration piece with the rest of the organization was a big deal."



- "I would tell someone to just do it, and make firstline workers more a part of the business."
- "I thought the real benefit was going to be email; instead, it turned out to be all the other productivity components. For example, if you have a quality control meeting, it is important to have the firstline workers involved since they actually do the work, not just manage it. They can now share information, show presentations, and be more creative."
- "I would have thought some of our old timers would have retired after we introduced Office 365. Instead, they did a bit more training and are now using it. Our union employees got on board right away too."
- "From an old-world stability standpoint, less time is spent in manual effort when things go down. That equates to cost savings: for example someone waiting to get their schedule. Office 365 enables them to do their jobs more efficiently and reduces costs."
- "Employees do a lot of self-training. Now they have access to the content whether in the office or not. How often in the past did we get shop-level employees doing anything more than when on their shift? Now it happens all the time."
- "Office 365 allows them to spend time on things that are more valuable to the organization. Previously, up to 40% of their time was spent on administrative activities."

For the financial analysis, Forrester made the following assumptions:

- Thirty-three percent of all employees are firstline workers who are using Office 365 F1 SKU.
- Based on the survey results, each firstline worker saves 28 minutes per day across the activities shown in the table above. Fifty percent of this was achieved in Year 1 as firstline workers became familiar with the tools.
- The average fully burdened cost (including benefits and taxes) is \$20.00 per hour.
- Because not all productivity improvements result in additional valueadd work being completed, a 50% downward productivity adjustment was made.

The improved firstline worker performance will vary based on which tools were used before and which activities are streamlined. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of \$6,650,723.

"Office 365 has more capabilities for [firstline] workers than I've seen anyplace else. Microsoft is committed to improving it because these workers are such a big part of businesses everywhere."

CTO, media and publishing

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.



| Improv | Improved Firstline Worker Performance: Calculation Table | | | | | | | |
|--------|--|--|-------------|-------------|-------------|--|--|--|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 | | | |
| A1 | Number of firstline workers | 10,000*33% | 3,300 | 3,300 | 3,300 | | | |
| A2 | Annual hours saved (rounded to nearest tenth) | (28 minutes*250 workdays)/ 60 minutes [50% in Year 1] | 58.3 | 116.7 | 116.7 | | | |
| А3 | Hourly fully burdened cost | \$40,000/2,000 hours | \$20.00 | \$20.00 | \$20.00 | | | |
| A4 | Productivity capture | | 50% | 50% | 50% | | | |
| At | Improved firstline worker performance | A1*A2*A3*A4 | \$1,925,000 | \$3,850,000 | \$3,850,000 | | | |
| | Risk adjustment | ↓15% | | | | | | |
| Atr | Improved firstline worker performance (risk-adjusted) | | \$1,636,250 | \$3,272,500 | \$3,272,500 | | | |

+ Improved Firstline Manager Performance

The teamwork and communication tools within Office 365 empower managers to more effectively and efficiently manage their firstline worker teams. This results in higher team performance and reduces the effort that managers need to put into lower value-add activities such as scheduling. Communication and collaboration across managers also improved through adoption of Office 365.

The survey of 92 companies that were using Office 365 for Firstline Workers revealed the following manager time savings on common tasks:

| Managers activities | Average time per week | Average percent decrease with Office 365 |
|--|-----------------------|--|
| Create schedules for direct reports | 1.4 hours (85.6 min) | 15.5% |
| Assign tasks for direct reports | 1.6 hours (95.7 min) | 17.4% |
| Change or adjust schedule based on employee feedback | 1.3 hours (78.4 min) | 14% |
| Communicate with direct reports individually | 2.2 hours (133.8 min) | 19.6% |
| Communicate with direct reports across team | 2.1 hours (126.9 min) | 17.4% |
| Review company updates, information | 1.6 hours (94.4 min) | 16.4% |
| Peer communication within immediate team | 2.4 hours (144.7 min) | 14.9% |
| Peer communication outside immediate team | 1.7 hours (103.4 min) | 15.2% |

From the interviews, Forrester heard:

- Managers are saving time contacting nurses. It is quicker than calling them. A typical response via email is less than 1 hour, which is faster than it used to be. Group emails save a lot of time."
- Managers are much more productive because of improved communications and knowledge sharing."



- "Managers are more satisfied because they can access important content relating to their and their employees' jobs, such as scheduling information. Managers can also train their employees better."
- "Peer communication has improved amongst managers. It has improved the handover process across shifts. We've seen a lot better transitions because everything is documented and not left to verbal communication. This results in better customer experiences."
- "Managers can work more holistically than in the past. Instead of trying to do things on a one-off basis dealing with a single employee, they can see what needs to be done within the context of the entire team. This makes them more productive and allows them to look at their staff as people, not just resources."

For the financial analysis, Forrester assumes that:

- > The average firstline worker to manager ration is 25 to 1.
- Firstline managers save, on average, 25 minutes per day on the activities shown in the table above.
- > The average fully burdened cost is \$32.50 per hour.
- Because not all productivity improvements result in additional valueadd work being completed, a 50% downward productivity adjustment was made.

Firstline manager time savings will vary based on the activities they need to complete and how manual the activities were prior to the introduction of Office 365. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of \$385,979.

"When any manager can effectively communicate with staff, it allows for quicker turnaround times, and, more importantly, it keeps the chaos down. It reduces the risk of tasks not getting completed."

CTO, healthcare



| Improv | Improved Firstline Manager Performance: Calculation Table | | | | | | |
|--------|---|--|-----------|-----------|-----------|--|--|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 | | |
| B1 | Number of firstline worker managers | A1/25 | 132 | 132 | 132 | | |
| B2 | Annual hours saved (rounded to nearest tenth) | (25 minutes*250 workdays)/60 minutes [50% in Year 1] | 52.1 | 104.2 | 104.2 | | |
| В3 | Hourly fully burdened cost | \$65,000/2,000 hours | \$32.50 | \$32.50 | \$32.50 | | |
| B4 | Productivity capture | | 50% | 50% | 50% | | |
| Bt | Improved firstline manager performance | B1*B2*B3*B4 | \$111,719 | \$223,438 | \$223,438 | | |
| | Risk adjustment | ↓15% | | | | | |
| Btr | Improved firstline manager performance (risk-adjusted) | | \$94,961 | \$189,922 | \$189,922 | | |

+ Reduced Employee Turnover Onboarding Costs

The interviewed and surveyed companies said that moving firstline workers to Office 365 improved employee satisfaction. This can reduce employee turnover and the associated costs to find and onboard replacements. Some of what Forrester heard includes:



- "Now they can easily connect to team sites, blogs, and other communication tools. The CEO does a townhall meeting, and everyone can get to it via Skype. Employee experience has improved a lot, and they feel a part of the organization."
- "Firstline workers now have access to company information anytime/anyplace, just like our knowledge workers. They are more informed, and anyone who is more informed is more comfortable and engaged in their role."

For the financial analysis, Forrester assumes that:

- Based on the interviews and survey, a 10% firstline worker annual turnover rate was used.
- > This was reduced by 8%, e.g. down from 10% of all firstline workers to 9.2%. Half of this benefit was realized in Year 1, as firstline workers become more familiar with Office 365.

The onboarding-related savings will vary depending on the previous turnover rate and the roles involved, e.g. call center workers typically have a higher turnover rate. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$115,323.

"[Firstline] employees are more satisfied because they have access to important content relating to their jobs, schedule information, and can complete training easier. We've seen a lot less complaints since moving them to Office 365."

IT manager, airline

| YEAR 3 | |
|-------------------|---|
| YEAR 3 330 | - |
| | |

| Reduc | Reduced Employee Turnover Onboarding Costs: Calculation Table | | | | | | | |
|-------|---|------------------------|----------|----------|----------|--|--|--|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 | | | |
| C1 | Number of firstline workers leaving | A1*10% [50% in Year 1] | 165 | 330 | 330 | | | |
| C2 | Reduced number of leavers | C1*8% [Rounded down] | 13 | 26 | 26 | | | |
| C3 | Average onboarding costs | | \$2,425 | \$2,425 | \$2,425 | | | |
| Ct | Reduced employee turnover onboarding costs | C2*C3 | \$31,525 | \$63,050 | \$63,050 | | | |
| | Risk adjustment | ↓10% | | | | | | |
| Ctr | Reduced employee turnover onboarding costs (risk-adjusted) | | \$28,373 | \$56,745 | \$56,745 | | | |

+ Reduced End User Security Breaches

Interviewed and surveyed companies also reported that IT security improved because firstline workers were better protected from phishing and other end point security attacks. This resulted in fewer data breaches, and the effort to remediate remaining ones was lower.

The survey showed that breaches were reduced by 61%. The average remediation cost for remaining breaches went from \$23,939 down to \$6,378. Additionally, better identity and access management for frontline workers can result in more secure and controlled access to company intellectual property and systems, which brings a whole set of additional benefits.

Some of what Forrester heard in the interviews includes:

- "We now have much better security for these workers. OneDrive has helped us with saving and sharing documents securely. With the cloudbased solution, I have no concerns about the security."
- "With OneDrive and SharePoint, we can securely share information with external vendors. From an IT admin perspective, it is very easy for us to set up data loss prevention (DLP) policies."



- "Giving Office 365 to our firstline workers has reduced our Health Insurance Portability and Accountability Act (HIPAA) violation risk. In the past, they might put patients' social security numbers in an email. Now, I can put rules in place to block those emails."
- "We are using Office 365 as a compliance tool. Anything that our line employees have to sign off on we are doing in Office 365. We were pretty good about this in the past, and things are now much simpler. We were able to replace another tool."

For the financial analysis, Forrester assumes that:

- Successful end user data breaches were reduced by two-thirds from six to two annually.
- The remediation cost for each of the remaining two breaches went from \$29,939 down to \$6,378.

The security savings depends on how secure the previous environment was and if firstline workers had access to email and other systems prior to Office 365. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$394,251.

"There has been a reduction in successful malware and phishing attacks since moving to Office 365. Having Microsoft securing more of our infrastructure is much easier than when it was onpremises."

IT manager, airline



| Reduced End User Security Breaches: Calculation Table | | | | | | | |
|---|--|----------------------|-----------|-----------|-----------|--|--|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 | | |
| D1 | Reduced number of breaches | 6-2 | 4 | 4 | 4 | | |
| D2 | Reduced remediation costs — eliminated breaches | D1*\$29,939 | \$119,756 | \$119,756 | \$119,756 | | |
| D3 | Reduced remediation costs — remaining breaches | 2*(\$29,939-\$6,378) | \$47,122 | \$47,122 | \$47,122 | | |
| Dt | Reduced end user security breaches | D2+D3 | \$166,878 | \$166,878 | \$166,878 | | |
| | Risk adjustment | ↓5% | | | | | |
| Dtr | Reduced end user security breaches (risk-adjusted) | | \$158,534 | \$158,534 | \$158,534 | | |

+ Modernized Firstline Worker Processes

Companies have many business processes to support and manage firstline workers. It is typically the case that these processes have not been updated using modern digital technologies. The capabilities of Office 365 F1 make it easier for these processes to be updated. Modernizing these processes can streamline operations and reduce costs.

Forrester included one simple example in the financial analysis. Various materials such as employee handbooks and schedules could be delivered in an electronic format instead of being printed and distributed. This could reduce costs as well as get the latest information into the hands of firstline workers faster.

For the financial analysis, Forrester assumes that:

- Employee handbooks are updated, printed, and distributed quarterly.
- > The average cost is \$4 to print and \$1 to distribute.
- Ninety percent of the firstline workers receive the new handbooks in an electronic format. The remainder may still need a hard copy because of their location, Americans with Disabilities Act (ADA) requirements, or complete lack of computer skills.

""If workers couldn't access the schedule online, they couldn't switch days. They would have to do manual printouts, which was challenging and wasted a lot of time."

IT manager, airline





This benefit will vary based on what was previously distributed in printed form. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$140,333.

| Moder | Modernized Firstline Worker Processes: Calculation Table | | | | | | | |
|-------|--|-----------------------|----------|----------|----------|--|--|--|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 | | | |
| E1 | Number of firstline workers | A1 | 3,300 | 3,300 | 3,300 | | | |
| E2 | Number of printouts | 1 per quarter | 4 | 4 | 4 | | | |
| E3 | Cost per printout | \$4+\$1 | \$5.00 | \$5.00 | \$5.00 | | | |
| E4 | Percentage reduction | \$100,000/2,000 hours | 90% | 90% | 90% | | | |
| Et | Modernized firstline worker processes | E1*E2*E3*E4 | \$59,400 | \$59,400 | \$59,400 | | | |
| | Risk adjustment | ↓5% | | | | | | |
| Etr | Modernized firstline worker processes (riskadjusted) | | \$56,430 | \$56,430 | \$56,430 | | | |

+ Lower TCO

The last area that Forrester looked at was the lower TCO by moving firstline worker solutions to the cloud. Interviewed and surveyed companies reported lower support effort, reduced hardware costs, and eliminated solutions that are now part of Office 365. From the survey, Forrester learned that IT support costs were 10.6% lower, non-Microsoft solution costs were down 16.8%, and Microsoft licensing costs were reduced 13.4%.

From the interviews, Forrester heard:

- "My help desk does not get as many calls. I had one open position that I did not have to fill and allocated to another team."
- "We've always had a small IT team, and, now that we have Office 365, for every employee we can make do with the existing team instead of having to scale up. We currently have two people supporting SharePoint and probably would have added another four FTEs. We also had an outsourced Exchange support contract for \$200,000 that we got rid of. This alone paid for the implementation."
- "We get fewer technology help desk calls. We probably would have had to add resources here over time."
- "The biggest savings from a hardware perspective is SharePoint and Exchange. If we had to refresh everything, it would be \$350,00 in upfront hardware costs, and we were coming to a refresh point. Ongoing operations, including power and cooling, would be another \$100,000."
- "Moving all of our employees to Office 365 has definitely been a positive experience for us. It helped us stabilize the environment and alleviate pressures on the IT organization. It is good to focus less on infrastructure and more on our products and services themselves."

For the financial analysis, Forrester took these examples and the survey results and scaled them up or down to match the composite organization size.

The TCO savings will vary based on the overall size of the organization

"Our kiosks for [firstline] workers are much easier to manage now that they are running Office 365. We used to replace the hardware every three years, and now they should last five to six years."

CTO, media and publishing



and which technologies were given to firstline workers beforehand. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$439,215.

| Lower ' | TCO: Calculation Table | | | | |
|---------|---|--------------------------------|-----------|-----------|-----------|
| REF. | METRIC | CALC. | YEAR 1 | YEAR 2 | YEAR 3 |
| F1 | Avoided additional IT support FTEs | | 0 | 1 | 1 |
| F2 | Annual fully burdened cost | | \$100,000 | \$100,000 | \$100,000 |
| F3 | Avoided additional IT support costs | F1*F2 | \$0 | \$100,000 | \$100,000 |
| F4 | Eliminated external support contract | | \$0 | \$25,000 | \$25,000 |
| F5 | Avoided on-premises hardware refresh | Maintenance and hosting at 20% | \$75,000 | \$15,000 | \$15,000 |
| F6 | Eliminated identity and access management (IDAM) and compliance solutions | | \$50,000 | \$50,000 | \$50,000 |
| F7 | Reduced webconferencing and telecom usage costs | | \$30,000 | \$30,000 | \$30,000 |
| Ft | Lower TCO | F3+F4+F5+F6+F7 | \$155,000 | \$220,000 | \$220,000 |
| | Risk adjustment | ↓10% | | | |
| Ftr | Lower TCO (risk-adjusted) | | \$139,500 | \$198,000 | \$198,000 |

+ Unquantified Benefit — Improved Business Outcomes

Interviewees also talked at length about how extending Office 365 to firstline workers improves business outcomes in terms of increased revenues, happier customers, and improved operations. They were not easily able to put a dollar value against these benefits, and because these benefits can vary so widely from one company to the next, Forrester did not attempt to do so. Readers should take these benefits into consideration, as they may be larger than the cost savings and productivity gains quantified in the study.

Some examples of improved business outcomes include:

- "Our kiosk workers provide feedback faster, which allows management to make changes."
- "Being able to streamline and improve things is huge. An example is where you have a customer looking for a certain product, and it is not in a particular warehouse. Having people on the floor in different locations and able to communicate with each other helps us fill customer demand. This happens all the time."
- "We can now assess large customer order problems in the field faster. Our employees out there can communicate their findings to management in the office faster."
- "We used to struggle to consistently provide tools and services to our employees in the field, which impacted their ability to do their jobs. By fixing this, we have improved the end customer experience."
- "Patient care is our priority, and the tools in Office 365 have helped us improve the quality of care we're able to provide to patients."
- "It becomes a way of work life. Users expect to have these tools and the ability to do their jobs without hassles and frustration."

"Being able to engage other workers across the organization is a big deal. We had situations where best practice process changes happened because of what we learned from employees on the shop floor and customer service centers. In the past, the feedback might not make it back to management, and nobody would act on it. Now we get concrete feedback we can act on."

CTO, media and publishing



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 Office 365 for Firstline Workers and later realize additional uses and business opportunities.

Interviewees consistently said that they are looking to roll out more of the solutions that are part of the F1 SKU. This included Yammer and Teams. Others are looking to build out more automated workflows that affect firstline workers jobs. These can all deliver additional future benefits, none of which were included in the financial analysis.

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.



| Total | Costs | | | | | | |
|-------|--------------------------------|-----------|-----------|-----------|-----------|-------------|------------------|
| REF. | COST | INITIAL | YEAR 1 | YEAR 2 | YEAR 3 | TOTAL | PRESENT VALUE |
| Gtr | Incremental implementation | \$455,000 | \$0 | \$0 | \$0 | \$455,000 | \$455,000 |
| Htr | Incremental ongoing IT support | \$0 | \$105,000 | \$105,000 | \$105,000 | \$315,000 | \$261,119 |
| ltr | Office 365 license costs | \$0 | \$190,080 | \$190,080 | \$190,080 | \$570,240 | \$472,701 |
| Jtr | Firstline worker hardware | \$362,250 | \$36,225 | \$36,225 | \$36,225 | \$470,925 | \$452,336 |
| | Total costs (risk-adjusted) | \$817,250 | \$331,305 | \$331,305 | \$331,305 | \$1,811,165 | \$1,641,156 |

- Incremental Implementation

The amount of effort required to roll out Office 365 to firstline workers in addition to knowledge workers varied greatly across the interviewed and surveyed organizations. The largest factor was what percentage of the total workforce consisted of firstline workers. Forrester took a conservative approach and included a scenario closer to the highest cost/effort one shared by the interviewees.

Based on this approach, Forrester made the following implementation assumptions:

- Professional services, costing \$400,000, were used to migrate mailboxes and SharePoint and to provide training to the 3,300 firstline workers. (Some companies used no professional services.)
- The implementation effort, which followed shortly after the rollout to knowledge workers, lasted two months, and two internal IT FTEs were involved.

The implementation effort and cost can vary significantly based on what proportion of the total workforce is firstline workers, and if previous solutions such as email or SharePoint need to be migrated. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of \$455,000.

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 more than \$1.6 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.

Incremental Implementation: Calculation Table

| REF. | METRIC | CALC. | INITIAL |
|------|--|---------------------------------------|-----------|
| G1 | Professional services | | \$400,000 |
| G2 | Internal effort | 2 FTEs*2 Months*(\$100,000/12 months) | \$33,333 |
| Gt | Incremental implementation | G1+G2 | \$433,333 |
| | Risk adjustment | ↑5% | |
| Gtr | Incremental implementation (risk-adjusted) | | \$455,000 |

- Incremental Ongoing IT Support

Interviewees and survey respondents reported that overall ongoing operations and support costs associated with Office 365 went down compared to previous solutions. Forrester assumed that one additional FTE was required to handle the additional volume associated with the



3,300 firstline workers that make up one-third of the entire organization. Some interviewees said that they did not need to add any resources to support the increased user base.

The amount of incremental effort will vary based on how many firstline workers there are and if the IT organization had spare capacity. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of \$261,119.

| Incremental Ongoing IT Support: Calculation Table | | | | | | |
|---|--|----------------|-----------|-----------|-----------|-----------|
| REF. | METRIC | CALC. | INITIAL | YEAR 1 | YEAR 2 | YEAR 3 |
| H1 | Internal IT support | 1FTE*\$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |
| Ht | Incremental ongoing IT support | H1 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |
| | Risk adjustment | <u>†</u> 5% | | | | |
| Htr | Incremental ongoing IT support (risk-adjusted) | | \$105,000 | \$105,000 | \$105,000 | \$105,000 |

- Office 365 License Costs

Forrester assumed that all 3,300 firstline workers were given F1 licenses. Forrester also included the cost of E3 licenses for the firstline worker managers. These E3 licenses may have already been incurred in the knowledge work rollout, but they were included here to show the TCO of rolling out Office 365 for Firstline Workers.

Because list price was used, Forrester made no risk adjustment. The three-year total PV was \$472,701.

| Office 3 | 365 License Costs: Calculation Table | • | | | | |
|----------|--|---------------------------------|-----------|-----------|-----------|-----------|
| REF. | METRIC | CALC. | INITIAL | YEAR 1 | YEAR 2 | YEAR 3 |
| I1 | Firstline worker (F1) licenses | 3,300 workers*\$4* 12 months | \$158,400 | \$158,400 | \$158,400 | \$158,400 |
| 12 | Firstline manager (E3) licenses | 132 managers*\$20* 12 months | \$31,680 | \$31,680 | \$31,680 | \$31,680 |
| lt | Office 365 license costs | l1+l2 | \$190,080 | \$190,080 | \$190,080 | \$190,080 |
| | Risk adjustment | 0% | | | | |
| ltr | Office 365 license costs (risk-adjusted) | | \$190,080 | \$190,080 | \$190,080 | \$190,080 |

- Firstline Worker Hardware

Some of the interviewees provided new hardware to firstline workers in the form of shared computers (in places like the shop floor and break rooms) and mobile devices. Companies provided mobile devices to improve business processes and information flows. Forrester included both types of hardware in the financial model.

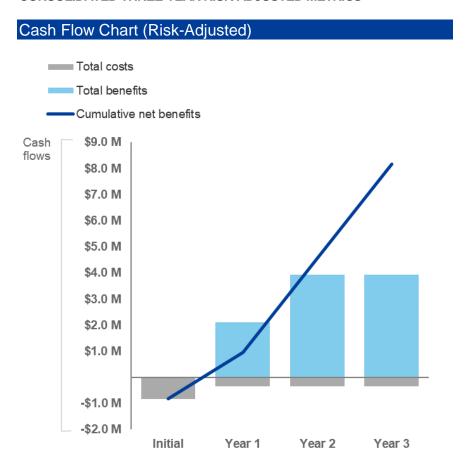
This cost will vary based on how many shared computers are required and how many firstline workers, if any, are given mobile devices. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of \$452,336.



| Firstline Worker Hardware: Calculation Table | | | | | | |
|--|---|-----------------------------------|-----------|----------|----------|----------|
| REF. | METRIC | CALC. | INITIAL | YEAR 1 | YEAR 2 | YEAR 3 |
| J1 | Shared computers | 15*\$1,000 [Maintenance 10%] | \$15,000 | \$1,500 | \$1,500 | \$1,500 |
| J2 | Handheld devices | A1*20%*\$500 [Maintenance 10%] | \$330,000 | \$33,000 | \$33,000 | \$33,000 |
| Jt | Firstline worker hardware | J1+J2 | \$345,000 | \$34,500 | \$34,500 | \$34,500 |
| | Risk adjustment | ↑5% | | | | |
| Jtr | Firstline worker hardware (risk-adjusted) | | \$362,250 | \$36,225 | \$36,225 | \$36,225 |

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



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 | (\$817,250) | (\$331,305) | (\$331,305) | (\$331,305) | (\$1,811,165) | (\$1,641,156) | |
| Total benefits | \$0 | \$2,114,048 | \$3,932,131 | \$3,932,131 | \$9,978,309 | \$8,125,825 | |
| Net benefits | (\$817,250) | \$1,782,743 | \$3,600,826 | \$3,600,826 | \$8,167,144 | \$6,484,668 | |
| ROI | | | | | | 395% | |
| Payback period | | | | | | 6 months | |

Microsoft Offce 365 For Firstline Workers: Overview

The following information is provided by Microsoft. Forrester has not validated any claims and does not endorse Microsoft or its offerings.

Office 365 for Firstline Workers is the F1 plan (previously K1) in the Office 365 family. It includes:

- **Schedule and task management** Create, update, and manage schedules and tasks. Publish shift schedules to let employees request time off or swap shifts, manage schedules from anywhere on mobile devices or the web, and provide real-time input about task assignments. Track work, complete forms, and automate team processes.
- **Communications and community** Connect employees with modern tools. Engage employees and optimize processes with updates and alerts. Use chat and IM presence to make teams more agile and unified. Send messages and share documents, videos, announcements, and best practices on team sites. Help protect communications on any device.
- Training and onboarding Enable easy access to onboarding and training materials. Help employees stay up-to-date on new job procedures and view and respond quickly to service requests and updates. Distribute and store training content and corporate announcements on team sites. Find and view training videos on any device.
- **Identity and access management** Manage employee access and digital identity painlessly. Empower managers to add or remove workers from teams and IT admins to control access to Office 365. Get the same identity-management experience and control on both company- and employee-owned devices.



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.



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.



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.



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



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%.



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

