A Forrester Total Economic Impact™ Study

Commissioned By Microsoft

Project Director:
Sean McCormick

December 2015

The Total Economic Impact™ Of Microsoft Office 365 PPM

Cost Savings And Business Benefits Enabled By Microsoft Project And Portfolio Management

FORRESTER®

Table Of Contents

Executive Summary 3

Disclosures 5

TEI Framework And Methodology 6

Analysis 7

Financial Summary 22

Microsoft Office 365 PPM: Overview 23

Appendix A: Composite Organization Description 25

Appendix B: Total Economic Impact™ Overview 26

Appendix C: Forrester And The Age Of The Customer 27

Appendix D: Glossary 28

Appendix E: Endnotes 28

ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit forrester.com/consulting.

© 2015, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to www.forrester.com.

FORRESTER®

Executive Summary

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 Project and Portfolio Management. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Office 365 PPM on their organizations.

Microsoft Office 365 PPM can help increase visibility into project performance and improve project management performance.

The costs and benefits for a composite organization of 5,000 employees, based on customer interviews, are:

- **Investment costs: $1,710,810.**
- **Annual costs: $174,890.**
- **Total cost savings and benefits: $8,359,959.**

To better understand the benefits, costs, and risks associated with an Office 365 PPM implementation, Forrester interviewed four customers with multiple years of experience using Office 365 PPM. Microsoft Office 365 PPM is a cloud-based software-as-a-service (SaaS) offering that helps organizations improve resource management, increase project management performance, and improve visibility into projects, programs, and portfolios. As a cloud-based solution, Office 365 PPM also reduces infrastructure costs and removes the need for costly software upgrades. Additionally, Office 365 PPM easily scales with business growth while providing synergies with Office 365 products and integration with SharePoint and Power BI.

Prior to Office 365 PPM, customers had implemented an outdated on-premises project management solution that was poorly utilized by project managers (PMs). In many instances, Microsoft Excel was the tool of choice for PMs to track project progress and performance. This impeded visibility into projects for leadership, finance, and project management offices (PMOs), hindering the ability to strategically manage project portfolios. With Office 365 PPM, customers were able to build more consistent project management practices that provided greater visibility into project management performance. This provided leadership with the ability to make better strategic decisions in the project portfolio. Said one enterprise PMO leader when speaking about Microsoft Office 365 PPM: “The visibility to the projects was huge . . . especially when you can deploy it at an enterprise level and for the first time as an organization get visibility to your entire project portfolio, and then making the selection, prioritization, and sequencing decisions.”

MICROSOFT GENERATES NEW INCREMENTAL SALES

Our interviews with four existing customers and subsequent financial analysis found that a composite organization based on these interviewed organizations experienced the risk-adjusted ROI, benefits, and costs shown in Figure 1.[1] See Appendix A for a description of the composite organization.

The composite organization analysis points to benefits of $2.7 million per year versus implementation costs of $1.7 million and annual costs of $174,890, adding up to a net present value (NPV) of $6,279,113.

This translates to benefits of more than $5,500 per user per year, costs of less than $1,400 per user per year, and an NPV of more than $4,100 per user per year. With Office 365 PPM, visibility into project performance helped reduce budget overruns by 5%, leading to $2.6 million of savings over three years. Additional benefits included increased project management performance, reduced infrastructure costs, and better resource management.

FIGURE 1
Financial Summary Showing Three-Year Risk-Adjusted Results

Source: Forrester Research, Inc.

› **Benefits.** The composite organization experienced the following risk-adjusted present value benefits that represent those experienced by the interviewed and surveyed companies:

- **Improved visibility into project performance reduced project budget overruns by 5%.** Excluding labor costs, visibility into project performance allowed organizations to make timely decisions and address issues as they arose, preventing project delays and reducing budget overruns by $2,629,761 over three years.
- **Increased project management performance and project throughput generated $1,864,209 in savings over three years.** Office 365 PPM, by streamlining reporting and reducing the amount of administrative workload on project managers, allowed them to be more productive and increase their annual project throughput by 14%.
- **Improved resource management led to $3,103,119 of savings over three years.** Office 365 PPM provides the ability for resource pools to be more effectively managed while improving alignment of skillsets.
- **Migrating to a cloud-based SaaS PPM solution allowed organizations to save $162,000 annually.** In addition to a reduction in annual maintenance and infrastructure cost avoidance, organizations were able to save an additional $360,000 in avoiding the upgrade of their on-premises project management software.

› **Costs.** The composite organization experienced the following risk-adjusted present value costs:

- **Software licensing fees of $167,271, or $124 per user per year.** This is the blended annual software license cost for Microsoft Office 365 PPM per user per year based on 70% lite users, 20% advanced users, and 10% Project Pro users.
- **Implementation costs of $1,263,554.** This includes $500,000 of professional service fees for implementation and $100,000 of ongoing support costs from Microsoft. An additional six internal full-time equivalents (FTEs) have been included to support the implementation of Office 365 PPM.
- **Change management costs of $450,000.** In order to ensure high adoption rates and maximize the benefits realized by Office 365 PPM, change management support is required for nine months after deployment**.**
- **Internal training costs of $205,920.** A total of 4,000 hours of training is required for the combination of project managers and lite users.

Disclosures

The reader should be aware of the following:

- The 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 PPM.
- 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.

TEI Framework And Methodology

INTRODUCTION

From the information provided in the interviews, Forrester has constructed a Total Economic Impact (TEI) framework for those organizations considering implementing Microsoft's Office 365 PPM. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision, to help organizations understand how to take advantage of specific benefits, reduce costs, and improve the overall business goals of winning, serving, and retaining customers.

APPROACH AND METHODOLOGY

Forrester took a multistep approach to evaluate the impact that Microsoft's Office 365 PPM can have on an organization (see Figure 2). Specifically, we:

- Interviewed Microsoft marketing, sales, and consulting personnel, along with Forrester analysts, to gather data relative to Office 365 PPM and the marketplace for Office 365 PPM.
- Interviewed four organizations currently using Microsoft's Office 365 PPM to obtain data with respect to costs, benefits, and risks.
- Designed a composite organization based on characteristics of the interviewed organizations (see Appendix A).
- Constructed a financial model representative of the interviews using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the interviews as applied to the composite organization.
- Risk-adjusted the financial model based on issues and concerns the interviewed organizations highlighted in interviews. Risk adjustment is a key part of the TEI methodology. While interviewed organizations provided cost and benefit estimates, some categories included a broad range of responses or had a number of outside forces that might have affected the results. For that reason, some cost and benefit totals have been risk-adjusted and are detailed in each relevant section.

Forrester employed four fundamental elements of TEI in modeling Microsoft Office 365 PPM's service: 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 B for additional information on the TEI methodology.

FIGURE 2
TEI Approach

Source: Forrester Research, Inc.

Analysis

COMPOSITE ORGANIZATION

For this study, Forrester conducted a total of four interviews with representatives from the following companies, which are Microsoft Office 365 PPM customers:

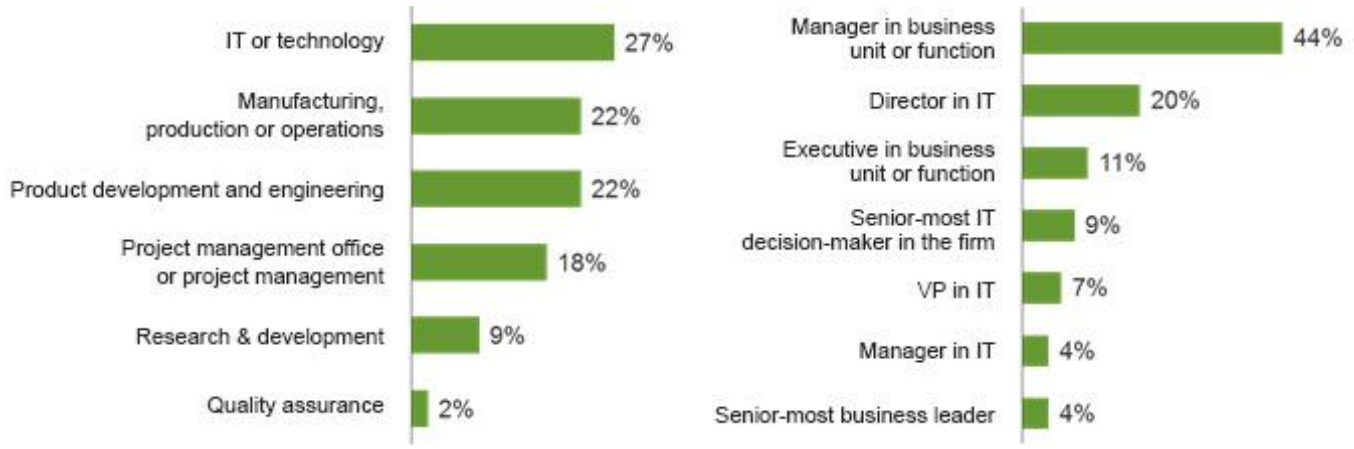
- A global technology hardware manufacturer with 8,200 employees and $12 billion in annual revenue. This organization has 7,500 projects being managed by 1,000 project managers currently using Office 365 PPM.
- A multinational energy conglomerate with 37,500 employees and $44 billion of revenue annually. A small implementation of Office 365 PPM is leading the way for the organization to build off of. One hundred projects are being managed annually, with six PMs using Office 365 PPM.
- A national energy services provider with 5,000 employees and $3.6 billion in annual revenue. It has 500 users and 100 PMs utilizing Office 365 PPM.
- An international nonprofit organization focused on writing grants for world issues it deems appropriate. It has 1,500 employees and 90 PMs and averages 100 projects per year.

In addition to the interviews, Forrester conducted a survey of 45 Microsoft Office 365 PPM customers with the following characteristics:

- The 45 companies were spread across America and Europe, with nine located in the US, 15 located in the UK, 15 located in France, and six located in Germany.
- On average, the surveyed organizations had 15,500 employees and $3.6 billion in annual revenue.
- The breakout of specific roles and departments surveyed can be seen in Figure 3.

> *"They [leadership] have a much better view of which projects should kick off to unlock value and unlock it as quickly as possible."*
>
> ~ Portfolio manager, national energy services organization

FIGURE 3
Surveyed Roles And Departments



Source: Forrester Research, Inc.

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 that Forrester synthesized from these results represents an organization with the following characteristics:

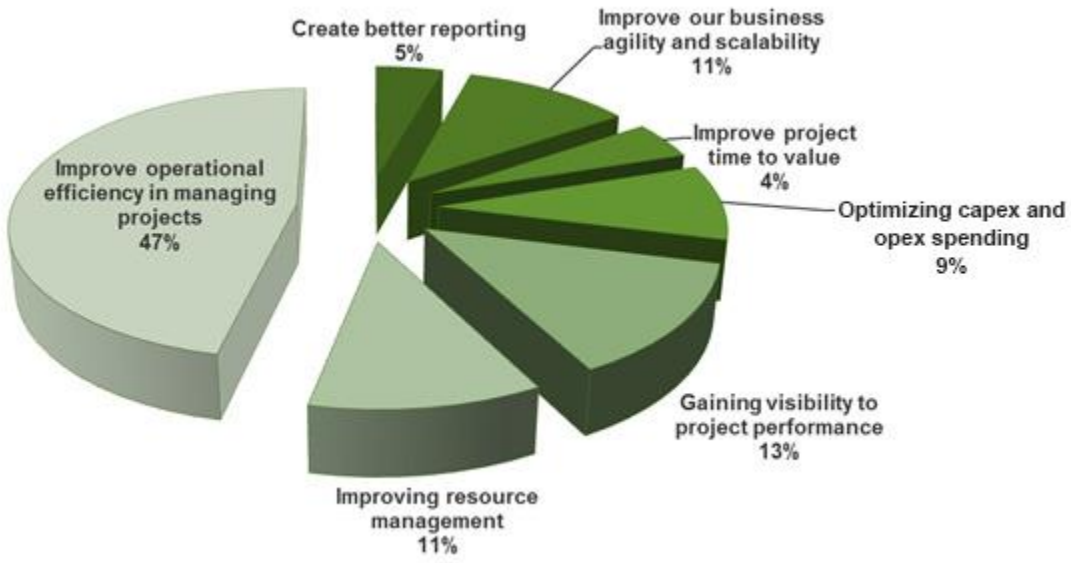
- It is a multinational company with $3.5 billion in annual revenue.
- It has 5,000 employees.
- It has 500 Microsoft Office 365 PPM users, with 100 project managers.
- It manages 300 projects per year at an average cost of $150,000 per project.

> *"All things being equal, my folks are getting 10% more milestones achieved than they were under the old system."*
>
> ~Sr. manager, global manufacturer company

INTERVIEW HIGHLIGHTS

The interviewed organizations were facing similar issues as the surveyed respondents. Nearly half of survey respondents cited improvements in operational efficiency in managing projects as their No. 1 reason for introducing a PPM solution. Additional reasons included lack of visibility into project performance, improving business agility and scalability, and better resource management. See Figure 4 for the top reasons that surveyed companies introduced a PPM solution.

FIGURE 4
Top Priorities For Companies Introducing A PPM Solution



Source: Forrester Research, Inc.

Within the composite organization, the current solution lacked strategic portfolio capabilities. Additionally, PMs didn't find the previous tool effective and resorted to using spreadsheets for project planning. A large system upgrade would be required, including additional infrastructure, if the composite organization was going to fix its issues.

Microsoft Office 365 PPM was the chosen solution, as it provided synergies with the composite organization's recent Office 365 implementation and incorporated ease of scalability with its cloud-based SaaS offering. Additional benefits included:

- The avoidance of costly upgrade costs.
- Optimizing capex and opex spending with strategic project portfolio planning capabilities.
- Improvements in overall usage and adoption, including improving team communications across geographies and business segments.
- Improving speed and visibility into project performance and information through the creation of better reporting.

The interviews and surveys revealed that:

- **Cloud-based benefits, including ease of scalability, leveraging Office 365 synergies, and reducing security and compliance concerns, were realized.** Survey respondents, when asked, "Why did your organization select Microsoft Office 365 PPM over other PPM solutions?" responded with the results in Figure 5. Clearly, the ability to leverage synergies with Office 365 was an important benefit for organizations. Increased speed of implementation and improved usability and accessibility for the workforce while removing the need and cost for software upgrades were additional benefits. One program manager said: "The advantage in looking at it [Office 365 PPM] is that it could be set up really quickly, and I wouldn't have to worry about a new system in our infrastructure and having to put in the support models and the necessary cost and expenses around hosting it on our own infrastructure." Another portfolio manager said: "The thing that has much value for us and for project online users is as Microsoft develops new features within the product, they just deploy them in Project Online. So, you don't have to wait years for the next major version upgrade to be released. You get it if it's available."

FIGURE 5
Why Organizations Selected Microsoft Office 365 PPM

Source: Forrester Research, Inc.

- **Visibility into project performance increased after implementing Microsoft Office 365 PPM.** The most significant benefit increased visibility into projects and their performance and enabled project leaders to take action on issues as they arose. One IT PMO leader said, "*We've been able to see a dramatic reduction in the amount of time it takes us to resolve incidents when they happen.*" Microsoft Office 365 PPM provided organizations a consistent platform for all projects to be managed in, standardizing reporting and improving visibility into project performance. With greater visibility into project milestones, the composite organization was able to complete more projects on time and under budget. In addition, Office 365 PPM reduces administrative workload for PMs and helps them communicate with all project stakeholders, resulting in higher project throughput across the organization.
- **Resource management improvements were captured.** Survey respondents highlighted that a key benefit of Office 365 PPM was better resource management capabilities. With Office 365 PPM, project managers had greater visibility into their resource needs ahead of time and were able to better plan for scarce resources within their projects. In addition, skillsets were better matched up with specific project needs, increasing the efficiency within projects. On average, survey respondents realized a 13% reduction in project labor costs as well as a 16% reduction in the time it takes to allocate resources to projects. With a 14% average increase in resource utilization, surveyed organizations were able to maximize resource productivity.

"Collaboration"

"Reduced implementation time"

"Simplicity of work"

"Improved benefits realization"

"Visibility"

"Better control of projects"

"Speed and consistency"

"Improved accountability"

"Flexibility and responsiveness"

~ Survey respondents, when asked, "What other benefits or cost savings have been experienced with Office 365 PPM?"

BENEFITS

The composite organization experienced a number of quantified benefits in this case study:

- Reduced project budget overruns.
- Increased PM performance and project throughput.
- Improved resource management.
- Infrastructure cost avoidance.

Another important benefit mentioned by the composite organization was better alignment of strategic priorities within projects. With Office 365 PPM, projects could be mapped to strategic objectives and reports could be created to help assist in decision-making. One enterprise PMO leader said they were able to reduce the budgeted size of their portfolio by 67% and allocate the resources more effectively in order to support the organization's strategic opportunities. Additionally, 75% of survey respondents who were able to optimize their project portfolios saw better alignment of strategic priorities and projects since implementing Microsoft Office 365 PPM.

Reduced Project Budget Overruns

The composite organization indicated that a key benefit from the Office 365 PPM implementation was a reduction in project budget overruns. Through the increased visibility into project performance, PMs were able to remediate issues much faster and ensure projects were completed on time and under budget. On average, our composite organization realized a 5% reduction in the amount of projects that were over budget. With 300 projects per year at an average cost of $150,000 per project, this meant the composite organization was able to save between $700,000 and $1.6 million per year.

This benefit was calculated over a three-year adoption phase, representing the degree to which project managers gained efficiency by using Microsoft Office 365 PPM. The most significant benefit was a reduction in project budget overruns. The total benefit was $2,921,957, or about $5,844 per user.

The companies interviewed experienced various outside forces that resulted in a broad range of budget overrun reductions. To compensate, this benefit was risk-adjusted and reduced by 10%. The risk-adjusted total benefit resulting from improved policy and claims processing over the three years was $2,629,761, or about $5,259 per user. See the section on Risks for more detail.

TABLE 1
Reduced Project Budget Overruns

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
A1	Percent reduction in projects over budget (excluding labor costs)			5%	5%	5%
A2	Number of projects per year			300	300	300
A3	Average budget per project			$150,000	$150,000	$150,000
A4	Adoption percent			35%	55%	70%
At	Reduced project budget overruns	A1*A2*A3*A4	$0	$787,500	$1,237,500	$1,575,000
	Risk adjustment	↓10%				
Atr	**Reduced project budget overruns (risk-adjusted)**		**$0**	**$708,750**	**$1,113,750**	**$1,417,500**

Source: Forrester Research, Inc.

Increased PM Performance And Project Throughput

Microsoft Office 365 provided project managers with the necessary tools to make communicating project status more efficient and effective while reducing the level of manual effort. Prior to Office 365 PPM, the PMs were spending 45 minutes every week producing time summary plans and other milestone reports. With Office 365 PPM, these reports could be generated in seconds, saving an average of 39 hours per PM per year. In addition to the reporting time savings, the tools helped PMs be more efficient in their day-to-day responsibilities, allowing them to take on more projects each year. As a result, on average, the composite organization's PMs were able to increase their project throughput by 14%.

In total, the composite organization realized 51,040 hours of savings over three years related to improved PM performance. At an average blended rate of $50 per hour, the annual savings were between $500,000 and $1.2 million. In order to calculate this benefit, an adoption ramp-up was built over three years. This ramp represents the degree to which PMs effectively utilized Microsoft Office 365 PPM. The total benefit resulting from increased PM performance and project throughput over the three-year period was $2,071,343, or about $20,713 per PM. See Table 2 for more details.

Interviewed organizations provided a broad range of PM performance saving improvements. To compensate, this benefit was risk-adjusted and reduced by 10%. The risk-adjusted total benefit resulting from increased PM performance and project throughput over the three years was $1,864,209, or about $18,642 per PM. See the section on Risks for more detail.

TABLE 2
Increased PM Performance And Project Throughput

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
B1	Number of project managers			100	100	100
B2	Reporting hours saved per PM			39	39	39
B3	Increased projects per PM			14%	14%	14%
B4	Total hours saved per PM	B2+B3*2,000 hours		319	319	319
B5	Average hourly PM rate	Blended fully loaded rate of $50		$50	$50	$50
B6	Adoption percent			35%	55%	70%
Bt	Increased PM performance and project throughput	B1*B4*B5*B6	$0	$558,250	$877,250	$1,116,500
	Risk adjustment	↓10%				
Btr	**Increased PM performance and project throughput (risk-adjusted)**		**$0**	**$502,425**	**$789,525**	**$1,004,850**

Source: Forrester Research, Inc.

Improved Resource Management

Another key benefit realized by the composite organization was improved resource management. With Office 365 PPM, resource skillsets could be matched to project needs. This allowed PMs to not only to plan for risk in project timelines due to a lack of available resource skills, but also make the necessary arrangements to acquire contract resources ahead of time. In addition, the time it takes to allocate resources to projects was streamlined with Microsoft's Office 365 PPM. As a result, the composite organization saw a 13% increase in resource productivity due to having better-aligned skillsets on projects as well as 25 hours of project delay reductions due to resource unavailability.

In total, the composite organization was able to save between $900,000 and $1.9 million per year by improving resource management. To calculate this benefit, an adoption ramp-up was built over three years. This ramp represents the degree to which PMs effectively utilized Microsoft Office 365 PPM. With labor costs accounting for 40% of a project's total cost on average, the composite organization was able to save $7,800 per project before applying the adoption percentage. Over the three-year period, our composite organization saved a total present value of $3,447,909.

Interviewed organizations provided a broad range of resource management improvements, and there are a variety of outside forces that might also have an impact on this benefit. Therefore, a risk-adjustment was applied, which reduced the benefit by 10%. The risk-adjusted total benefit resulting from improved resource management over the three years was $3,103,119, or about $6,206 per user. See the section on Risks for more detail.

TABLE 3
Improved Resource Management

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
C1	Percent reduction in project labor costs			13%	13%	13%
C2	Average labor cost per project	40% of avg. project cost @ $150,000		$60,000	$60,000	$60,000
C3	Hours saved in avoiding project delays due to resource unavailability per project			25	25	25
C4	Projects per year			300	300	300
C5	Average hourly labor rate	Blended fully loaded rate of $42		$42	$42	$42
C6	Adoption percent			35%	55%	70%
Ct	Improved resource management	(C1*C2*C4*C6) +(C3*C4*C5*C6)	$0	$929,250	$1,460,250	$1,858,500
	Risk adjustment	↓10%				
Ctr	**Improved resource management (risk-adjusted)**		**$0**	**$836,325**	**$1,314,225**	**$1,672,650**

Source: Forrester Research, Inc.

Infrastructure Cost Avoidance

The composite organization's legacy project planning platform was outdated and had reached its end of life. A $400,000 investment was going to be required in order to upgrade the system to the latest version. In addition, the composite organization was spending $80,000 each year to maintain the infrastructure and support the software. Furthermore, by adopting Microsoft's cloud-based SaaS PPM solution, the composite organization would now receive the latest security patches automatically from Microsoft. By always being on the latest release and relying on Microsoft's security software, the composite organization was able to save an additional $100,000 each year. In total, the composite organization was able to save $847,633 over the three-year period.

Since interviewed organizations had different legacy platforms and configurations, and since there are a variety of other variables that might also have an impact on this benefit, a risk-adjustment was applied, which reduced the benefit by 10%. The risk-adjusted total benefit resulting from infrastructure cost avoidance over the three years was $762,870, or about $1,525 per user. See the section on Risks for more detail.

TABLE 4
Infrastructure Cost Avoidance

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
D1	Software upgrade avoidance		$400,000			
D2	Maintenance and infrastructure savings			$80,000	$80,000	$80,000
D3	Security and compliance savings			$100,000	$100,000	$100,000
Dt	Infrastructure cost avoidance	D1+D2+D3	$400,000	$180,000	$180,000	$180,000
	Risk adjustment	↓10%				
Dtr	**Infrastructure cost avoidance (risk-adjusted)**		**$360,000**	**$162,000**	**$162,000**	**$162,000**

Source: Forrester Research, Inc.

Total Benefits

Table 5 shows the total of all benefits across the four areas listed above, 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 $8.3 million, or $16,719 per user.

TABLE 5
Total Benefits (Risk-Adjusted)

Ref.	Benefit	Initial	Year 1	Year 2	Year 3	Total	Present Value
Atr	Reduced project budget overruns	$0	$708,750	$1,113,750	$1,417,500	$3,240,000	$2,629,761
Btr	Increased PM performance and project throughput	$0	$502,425	$789,525	$1,004,850	$2,296,800	$1,864,209
Ctr	Improved resource management	$0	$836,325	$1,314,225	$1,672,650	$3,823,200	$3,103,119
Dtr	Infrastructure cost avoidance	$360,000	$162,000	$162,000	$162,000	$846,000	$762,870
	Total benefits (risk-adjusted)	**$360,000**	**$2,209,500**	**$3,379,500**	**$4,257,000**	**$10,206,000**	**$8,359,959**

Source: Forrester Research, Inc.

COSTS

The composite organization experienced a number of costs associated with the Office 365 PPM solution:

- Software license fees.
- Implementation costs.
- Change management costs.
- Internal training costs.

These represent the mix of internal and external costs experienced by the composite organization for initial planning, implementation, and ongoing maintenance associated with the solution.

Software License Fees

Software licensing fees for Office 365 PPM were incurred on a monthly basis at an average rate of $10 per user per month. Our composite organization had a combination of licenses, including 10% Project Pro, 20% PMs, and 70% lite users. Each year, the composite organization incurred software license fees of $61,800, for a total of $159,306, or about $318 per user.

Software costs vary from organization to organization, considering different licensing agreements, what other products may be licensed from the same vendor, and other discounts. To compensate, this cost was risk-adjusted up by 5%. The risk-adjusted cost of software over the three years was $167,271. See the section on Risks for more detail.

TABLE 6
Software License Fees

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
E1	License fees		$123.60		$123.60	$123.60
E2	Number of users		500		500	500
Et	Software license fees	E1*E2	$61,800	$0	$61,800	$61,800
	Risk adjustment	↑5%				
Etr	**Software license fees (risk-adjusted)**		**$64,890**	**$0**	**$64,890**	**$64,890**

Source: Forrester Research, Inc.

Implementation Costs

Implementation of Microsoft Office 365 PPM took approximately eight months. This included a six-month proof of concept, installation and integration of the software, and the development of new processes and best practices for using the software. An internal team of six people led the implementation at a cost of $50 per hour. In addition to the internal implementation costs, professional services were purchased to help develop reporting and configure the software to the organization's specific requirements, as well assist in change management. The composite organization continued to purchase $100,000 of ongoing professional services each year to help

optimize and improve the utilization of Microsoft Office 365 PPM. Initially, the composite organization incurred $900,000 in costs and then $100,000 each year thereafter, for a total cost of $1,148,685 over three years.

Implementation costs are more variable from organization to organization, considering some organizations outsource and some manage this in-house, perhaps augmented with third-party consulting help. To compensate, this cost was risk-adjusted up by 10%. The risk-adjusted cost of implementation over the three years was $1,263,554. See the section on Risks for more detail.

TABLE 7
Implementation Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	Internal FTEs		6			
F2	Months		8			
F3	Hours per year		2,000			
F4	Average hourly FTE rate	Blended fully loaded rate of $50	$50			
F5	Internal labor cost	F1*(F2/12*F3)*F4	$400,000			
F6	Professional services		$500,000	$100,000	$100,000	$100,000
Ft	Implementation costs	F5+F6	$900,000	$100,000	$100,000	$100,000
	Risk adjustment	↑10%				
Ftr	**Implementation costs (risk-adjusted)**		**$990,000**	**$110,000**	**$110,000**	**$110,000**

Source: Forrester Research, Inc.

Change Management Costs

In order to maximize the value and benefits of a PPM solution, it's critical to put strong change management practices in place. For the composite organization, a six-person team was formed to help communicate, educate, and drive adoption across all departments and key stakeholders who would be utilizing the Office 365 PPM solution. The bulk of the change management training material development, training, and communications took place over a nine-month period in the first year. With an average hourly rate of $50, the total change management costs incurred were $450,000.

As there are a range of degrees to which an organization may invest in change management costs based on the needs of that organization, a 10% risk adjustment was applied, resulting in a total risk-adjusted change management cost of $495,000.

TABLE 8
Change Management Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
G1	Internal FTEs			6		
G2	Months			9		
G3	Hours per year			2,000		
G4	Average hourly FTE rate	Blended fully loaded rate of $50		$50		
Gt	Change management costs	G1*(G2/12*G3)*G4	$0	$450,000	$0	$0
	Risk adjustment	↑10%				
Gtr	**Change management costs (risk-adjusted)**		**$0**	**$495,000**	**$0**	**$0**

Source: Forrester Research, Inc.

Internal Training Costs

The cost related to the time that employees and contractors had to spend in training to learn the new Microsoft Office 365 PPM solution is accounted for in Table 9. Lite users required 4 hours of formal in-class training, while power users, like PMs, required three days, or 24 hours, of in-class training. In total, the overall cost of internal training was $187,200.

As there are a range of degrees to which an organization may invest in formal training, a 10% risk adjustment was applied to this cost, resulting in a total risk-adjusted internal training cost of $205,920.

TABLE 9
Internal Training Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
H1	Number of Lite users trained		400			
H2	Hours of training per Lite user		4			
H3	Average hourly rate per Lite user	Blended fully loaded rate of $42	$42			
H4	Number of PMs Trained		100			
H5	Hours of training per PM		24			
H6	Average hourly rate per PM	Blended fully loaded rate of $50	$50			
Ht	Internal training costs	H1*H2*H3+H4*H5*H6	$187,200	$0	$0	$0
	Risk adjustment	↑10%				
Htr	**Internal training costs (risk-adjusted)**		**$205,920**	**$0**	**$0**	**$0**

Source: Forrester Research, Inc.

Total Costs

Table 10 shows the total of all costs as well as associated present values, discounted at 10%. Over three years, the composite organization expects total costs to total a net present value of a little more than $2 million, or $4,173 per user.

TABLE 10
Total Costs (Risk-Adjusted)

Ref.	Cost Category	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Software license fees	$64,890	$0	$64,890	$64,890	$194,670	$167,271
Ftr	Implementation costs	$990,000	$110,000	$110,000	$110,000	$1,320,000	$1,263,554
Gtr	Change management costs	$0	$495,000	$0	$0	$495,000	$450,000
Htr	Internal training costs	$205,920	$0	$0	$0	$205,920	$205,920
	Total costs (risk-adjusted)	**$1,260,810**	**$605,000**	**$174,890**	**$174,890**	**$2,215,590**	**$2,086,745**

Source: Forrester Research, Inc.

FLEXIBILITY

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for some 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. There are multiple scenarios in which a customer might choose to implement Office 365 PPM and later realize additional uses and business opportunities. Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix B).

Specific to Office 365 PPM, Microsoft offers sync capabilities with other Microsoft software, including Power BI. While the interviewed organizations had not integrated Power BI within their organizations, three of the four were planning to do so in the near future. In integrating with Power BI, organizations would have access to advanced reporting and dashboarding capabilities. For this study, the value of Power BI as a flexibility option was not quantified, as the interviewed organizations had not been using Power BI for more than six months.

RISKS

Forrester defines two types of risk associated with this analysis: "implementation risk" and "impact risk." Implementation risk is the risk that a proposed investment in Office 365 PPM may deviate from the original or expected requirements, resulting in higher costs than anticipated. Impact risk refers to the risk that the business or technology needs of the organization may not be met by the investment in Office 365 PPM, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

TABLE 11
Benefit And Cost Risk Adjustments

Benefits	Adjustment
Reduced project budget overruns	↓ 10%
Increased PM performance and project throughput	↓ 10%
Improved resource management	↓ 10%
Infrastructure cost avoidance	↓ 10%
Costs	**Adjustment**
Software license fees	↑ 5%
Implementation costs	↑ 10%
Change management costs	↑ 10%
Internal training costs	↑ 10%

Source: Forrester Research, Inc.

Quantitatively capturing implementation risk and impact risk by directly adjusting the financial estimates results provides more meaningful and accurate estimates and a more accurate projection of the ROI. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates. The risk-adjusted numbers should be taken as "realistic" expectations since they represent the expected values considering risk.

The following impact risks that affect benefits are identified as part of the analysis:

- **Reduced project budget overruns risk.** This assumes a current level beyond 5% of budget overruns exists within an organization. As this is common for many organizations, in a rare case it may not apply. Additionally, the risk includes the extent to which organizations adopt and utilize Office 365 PPM. To account for these variables, a 10% risk adjustment has been assessed.
- **Increased PM performance and project throughput risk.** This includes the extent to which PMs utilize or adopt Office 365 PPM. An adoption ramp-up has been created with 35%, 55%, and 70% in years 1, 2, and 3, respectively. The risk of utilization being different from the adoption ramp-up has been considered, and a 10% risk-adjustment has been applied.
- **Improved resource management risk.** This includes the extent to which PMs and resources utilize or adopt Office 365 PPM. In addition, different resource models, including managed service models, can have an impact on the benefits realized. A 10% risk adjustment has been applied to account for these impacts.
- **Infrastructure cost avoidance risk.** This was identified in the differences between organizations' legacy platforms and the timing of system upgrades. As a range of potential savings was identified from both the extent of legacy hardware cost avoidance to the cost and complexity of an on-premises system upgrade, a 10% risk adjustment was applied to this benefit.

The following implementation risks that affect costs are identified as part of this analysis:

- Software license fee risks consider different licensing agreements, what other products may be licensed from Microsoft, and other discounts that may apply. To account for this implementation risk, a 5% risk adjustment has been applied.
- Implementation cost risks consider the way in which organizations might integrate Office 365 PPM into their organization, including managing the implementation in-house with third-party consulting help or using a preferred Microsoft partner. To account for this implementation risk, a 10% risk adjustment has been applied.
- Change management cost risks include the extent to which change management is required for the education and training of the Office 365 PPM solution. While this analysis has accounted for a normal level of change management for an organization to be successful in its implementation, some organizations may require more or less based on their project management maturity. A 10% risk adjustment has been applied to account for this implementation risk.
- Internal training cost risks account for the amount of training required by each user. Based on the maturity of the project management team and lite users, more training may be required. To account for this implementation risk, a 10% risk adjustment has been applied.

The largest risk with any PPM solution is the level of adoption or usage once the new software is introduced. Office 365 PPM helps to increase adoption by providing easier accessibility through its cloud-based SaaS offering. As such, the application can be accessed on PCs, tablets, and smartphones from anywhere, anytime. Furthermore, since Microsoft products are typically utilized already within organizations, being able to provide consistency in software helps increase adoption. One IT manager said: "[With our previous system], they needed separate training to start using it. It just didn't fit with our suite of applications and the history of experience that people had because we use Microsoft Office applications and have done [so] for years here."

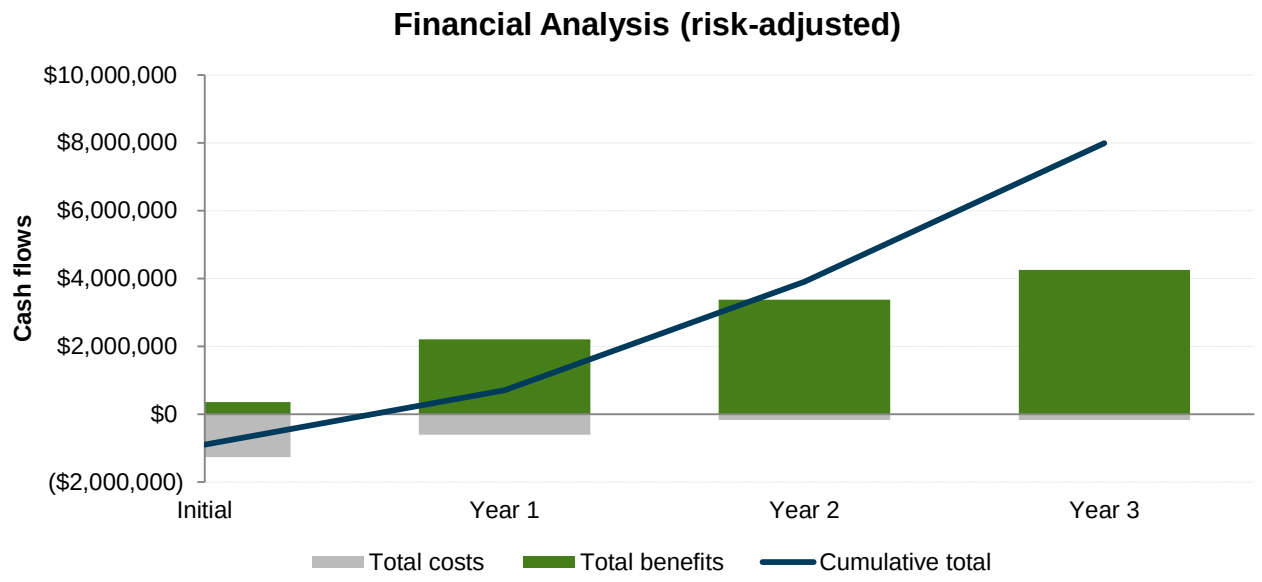
Table 11 shows the values used to adjust for risk and uncertainty in the cost and benefit estimates for the composite organization. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Financial Summary

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 in Office 365 PPM.

Table 12 below shows the risk-adjusted ROI, NPV, and payback period values. These values are determined by applying the risk-adjustment values from Table 11 in the Risks section to the unadjusted results in each relevant cost and benefit section.

FIGURE 6
Cash Flow Chart (Risk-Adjusted)



Source: Forrester Research, Inc.

TABLE 12
Cash Flow (Risk-Adjusted)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Costs	($1,260,810)	($605,000)	($174,890)	($174,890)	($2,215,590)	($2,086,745)
Benefits	$360,000	$2,209,500	$3,379,500	$4,257,000	$10,206,000	$8,359,959
Net benefits	**($900,810)**	**$1,604,500**	**$3,204,610**	**$4,082,110**	**$7,990,410**	**$6,273,214**
ROI						**301%**
Payback period						**6.7 months**

Source: Forrester Research, Inc.

Microsoft Office 365 PPM: Overview

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

Office 365 PPM provides a comprehensive solution for collaborative work and project, portfolio, and resource management in the cloud. It offers relevant capabilities for diverse audiences across the enterprise and enables business leaders to align project portfolio investments with business strategy. It provides PMOs with visibility into project portfolios across the enterprise. Project managers get deep scheduling, issue and risk management, project financials, and reporting support through the Web and the cloud-delivered desktop client. Resource management capabilities allow for optimal capacity planning and tracking. Integrated reporting capabilities provide actionable insights at all levels of the organization. Team members also get to take advantage of built-in Office 365 collaboration capabilities, such as Skype for Business.

	Actions and insights for everyone	Optimize portfolio outcomes and resource utilization	Strengthen everyday collaboration	Work anytime, anywhere
Benefits	• Get started quickly. • Cater to all audiences — executives, project managers, and team members. • Make data-driven decisions.	• Construct optimal portfolios. • Effectively manage resources.	• Engage in real-time project collaboration. • Improve communications. • Have a familiar user experience.	• Have access from virtually anywhere. • Get simplified IT management. • Get world-class Office 365 cloud.
Top features	***Get started quickly*** • **Visual tiles** identify important steps and provide a simple guide for you and your organization. • **Project templates** are pre-populated with the right items (documents, tasks, calendars, etc.) for common types of projects. ***Cater to all audience*** • **Summary dashboards** help portfolio managers glean insights and make better portfolio-level decisions. • **Enhanced multiple timelines** enable project managers to view and communicate project status in different slices. • **Improved time and task management** for team members allow organizations to have greater visibility into recorded time for project or non-project work.	***Construct optimal portfolios*** • Have structured options to manage a project's progression or rejection through each stage. • Select **optimal project portfolios** in line with business strategy, by providing **best-in-class portfolio techniques.** • Run portfolio optimization scenarios under varying budgetary constraints, and maximize resource utilization.	***Real-time project updates*** • Enable teams to plan, schedule, and manage tasks more effectively in the browser itself — keeping everyone updated of overall progress. • Enable project teams to stay in sync by providing real-time co-authoring of project documents by team members. ***Improve communications*** • **Built-in integration with Skype for Business** enables real-time conversations between project participants. • Send important **task update notifications** to relevant parties through email.	***Access from virtually anywhere*** • Extend your PPM experience to multiple devices, keeping you up to date while you're on the go. ***Simplified IT management*** • The solution is delivered through Office 365 and compliant with industry standards. It offers 24x7 IT support to ensure your business stays secure and available.

	Actions and insights for everyone	Optimize portfolio outcomes and resource utilization	Strengthen everyday collaboration	Work anytime, anywhere
	Make data-driven decisions • There are a wide variety of pre-built, yet easily configurable, out-of-the box **reports.**	***Effectively manage resources*** • Project managers can systematically request resources from resource managers during planning using their favorite tool — Project Professional or Project Pro for Office 365. • Intuitive heat maps enable resource managers to better manage and forecast the utilization of their resource pools.	***Familiar user experience*** • Get a user experience consistent with widely used Office applications and easily transfer data to and from them. • Easily extend out-of-the-box capabilities by discovering and deploying Project **add-ins** from the Office store to meet your custom needs. • **Backstage experience** helps automatically discover commands and URLs you frequently use and simplify how you see and share project details with others.	***World-class Office 365 cloud*** • Is supported across a variety of special multitenant deployments, such as a government community cloud and Office 365 Dedicated, among others. • Offers enterprise-grade reliability with a 99.9% financially backed uptime service-level agreement. • Complies with **world-class industry standards verified by third parties**: certified for ISO 27001, EU Model Clauses, HIPAA Business Associate Agreement, Data Processing Agreement, and the Federal Information Security Management Act (FISMA). • Offers continuous **data backup**, disaster recovery, and globally redundant data centers.

Appendix A: Composite Organization Description

For this TEI study, Forrester has created a composite organization to illustrate the quantifiable benefits and costs of implementing Microsoft Office 365 PPM. The composite company is intended to represent a multinational organization with $3.5 billion of revenue annually and is based on characteristics of the interviewed and surveyed customers.

The composite company has 5,000 employees worldwide, with 500 Microsoft Office 365 PPM users and 100 project managers.

In purchasing Office 365 PPM, the composite company has the following objectives:

- Avoid costly upgrade costs.
- Optimize capex and opex spending with strategic project portfolio planning capabilities.
- Make improvements in overall usage and adoption, including improving team communications across geographies and business segments.
- Improve speed and visibility into project performance and information through the creation of better reporting.

For the purpose of the analysis, Forrester assumes that the composite organization has purchased 500 Microsoft Office 365 PPM licenses and has 100 project managers. The composite organization executes an average of 300 total projects annually, with an overall project budget of $45 million, or $150,000 per project.

FRAMEWORK ASSUMPTIONS

Table 13 provides the model assumptions that Forrester used in this analysis.

The discount rate used in the PV and NPV calculations is 10%, and the time horizon used for the financial modeling is three years. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their respective company's finance department to determine the most appropriate discount rate to use within their own organizations.

TABLE 13
Model Assumptions

Ref.	Metric	Calculation	Value
I1	Hours per week		40
I2	Weeks per year		50
I3	Hours per year (M-F, 9-5)		2,000
I4	Average hourly PM rate (blended fully loaded)		$50
I5	Average hourly labor rate (blended fully loaded)		$42
I6	Number of projects per year		300
I7	Average budget per project		$150,000

Source: Forrester Research, Inc.

Appendix B: Total Economic Impact™ Overview

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. TEI assists technology vendors in winning, serving, and retaining customers.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, flexibility, and risks.

BENEFITS

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often, product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place 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. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

COSTS

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the form of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

FLEXIBILITY

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point. However, having the ability to capture that benefit has a PV that can be estimated. The flexibility component of TEI captures that value.

RISKS

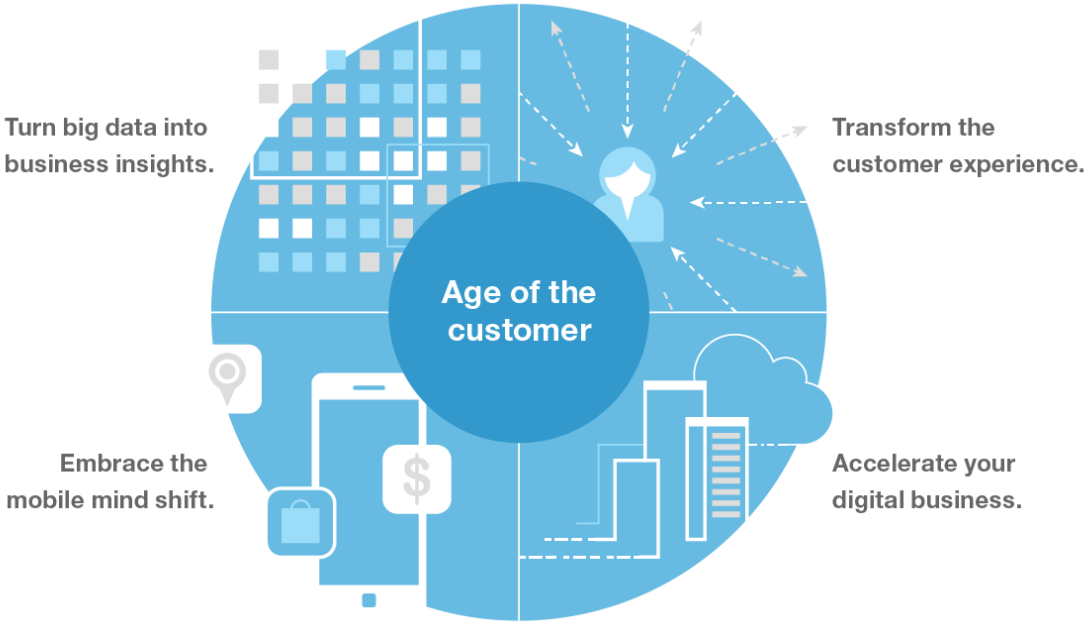
Risks measure the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: 1) the likelihood that the cost and benefit estimates will meet the original projections and 2) the likelihood that the estimates will be measured and tracked over time. TEI risk factors are based on a probability density function known as "triangular distribution" to the values entered. At a minimum, three values are calculated to estimate the risk factor around each cost and benefit.

Appendix C: Forrester And The Age Of The Customer

Your technology-empowered customers now know more than you do about your products and services, pricing, and reputation. Your competitors can copy or undermine the moves you take to compete. The only way to win, serve, and retain customers is to become customer-obsessed.

A customer-obsessed enterprise focuses its strategy, energy, and budget on processes that enhance knowledge of and engagement with customers and prioritizes these over maintaining traditional competitive barriers.

CMOs and CIOs must work together to create this companywide transformation.



Forrester has a four-part blueprint for strategy in the age of the customer, including the following imperatives to help establish new competitive advantages:

Transform the customer experience to gain sustainable competitive advantage.

Accelerate your digital business with new technology strategies that fuel business growth.

Embrace the mobile mind shift by giving customers what they want, when they want it.

Turn (big) data into business insights through innovative analytics.

Appendix D: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Companies set their own discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 10% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their respective organizations to determine the most appropriate discount rate to use in their own environment.

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.

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.

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.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A NOTE ON CASH FLOW TABLES

The following is a note on the cash flow tables used in this study (see the example table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in years 1 through 3 are discounted using the discount rate (shown in the Framework Assumptions section) at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations are not calculated until 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.

TABLE [EXAMPLE]
Example Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3

Source: Forrester Research, Inc.

Appendix E: Endnotes

[1] Forrester risk-adjusts the summary financial metrics to take into account the potential uncertainty of the cost and benefit estimates. For more information, see the section on Risks.