

A Forrester Total Economic Impact™ Study Prepared For Adobe

# Total Economic Impact™ Study Of Adobe Acrobat X

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FORRESTER

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## Executive Summary

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IT organizations are faced with shrinking budgets and increased end user demand for better collaboration tools. As organizations create competitive positions centered on collective knowledge and resources of their workers to build better products and create effective solutions, they need tools to make those assets more efficient and effective. IT executives are continuously aiming to position IT as a business enabler rather than a cost center. To maintain that balance, IT executives are looking into solutions that let IT do more with less while remaining agile and continuing to innovate.

In January 2011, Adobe commissioned Forrester Consulting to examine the total economic impact and potential return on investment (ROI) enterprises may realize by upgrading and expanding to all seats of Adobe Acrobat Standard and Pro and standardizing on Adobe Acrobat X Standard or Pro. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of investing in Adobe Acrobat X for their organization.

Based on the interviews with seven existing customers, we have identified a series of IT and end user benefits. The benefits described in this study are those that we had sufficient data to quantify. These include reimaging systems cost savings, end user productivity gain from more efficient patch deployments, IT cost savings in managing patch rollouts, and cost savings from converting PDF to Microsoft Word or Excel.

Based on the in-depth interviews, we have created a financial analysis for a composite organization for an organization with 1,000 Adobe Acrobat X users (see Appendix A for a description of the composite organization). The risk-adjusted ROI for our composite company is 112%, with a breakeven point (payback period) after deployment of 11.8 months (see Table 1).

### IT And End Users' Productivity Cost Savings

Forrester conducted a series of in-depth interviews with seven existing Adobe Acrobat X Standard and Pro customers. The customers interviewed were using a variety of Adobe Acrobat products — primarily versions 7, 8, and 9 — prior to deploying Adobe Acrobat X. Interviewees revealed that multiple versions of Acrobat were difficult for the IT department to manage, and frequent patch deployment was disrupting end users' productivity.

These organizations began evaluating and finally purchased Adobe Acrobat X as a part of their enterprise agreement. These customers have been using a variety of PDF platforms in addition to Adobe Acrobat. However, the decision to standardize on Adobe Acrobat X became possible due to the following factors:

- Higher quality of Portable Document Form (PDF) files produced compared with other PDF-creation platforms. Customers — particularly those in the engineering and architecture sectors — said that the quality and precision of the PDF files produced by Acrobat X are superior to the alternatives.
- Improved patching with cumulative patching capability. This capability reduces the effort and cost required to keep systems up-to-date.
- Microsoft Word and Excel conversion to PDF.

- Automated deployment of Acrobat X across the network with support for Microsoft System Center Configuration Manager (SCCM), Apple Remote Desktop, and Apple Installer Package.

The composite organization experienced the risk-adjusted ROI, costs, and benefits shown in Table 1.

**Table 1**

Composite Organization Three-Year Risk-Adjusted ROI<sup>1</sup>

ROI	Payback period	Total benefits (PV)	Total costs (PV)	Net present value (NPV)
112%	11.8 months	\$555,314	(\$262,023)	\$293,291

Source: Forrester Research, Inc.

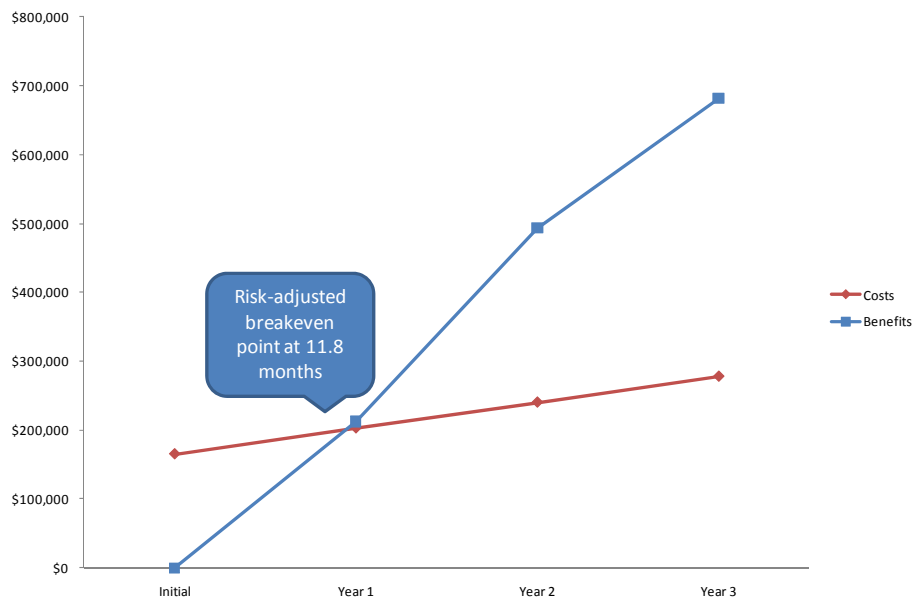
- **Benefits.** The organizations interviewed experienced the following benefits:
  - **Reimaging cost savings.** This benefit represents the IT savings associated with desktop and laptop reimaging.
  - **End user productivity gain.** This benefit represents end user productivity gain from reduction in the number and frequency of product patches released.
  - **IT patches deployment cost savings.** This benefit represents IT time savings resulting from patch testing and deployment efficiencies.
  - **Cost savings from PDF to Word and Excel.** This benefit represents the gain from PDF to Microsoft Word and Excel conversion.
- **Costs.** The organizations interviewed experienced the following costs:
  - **Software license fees.** This cost represents the total licensing costs associated with the upgrade of existing licenses to Adobe Acrobat X.
  - **Annual software support costs.** This cost represents the annual Platinum support costs for upgraded licenses.
  - **Implementation costs.** This cost represents the implementation costs from investigation to rollout.

**Table 2**  
Composite Organization Three-Year Risk-Adjusted Running Totals

Categories	Initial	Year 1	Year 2	Year 3
Costs	(\$167,843)	(\$205,709)	(\$243,584)	(\$281,459)
Benefits		\$208,270	\$483,630	\$667,850

Source: Forrester Research, Inc.

**Figure 1**  
Composite Organization Three-Year Risk-Adjusted Analysis



Source: Forrester Research, Inc.

### Factors Affecting Benefits And Costs

Table 1 illustrates the risk-adjusted financial results the composite organization achieves. The risk-adjusted values take into account any potential uncertainty or variance that exists in estimating the costs and benefits, producing more conservative financial estimates. The following factors may affect the financial results that an organization may experience:

- Analysis, discovery, and deployment could vary based on the level of integration and deployment with other applications, or changes in UI could impact how experienced Adobe users adapt to Adobe Acrobat X. As a result, the rollout may be delayed, which could affect the time to realization of benefits.

## Disclosures

The reader should be aware of the following:

- The study is commissioned by Adobe and delivered by the Forrester Consulting group.
- 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 Adobe Acrobat X.
- Adobe 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 customer names for the interviews were provided by Adobe.

## TEI Framework And Methodology

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### Introduction

From the information provided during a series of in-depth interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Adobe Acrobat X. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

### Approach And Methodology

Forrester took a multistep approach to evaluate the impact that Adobe Acrobat X can have on an organization (see Figure 2). Specifically, we:

- Interviewed Adobe marketing and sales, as well as Forrester analysts, to gather data relative to Acrobat X and the marketplace for collaboration platforms.
- Interviewed seven organizations from the US, Europe, Japan, and Asia Pacific currently using Adobe Acrobat X to obtain data pertaining to costs, benefits, and risks.
- Based on characteristics of the interviewed organizations, designed a composite organization (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.

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**Figure 2**

TEI Approach



Source: Forrester Research, Inc.

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Forrester employed four fundamental elements of TEI in modeling Adobe Acrobat X software:

1. Costs.
2. Benefits to the entire organization.
3. Flexibility.
4. Risk.

Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves the purpose of providing a complete picture of the total economic impact of purchase decisions. Please see Appendix B for additional information on the TEI methodology.

## Analysis

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### Interview Highlights

A total of seven customers were interviewed for this study, involving representatives from the following companies:

1. An engineering consultancy firm in Europe that provides solutions for capacity, safety, and integration issues in the areas of mobility, infrastructure, spatial planning, and transport systems. The total number of Acrobat licenses purchased is about 1,400. The license distribution is 90% Adobe Acrobat X Standard and 10% Adobe Acrobat X Pro.
2. A large accounting firm based in the US, which employs 8,000 professionals and operates in 90 cities. The firm's employees collaborate with clients daily to meet their tax and auditing needs. The organization purchased upgrades for Adobe Acrobat X for approximately 6,800 users — 200 are Adobe Acrobat X Pro, and the remaining are Adobe Acrobat X Standard. The organization is aiming for full deployment by the end of the year.
3. A large insurance and financial services firm based in the US. A total of 2,250 remote workers are using Adobe Acrobat X. The license distribution is 90% Adobe Acrobat X Standard and 10% Adobe Acrobat X Pro.
4. A large law firm based in the US with 17 offices across North America, Europe, the Middle East, and Asia. The organization has upgraded 2,000 licenses from Adobe Acrobat 9 Pro to Adobe Acrobat X Pro.
5. A large IT solution provider based in Tokyo. The organization has about 1,000 seats of Adobe Acrobat X Standard licenses and 400 seats of Adobe Acrobat X Pro.
6. A large planning, engineering, and construction management organization based in Australia. The entire drafting and design team, as well as the proposal marketing and publication groups based in Sydney and Brisbane, have deployed Adobe Acrobat X Standard.
7. A large manufacturer of chemicals, fertilizers, plastics, and metals. The organization also supplies materials to other companies, which use them to make the products on which the world has come to depend. The organization has upgraded its licenses to Adobe Acrobat X but currently only deploys about 5% of total licenses.

The in-depth interviews with these seven customers revealed:

- Some of the customers interviewed have not fully deployed the entire purchased licenses. The upgrade to Adobe Acrobat X has been tied to other rollouts such as Microsoft Office 2010.
- The organizations were managing multiple versions of Adobe Acrobat — 7, 8, and 9 — within their environment. Adobe has stopped supporting version 7 and version 8. These customers believed standardizing on Adobe Acrobat X would bring them IT efficiencies resulting from cumulative patching capability.

- All of the customers interviewed mentioned that Adobe Acrobat products cost several times more than other vendors in the space. However, they are not measuring the investment of their PDF platform based only on costs. For these customers, the quality, precision, security, and functionality of Adobe's products stand above competing PDF-creation platforms.
- Some customers mentioned that they have been deploying Acrobat X Standard instead of Acrobat X Pro in order to control costs. These organizations purchased some Adobe Acrobat X Pro licenses that employees can obtain with management approval.
- A number of customers mentioned that the PDF to Word/Excel conversion capability was a major selling point to standardize on Acrobat X. These organizations were using other applications to ensure that documents converted into and from PDF format maintain their intended formatting. One customer said: "PDF to Word conversion in Acrobat 9 was poor, and the conversion was changing the file format. End users were forced to reformat the file multiple times." According to interviewees, the formatting issues not only irritated the end users but also consumed many man-hours to adjust formatting errors. This enhancement will reduce conversion effort by 50%.
- The implementation time could vary for some organizations. Some of the interviewees noted that there were bugs in the initial release of the product that Adobe later fixed. As a result, the initial rollout caused some delays in deployment.
- The time-to-benefit could vary depending on adoption and rollout schedule. Some of the interviewed organizations noted that users who were comfortable with using Adobe Acrobat 6 through 9 needed time to familiarize themselves with the new Adobe Acrobat X UI. As a result, there was a demand for user training to prevent rollout delays or poor end user adoption.

### *Composite Organization*

Based on the in-depth interviews with the seven Adobe customers, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis to illustrate the areas financially affected. A composite organization synthesized from these results represents an organization with 1,000 Adobe Acrobat users, where the 400 licenses upgraded and 600 licenses purchased are distributed as 90% Adobe Acrobat X Standard and 10% Adobe Acrobat X Pro.

### *Framework Assumptions*

Table 3 provides the model assumptions that Forrester used in this analysis.

**Table 3**  
Model Assumptions

Ref.	Metric	Calculation	Value
A1	Hours per week		40
A2	Weeks per year		52
A3	Hours per year (M-F, 9-5)		2,080
A4	Average fully loaded salary of an end user		\$100,000
A5	Fully loaded hourly rate of an end user	(A4/A3)	\$48
A6	Average fully loaded salary of a project manager		\$112,470
A7	Fully loaded hourly rate of a project manager	(A6/A3)	\$54
A8	Average fully loaded salary of a packager		\$87,500
A9	Fully loaded hourly rate of a packager	(A8/A3)	\$42
A10	Average fully loaded salary of a desktop engineer		\$64,075
A11	Fully loaded hourly rate of a desktop engineer	(A10/A3)	\$31

Source: Forrester Research, Inc.

The discount rate used in the PV and NPV calculations is 10%, and 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.

## Costs

This section describes the costs related to planning, testing, and implementation of Adobe Acrobat X over a three-year period. Cost assumptions are based on detailed interviews with organizations to calculate license and support costs. We used Adobe Enterprise Agreement list prices and did not include any customers' negotiated discount. The following cost model can serve as a framework for organizations planning to upgrade to Adobe Acrobat X from a prior version.

### *Software License And Annual Support Costs*

This category represents the license fees and annual support costs of using Adobe Acrobat X. For the composite organization, we estimate that the organization purchases 600 licenses and upgrades 400 licenses to ensure that its 1,000 users have access to Adobe Acrobat X. The licenses are distributed 90% in Adobe Acrobat X Standard and 10% in

Adobe Acrobat X Pro. The purchase and upgrade costs are for Adobe Acrobat X Standard and Pro versions. Using the Adobe Enterprise Agreement list price, we estimate the total license cost in Table 4.

**Table 4**  
Software License Fees

Ref.	Metric	Calculation	Initial
B1	Total number of employees		1,000
B2	Total percent of new licenses purchased		60%
B3	Total percent of upgrade licenses		40%
B4	Percent of Adobe Acrobat X Standard licenses		90%
B5	Percent of Adobe Acrobat X Pro licenses		10%
B6	License costs for new purchased Adobe Acrobat X Standard licenses		\$180
B7	License costs for upgraded Adobe Acrobat X Standard licenses		\$84
B8	License costs for new purchased Adobe Acrobat X Pro		\$253
B9	License costs for upgraded Adobe Acrobat X Pro licenses		\$112
Bt	Software license fees	$B1 * (B2 * [B4 * B6 + B5 * B8] + B3 * [B4 * B7 + B5 * B9])$	\$147,100

Source: Forrester Research, Inc.

Customers interviewed had purchased annual Platinum support as a part of their investment in Adobe Acrobat X. The cost for Platinum support is \$36 for Adobe Acrobat X Standard and \$51 for Adobe Acrobat X Pro. For the composite organization, this equates to \$37,500 annually. Table 5 illustrates the calculation for annual Platinum support. License and maintenance costs portion represents 93% of the total investment.

**Table 5**  
Annual Software Support Costs

Ref.	Metric	Calculation	Per period
C1	Total number of licenses for Adobe Acrobat X Standard		900
C2	Total number of licenses for Adobe Acrobat X Pro		100
C3	Annual maintenance and support costs per Adobe Acrobat X Standard license for Platinum support		\$36
C4	Annual maintenance and support costs per Adobe Acrobat X Pro license for Platinum support		\$51
Ct	Annual software maintenance and support fees	$C1 * C3 + C2 * C4$	\$37,500

Source: Forrester Research, Inc.

### *Implementation Costs*

The final component of costs is the internal implementation effort, and it represents 7% of the total investment. Customers interviewed divided implementation into four phases: investigation and preparation, packaging and testing, pilot, and rollout. Based on the interviews, we estimated the internal resources allocated to each phase in tables 6 through 9 and summarized the total implementation costs in Table 10.

Based on the interviews, we estimated the resources allocated to each phase. During the investigation and preparation phase, the interviewed organizations allocated a project manager, packager, and end user representative to examine the value of this implementation as well as plan for deployment and rollout. For the composite organization, we estimate that the project manager allocated 68 hours, the packager spent 28 hours, and the end user representative contributed 24 hours to phase 1. Table 6 illustrates the calculation.

**Table 6**

## Phase 1: Investigation And Preparation

Ref.	Metric	Calculation	Value
D1	Project manager fully loaded average hourly rate		\$54
D2	Hours allocated to phase 1		68
D3	Packager fully loaded average hourly rate		\$42
D4	Hours allocated to phase 1		28
D5	User representative fully loaded average hourly rate		\$48
D6	Hours allocated to phase 1		24
Dt	Phase 1: investigation and preparation	$(D1*D2)+(D3*D4)+(D5*D6)$	\$6,000

Source: Forrester Research, Inc.

During the interviews, we learned that organizations that own Adobe Acrobat licenses typically upgraded their licenses when they were rolling out other applications. In phase 2, the deployment team was focused on packaging and testing to ensure that the upgrade software would properly integrate with other applications. The project manager spent 28 hours while the packager allocated 120 hours to this phase. Table 7 illustrates the calculation.

**Table 7**

## Phase 2: Packaging And Testing

Ref.	Metric	Calculation	Value
E1	Project manager fully loaded average hourly rate		\$54
E2	Hours allocated to phase 2		28
E3	Packager fully loaded average hourly rate		\$42
E4	Hours allocated to phase 2		120
Et	Phase 2: packaging and testing	$(E1*E2)+(E3*E4)$	\$6,552

Source: Forrester Research, Inc.

Phase 3 is the pilot phase. This section primarily measures the IT resources made available to track issues resulting from the pilot program. Organizations interviewed typically used between 30 and 50 users during the pilot phase to determine if the application does what it needs to do without interrupting users. During this phase, the project manager allocated 12 hours, the desktop engineer spent 24 hours, and the user representative contributed 16 hours. Table 8 illustrates this calculation.

**Table 8**

Phase 3: Pilot

Ref.	Metric	Calculation	Value
F1	Project manager fully loaded average hourly rate		\$54
F2	Hours allocated to phase 3		12
F3	Desktop engineer fully loaded average hourly rate		\$31
F4	Hours allocated to phase 3		24
F5	User representative fully loaded average hourly rate		\$48
F6	Hours allocated to phase 3		16
Ft	Phase 3: pilot	$(F1 * F2) + (F3 * F4) + (F5 * F6)$	\$2,160

Source: Forrester Research, Inc.

Rollout is the final phase of implementation. During this phase, the project manager spent 28 hours and the desktop engineer allocated 52 hours to complete the implementation. Table 9 represents the calculation.

**Table 9**

Phase 4: Rollout

Ref.	Metric	Calculation	Value
G1	Project manager fully loaded average hourly rate		\$54
G2	Hours allocated to phase 4		28
G3	Desktop engineer fully loaded average hourly rate		\$31
G4	Hours allocated to phase 4		52
Gt	Phase 4: rollout	$(G1*G2)+(G3*G4)$	\$3,124

Source: Forrester Research, Inc.

Table 10 summarizes the implementation cost of Adobe Acrobat X for the composite organization.

**Table 10**

Total Implementation Costs

Ref.	Metric	Calculation	Initial
Dt	Phase 1: investigation and preparation		\$6,000
Et	Phase 2: packaging and testing		\$6,552
Ft	Phase 3: pilot		\$2,160
Gt	Phase 4: rollout		\$3,124
Ht	Implementation costs	$Dt+Et+Ft+Gt$	\$17,836

Source: Forrester Research, Inc.

**Total Costs**

Table 11 summarizes the total costs of upgrading to Adobe Acrobat X for the composite organization.

**Table 11**

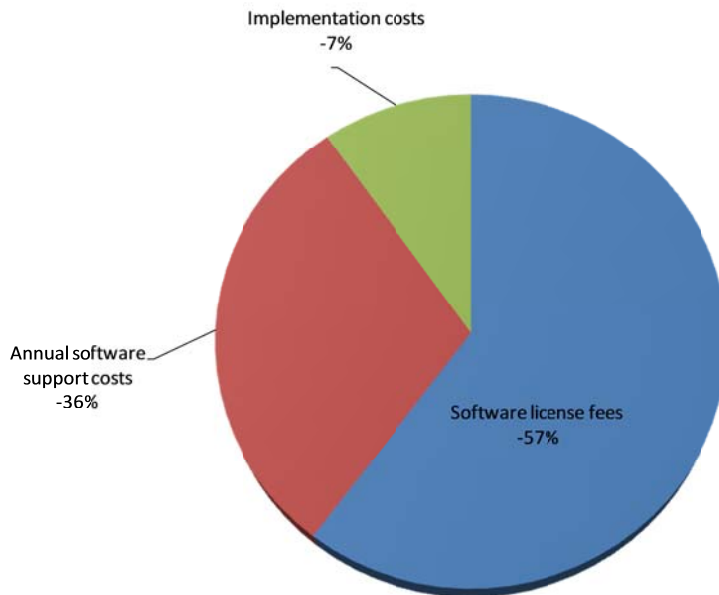
Total Costs — Non-Risk-Adjusted

Costs	Initial	Year 1	Year 2	Year 3	Total	PV
Software license fees	(\$147,100)				(\$147,100)	(\$147,100)
Annual software support costs		(\$37,500)	(\$37,500)	(\$37,500)	(\$112,500)	(\$93,257)
Implementation costs	(\$17,836)				(\$17,836)	(\$17,836)
<b>Total costs</b>	<b>(\$164,936)</b>	<b>(\$37,500)</b>	<b>(\$37,500)</b>	<b>(\$37,500)</b>	<b>(\$277,436)</b>	<b>(\$258,193)</b>

Source: Forrester Research, Inc.

**Figure 3**

Total Costs — Non-Risk-Adjusted



Source: Forrester Research, Inc.

## Benefits

The benefits that we had sufficient data to quantify financially are:

- Hardware reimaging cost savings.
- IT and end user productivity gain from improvement in patch testing and rollout.
- End user productivity gain from improvement in PDF to Microsoft Word and Excel conversion.

These benefits represent operating savings that in a three-year risk-adjusted model illustrates a total benefits PV of \$555,314. Some of the organizations interviewed have not fully deployed the solutions and have not been able to track the following benefits:

- Mitigating security risk through the use of sandboxing technology.<sup>2</sup>
- Improved IT organizational productivity by enhancing existing systems and processes.
  - Support for Windows 7, Microsoft Office 2010, and latest web browsers.
  - Out-of-the-box integration with Microsoft SharePoint.
  - IT process consistency assurances through guided Actions that automate routines and multistep tasks.<sup>3</sup>

To fully understand the potential impact on their organizations, readers should take into consideration all benefits, whether or not they are quantified in this study.

### *Reimaging Cost Savings*

According to Adobe, one of the major benefits associated with the release of Adobe Acrobat X is IT efficiencies. We validated this message with seven Adobe Acrobat X customers interviewed for this study. Reimaging cost savings was one of the benefits derived from automating the deployment of Adobe Acrobat X using Microsoft SCCM. Customers used this feature to improve their hardware refresh completion.

We estimate that the composite organization has a three-year hardware refresh program where 40% of 1,000 employees receive hardware replacement in Year 1, 30% in Year 2, and 30% in Year 3. Based on the interviews, we estimate that the composite organization, after deploying Adobe Acrobat X, saves 3 hours per machine on hardware reimaging. At a fully loaded hourly rate of \$31, we calculate this benefit in Table 12. This section represents 14% of the overall benefits.

**Table 12**  
Reimaging Cost Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
I1	Number of machines being reimaged		1,000		
I2	Number of hours saved for reimaging		3		
I3	Desktop engineer fully loaded average hourly rate		\$31		
I4	Percent completed		40%	30%	30%
It	Reimaging cost savings	I1*I2*I3*I4	\$37,200	\$27,900	\$27,900

Source: Forrester Research, Inc.

### *End User Productivity Gain*

According to interviewees, another reason for upgrading to Adobe Acrobat X was the ability to improve end user productivity by reducing the frequency of patch deployment. All interviewees mentioned that Adobe would release a number of patches at least four times a year. This meant these organizations had to test multiple sets of patches for Adobe Acrobat 8 and 9 because of a lack of standardization. When IT would release new patches, end users sometimes would elect to ignore them because the patch required multiple reboots. As a result, many systems were not up-to-date and could become vulnerable to security issues.

As a part of the upgrade decision, these organizations also elected to standardize on Adobe Acrobat X. Using the cumulative patching capability, these organizations were able to reduce disruptions to their employees' workdays. For the composite organization, we estimated the number of patches required to be tested and deployed for versions 8 and 9 annually (customers who own version 7 no longer receive any support). For the 1,000-employee organization, we have calculated the total number of reboots prior to Adobe Acrobat X in Table 13. This category represents 24% of the overall benefits.

**Table 13**

Total Number Of Reboots Prior To Adobe Acrobat X

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
J1	Number of Adobe Acrobat 8 patches		8	12	6
J2	Number of users on version 8		150		
J3	Number of Adobe Acrobat 9 patches		10	14	10
J4	Number of users on version 9		850		
Jt	Total number of reboots prior Adobe Acrobat X	$(J1*J2)+(J3*J4)$	9,700	13,700	9,400

Source: Forrester Research, Inc.

The Adobe customers Forrester interviewed estimated that they continue to deploy all the patches twice a year. For the composite organization, we calculate the number of reboots before and after deployment in rows “Jt” and “K2”. We estimate that the installation, shutdown, and restart per system per patch is 15 minutes. To remain conservative, we estimate that 50% of the benefit is captured. At a fully loaded hourly rate of \$48, Table 14 illustrates the calculation.

**Table 14**

End User Productivity Gain

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
K1	Number of reboots associated with patches prior to Adobe Acrobat X	$(J1*J2)+(J3*J4)$	9,700	13,700	9,400
K2	Number of reboots associated with patches after Adobe Acrobat X	2 updates per each 1,000 user	2,000	2,000	2,000
K3	Average of number of hours		0.25		
K4	User representative fully loaded average hourly rate	$(A4/A3)$	\$48		
K5	Percent of benefit captured		50%		
Kt	End user productivity gain	$(K1-K2)*K3*K4*K5$	\$46,200	\$70,200	\$44,400

Source: Forrester Research, Inc.

### IT Patches Deployment Time Savings

Another component of benefit is the IT productivity gain derived from patch testing and release. According to the interviews, Adobe was releasing patches for prior Adobe Acrobat versions at least every quarter. To maintain multiple versions, IT was required to test each release and package it properly. Failure in packaging could have consumed many man-hours in troubleshooting.

In this section, we are only measuring the savings resulting from time savings for IT staff. In Table 15, we have outlined the number of patches released annually for versions 8 and 9. Based on an average of 80 hours of testing per patch, we estimate the total time required to package and test Adobe Acrobat 8 and 9 patches.

**Table 15**

Total Time Spent Packaging And Testing Adobe Acrobat 8 And 9 Patches

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
L1	Number of Adobe Acrobat 8 patches		8	12	6
L2	Number of Adobe Acrobat 9 patches		10	14	10
L3	Average number of hours to test each released patch		80		
Lt	Total time spent packaging and testing Adobe Acrobat 8 and 9 patches	$(L1+L2)*L3$	1,440	2,080	1,280

Source: Forrester Research, Inc.

In Table 16, we estimate the total IT patch deployment cost savings. Organizations interviewed are planning to test patches released twice a year. As a result of cumulative patch capability, when they test the latest patch release, it includes all the prior patches released. Therefore, they not only save in testing but they also could save in packaging time. The packaged patches reduced the risk for error. In the prior environment, some organizations were packaging the releases themselves to reduce the burden on end users.

For the composite organization, we estimate that two workers at a fully loaded hourly rate of \$42 spent 1,440 hours in Year 1, 2,080 hours in Year 2, and 1,280 hours in Year 3 to test Adobe Acrobat versions 8 and 9. After deployment, using cumulative patching capability, the composite organization spent 80 hours twice a year on patch testing and deployment. This section represents 53% of the overall benefits.

**Table 16**

## IT Patch Deployment Cost Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
M1	Number of workers		2		
M2	Fully loaded hourly rate of a packager	(A8/A3)	\$42		
M3	Total time spent packing and testing Adobe Acrobat 8 and 9 patches	(L1+L2)*L3	1,440	2,080	1,280
M4	Using cumulative patching capability for a new set of patches that needed to be tested annually		2		
M5	Average time to test each patch		80		
Mt	IT patch deployment cost savings	$M1*M2*(M3-M4*M5)$	\$107,520	\$161,280	\$94,080

Source: Forrester Research, Inc.

*PDF To Excel And Word Conversion*

According to a number of customers interviewed, one of the main reasons for upgrading to Adobe Acrobat X was the improvement in PDF conversion to Excel and Word. With the prior versions of Adobe Acrobat, these organizations needed to use other tools to ensure that PDF files would properly convert to Excel and Word without a need to reformat documents. After evaluating Adobe Acrobat X, these organizations agreed that Adobe has made great progress to ensure that this capability thoroughly protected the original and intended format of the Excel and Word document. Our interviewees believed that the enhanced conversion capability has not only reduced conversion efforts by 50% but it has also eliminated the need to purchase multiple applications. Previously, when the end user would receive a file, he or she was required to open another program, convert the file, and save it for use.

We have created a framework to estimate the productivity gain for the composite organization. We estimate 250 end users at a fully loaded hourly rate of \$48. We assume that these users save 15 minutes per month. To remain conservative, we assume that only 50% of the benefit is realized. Table 17 represents the calculation. This category represents 9% of the overall benefits.

**Table 17**

## PDF Conversion To Excel And Word

Ref.	Metric	Calculation	Per period
N1	Number of workers		250
N2	Average fully loaded hourly rate		\$48
N3	Average number of hours saved per month		0.25
N4	Number of months per year		12
N5	Percent of benefit captured		50%
Nt	PDF conversion to Excel and Word	$N1*N2*N3*N4*N5$	\$21,600

Source: Forrester Research, Inc.

*Total Benefits*

Table 18 summarizes total benefits derived from the deployment of Adobe Acrobat X.

**Table 18**

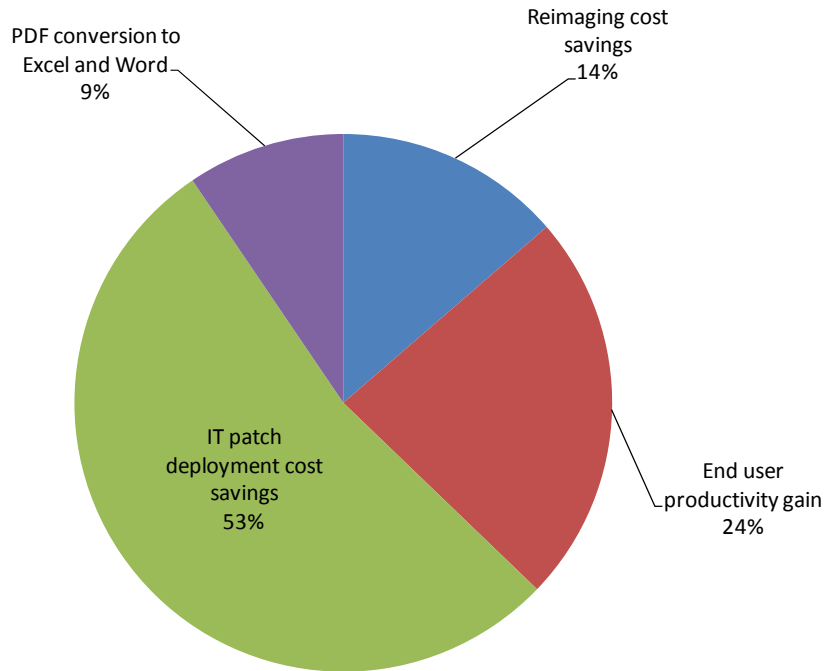
## Total Benefits — Non-Risk-Adjusted

Benefits	Year 1	Year 2	Year 3	Total	PV
Reimaging cost savings	\$37,200	\$27,900	\$27,900	\$93,000	\$77,838
End user productivity gain	\$46,200	\$70,200	\$44,400	\$160,800	\$133,375
IT patch deployment cost savings	\$107,520	\$161,280	\$94,080	\$363,880	\$301,718
PDF conversion to Excel and Word	\$21,600	\$21,600	\$21,600	\$64,800	\$53,716
Total benefits	\$212,520	\$280,980	\$187,980	\$681,480	\$566,647

Source: Forrester Research, Inc.

**Figure 4**

Total Benefits — Non-Risk-Adjusted



Source: Forrester Research, Inc.

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## Flexibility

There are other components of Adobe Acrobat X that customers are not currently using. To estimate potential benefits if an organization deploys other components of the suite, the reader should refer to the outline in Table 19.

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 Adobe Acrobat X 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).

**Table 19**  
Flexibility Benefit Framework

Metric	Calculation
Asset value (benefit)	IT or business costs avoided, revenue generated, capital saved
Cost to acquire option	Planning and discovery, subscription, and annual maintenance are examples of costs to consider.
Expiration	Time to expire, in years
Flexibility	Black-Scholes option pricing model

Source: Forrester Research, Inc.

## Risk

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 Adobe Acrobat X 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 Adobe Acrobat X, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

Quantitatively capturing investment and impact risk by directly adjusting the financial estimates results in 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, as they represent the expected values considering risk.

The following implementation risk that affects costs is identified as part of this analysis:

- The implementation time could vary for some organizations. Some of the interviewees noted that there were bugs in the initial release of the product that Adobe later fixed. This led to a delay in the initial rollout.

The following impact risk that affects benefits is identified as part of the analysis:

- The time-to-benefit could vary depending on adoption and rollout schedule. Some organizations interviewed noted that users who were comfortable with using Adobe Acrobat versions 6 through 9 needed time to familiarize themselves with the new Adobe Acrobat X UI. As a result, a few organizations interviewed received some push-back during the pilot phase, and some organizations were required to implement training sessions. We have allocated high risk to the implementation costs, as this cost could vary.

Table 20 shows the values used to adjust for risk and uncertainty in the cost and benefit estimates. The TEI model uses a triangular distribution method to calculate risk-adjusted values. To construct the distribution, it is necessary to first estimate the low, most likely, and high values that could occur within the current environment. The risk-adjusted value

is the mean of the distribution of those points. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

**Table 20**  
Cost and Benefit Risk Adjustments

<b>Costs</b>	<b>Low</b>	<b>Most likely</b>	<b>High</b>	<b>Mean</b>
Software license fees	98%	100%	105%	101%
Annual software support costs	98%	100%	105%	101%
Implementation costs	100%	100%	125%	108%
<b>Benefits</b>	<b>Low</b>	<b>Most likely</b>	<b>High</b>	<b>Mean</b>
Reimaging cost savings	90%	100%	105%	98%
End user productivity gain	90%	100%	105%	98%
IT patch deployment cost savings	90%	100%	105%	98%
PDF conversion to Excel and Word	90%	100%	105%	98%

Source: Forrester Research, Inc.

## Financial Summary

The financial results calculated in the Costs and Benefits sections can be used to determine the ROI, NPV, and payback period for the organization's investment in Adobe Acrobat X. These are shown in Table 21 below.

**Table 21**

Cash Flow — Non-Risk-Adjusted

Categories	Initial	Year 1	Year 2	Year 3	Total	PV
Costs	(\$164,936)	(\$37,500)	(\$37,500)	(\$37,500)	(\$277,436)	(\$258,193)
Benefits		\$212,520	\$280,980	\$187,980	\$681,480	\$566,647
Net benefits	(\$164,936)	\$175,020	\$243,480	\$150,480	\$404,044	\$308,454
ROI	119%					
Payback period	11.3 months					

Source: Forrester Research, Inc.

Table 22 below shows the risk-adjusted ROI, NPV, and payback period values. These values are determined by applying the risk-adjustment values from Table 20 in the Risk section to the cost and benefits numbers in Tables 11 and 18.

**Table 22**

Cash Flow — Risk-Adjusted

Categories	Initial	Year 1	Year 2	Year 3	Total	PV
Costs	(\$167,834)	(\$37,875)	(\$37,875)	(\$37,875)	(\$281,459)	(\$262,023)
Benefits		\$208,270	\$275,360	\$184,220	\$667,850	\$555,314
Net benefits	(\$167,834)	\$170,395	\$237,485	\$146,345	\$386,392	\$293,291
ROI	112%					
Payback period	11.8 months					

Source: Forrester Research, Inc.

## Adobe Acrobat X: Overview

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According to Adobe, Acrobat X software enables employees across an organization to more effectively communicate and collaborate while enabling IT to maintain control over security and document compliance. Additionally, Acrobat X is far simpler to deploy and manage as a result of enhanced application security, improved update processes, and increased support for deployment automation tools.

Adobe Acrobat X offers six fundamental benefits for IT and end users. Adobe Acrobat X will:

1. **Enhance existing systems and processes to increase organizational productivity.** Out-of-the-box integration with Microsoft Office and SharePoint gives users time-saving tools and a seamless experience. For example, users can easily export PDF files to Word, Excel, and PowerPoint while retaining layouts, formatting, and tables and directly check-in/checkout PDF files in SharePoint-hosted environments.
2. **Help safeguard systems and data.** Adobe Acrobat X is the only PDF software that uses the sandbox security technique to protect systems and data. Acrobat uses a layered security defense including granular JavaScript execution control and tighter integration with both Microsoft Windows and Apple Mac OS X operating system architectures.

Document security features available in Acrobat help protect company information when PDF files are shared outside the firewall.

3. **Easily deploy and manage Acrobat across the entire enterprise.** Support for Microsoft SCCM/SCUP and Apple Remote Desktop streamlines deployments of Acrobat in the enterprise. Updates are simplified with cumulative patches on a predictable, quarterly schedule. Free Adobe tools such as the Customization Wizard and the Administrator's Information Manager (AIM) speed installer and application configuration.
4. **Collect data quickly and easily by creating fillable PDF forms.** Easily convert existing paper or electronic forms to fillable PDF forms, track the status of distributed forms, and collect data centrally.
5. **Streamline PDF tasks.** Prepare PDF documents faster by creating guided Actions with the new Action Wizard in Acrobat X software. An Action guides a user through a set of predefined steps that can be applied to a single PDF or across batches of files. Actions can be used for a wide variety of tasks, ranging from formatting corporate documents to securing files for public distribution. Deployed across the organization, Actions can increase productivity and ensure consistency.
6. **Expedite document reviews and approvals.** Accelerate document review and approval processes across dispersed teams. Acrobat X makes shared document reviews easier to manage by tracking responses and allowing participants to see and build on each other's comments in real time in one PDF. Make it easy for people to sign and approve PDF documents electronically using Acrobat stamps, ink signature, or digital signature.

## Appendix A: Composite Organization Description

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For this TEI study, Forrester has created a composite organization to illustrate the quantifiable costs and benefits of upgrading to Adobe Acrobat X. The composite company is intended to represent an organization with 1,000 employees using Adobe Acrobat X as a collaboration tool as well as an instrument to support document archiving. This information was derived from conducting interviews with seven existing customers provided by Adobe.

Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. Forrester synthesized a composite organization from these results. It represents an organization with 1,000 Adobe Acrobat users, where the 400 licenses upgraded and 600 licenses purchased are distributed as 90% Adobe Acrobat X Standard and 10% Adobe Acrobat X Pro. The composite organization was using a combination of Adobe Acrobat versions 8 and 9.

In upgrading to Adobe Acrobat X from the prior version, the composite company has the following objectives:

- Reduce burden on IT when deploying and maintaining the PDF platform.
- Continue to support end users' collaboration and archiving needs.

For the purpose of the analysis, Forrester assumes that:

- The organization is standardizing on Adobe Acrobat X to ensure that IT efficiencies are realized.
- The organization is monitoring the need to deploy Adobe Acrobat X Pro versus Adobe Acrobat X Standard.

## Appendix B: Total Economic Impact™ Overview

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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.

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

### *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.

### *Risk*

Risk measures 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 applies a probability density function known as “triangular distribution” to the values entered. At minimum, three values are calculated to estimate the underlying range around each cost and benefit.

### *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 in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

## **Appendix C: Glossary**

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**Discount rate:** The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a 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 organization 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 an interest rate (the discount rate). The PV of costs and benefits feed into the total net present value of cash flows.

**Payback period:** The breakeven point for an investment. 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 Framework Assumptions section) at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

## **Appendix D: Supplemental Material**

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### *Related Forrester Research*

"Valuing IT Flexibility," Forrester Research, Inc., June 8, 2004

### *Online Resources*

For additional information regarding option valuation using Black-Scholes, consider *Real Options: Managing Strategic Investment in an Uncertain World* (<http://www.real-options.com/index.htm>).

## **Appendix E: Endnotes**

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<sup>1</sup> Forrester risk-adjusts the summary financial metrics to take into account the potential uncertainty of the cost and benefit estimates. For more information on Risk, please see page 23.

<sup>2</sup> The sandboxing technology offers a read-only environment for PDF files being viewed within a supported web browser or within Acrobat X itself to prevent malicious code from using the PDF format to write to the computer's file system.

<sup>3</sup> Without writing a script, the user can automate a sequence of frequently used steps that can be applied to a single PDF or to batches of files. For an example, if you need to protect a PDF file, there are few steps involved. The Action Wizard tells you what to do. So that users who are not familiar with Acrobat can complete the steps, the Actions can be shared with others.