WHITE PAPER

Acrobat X: A Strategic Choice for Enterprise-Wide Productivity

A Study of Knowledge Worker Collaboration Workflows

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Key Takeaways

- In a live lab-test study of knowledge worker productivity, Crimson Consulting found that for some workflows associated with the collaborative creation, review, and distribution of documents, using Adobe Acrobat X is almost twice as fast as using Microsoft Office 2010 alone.
- The study results indicate that the overall productivity improvement for these tasks using Adobe Acrobat X could amount to over 7 hours/week per knowledge worker out of the 20 hours/week they spend on collaborative tasks.[1]
- At an average burdened hourly rate of $36.00 per knowledge worker, assuming 60% effectiveness using Adobe Acrobat X, the annual savings produced by the productivity improvement could approach $13,000 per knowledge worker.
- For an organization or department deploying Adobe Acrobat X to 500 knowledge workers, the total annual savings exceeds $6 million.
- This white paper includes an interactive cost-savings model that IT decision-makers may use to estimate the cost savings possible from deploying Adobe Acrobat X to knowledge workers across their own organization.
- Based on the findings of the live lab-test study and in-depth interviews of twelve IT decision-makers in North America, Europe and Japan involved with the purchase decision for broadly deployed desktop software, Crimson Consulting recommends that organizations consider making Adobe Acrobat X part of their standard desktop image.

Executive Summary

Document creation and distribution is a core activity for knowledge workers and is an increasingly collaborative one. One of the most pressing questions facing IT decision-makers is the optimal desktop software image to support this activity, especially as collaboration expands to include more people both inside and outside the organization.

In attempting to answer this question, IT may overlook a powerful collaborative tool, Adobe Acrobat X, which offers many productivity benefits. In combination with productivity software such as Microsoft Office 2010 and back-end collaborative solutions such as Microsoft SharePoint 2010, Adobe Acrobat X can greatly increase knowledge worker productivity for collaborative document creation, review, and distribution.

To quantify the strategic value of Adobe Acrobat as part of an organization's desktop image, Adobe commissioned Crimson Consulting to undertake a study of how Adobe Acrobat X can increase knowledge worker productivity, based on live lab testing of common business workflows. Crimson developed eleven scenarios that represent common knowledge worker processes and workflows, such as creating, editing, and sharing text documents, spreadsheets, presentations, and forms. These workflows were refined and validated by in-depth interviews with twelve IT decision-makers in North America, Europe, and Japan involved in deciding the software included in their organization's desktop software image.

The results of the scenario testing are listed in Table 1 and are discussed in more detail in the "Scenario Testing Results" section.

[1] According to an IDC study: Hidden Costs of Information Work: A Progress Report, Doc #217936, May 2009

Table 1: Results of Standard Workflow Scenario Testing

Scenario	Description	Acrobat Workflow Performance Improvement
Document Review		
1	Review a text-based document with existing comments and add comments	39%
2	Review a spreadsheet with existing comments and add comments	8%
3	Review a presentation with existing comments and add comments	12%
4	Compare 2 documents and review changes	60%
Comment Aggregation		
5	Aggregate comments into a final text-based document	80%
6	Aggregate spreadsheet comments into a final document	66%
7	Aggregate presentation comments into a final document	26%
Electronic Forms		
8	Aggregate and track responses from an electronic form	4168%
9	Create a form from a paper form	207%
Document Security		
10	Remove sensitive information from a document	80%
11	Secure a document	46%

Working from these findings, Crimson developed an interactive model based on knowledge worker cost profiles developed by IDC that IT decision-makers can use to estimate the savings possible for their own organization, which is presented at the end of this white paper.

The results of this study clearly show that making Adobe Acrobat X a part of the standard desktop image for knowledge workers can deliver significant productivity increases and cost savings compared to productivity applications and collaborative back-ends alone. For some common workflows, using Acrobat is almost twice as fast.

This amounts to a significant savings. At an average burdened hourly rate of $36.00 per knowledge worker for a standard mix of tasks, assuming 60% average effectiveness in using Acrobat X, the annual savings realized per knowledge worker could approach $13,000 or a total of over $6 million annually for an organization or department with 500 knowledge workers.

This white paper discusses the study in detail. We review the eleven scenarios used to measure the productivity gains possible with Adobe Acrobat X, profile the twelve companies interviewed, apply the model to their specific situations, and show how IT decision-makers can customize the interactive model to estimate the savings possible for their own organization.

Introduction

Whether paper or electronic, documents remain the foundation of business processes. Documents are used to codify and preserve every kind of business activity: decisions, knowledge, contracts, and more. Creating, distributing, and acting on these documents are core activities for knowledge workers.

Creating such documents has always been a collaborative process. One of the fundamental goals of business IT has been to support that process and enable more people to participate effectively in document creation.

In the modern enterprise, much of IT's effort towards this goal naturally focuses on the desktop software image: what applications should be standard on knowledge worker desktops to provide the most efficient environment for document creation and distribution? The answer has generally been some sort of productivity suite, such as Microsoft Office, or some subset of the applications from such a suite. As business needs and regulatory mandates have required more centralized management of document authoring, collaboration and approval workflows, IT has found it increasingly necessary to supplement desktop productivity software with back-end solutions such as Microsoft SharePoint.

Even so, IT still faces a number of challenges. There remain many gaps in the collaborative workflow offered by productivity applications and back-end document management systems, and it is often difficult to support proven business processes with the collaborative tools offered. Training with such systems can also be an issue, which tends to limit their effectiveness.

Even more pressing is the rapid growth of distributed collaboration, which more and more includes "outside-the-firewall" participants (e.g. business partners, contractors, ad hoc team members). This not only exacerbates existing problems, such as preserving collaborative workflows when the originating applications are upgraded or retired (thus changing document formats), but also creates new and more urgent ones.

How can IT secure documents circulated by email outside the organization? How can they provide the same collaborative features to users who cannot access the corporate document management solution? How can they enable collaborative document creation and review across different file formats, platforms, browsers, and devices?

Most important, how can IT address all of these challenges in a cost-effective manner?

Adobe Acrobat in the Enterprise

For a long time, the Portable Document Format (PDF) has been the standard for effective document distribution. The free Adobe Reader is now installed on more than 90% of Internet-connected computers, ensuring that recipients can view and print a document as its creator intended, regardless of what application was used to create it.

Unfortunately, the ubiquity of PDF *files* tends to make IT professionals and knowledge workers alike overlook the benefits of the Adobe Acrobat *application*, which has steadily been evolving into a rich set of collaborative tools, as exemplified by the latest release, Adobe Acrobat X. Using Acrobat simply as a means of converting documents to PDF obscures its strategic benefits to an organization. As part of the standard desktop image, Adobe Acrobat X can help IT support more efficient collaborative document creation, review, and distribution by supplying functionality lacking in productivity software such as Microsoft Office and document management or collaborative systems such as Microsoft SharePoint.

Adobe Acrobat X offers four fundamental benefits for knowledge worker collaboration:

Easy collaboration outside the corporate system. Adobe Acrobat X enables users of the free Adobe Reader to participate in critical collaborative workflows across different file formats, platforms, browsers, and devices.

Increased knowledge worker productivity. Adobe Acrobat X delivers a rich feature set, designed to enhance knowledge worker productivity when combined with productivity software such as Microsoft Office.

Greater ease of use. Adobe Acrobat X organizes its extensive functionality into an intuitive interface that makes even advanced operations such as form creation and data collection accessible to every user.

Improved document security. Adobe Acrobat X supplies a very strong security model that can protect sensitive information without restricting its distribution.

To verify the strategic value of Adobe Acrobat as part of an organization's desktop image, Adobe commissioned Crimson Consulting to undertake a study of how Adobe Acrobat X can increase knowledge worker productivity, based on live testing of common business workflows and refined by in-depth interviews with twelve IT decision-makers involved with their organization's desktop software image. The tests used Microsoft Office 2010 as a baseline because of its widespread adoption and familiarity (which helped eliminate learning-curve bias from the tests), but the results are illustrative of the increased productivity Adobe Acrobat X can offer for these common workflows in combination with virtually any productivity application or document management system.

The results of our study clearly show that making Adobe Acrobat X a part of the standard desktop image for knowledge workers can deliver significant productivity increases and cost savings compared to productivity applications such as Microsoft Office alone.

This white paper discusses those results in depth, and supplies an interactive cost model that you can use to estimate the potential cost savings for your organization.

Collaboration Workflows Study Methodology

Crimson developed eleven scenarios that represent common knowledge worker processes and workflows such as creating, editing, and sharing text documents, spreadsheets, presentations, and forms. These scenarios are grouped into four categories, as listed in Table 2:

- Document review
- Comment aggregation
- Electronic forms
- Document security

Table 2: Standard knowledge worker scenarios tested

Scenario	Description
Document Review	
1	Review a text-based document with existing comments and add comments
2	Review a spreadsheet with existing comments and add comments
3	Review a presentation with existing comments and add comments
4	Compare 2 documents and review changes
Comment Aggregation	
5	Aggregate comments into a final text-based document
6	Aggregate spreadsheet comments into a final document
7	Aggregate presentation comments into a final document
Electronic Forms	
8	Aggregate and track responses from an electronic form
9	Create an electronic form from a paper form
Document Security	
10	Remove sensitive information from a document
11	Secure a document

In the live lab tests, each of these scenarios was executed by the test subjects on the same computer using both Microsoft Office applications alone, and Microsoft Office in combination with Adobe Acrobat X, in order to estimate the savings possible from the increased productivity hypothesized for the latter combination.

The test subjects were knowledge workers with varying levels of expertise. No previous knowledge of Microsoft Office or Adobe Acrobat was required, and all subjects were trained on each workflow prior to the test to eliminate learning curve effects. The results reported are the minimum time needed to complete the task.

It must be emphasized that these tests are not a competitive *product* comparison of Microsoft Office versus Adobe Acrobat X, since the two products fulfill different functions. Instead, they are a competitive *workflow* comparison of two ways of accomplishing the same task: one based on the use of Microsoft Office alone, and the other based on the use of Adobe Acrobat X's extensive collaborative features to support and enhance Office workflows.

The results of these tests became the basis of the interactive cost savings model found in "Appendix A: Interactive Cost Model," which may be customized to estimate potential savings for your organization. The model was further refined based on in-depth interviews with IT managers at twelve different companies in the United States, Europe, and Japan:

- Energy Products Consultancy, 4,500 employees
- Utilities Company, 1,800 employees
- Large Software Company, 7,000 employees
- Luxury Goods Distribution Syndicate, 3,000 employees
- Large University, 8,500 employees
- Online Educational Institution, 5,000 employees
- Fortune 500 Manufacturing Firm, 300,000 employees
- Advertising and Marketing Firm, 3,000 employees
- Online Merchant, 9,000 employees
- Large Printing Firm, 4,800 employees
- IT Software and Services Company, 9,000 employees
- Internet Hosting Firm, 8,000 employees

In "Appendix B: Company Profiles," we have applied the cost model to each of these companies based on interviewee estimates of the average time spent by their knowledge workers on the tasks involved. These profiles can be useful for obtaining a quick sense of how the productivity benefits offered by Adobe Acrobat X will apply to your company even before using the interactive model in Appendix A.

Scenario Testing Results

Overall, the tests indicate that a notable increase in productivity may be gained from augmenting knowledge workers' standard desktop productivity software with the extensive collaborative functionality of Adobe Acrobat X. In most cases the productivity improvement was between 25% and 80%. In the scenarios dealing with electronic forms, the improvements were dramatically greater due to Acrobat's extensive automation of forms-related tasks.

These results indicate that Acrobat greatly enhances document collaboration and exchange for Microsoft Office users. As shown later in the *pro forma* Cost Savings Model and the company profiles, this can offer significant and strategic cost savings across an organization. At an average burdened hourly rate of $36.00 per knowledge worker, assuming 60% average effectiveness in using Acrobat X, the annual savings realized per knowledge worker can approach $13,000.

Document Review Scenarios (Scenarios 1-4)

The four document review scenarios compare the workflow performance in Microsoft Office alone (the "typical workflow") and Office with Acrobat (the "Acrobat workflow") for the common practice of circulating a document via email for comment. They concentrate on the review process itself rather than the aggregation of comments and production of the final document, which is the subject of scenarios 5 – 7.

Comment Review Scenarios

In the first three scenarios, the test subject was asked to review existing comments in different types of documents and add several of his or her own.

In the typical workflow, the knowledge worker receives an Office document as an email attachment.

In the Acrobat workflow, the knowledge worker receives an email with a link to a PDF version of the Office document hosted on a shared server.[2] This PDFfile would have been automatically created when the document's author initiated a Shared Review using the ribbon command added by the Acrobat PDFMaker for Office. Because all user comments are added to the same shared document, it is possible that a user will see that a comment he or she intended has already been made, thus saving time and further increasing the savings, but the effect of this on productivity was not tested in these scenarios.

In the typical workflow portion of each of the scenarios representing these workflows, the test subject used the native comment tool supplied, of which there is only one for each application. In the Acrobat workflow portion of each scenario, the test subject used the Sticky Note, the closest of the 20 annotation tools offered by Acrobat to the comment tool available in Word, Excel, or PowerPoint.

Findings

Overall, Acrobat and Office together are more efficient than Office alone for comment review. The biggest improvement was seen with the mark up of a text-based document, which was 39% more efficient with Acrobat.

Document Comparison Scenario

In the fourth scenario, the test subject was asked to compare two text-based documents and review the differences between them. Shared Review was not used for the Acrobat workflow portion of this scenario.

Findings

Acrobat and Office together are 60% more efficient than Office alone for comparing two Word documents.

[2] This can be a SharePoint or other collaboration solution servers, Acrobat.com, a network folder, or a web server folder.

Table 3: Workflow Testing Results—Document Review Scenarios

Scenario	Description	Typical Workflow (minimum time in seconds)	Acrobat Workflow (minimum time in seconds)	Acrobat Workflow Performance Improvement
1	Review a text document with existing comments and add 6 comments	91.7	66.0	39%
2	Review a spreadsheet with existing comments and add 5 comments	64.7	60.0	8%
3	Review a presentation with existing comments and add 6 comments	80.3	72.0	12%
4	Compare 2 documents and review changes	18.7	11.7	60%

Scenario 1—Text Document Review

A knowledge worker receives either a Word document or a link to a shared PDF version of the same document via email for comment. The user opens Outlook 2010, retrieves the email, and then uses either Word 2010 or Acrobat X Pro to open the appropriate document, review existing comments, add 6 new comments and save the document.

In Word 2010, the comments are added using the New Comment tool. In Acrobat, the comments are added using the Sticky Note tool.

Findings

It is 39% faster to mark up a document as PDF than as a native Word document because the comment tools are continuously enabled in Acrobat, rather than being part of a complex menu system.

Scenario 2—Spreadsheet Review

A knowledge worker receives either an Excel spreadsheet or a link to a shared PDF version of the same spreadsheet via email for comment. The user opens Outlook 2010, retrieves the email and then uses Excel 2010 or Acrobat X Pro to open the appropriate document, review existing comments, add 5 new comments and save the document.

In Excel 2010, the comments are added using the New Comment tool. In Acrobat, the comments are added using the Sticky Note tool, the nearest equivalent tool in the Acrobat Comments palette.

Findings

It is 8% faster to mark up a spreadsheet as PDF than as a native Excel spreadsheet, because the comment tools are continuously enabled in Acrobat. However, the Excel comment tool automatically places the comment in the precise cell intended, while the Acrobat sticky note tool is free-form, so the advantage is small.

Scenario 3—Presentation Review

A knowledge worker receives either a PowerPoint presentation or a PDF version of the same presentation via email for comment. The user opens Outlook 2010, retrieves the email and then uses PowerPoint 2010 or Acrobat X Pro to open the appropriate document, review existing comments, add 6 additional comments and save the document.

In PowerPoint 2010, the comments are added using the New Comment tool. In Acrobat, the comments are added using the Sticky Note tool, the nearest equivalent tool in the Acrobat Comments palette.

Findings

It is 12% faster to mark up a deck of slides as PDF than as a native PowerPoint document because the comment tools are continuously enabled in Acrobat.

Scenario 4—Text Document Comparison

In this scenario, the knowledge worker has two documents in Word format or the same documents in PDF format and wants to view the differences between them. This workflow is likely to be encountered even in companies that have formalized document creation and editing with a document repository or content management system because users often avoid using these systems for changes they consider minor when the work is still in progress.

In Word, the test subject used the Word Compare command to display the differences in a comparison pane. With the PDF documents, the test subject used the Acrobat Compare Documents command to similarly view the changes in the Comment pane.

Findings

Acrobat is 60% faster at comparing text documents than Microsoft Word. This is because the application itself is faster than Microsoft Word 2010. Acrobat has the added advantage that document comparison can be used across different file formats.

Comment Aggregation Scenarios (Scenarios 5-7)

The three comment aggregation scenarios compare the workflow performance in Office alone (the “typical workflow”) and Office with Acrobat (the “Acrobat workflow”) for the common practice of circulating a document via email for comment, but concentrate on the final step: the aggregation of comments into a final document at the end of the review process.

In the typical workflow, the knowledge worker receives three separate Office documents as email attachments and aggregates the comments to create a final document.

In the Acrobat workflow, the knowledge worker receives an email with a link to a PDF version of the Office document hosted on a shared server.[3] This PDF file would have been automatically created when the document’s author initiated a Shared Review using the menu added by the Acrobat PDFMaker for Office. All user comments have been added to that shared document, and the knowledge worker uses them to modify the original document.

In each of the scenarios representing these workflows, the test subject was asked to take three sets of comments from coworkers, review them, and make the recommended changes.

Findings

Acrobat clearly increases the speed of aggregating comments. The most significant difference was with Word documents due to the ability to easily import all comments from the shared PDF file into the original Word document. With Word-based documents, aggregation of comments was nearly twice as fast.

[3] This can be Acrobat.com, a SharePoint or other collaboration solution server, a network folder, or a web server folder.

Table 4: Workflow Testing Results—Comment Aggregation Scenarios

Scenario	Description	Typical Workflow (minimum time in seconds)	Acrobat Workflow (minimum time in seconds)	Acrobat Workflow Performance Improvement
5	Aggregate comments into final text-based document	132.3	73.7	80%
6	Aggregate spreadsheet comments into final document	81.7	49.3	66%
7	Aggregate presentation comments into final document	119.0	94.3	26%

Scenario 5—Text Document Comment Aggregation

In this scenario, a knowledge worker receives three sets of comments on a Word document he or she distributed, combines them into a single Word file with comments, and then uses the instructions in the comments to make the changes to the original Word document.

Using Word alone, the test subject received the three sets of comments as three Word documents, used Word's Compare/Combine capability twice to aggregate the comments, and then used them to edit the original Word document.

Using Acrobat, all comments have been added to the shared PDF document created by the Shared Review process. The test subject used the Import Comments command to import all of the comments in the shared file into the original Word document and then edited that document.

Findings

Acrobat and Word together are 80% faster at text document comment aggregation as Word alone.

Scenario 6—Spreadsheet Comment Aggregation

In this scenario, a knowledge worker receives three sets of comments on an Excel spreadsheet he or she distributed and uses the instructions in the comments to make the changes in the original file.

Using Excel alone, the test subject received the three sets of comments as three spreadsheets and viewed them side-by-side them sequentially to apply the comments to the original spreadsheet, as Excel has no Combine/Compare capability.

Using Acrobat, all comments have been added to the PDF document created by the Shared Review process. The test subject opened that file side-by-side with the original Excel spreadsheet and used the comments to modify the original.

Findings

Acrobat and Excel together are 66% faster at spreadsheet comment aggregation than Excel alone.

Scenario 7—Presentation Comment Aggregation

A knowledge worker receives three sets of comments on a PowerPoint document he or she distributed and uses the instructions in the comments to make the changes in the final file.

Using PowerPoint alone, the test subject received the three sets of comments as three PowerPoint documents and used PowerPoint's Compare/Merge capability twice to aggregate the comments for editing.

Using Acrobat, all comments have been added to the PDF file created by the Shared Review process. The test subject opened that file side-by-side with the original PowerPoint presentation, and used the comments to modify the original.

Findings

Acrobat and PowerPoint together are 26% faster at presentation comment aggregation than PowerPoint alone.

Electronic Forms Scenarios (Scenarios 8-9)

Collecting information is a fundamental task for many knowledge workers, and electronic forms are a popular way to do this. For data collection that is ad-hoc and not part of a larger, formal process, knowledge workers are left with few tools to help them automate the process. By contrast with data-collection by phone, a form does not require real-time participation by either the form originator or the person responding. By contrast with email, the information comes in an organized structure that is more easily collated and analyzed.

The two scenarios used in this study compared performance in Office alone (the “typical workflow”) and in Acrobat alone (the “Acrobat workflow”) for two common electronic form tasks: aggregating data from electronic forms and creating an electronic form from a paper form. These scenarios exercise only a small subset of the forms capabilities in Acrobat X, which offer additional benefits, including:

- Online and offline completion
- Full format control
- Formulas for calculated fields or validation can be created without programming expertise
- Electronic signature or stamps for approval

But even in the limited scenarios tested, Acrobat made the workflow dramatically more efficient than Office alone. In fact, the difference is so great that it is fair to assume that despite the fact that although many knowledge workers use Microsoft Word to create forms, data collection via electronic forms is simply not cost-effective with Office alone, and that adding Acrobat can enable more effective data collection for knowledge workers and increase their productivity.

Table 5: Workflow Testing Results—Electronic Forms Scenarios

Scenario	Description	**Typical Workflow** (minimum time in seconds)	**Acrobat Workflow** (minimum time in seconds)	**Acrobat Workflow Performance Improvement**
8	Aggregate and track responses from an electronic form	640.2	15.0	4168%
9	Create an electronic form from a paper form	237.7	77.3	207%

Scenario 8—Aggregate Electronic Form Responses

In this scenario, the knowledge worker receives 10 completed forms and wishes to combine the responses into an Excel spreadsheet for analysis.

In the typical workflow, the test subject received 10 Word documents and copied the results manually into an Excel spreadsheet.

In the Acrobat workflow, the test subject received 10 PDF forms and used the Merge Data Files into Spreadsheet command to save the results to an Excel spreadsheet. This workflow was devised to reproduce a standard forms distribution technique, even though Acrobat X offers a much more efficient method. Acrobat X can automatically collect and aggregate responses via an internal server such as

SharePoint or the Adobe-hosted Acrobat.com service. These responses can be viewed, sorted, or filtered via the Tracker that is included in Acrobat X and can be exported from Tracker as a CSV file for use with other applications.

Findings

Acrobat is over 4000% faster at aggregating electronic form responses because it combines all the form responses into an Excel spreadsheet using a single command.

Scenario 9—Create an Electronic Form from a Paper Form

In this scenario, the knowledge worker needs to transform a paper document into a fillable electronic form.

In the Office alone scenario, the test subject scanned the document, loaded it into a blank Word document as a "watermark," and then used the tools in the Developer tab to manually create form fields that correspond to each entry area in the form.

In the Acrobat scenario, the test subject scanned the document into Acrobat, which automatically recognizes form fields, makes them editable, and associates label tags with them. The test subject reviewed each field to assure that it was correct and made the necessary changes, which included changing one form field from a text field to a drop-down list.

Findings

Acrobat is over 200% faster at creating an electronic form from a paper form because it automates many of the steps needed.

Document Security Scenarios (Scenarios 10-11)

Document security is a rising concern for IT, especially since many knowledge workers must send documents to people "outside the firewall" where the distribution of documents cannot be easily controlled. In such cases, it is important to be able to remove sensitive information (e.g. financial data, corporate intellectual property, forward-looking statements, etc.) prior to sharing and assure the authenticity of a document.

These two scenarios test two common tasks in Office alone (the "typical workflow") and in Acrobat alone (the "Acrobat workflow"). The first is a simple example of controlling the distribution of sensitive information: removing personally-identifiable information (PII) from a document (the inclusion of which can expose a business to litigation or impact security). The second involves digitally signing a document.

Acrobat is clearly more efficient at both tasks because the functionality is built into Acrobat and requires fewer manual steps than using Office alone.

Table 6: Workflow Testing Results—Document Security Scenarios

Scenario	Description	Typical Workflow (minimum time in seconds)	Acrobat Workflow (minimum time in seconds)	Acrobat Workflow Performance Improvement
10	Remove sensitive information from a text document	70.3	39.0	80%
11	Digitally sign a text document	32.7	22.3	46%

Scenario 10—Remove Sensitive Information from a Text Document

A knowledge worker wants to ensure that a Word document does not contain any Personally Identifiable Information (PII) such as telephone numbers or email addresses.

In the typical scenario, the test subject opened the Word document, searched for number sequences and email strings (containing the @ sign) using the Advanced Find feature and removed any they found.

In the Acrobat scenario, the test subject opened the Acrobat toolbar and used the Search and Remove Text command to identify and redact all phone numbers and email addresses, which Acrobat recognizes automatically.

Findings

Acrobat is 80% faster at removing sensitive information from a text document than Microsoft Word, as the search for and removal of emails, phone numbers, and other personal information is a built-in function of Acrobat.

Scenario 11—Digitally Sign a Text Document

A knowledge worker wants to digitally sign a text document to assure the recipient of its validity and secure the document from changes after signing.

In the typical scenario, the test subject opened the Word document, positioned the cursor appropriately, used the Word Signature Line command to add the required information, and then added a digital signature.

In the Acrobat scenario, the test subject opened the Word document, used the Acrobat toolbar to create a PDF file, and then used the Sign Document command to add a digital signature.

Findings

Acrobat is 46% faster at digitally signing a document, as this function requires fewer manual steps in Acrobat.

Cost Savings for a Typical Organization

We used the results of our scenario testing, along with the in-depth interviews of twelve IT professionals involved with the purchase decision for broadly deployed desktop software, to develop a pro forma model, representing a typical organization, and an interactive model, which can be used to estimate the potential cost savings for your organization. The pro forma cost savings model is detailed in this section. The interactive cost savings model can be found in "Appendix A: Interactive Cost Model."

The model estimates the savings available from making Adobe Acrobat X available to knowledge workers using Microsoft Office for five fundamental collaborative tasks:

- Communicate/collaborate with team members and others internal to the organization

- Review other's documents
- Communicate/collaborate with customers, suppliers, and others outside the organization
- Gather reviews and comments and revise documents
- Publish information

In this section, we use the average values collected from the IT interviews and apply the model to a moderate-sized company or department with the following characteristics:

1. 500 knowledge workers
2. An average burdened rate of $36.00/hour per knowledge worker (based on the study by IDC)
3. A 60% average effectiveness rate for Adobe Acrobat X.

At an average burdened hourly rate of $36.00 per knowledge worker for a standard mix of tasks, assuming 60% average effectiveness in using Acrobat X, the annual savings realized per knowledge worker could approach $13,000, or a total of over $6 million annually for an organization or department with 500 knowledge workers.

It should be emphasized again that although Microsoft Office 2010 was used as the basis of the tests used to develop this model, due to its widespread use and familiarity, similar gains in collaboration efficiency and productivity may be realized with other productivity software as well.

1. Organization information	IDC Research Industry Averages	*Pro Forma* Organization
Average fully burdened rate per hour	**$36.06**	$36.00
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		500

2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	5.5
Reviewing documents from other people	**2.1**	2.5
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.2
Gathering comments and revising documents	**2.3**	4.5
Publishing information	**3.7**	1.5

3. Weekly cost per task per knowledge worker	
Communicating and collaborating with team members and others internal to organization	$198.00
Reviewing documents from other people	$90.00
Communicating and collaborating with customers, suppliers, and others outside the organization	$187.20
Gathering comments and revising documents	$162.00
Publishing information	$54.00
Total cost per knowledge worker	**$691.20**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$3,960
Reviewing documents from other people	60%	$2,700
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,488
Gathering comments and revising documents	80%	$6,480
Publishing information	30%	$810
Total annual productivity improvement capability per knowledge worker		**$21,438**
Acrobat deployment as % of knowledge workers		**100%**
Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$12,863**
Total annual cost savings		**$6.4M**

Conclusions & Recommendation

In combination with productivity software such as Microsoft Office and document management or collaborative systems such as Microsoft SharePoint, Adobe Acrobat X can greatly increase knowledge worker productivity for collaborative document creation, review, and distribution.

Adobe Acrobat X offers four fundamental benefits for knowledge worker collaboration:

Easy collaboration outside the corporate system. Adobe Acrobat X enables users of the free Adobe Reader to participate in critical collaborative workflows across different file formats, platforms, browsers, and devices.

Increased knowledge worker productivity. Adobe Acrobat X delivers a rich feature set, designed to enhance knowledge worker productivity when combined with productivity software such as Microsoft Office.

Greater ease of use. Adobe Acrobat X organizes its extensive functionality into an intuitive interface that makes even advanced operations such as form creation and data collection accessible to every user.

Improved document security. Adobe Acrobat X supplies a very strong security model that can protect sensitive information without restricting its distribution.

Based on a live lab-test study of knowledge worker productivity and in-depth interviews of twelve IT decision-makers involved with the purchase decision for broadly deployed desktop software, Crimson Consulting recommends that organizations consider making Adobe Acrobat X part of their standard desktop image. Doing so will greatly increase knowledge worker productivity for collaborative creation, review, and distribution of documents. For some of the most common tasks, using Acrobat is almost twice as fast.

At an average burdened hourly rate of $36.00 per knowledge worker for a standard mix of tasks, assuming 60% average effectiveness in using Acrobat X, the annual savings realized per knowledge worker could approach $13,000, or a total of over $6 million annually for an organization or department with 500 knowledge workers.

Appendix A: Interactive Cost Model

The model below illustrates the savings achievable by making Adobe Acrobat X a part of your standard desktop image. You may customize the model to derive a cost-savings estimate for your organization.

Customizing the Model

The model is divided into four sections; you may enter your own estimates into sections 1 and 2 to derive the estimated savings your organization or department can realize from using Adobe Acrobat in combination with Microsoft Office. For reference, the model shows the values of the ProForma Organization, based on the in-depth interviews of twelve IT professionals involved with the purchase decision for broadly deployed desktop software.

1. Average Fully Burdened Rate per Hour. You may enter a different knowledge worker cost profile to customize this form for your organization or department. The average shown was determined by International Data Corporation in a U.S.-based study.[4]

2. Average Weekly Time per Task per Knowledge Worker. You may enter different averages to customize this model for your organization or department.

3. Weekly Burdened Cost per Task per Knowledge Worker. This is derived from the burdened costs and times in sections 1 and 2, but only those tasks applicable to the current study are included. If you customize Sections 1 and 2, this will show the cost per task for a knowledge worker in your organization or department.

4. Yearly Estimated Acrobat Productivity Improvement. In the “Acrobat deployment as % of knowledge workers” field, estimate the percentage of total knowledge workers who will have Acrobat. In the “Average Acrobat effectiveness across all knowledge workers” field you may enter a percentage to account for possible variations in usage in your organization or department even if Adobe Acrobat is a standard part of your desktop image. Once you have entered this, if you have customized Sections 1 and 2, the final two rows will show you the potential yearly TCO improvement per knowledge worker and the potential total savings for your organization or department.

[4] IDC, Hidden Costs of Information Work: A Progress Report, Doc #217936, May 2009

1. Organization information	IDC Research Industry Averages	Your Organization
Average fully burdened rate per hour	$36.06	$ 36.00
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		500

2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	6.4	5.5
Reviewing documents from other people	2.1	2.5
Communicating and collaborating with customers, suppliers, and others outside the organization	5.2	5.2
Gathering comments and revising documents	2.3	4.5
Publishing information	3.7	1.5

3. Weekly cost per task per knowledge worker	
Communicating and collaborating with team members and others internal to organization	$ 198
Reviewing documents from other people	$ 90
Communicating and collaborating with customers, suppliers, and others outside the organization	$ 187
Gathering comments and revising documents	$ 162
Publishing information	$ 54
Total cost per knowledge worker	**$ 691**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$ 3,960
Reviewing documents from other people	60%	$ 2,700
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$ 7,488
Gathering comments and revising documents	80%	$ 6,480
Publishing information	30%	$ 810
Total annual productivity improvement capability per knowledge worker		$ 21,438
Acrobat deployment as % of knowledge workers		100%
Average Acrobat effectiveness across all deployed knowledge workers		60%
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$ 12,863**
Total annual cost savings		**$6.43M**

Reset to default

Appendix B: Company Profiles

A part of our study, Crimson Consulting conducted in-depth interviews of IT professionals at twelve different companies, which are briefly described in the following company profiles. Five were in the United States, three in Europe, and four in Japan. Some version of Microsoft Office was standard at all of them, but their use of Adobe Acrobat varied widely.

We have used the above model to produce *pro forma* estimates of the savings per employee that could be realized by each of these companies to help you apply the model to your own organization. In doing so, we have assumed the following average knowledge worker cost profile based on the US. rates in the IDC study, adjusted for Europe and Japan.

Region	Regional adjustment	Fully burdened rate per hour
United States	Basis	$36.06
Europe (UK and Germany)	+5%	$37.86
Japan	-15%	$30.65

U.S. Companies

Energy Products Consultancy, 4,500 employees

Interviewee is the Senior Operations Manager at a consulting firm that implements energy systems for a wide range of companies in the commercial and industrial sectors. He is a key influencer in deciding desktop software for their 4,500 employees, of which over 50% are knowledge workers with PCs.

1. Organization information	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$36.06
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		2250
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	5.5
Reviewing documents from other people	**2.1**	2.5
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.2
Gathering comments and revising documents	**2.3**	4.5
Publishing information	**3.7**	1.5
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$198.33
Reviewing documents from other people		$90.15
Communicating and collaborating with customers, suppliers, and others outside the organization		$187.51
Gathering comments and revising documents		$162.27
Publishing information		$54.09

Total cost per knowledge worker		**$692.35**
4. Yearly Estimated Acrobat Productivity Improvement		
	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$3,967
Reviewing documents from other people	60%	$2,705
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,500
Gathering comments and revising documents	80%	$6,491
Publishing information	30%	$811
Total annual productivity improvement capability per knowledge worker		**$21,474**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$12,884**
Total annual cost savings		**$29.0M**

Utilities Company, 1,800 employees

Interviewee is the IT Operations Director for a Midwest utilities company of about 1,600 employees of which 80% are knowledge workers with PCs. The company is currently upgrading from Microsoft Office 2003 to 2007 and Acrobat is required desktop software. Most Microsoft Word documents are converted to PDF to be routed and sent, usually within the same department, but sometimes to different locations.

1. Organization information		
	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$36.06
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		1280
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	20.0
Reviewing documents from other people	**2.1**	1.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.2
Gathering comments and revising documents	**2.3**	1.0
Publishing information	**3.7**	2.1
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$721.20
Reviewing documents from other people		$36.06

Communicating and collaborating with customers, suppliers, and others outside the organization	$187.51
Gathering comments and revising documents	$36.06
Publishing information	$75.73
Total cost per knowledge worker	**$1,056.56**

4. Yearly Estimated Acrobat Productivity Improvement	**Productivity Increase from Research**	
Communicating and collaborating with team members and others internal to organization	40%	$14,424
Reviewing documents from other people	60%	$1,082
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,500
Gathering comments and revising documents	80%	$1,442
Publishing information	30%	$1,136
Total annual productivity improvement capability per knowledge worker		**$25,585**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$15,351**
Total annual cost savings		**$19.6M**

Large Software Company, 7,000 employees

Interviewee is the Manager of Technical operations for a large software company which has recently been upgrading to Microsoft Office 2010. He is part of the overall company software decision-making process and has direct responsibility for the software used by his group. Of the company's 7,000 employees, about 95% are knowledge workers. The company's collaboration needs involve mostly creating and commenting on Microsoft Word documents and Excel spreadsheets.

1. Organization information	**IDC Research Industry Averages**	
Average fully burdened rate per hour	**$36.06**	$36.06
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		6650
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	15.0
Reviewing documents from other people	**2.1**	1.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	3.5
Gathering comments and revising documents	**2.3**	1.0
Publishing information	**3.7**	2.0

3. Weekly cost per task per knowledge worker	
Communicating and collaborating with team members and others internal to organization	$540.90
Reviewing documents from other people	$36.06
Communicating and collaborating with customers, suppliers, and others outside the organization	$126.21
Gathering comments and revising documents	$36.06
Publishing information	$72.12
Total cost per knowledge worker	**$811.35**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$10,818
Reviewing documents from other people	60%	$1,082
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$5,048
Gathering comments and revising documents	80%	$1,442
Publishing information	30%	$1,082
Total annual productivity improvement capability per knowledge worker		**$19,472**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$11,683**
Total annual cost savings		**$77.7M**

Luxury Goods Distribution Syndicate, 3000 employees

Interviewee is a Senior IT Manager for a syndicate that distributes luxury goods all over the world. He makes final recommendations with regard to technical and business decisions for desktop productivity software. His company has approximately 3,000 employees worldwide, 45% of whom are knowledge workers.

1. Organization information	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$36.06
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		1350
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	10.0
Reviewing documents from other people	**2.1**	3.0

Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.0
Gathering comments and revising documents	**2.3**	2.0
Publishing information	**3.7**	2.0

3. Weekly cost per task per knowledge worker	
Communicating and collaborating with team members and others internal to organization	$360.60
Reviewing documents from other people	$108.18
Communicating and collaborating with customers, suppliers, and others outside the organization	$180.30
Gathering comments and revising documents	$72.12
Publishing information	$72.12
Total cost per knowledge worker	**$793.32**

4. Yearly Estimated Acrobat Productivity Improvement	**Productivity Increase from Research**	
Communicating and collaborating with team members and others internal to organization	40%	$7,212
Reviewing documents from other people	60%	$3,245
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,212
Gathering comments and revising documents	80%	$2,885
Publishing information	30%	$1,082
Total annual productivity improvement capability per knowledge worker		**$21,636**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$12,982**
Total annual cost savings		**$17.5M**

Large University, 8500 employees

Interviewee is on the IT management forum for a large university and makes decisions for his department and recommendations for the university of about 8,500 knowledge workers. Most of their collaborative work is done within the department and rarely outside the university.

1. Organization information	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$36.06
Work weeks per year per knowledge worker		50
Knowledge workers in the organization		800
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	5.0
Reviewing documents from other people	**2.1**	7.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	20.0
Gathering comments and revising documents	**2.3**	5.0
Publishing information	**3.7**	1.0
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$180.30
Reviewing documents from other people		$252.42
Communicating and collaborating with customers, suppliers, and others outside the organization		$721.20
Gathering comments and revising documents		$180.30
Publishing information		$36.06
Total cost per knowledge worker		**$1,370.28**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$3,606
Reviewing documents from other people	60%	$7,573
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$28,848
Gathering comments and revising documents	80%	$7,212
Publishing information	30%	$541
Total annual productivity improvement capability per knowledge worker		**$47,780**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$28,668**

Total annual cost savings	**$22.9M**

European Companies

Online Educational Institution, 5,000 employees

Interviewee is a Technical Director with an online educational institution. He makes the final technical decision with respect to software procurements and makes final recommendations for the business decision. His company employs 5,000 people, with 90% qualified as knowledge workers.

1. Organization information	**IDC Research Industry Averages**	
Average fully burdened rate per hour	**$36.06**	$37.86
Work weeks per year per knowledge worker		48
Knowledge workers in the organization		4500
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	11.0
Reviewing documents from other people	**2.1**	5.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.0
Gathering comments and revising documents	**2.3**	6.0
Publishing information	**3.7**	1.0
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$416.49
Reviewing documents from other people		$189.32
Communicating and collaborating with customers, suppliers, and others outside the organization		$189.32
Gathering comments and revising documents		$227.18
Publishing information		$37.86
Total cost per knowledge worker		**$1,060.16**

4. Yearly Estimated Acrobat Productivity Improvement	**Productivity Increase from Research**	
Communicating and collaborating with team members and others internal to organization	40%	$7,997
Reviewing documents from other people	60%	$5,452
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,270
Gathering comments and revising documents	80%	$8,724
Publishing information	30%	$545
Total annual productivity improvement capability per knowledge worker		**$29,987**

Expected Acrobat deployment as % of knowledge workers	**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers	**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker	**$17,992**
Total annual cost savings	**$81.0M**

Fortune 500 Manufacturing Firm, 300,000 employees

Interviewee is an IT Product Manager for a large German firm that produces automotive parts, medical technology, solar technology, and power tools. He manages client desktop productivity software for his group. His company employs approximately 300,000 worldwide, of which 60% are knowledge workers.

1. Organization information	**IDC Research Industry Averages**	
Average fully burdened rate per hour	**$36.06**	$37.86
Work weeks per year per knowledge worker		48
Knowledge workers in the organization		180000
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	8.0
Reviewing documents from other people	**2.1**	2.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.0
Gathering comments and revising documents	**2.3**	3.0
Publishing information	**3.7**	1.5
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$302.90
Reviewing documents from other people		$75.73
Communicating and collaborating with customers, suppliers, and others outside the organization		$189.32
Gathering comments and revising documents		$113.59
Publishing information		$56.79
Total cost per knowledge worker		**$738.33**

4. Yearly Estimated Acrobat Productivity Improvement	**Productivity Increase from Research**	
Communicating and collaborating with team members and others internal to organization	40%	$5,816
Reviewing documents from other people	60%	$2,181
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,270
Gathering comments and revising documents	80%	$4,362

Publishing information	30%	$818
Total annual productivity improvement capability per knowledge worker		**$20,446**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$12,268**
Total annual cost savings		**$2,208.2M**

Advertising and Marketing Firm, 3,000 employees

Interviewee is an IT Manager for a British advertising, marketing, and marketing research firm with approximately 3,000 employees worldwide. He makes recommendations with regard to technical and business decisions for desktop productivity software. At his office there are approximately 300 employees, almost all of whom (99%) are knowledge workers.

1. Organization information	**IDC Research Industry Averages**	
Average fully burdened rate per hour	**$36.06**	$37.86
Work weeks per year per knowledge worker		48
Knowledge workers in the organization		2970
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	4.0
Reviewing documents from other people	**2.1**	1.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.2
Gathering comments and revising documents	**2.3**	1.0
Publishing information	**3.7**	3.0
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$151.45
Reviewing documents from other people		$37.86
Communicating and collaborating with customers, suppliers, and others outside the organization		$196.89
Gathering comments and revising documents		$37.86
Publishing information		$113.59
Total cost per knowledge worker		**$537.65**
4. Yearly Estimated Acrobat Productivity Improvement	**Productivity Increase from Research**	
Communicating and collaborating with team members and others internal to organization	40%	$2,908

Reviewing documents from other people	60%	$1,090
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$7,560
Gathering comments and revising documents	80%	$1,454
Publishing information	30%	$1,636
Total annual productivity improvement capability per knowledge worker		**$14,648**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$8,789**
Total annual cost savings		**$26.1M**

Japanese Companies

Online Merchant, 9,000 employees

Interviewee is a project manager for an online merchant with approximately 9,000 employees. He is a core technical and business recommender for desktop productivity software.

1. Organization information		
	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$30.65
Work weeks per year per knowledge worker		49
Knowledge workers in the organization		9000
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	6.0
Reviewing documents from other people	**2.1**	5.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	8.0
Gathering comments and revising documents	**2.3**	6.0
Publishing information	**3.7**	2.8
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$183.91
Reviewing documents from other people		$153.26
Communicating and collaborating with customers, suppliers, and others outside the organization		$245.21
Gathering comments and revising documents		$183.91
Publishing information		$85.82
Total cost per knowledge worker		**$852.10**
4. Yearly Estimated Acrobat Productivity Improvement		

	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$3,605
Reviewing documents from other people	60%	$4,506
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$9,612
Gathering comments and revising documents	80%	$7,209
Publishing information	30%	$1,262
Total annual productivity improvement capability per knowledge worker		**$26,193**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$15,716**
Total annual cost savings		**$141.4M**

Large Printing Firm, 4,800 employees

Interviewee is an executive manager at a printing firm that specializes in advertising materials for the entertainment industry, such as movie posters, banners, etc. The company employs about 4,800 people. He is the final decision-maker for desktop productivity software.

1. Organization information	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$30.65
Work weeks per year per knowledge worker		49
Knowledge workers in the organization		4800
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	1.3
Reviewing documents from other people	**2.1**	2.5
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	7.5
Gathering comments and revising documents	**2.3**	5.0
Publishing information	**3.7**	2.0
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$38.31
Reviewing documents from other people		$76.63
Communicating and collaborating with customers, suppliers, and others outside the organization		$229.88
Gathering comments and revising documents		$153.26

Publishing information		$61.30
Total cost per knowledge worker		**$559.38**
4. Yearly Estimated Acrobat Productivity Improvement		
	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$751
Reviewing documents from other people	60%	$2,253
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$9,011
Gathering comments and revising documents	80%	$6,008
Publishing information	30%	$901
Total annual productivity improvement capability per knowledge worker		**$18,924**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$11,354**
Total annual cost savings		**$54.5M**

IT Software and Services Company, 9,000 employees

Interviewee is a project leader for a company that supplies IT services and software. The company has approximately 9,000 employees. He develops the final proposals for the acquisition of desktop software.

1. Organization information		
	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$30.65
Work weeks per year per knowledge worker		49
Knowledge workers in the organization		9000
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	6.0
Reviewing documents from other people	**2.1**	4.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	5.0
Gathering comments and revising documents	**2.3**	9.0
Publishing information	**3.7**	4.0
3. Weekly cost per task per knowledge worker		
Communicating and collaborating with team members and others internal to organization		$183.91

Reviewing documents from other people	$122.60
Communicating and collaborating with customers, suppliers, and others outside the organization	$153.26
Gathering comments and revising documents	$275.86
Publishing information	$122.60
Total cost per knowledge worker	**$858.23**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$3,605
Reviewing documents from other people	60%	$3,605
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$6,008
Gathering comments and revising documents	80%	$10,814
Publishing information	30%	$1,802
Total annual productivity improvement capability per knowledge worker		**$25,833**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$15,500**
Total annual cost savings		**$139.5M**

Internet Hosting Firm, 8,000 employees

Interviewee is a project leader at a full-service Internet hosting firm that provides extensive website design services as well. The company employs about 8,000 people. He is the final technical and business recommender for desktop productivity software.

1. Organization information	IDC Research Industry Averages	
Average fully burdened rate per hour	**$36.06**	$30.65
Work weeks per year per knowledge worker		49
Knowledge workers in the organization		8000
2. Average time spent per task (hrs/wk)		
Communicating and collaborating with team members and others internal to organization	**6.4**	7.0
Reviewing documents from other people	**2.1**	6.0
Communicating and collaborating with customers, suppliers, and others outside the organization	**5.2**	8.0
Gathering comments and revising documents	**2.3**	4.0
Publishing information	**3.7**	3.0

3. Weekly cost per task per knowledge worker	
Communicating and collaborating with team members and others internal to organization	$214.56
Reviewing documents from other people	$183.91
Communicating and collaborating with customers, suppliers, and others outside the organization	$245.21
Gathering comments and revising documents	$122.60
Publishing information	$91.95
Total cost per knowledge worker	**$858.23**

4. Yearly Estimated Acrobat Productivity Improvement	Productivity Increase from Research	
Communicating and collaborating with team members and others internal to organization	40%	$4,205
Reviewing documents from other people	60%	$5,407
Communicating and collaborating with customers, suppliers, and others outside the organization	80%	$9,612
Gathering comments and revising documents	80%	$4,806
Publishing information	30%	$1,352
Total annual productivity improvement capability per knowledge worker		**$25,382**
Expected Acrobat deployment as % of knowledge workers		**100%**
Expected Average Acrobat effectiveness across all deployed knowledge workers		**60%**
Expected annual productivity improvement per Acrobat-deployed knowledge worker		**$15,229**
Total annual cost savings		**$121.8M**

About Crimson Consulting

We help executives achieve market leadership.

Crimson is an end-to-end marketing consultancy. We specialize in Channels and Partners; Products and Markets; Interactive and Lead Management. Our clients include Adobe, Cisco, eBay, Hitachi, HP, IBM, Intel, Microsoft, Oracle, SAP, Seagate, Symantec, and Verizon.

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