

Adobe@Adobe

Adobe® LiveCycle® ROI

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The purpose of this whitepaper is to demonstrate the return on investment Adobe achieved putting its words into action, and the lasting business value it continues to achieve by using its own software across the enterprise. By leveraging the Adobe LiveCycle ES2 Enterprise solution set, Adobe has achieved substantial return on investment (ROI) in several mission-critical areas:

- **Unified call center agent desktop application:** All in one support application that increases customer satisfaction, streamlines customer support, and maximizes agent productivity
- **Adobe sales workflow:** A real-time sales quoting tool that leverages existing business rules within SAP to consolidate multiple applications into one easy to use interface
- **Enterprise forms:** Consolidates and automates multiple employee processes to reduce manual workflow steps and paperwork
- **Contract processing with eSign:** A dynamic contract processing and electronic signature application
- **Secure board of director communication:** Provides for the creation, distribution, and review of secure corporate information and materials both on and offline

Through each of these solutions, Adobe was able to significantly improve the experience for customers, partners, and employees- while achieving an aggregate ROI of over \$3 million per year.

Introduction

Like many organizations today, Adobe is confronted with numerous challenges around making legacy systems across the enterprise perform better. In 2006, Adobe created the Adobe@Adobe program initiative. Adobe@Adobe envisions, develops, and promotes innovative, marketable solutions. In this way Adobe showcases emergent technologies that create new opportunities for business growth and efficiency. Adobe takes advantage of its own best-of-breed solutions and uses internal best practices to drive innovation and achieve ROI.

Adobe@Adobe identified numerous business areas where it could extend the value of existing back-end systems. The enterprise tool selected to capitalize on these opportunities is Adobe LiveCycle ES2. With LiveCycle, Adobe makes it easier for customers and employees to:

- Interact with information through intuitive user experiences
- Improve efficiencies through business process automation
- Enhance customer service through personalized communications management

Further, it improved internal efficiency and operational processes by enabling developers to build and deploy applications quickly and easily, and by empowering business users to manage application environments based on their specific needs.

This white paper addresses how Adobe@Adobe built robust LiveCycle solutions that deliver solid business benefits as well as positive ROI.

Challenges and approach

Adobe@Adobe was commissioned to evaluate areas that could realize significant improvements through the implementation of LiveCycle in order to meet the following goals:

- Deliver applications that people want to use: Build and deploy easy-to-use, personalized, and interactive applications that extend processes in an engaging way
- Improve operational efficiency: Boost profit margins and reduce total cost of ownership through better management and automation of critical business processes
- Communicate effectively with customers and partners: Respond quickly to customer demands, complex market conditions, and evolving regulatory requirements with personalized and more secure communications

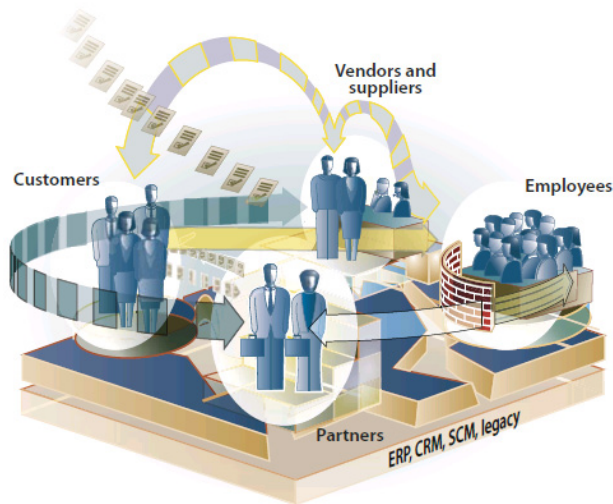


Figure 1: Adobe operations before deploying solution

Like many large enterprises, Adobe Systems relies on legacy, SAP, and other line-of-business applications for business processes. But these applications produced reports that were often unformatted and difficult to read, and automatic data exchange was not possible. Adobe needed to reduce the costs and delays associated with forms and documents and to connect the information in forms and documents to the SAP system.

After intensive study, Adobe@Adobe identified five key business use cases where Adobe software solutions were implemented to address these challenges:

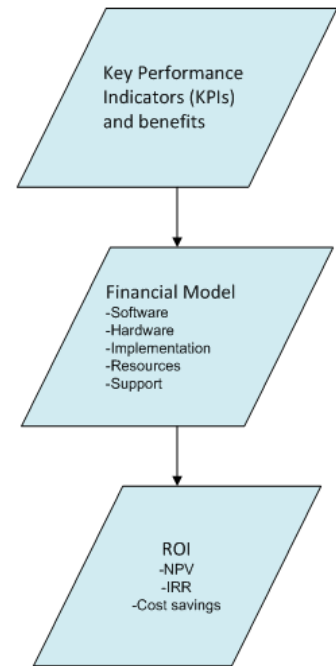
Business challenge	Solution
Call center agents equipped with a myriad of non-integrated legacy applications that lower productivity	Unified call center desktop: All in one application to increase customer satisfaction, streamline customer support, and maximize agent productivity
Quoting and sales tools not compatible with the business rules in legacy ERP systems and require many and frequent manual steps to complete a sale-> contract -> order fulfillment	Adobe sales workflow: A real-time sales quoting tool that leverages existing business rules within SAP to consolidate multiple applications into one easy to use interface
Employees have to hunt to find cumbersome manual forms and documents to manage workflow	Enterprise forms: Consolidate and automate multiple forms and processes across departments
Contracts require expensive review by the legal team with no secure, simple method for signing forms	Contract processing with eSign: A dynamic contract processing and electronic signature application
Need to assemble and distribute secure corporate communications to Board members both on and offline	Secure board of director communication: Distribute and review more secure corporate information and materials—online and offline

An in-depth study of these five solutions comprises the following sections of this white paper. For each solution, the return on investment is discussed through an examination of the metrics and Key Performance Indicators (KPIs) used to achieve cost savings and long-term business value.

Measuring ROI

In order to effectively measure ROI, Adobe@Adobe applied a standardized financial model to each solution. KPIs were identified and used to map the benefits for each application to individual KPIs. Each KPI contained specific metrics that could be mapped to cost savings and other benefits. Financial information for each project (resource cost and expenses for software, hardware, and support) was formulated and applied to a standard budgeting model. ROI was then calculated across a number of metrics: NPV (net present value), IRR (internal rate of return), and time to payback based on the cost savings or revenue increases found.

Each solution below has a matrix with the individual KPIs, benefits, and ROI listed. The summary section contains the aggregate ROI for the full set of Adobe@Adobe solutions.



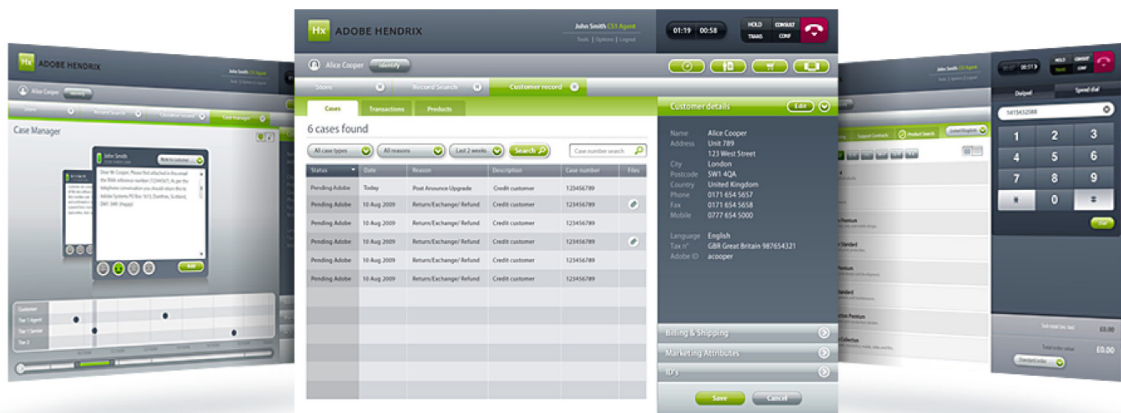
Case study: Unified call center agent desktop

Adobe call center agents were faced with myriad applications and processes that required toggling between them and time-consuming manual tasks. Productivity, average hold time, and employee retention were all adversely impacted. Adobe needed to create a unified, easy to use interface that could integrate existing systems to increase productivity.

Solution overview

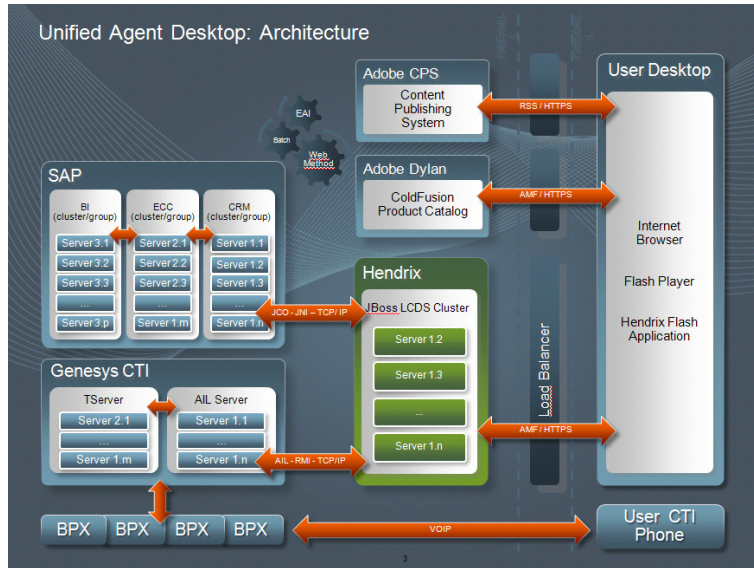
The Unified Call Center Agent Desktop is a clear example of the value Adobe provides with solutions for customer experience management (CEM). The Unified Call Center Agent Desktop provides a single interface that replaces call center complexity with simplicity—empowering agents to quickly greet customers, understand and rapidly solve problems, and easily capture the solution to be shared with other agents for future use.

With the ability to rapidly identify customers and match records to Adobe's existing CRM system, agents can more easily deliver a personalized experience for customers. The Unified Call Center Agent Desktop delivers a simple, intuitive, and effective experience for call center agents—enabling them to help more customers the first time, in less time, every time.



Architecture

The Unified Call Center Agent Desktop integrates to a Service Oriented Architecture (SOA) model with interfaces to SAP CRM servers, as well as CTI and Adobe ColdFusion® Catalog/Publishing systems. This application stack presents a single, unified user interface that surfaces content and CRM information, applies business rules from the ERP systems, and allows for deep telephony integration.



Adobe software used includes

- Adobe LiveCycle Data Services ES2
- Adobe Flex® Builder™
- Adobe Coldfusion Enterprise
- Adobe Coldfusion Builder™

Key performance indicators and benefits realized: Unified Call Center Agent Desktop

Improved customer satisfaction and AHT

Reduced average handling times, escalation rates, and improved morale lead to satisfied customers. Customer satisfaction improved 10%

Agents were spending up to 17 minutes per call to resolve issues due to having to retrieve information from multiple systems. Average call handling times (AHT) has dropped by 15%. Savings: \$550,000/yr

Training cost reduction and lower agent churn

Training on the previous systems took one week; agents are now ready to answer calls in one day. Savings: \$100,000/yr

Improving system user interfaces contributes to an improved user experience and working environment. Adobe achieved a 12% decrease in churn rate by implementing the new system. Savings: \$75,000/yr

ROI summary

By implementing the Unified Call Center Agent Desktop, Adobe realized \$725,000 per year in cost savings. Even with a substantial upfront implementation that required multiple interfaces and substantial front-end design, the project has an expected NPV of nearly \$350,000 and IRR of 11%.

Year	2011	2012	2013	2014
Cash flow	\$439,667	\$439,667	\$582,333	\$725,000
Cumulative cash flow	-\$1,224,782	-\$785,115	-\$202,782	\$522,218

More significantly, the increases in customer satisfaction present many new opportunities for up-selling and cross-selling solutions to satisfied customers.

Case study: Adobe sales workflow

The Adobe sales team faced a multitude of different systems for order entry and processing. Sales force automation, ERP, contracting, coaching, and order entry systems required sales teams to rekey information for each process step from leads to quotes to contracts to order management. This led to multiple points of possible error, time wasted in redundant data entry, and no direction connection to business logic for provisioning or approvals.

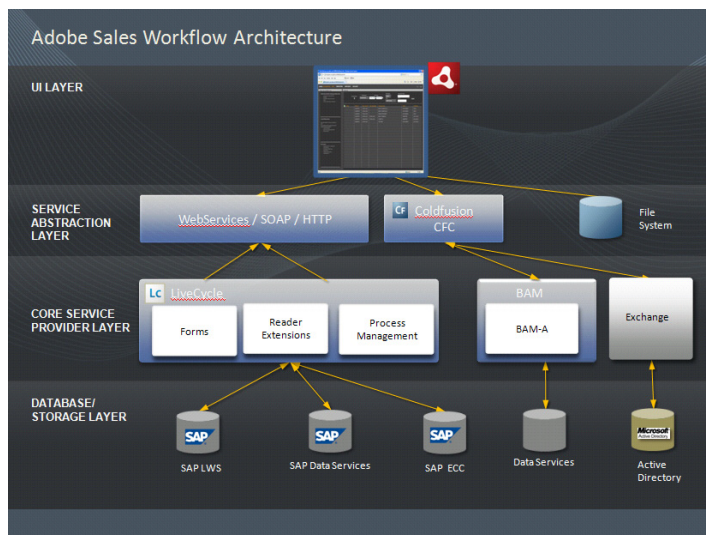
Solution overview

Adobe created Adobe Sales Workflow to address these needs by supporting quote generation, validating the quote against a customer's existing entitlement, triggering credit approval, automatically creating the customer master, and placing the order on hold in SAP until the purchase order is received.

With Adobe Sales Workflow, the sales team can create a quote, which validates against an entitlement using SaaS. Once the customer has a quote, sales can convert to an order by pressing a button, and once executed the order will automatically be sent into SAP and a PO is issued. In future phases, the interface will link directly to pricing and nonstandard terms approval and then trigger the approval process, contract request, and output to reporting.

Architecture

Adobe Sales Workflow uses a Service Oriented Architecture (SOA) to leverage data such as business rules from SAP and Entitlement; the services are surfaced through an intuitive, rich Internet application (RIA).



Adobe Sales Workflow uses the following software

- Adobe LiveCycle Forms ES2
- Adobe LiveCycle Process Management ES2
- Adobe LiveCycle Reader[®] Extensions ES2

Key performance indicators and benefits realized: Adobe sales workflow

Improved productivity

Time savings of one hour on a per-order basis is realized when manual data entry is reduced, switching between systems is eliminated, and a streamlined workflow results in a better user experience.

Savings: \$2 million/yr

Order and data accuracy

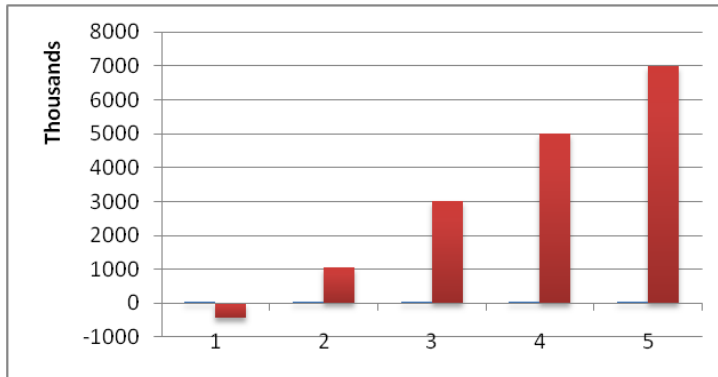
Application of business validations upfront validates orders and compatibility with existing systems. Availability for fulfillment reduces incorrect orders and shipments.

NIGO reduction of over 90%

ROI summary

Adobe Sales Workflow will deliver a savings of \$2 million per year in cost savings. Overall, the substantial ROI is anticipated to yield an NPV of \$6 million and an outstanding IRR of 373%.

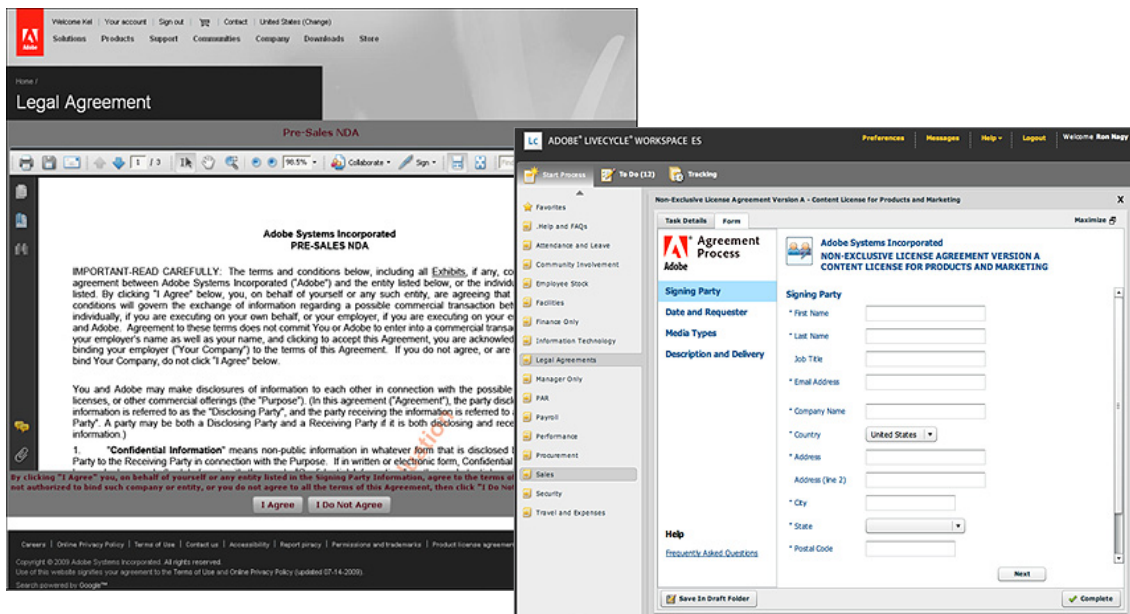
The project breaks even in year two as shown below.



Cash flow and payback period

Case study: Contract processing with eSign

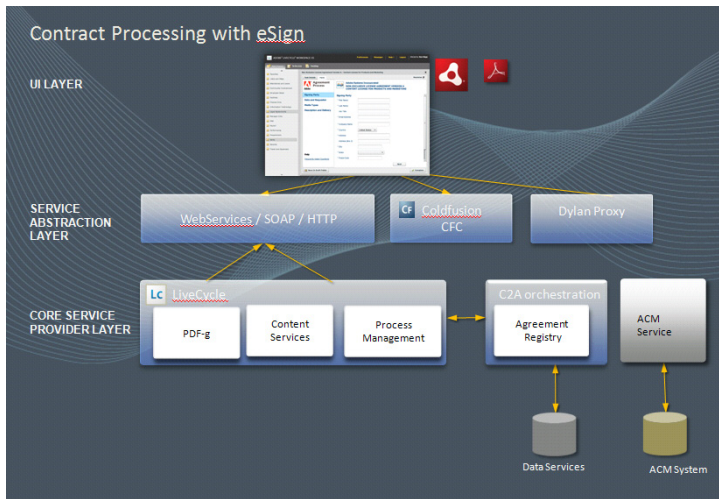
Adobe needed to reduce the processing time for contract signatures as well as provide a simple, automated way to route contract agreements without involving the legal department. The existing manual process was slow, with handwritten signatures required even on documents that did not require any modifications prior to signature.



Solution overview

Contract Processing with eSign is a global, scalable system that provides an electronic signature service that can handle processing of standard, "click-through" agreements between Adobe and external parties. The project leverages LiveCycle ES2 technologies, including Solution Accelerator components. By creating and deploying Contract Processing with eSign, Adobe was able to rapidly achieve a number of benefits:

- Decrease cycle-time to generate a wide-variety of agreements, thereby accelerating time to contracting and revenue recognition
- Streamline internal company touch-points and work related to creating, publishing, delivering, receiving, and executing these agreements
- Make it easier for partners and vendors to do business with Adobe
- Partner with all functions to support the strategic imperatives and improve direct sales and channel productivity and effectiveness



- Adobe software includes**
- Adobe LiveCycle Process Manager ES2
 - Adobe LiveCycle Content Services ES2
 - Adobe LiveCycle PDF generator ES2
 - Adobe AIR*
 - Adobe Flex Builder

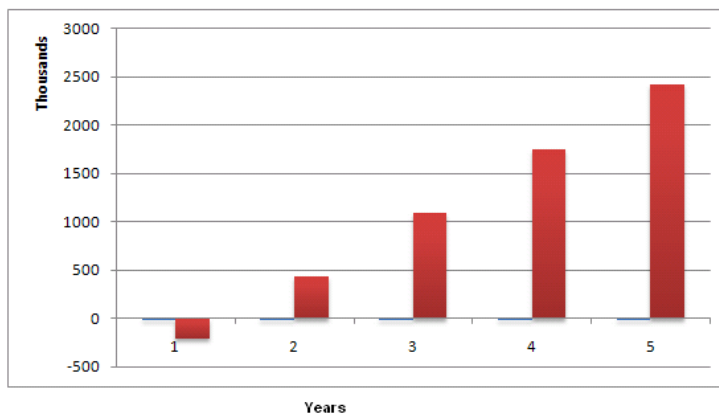
Architecture

The Contract Processing system uses LiveCycle to automate workflows, display and track the appropriate forms and content, generate documents for signature, and store/send them securely.

Key performance indicators and benefits realized: Contract processing with eSign	
Faster contract approvals and shorter processing time	
Touch rate on contracts with no negotiation required (standard partner and vendor agreements) greatly improved processing time.	Touch rate improved from 100% to 7%
Savings in rekeying and data accuracy now that electronic documents are created, signed, and moved through the workflow.	Errors reduced 45%
Reduced legal expenses	
Previously, 1,500 contracts/month required hand processing; now, no signatures are required saving legal expenses.	Savings: \$675,000/yr

ROI summary

By implementing Contract Processing with eSign, Adobe realized a cost savings of over \$675,000/yr in hard benefits; this yields an IRR of 304% and an NPV in excess of \$2 million over a five-year period. This considerable positive return is enhanced by the cash flows freed up from the legal and contractual teams—totaling nearly \$2.5 million after five years, with a payback period of less than 24 months.



Cash flow and payback period

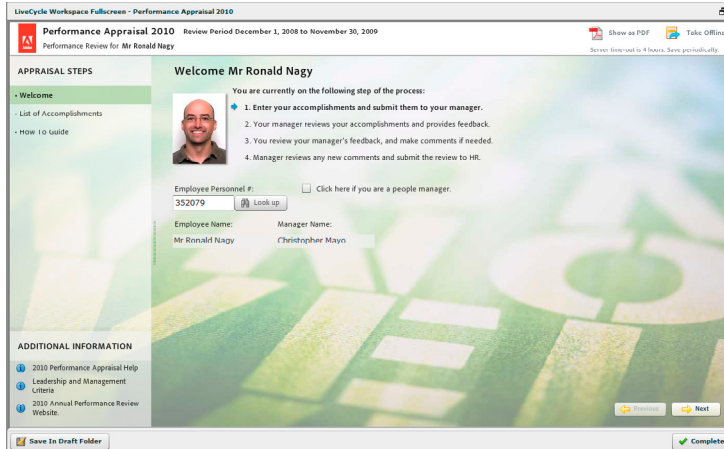
The reduction in legal resource cost represents the largest portion of the cost savings; the productivity increase offers additional opportunities to leverage other processes in the future by using the eSign system.

Case study: Enterprise forms

Adobe maintains a large workforce of nearly 10,000 individuals globally. To manage hundreds of discrete data and system updates across departments, various legacy systems required manual data entry and workflow. Often paper documents were ultimately signed and mailed with no tracking and few business rules to manage the process.

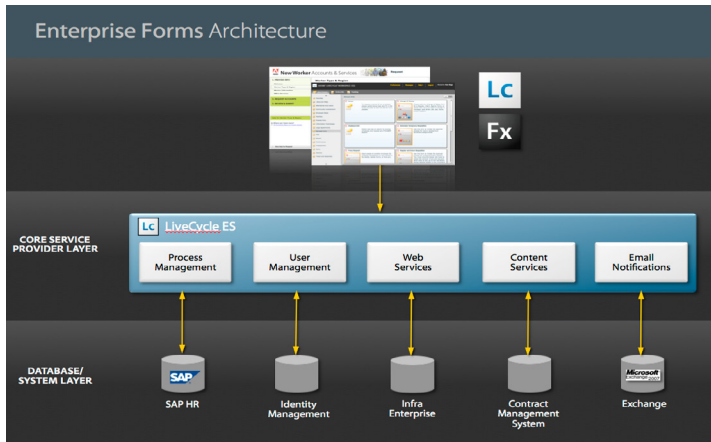
Solution overview

Adobe created the Enterprise Forms to meet these needs using the LiveCycle ES2 solution. The new forms consolidated and automated multiple processes, which formerly required human interaction. All enterprise forms are now automated and signed electronically, whether online or offline. Removing manual intervention greatly reduces time spent and increases the turn-around time.



Architecture

The Forms system uses LiveCycle to automate workflows, display and track the appropriate forms and content, generate documents for signature, and store/send securely.



Adobe LiveCycle components include

- Adobe LiveCycle Process Manager ES2
- Adobe LiveCycle PDF Generator ES2
- Adobe LiveCycle Reader Extensions ES2
- Adobe LiveCycle Forms ES2

Key performance indicators and benefits realized: Enterprise forms

Time savings and increased productivity

Reduced data entry time for each transaction: forms allow for rapid search and execution of changes.

Savings: \$305,000/yr

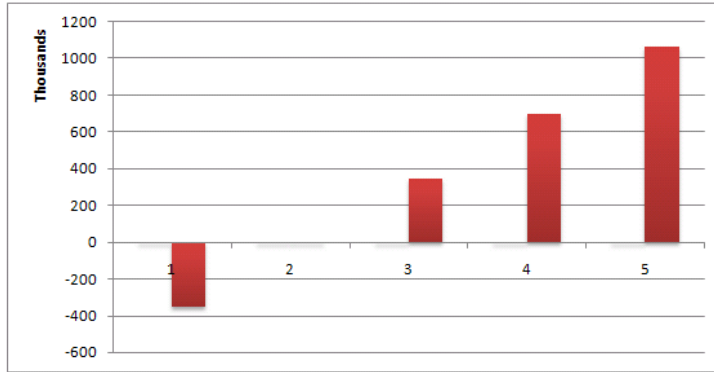
Document completion and data accuracy

Data accuracy greatly reduced NIGO submissions (not in good order); completion rates increased significantly.

50% improvement in NIGO submissions and 99% completion rates

ROI summary

The Adobe Enterprise Forms create a substantial savings for Adobe both in cost reduction and in data accuracy. The total for the cost savings exceeds \$300,000 per year, and this represents a payback period within 24 months and an NPV of over \$727,000 by the fifth year after completion.



Cash flow and payback period

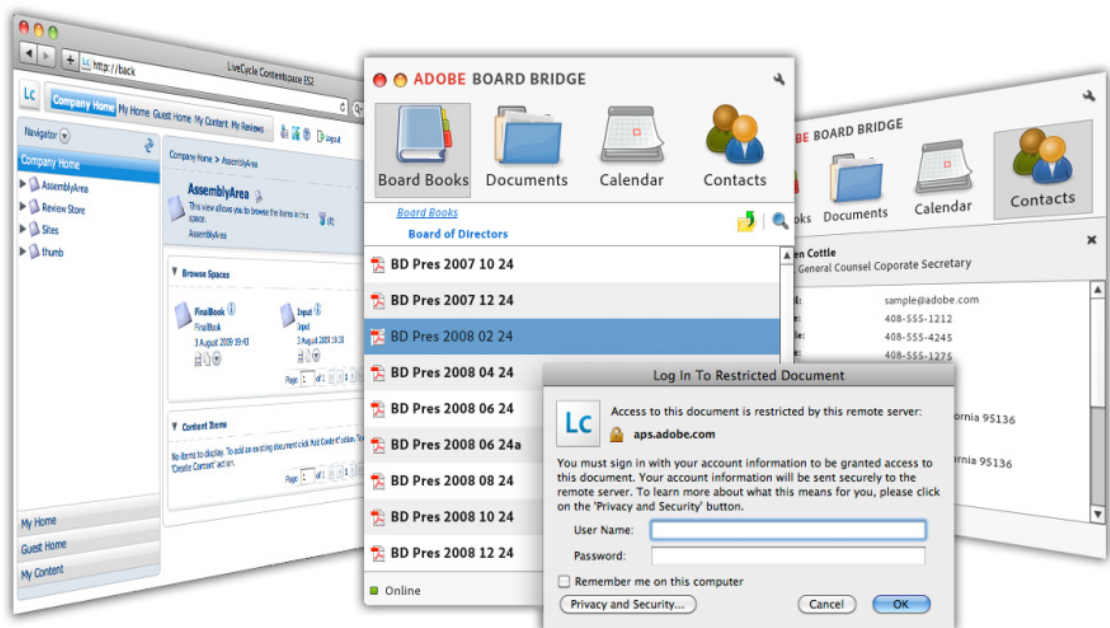
Although many organizations have online forms and processes, the ability of LiveCycle to leverage existing back-end systems and overlay them with a well-defined and highly intuitive interface was well received by employees. Adobe@Adobe found that Adobe Enterprise Forms provided a consistent workflow and high rates of acceptance, netting strong gains in usage, document completion, and data accuracy.

Case study: Secure board of director communication

Adobe needed to find a way to securely create, distribute, update, and navigate information to and from its board of directors. The legacy solution was cumbersome and prone to issues with downloading, finding, and searching for content. To meet this need, Adobe developed the Secure Board of Director Communication platform.

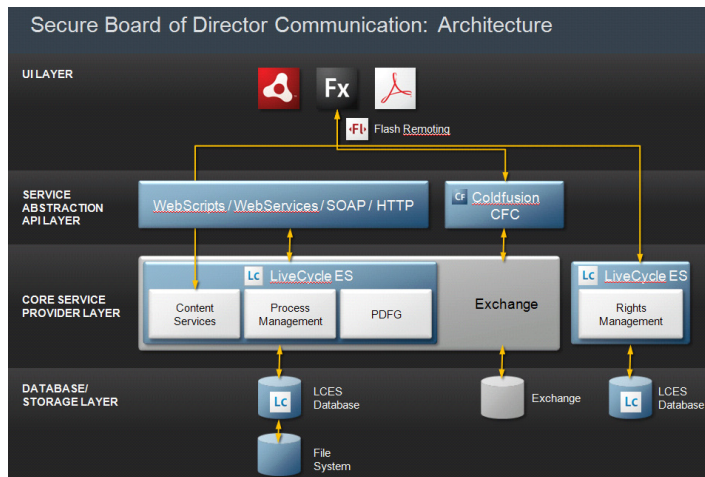
Solution overview

The Secure Board of Director Communication system provides a secure mechanism for creating, viewing, and distributing documents in a secure manner. It incorporates a LiveCycle solution that leverages Adobe AIR, Flex, LiveCycle Rights Management, and other technologies to help the Adobe Board of Directors perform their regular operations.



- View the latest meeting packet as well as real-time information updates (aka Board Book)
- Manage the creation and distribution of content
- Access documentation such as presentations, meeting minutes, or contact information

Architecture



Adobe software incorporated includes

- Adobe LiveCycle Rights Management ES2
- Adobe LiveCycle Content Services ES2
- Adobe ColdFusion Builder
- Adobe ColdFusion Enterprise

Key performance indicators and benefits realized: Secure board of directors communication

Time savings and increased productivity

Reduced data entry time and distribution time to create and disseminate packets	Savings: \$24,000/yr
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Eliminate mailing and postage for quarterly/yearly and other packets	Savings: \$10,000 / yr
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Risk management

Reduced risk of lost or stolen information via insecure connections and hard copies of secure data

ROI summary

The secure Board of Directors Communication system generates a cost savings in excess of \$34,000 per year by reducing time and materials in document creation and distribution. A considerable portion of this ROI is founded on opportunity cost; equivalent systems from outside vendors represented an investment of nearly \$25,000 per year, which is mitigated by the current system.

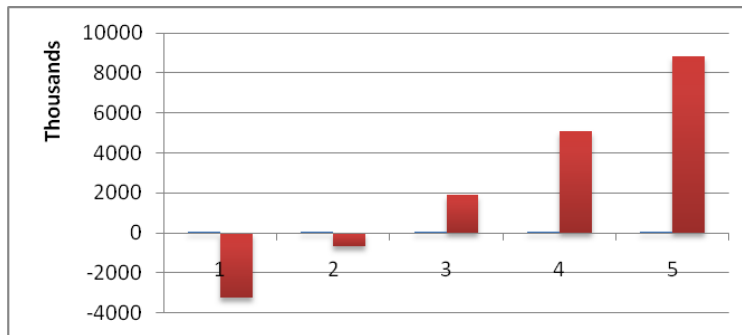
Adobe@Adobe found that risk management and mitigation through secure distribution of materials represented very significant soft ROI - the losses in case of a security breach could have a tremendous financial and market impact.

Summary

Adobe realized a very positive ROI by the internal implementation of LiveCycle solutions. The five solutions in aggregate yielded an NPV of over \$7 million and an IRR of 77% over a five-year horizon. Cost savings from each solution more than outweighs implementation, hardware, and software costs, as shown below.

Calculations					
	2010	2011	2012	2013	2014
Capital	\$596,500	\$1,193,000	\$1,193,000	\$596,500	-
Internal Adobe cost	\$2,447,867	-	-	-	-
Op Ex	\$199,248	-	-	-	-
Total Op Ex	\$2,647,115	\$0	\$0	\$0	-
Total cost	\$3,243,615	\$1,193,000	\$1,193,000	\$596,500	\$0
Revenue gain benefits	\$0	\$0	\$0	\$0	\$0
Cost reduction benefit	0	\$3,770,060	\$3,770,060	\$3,770,060	\$3,770,060
Total benefit	\$0	\$3,770,060	\$3,770,060	\$3,770,060	\$3,770,060
Net	\$3,243,615	\$2,577,060	\$2,577,060	\$3,173,560	\$3,770,060

A strong business case is enhanced by a rapid payback period: for the aggregate solutions herein, the payback period is less than 36 months.



Cash flow and payback period

Year	2010	2011	2012	2013	2014*
Cash flow	-\$3,243,615	\$2,577,060	\$2,577,060	\$3,173,560	\$3,770,060
Cumulative cash flow	-\$3,243,615	-\$666,555	\$1,910,505	\$5,084,065	\$8,854,125

Conclusion

Like Adobe, organizations can implement the LiveCycle enterprise-class solutions to enable and enhance their own workflows, processes, and applications. Adobe realized a substantial positive return on its investment by incorporating LiveCycle products internally. By incorporating its own software to address real business challenges, Adobe has dramatically improved productivity, reduced costs, and is better able to focus on opportunities for increasing growth and revenue.

For more information

Solution details: www.adobe.com/products/livecycle



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