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The Total Economic Impact™ Of Dropbox

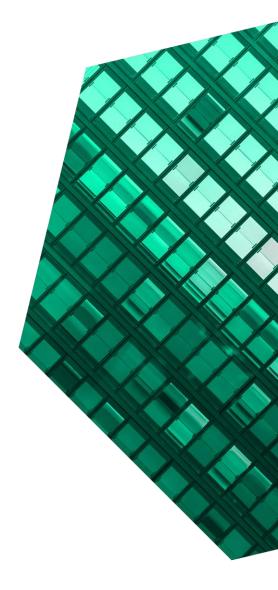
Cost Savings And Business Benefits Enabled By Dropbox

OCTOBER 2022

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Consulting Team: Richard Cavallaro Carmen Serradilla Ortiz



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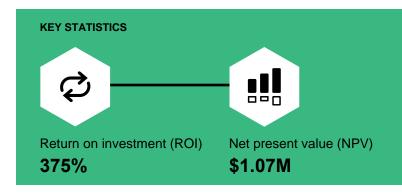
Executive Summary

Dropbox improves productivity for users at the individual and team levels, accelerating the benefits of key workflows and projects while providing a better employee experience. Administrators benefit from an improved ease of managing users and permissions via centralized administrative tools — all while improving governance of critical content, files, and intellectual property through activity monitoring, alerting, and security capabilities.

Information and frontline workers all need to capture their ideas, plans, decisions, and observations into some type of document — whether in a brief, presentation, spreadsheet, chat, wiki, photo, or image. Content platforms equipped with secure sharing capabilities, task tracking, e-signatures, and more, are increasingly important in workflows requiring collaboration across internal and external stakeholders as hybrid work becomes increasingly common.¹

<u>Dropbox</u> is a content service platform that enables secure file sharing and collaboration across internal and external users, teams, and workflows — all while maintaining an easy-to-manage and governance-minded admin experience. Dropbox commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Dropbox. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Dropbox on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives with experience using Dropbox. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single <u>composite organization</u>, a small to medium-size business (SMB) with 1,000 total employees (300 of which are Dropbox users).



Prior to using Dropbox, friction existed throughout the file sharing and collaboration experience. Users and teams often struggled to locate or access files that they needed to collaborate on, while file size limitations, several disparate content management solutions, and prevalent rework further diminished the experience. On the admin side, managing permissions for collaborators (internal and external) was becoming an increasingly arduous task. Ensuring good content governance and security amid increasingly external collaboration was becoming nearly impossible, exposing the organizations to external risks.

By adopting Dropbox, productivity for users increased at the individual and team levels, which accelerated the benefits of key workflows and projects while providing a better employee experience. IT (or team-level) administrators benefited from an improved ease of managing users, permissions, and security via centralized administrative tools, activity monitoring, and alerting capabilities.

Dropbox offers our users productivity and efficiency, improving time to market for the deliverance of products, messaging, and ultimately business.

SVP of worldwide sales, software

KEY FINDINGS

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- Improved user productivity valued at over \$530,000 over three years. By adopting Dropbox, the composite organization's key users and teams reclaim hundreds of hours per week attributable to functionality from Dropbox.
- Faster team collaboration by 10%, accelerating over \$395,000 in project-related benefits. The composite organization experiences efficiencies at the team level resulting from its Dropbox adoption. Teams whose projects and workflows benefit most from Dropbox features complete work faster and accelerate the benefits associated with these projects.

Improved velocity of team collaboration

10%



- A 90% reduction in rework across the organization. With improvements to the ease of navigating files and collaboration across the organizations, the composite organization sees redundant work within Dropbox workflows disappear.
- Avoided content administration totaling hundreds of hours. Dropbox facilitates user access and permissions management through a centralized admin console. The composite organization experiences improved ease of managing users while ensuring accurate permissions and adherence to content governance policies.
- A 5% cost avoidance to the annualized cost of data leakage. Dropbox allows the composite organization to better adhere to security policies and maintain content governance, protecting valuable customer data, intellectual property, and other critical internal data.

Unquantified benefits. Benefits that are not quantified in this study include:

 Infrastructure and legacy solution cost savings. Some of the organizations' interviewees spoke to Forrester about cost savings associated



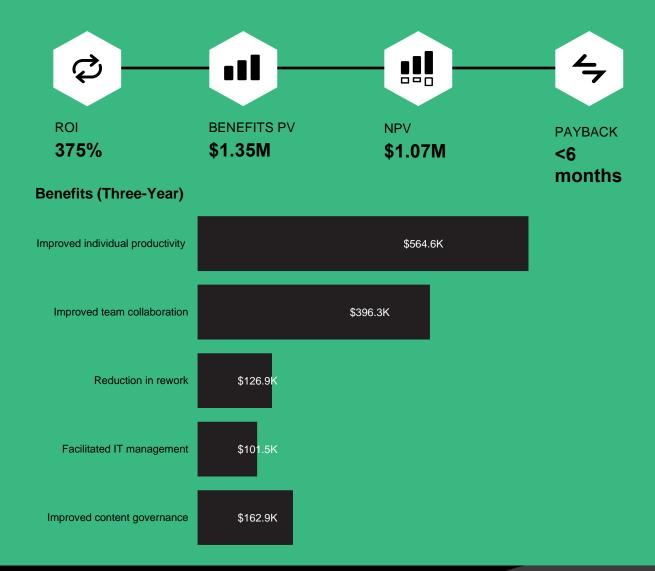
with the replacement of legacy document sharing and collaboration tools.

 Improved employee experience. With Dropbox, users are equipped with a more robust set of collaboration tools which facilitate their day-today activities on key workflows, reducing the tedium associated with collaboration and file sharing.

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- Subscription fees for Dropbox. Organizations pay a subscription fee to Dropbox on a per user per month basis. The composite organization pays \$24 per user per month for Dropbox Advanced.
- Initial and ongoing Dropbox management. For the composite organization, onboarding users is nearly instantaneous. Managing users, permissions, and content governance on Dropbox is comparatively easy compared to its legacy tools.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$1.35M over three years versus costs of \$284,000, adding up to a net present value (NPV) of \$1.07 million and an ROI of 375%.



"At our company, Dropbox has facilitated better content collaboration, more connected teams, and more productive teams altogether."

— Director of IT, conglomerate

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in Dropbox.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that Dropbox can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Dropbox and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in Dropbox.

Dropbox reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

Forrester sourced the customer names for the interviews. Dropbox did not participate in the interviews.



DUE DILIGENCE

Interviewed Dropbox stakeholders and Forrester analysts to gather data relative to Dropbox.



INTERVIEWS

Interviewed five representatives at organizations using Dropbox to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewees' organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Dropbox Customer Journey

Drivers leading to the Dropbox investment

Interviews			
Role	Industry	Region	Revenue
VP of real estate	Advertising	North America	~\$2.7 billion
CIO, global technology solutions	Animal health	North America	~\$4.4 billion
Director of IT	Conglomerate	North America	~\$4 billion
Principal UX design consultant	Design	Europe	~\$50 million
SVP of worldwide sales	Software	North America	~\$150 million

KEY CHALLENGES

The interviewees noted how their organizations struggled with common challenges, including:

- A lack of external collaboration capabilities delayed workflows and burdened key personnel. Each of the interviewees cited external collaboration challenges that hindered and delayed the daily workflows of their organizations' personnel — a symptom of legacy solutions. The usage of internally shared drives and tools limited the scope of external collaboration, often adding days or weeks to teams' workflows as critical files were shared and reshared over email. File size limitations and incompatible file types added further complexity to collaboration.
- Limited visibility into user access and file
 traffic exposed the organizations' files and IP
 to risk. Shadow IT was common because teams
 and users often resorted to their own solutions to
 alleviate collaboration productivity barriers,
 exposing the organization to the risk of data
 leakage or breaches involving valuable files,
 client data, or intellectual property. Resulting
 security concerns around file sharing with
 external parties forced additional diligence from

"We used to deal with limitations on file sizes we could transfer. With Dropbox, we don't see any limitations whatsoever, and we have some pretty large files and code that we're working with."

SVP of worldwide sales, software

the organizations' already limited IT and security personnel. Access and permissions management not only affected IT administrator productivity but also productivity at the team level because users did not have a streamlined set of tools to manage access to key files.

 A disparate collection of content management solutions complicated users' workflows and productivity. Interviewees told Forrester that their teams and users often lacked a single pane of glass view for the files and content they needed to work with on a daily basis. Larger enterprise collaboration management (ECM) solutions were difficult to navigate and lacked the

permissions and sharing capabilities that these specialized teams required for fluid collaboration. Excessive time spent navigating these solutions was common, as was rework on files or content that was not located. The director of IT at the conglomerate summarized: "Our primary [document sharing and collaboration solution] was more of an internal portal that did not give our most important users the advanced collaboration features they needed. It can be clunky, and most of our users don't [understand it] as well. The momentum to adopt Dropbox came from our users for this reason."

"Working from home has made our teams much more digitally aware. Digital collaboration has increased significantly, and our teams demand tools that enable faster collaboration across the board."

Director of IT, conglomerate

• Version control and visibility challenges hindering effective collaboration. On the legacy set of ECM solutions, interviewees told Forrester that users and administrators lacked the specialized tools that could provide visibility into file version history, user access and revisions, and version control. This further impacted user and team productivity. The senior vice president (SVP) of worldwide sales at the software organization expressed the importance of version control when working with their organization's codebase, noting: "It is incredibly imperative for us to be working on the right version of [the code], but change notification [is also important]. We always need to know who worked on [the code] and what they did."

INVESTMENT OBJECTIVES

The interviewees' organizations searched for a solution that could:

- Work with large, diverse file types across several internal and externals users, teams, and workflows while fitting into the organization's existing stack of ECM tools and solutions.
- Adhere to the organizations' security policies while providing enhanced permissions controls, alerting, and traffic monitoring.
- Be easily managed at both the IT level and individual team level (access permissions, users, etc.).

Key Assumptions

- \$500M revenue
- 300 Dropbox users
- User-generated demand for Dropbox from teams dealing in large, specialized file types and frequent internal and external collaboration

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the five interviewees, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization is an industry-agnostic, medium-sized enterprise with 1,000 employees (300 of which are Dropbox users) and \$500 million in annual revenue.

Deployment characteristics. The organization adopts Dropbox as a result of user demand for a more refined set of file sharing and collaboration tools in an increasingly hybrid and remote working environment. 300 Dropbox users within the organization make up sales and marketing teams that rely on large files, specialized file types, and frequent internal and external collaboration in their daily workflows. Dropbox is selected primarily for its ability to remove friction from these workflows while improving controls around access, permissions, and security, protecting the organization's valuable intellectual property. Before adopting Dropbox, these users relied on the organization's primary cloudbased ECM solution to share files and collaborate internally. However, they lacked a consistent method of collaboration among different teams or external users.

"Dropbox integrates with everything else we have, and it is incredibly seamless. It fits in perfectly with our environment."

SVP of worldwide sales, software

"When we're looking at mission critical collaboration between diverse parties and executives, for us, Dropbox is way ahead."

Director of IT, conglomerate

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total	Total Benefits										
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value					
Atr	Improved individual productivity	\$138,915	\$277,830	\$277,830	\$694,575	\$564,636					
Btr	Improved team collaboration	\$159,360	\$159,360	\$159,360	\$478,080	\$396,305					
Ctr	Reduction in rework	\$51,030	\$51,030	\$51,030	\$153,090	\$126,904					
Dtr	Facilitated IT management	\$40,800	\$40,800	\$40,800	\$122,400	\$101,464					
Etr	Improved content governance	\$65,485	\$65,485	\$65,485	\$196,454	\$162,851					
	Total benefits (risk-adjusted)	\$455,590	\$594,505	\$594,505	\$1,644,599	\$1,352,160					

IMPROVED INDIVIDUAL PRODUCTIVITY

Evidence and data. Before adopting Dropbox and using legacy ECM solutions, key users at the interviewees' organizations lost working time to suboptimal and/or missing functionality, including:

- File size limitations that affected file transfers between users (internal and external), forcing time-consuming workarounds.
- Permissions and access issues prevented certain users from accessing key files in the moment of need.

"'Wow, I've emerged in the 21st century,' one dev told me.
Another user said, 'Dropbox is like adding an easy button for collaboration.'"

CIO, Global Technology Solutions,

- Inability to locate key files due to siloed ECM systems or shared drives.
- File access and synchronization limitations across multiple devices.

By adopting Dropbox, each of the interviewees highlighted examples of how their organizations' key users and teams reclaimed several hours per week attributable to functionality from Dropbox:

- The advertising organization's staff worked with very large file sizes. Its vice president (VP) of real estate noted that Dropbox offered an estimated 20% productivity increase to users transferring large files with Dropbox Transfer to and from clients. Dropbox team folders allow users to share files in groups, as opposed to individually which was previously the norm.
- Using Dropbox to transfer and collaborate on code, the developer users at the animal health organization self-reported a 10% to 30% impact to their productivity with Dropbox to their IT organization to solidify their organization's ongoing investment.
- Through trial and error with several collaboration tools and approaches, the principal UX design

consultant at the design organization summarized the importance of the ongoing Dropbox investment: "We can easily share our work externally. In the past, we'd use email, and it doesn't work. We'd use [another sharing solution], it doesn't work. Eventually we always say, 'just put it in Dropbox."

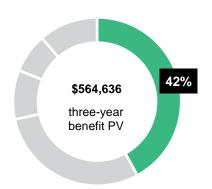
Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

- There are 300 Dropbox users at the organization.
- A 3% productivity increase, just over 1 hour per week per user. This benefit is calculated at 50% in Year 1 of the analysis as users are onboarded and ramp up Dropbox functionality.
- An average hourly rate of \$35 for each Dropbox user
- A 50% productivity capture for reclaimed working hours, as it cannot be assumed all hours will be repurposed to value-added activities.

Risks. This benefit will vary among organizations based on:

- The features and functionality within an organization's legacy content management stack as it relates to functionality increase once Dropbox is deployed.
- The workflows of affected users as it relates to the potential for productivity improvement.
- The number of affected Dropbox users and the seniority of those affected as it relates to the value of their reclaimed time.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$565,000.



шірг	oved Individual Productivity				
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Total Dropbox users	Composite	300	300	300
A2	Improvement to weekly productivity attributable to Dropbox	Interviews	1.5%	3%	3%
А3	Hours per user reclaimed per week	A2*40 hours	0.6	1.2	1.2
A4	Average hourly rate	TEI standard	\$35	\$35	\$35
A5	Productivity recapture	Assumption	50%	50%	50%
At	Improved individual productivity	A1*A3*A4*A5*49 weeks	\$154,350	\$308,700	\$308,700
	Risk adjustment	↓10%			
Atr	Improved individual productivity (riskadjusted)		\$138,915	\$277,830	\$277,830
Three-year total: \$694,575			Three-year p	resent value: \$564,636	3



IMPROVED TEAM COLLABORATION

Evidence and data. In addition to individual user productivity improvements, the interviewees reported efficiencies at the team level resulting from their organizations' Dropbox adoption and its related features. Teams whose projects and workflows benefit most from Dropbox features such as file previews, commenting, document creation and collaboration with Dropbox Paper, and multidevice access complete work faster and accelerate the benefits associated with these projects.

- The SVP of worldwide sales at the software organization told Forrester that the collaboration between its lead development sales representatives (LEDRU), marketing personnel, and proposal team has increased through indocument collaboration with Dropbox when generating proposals for prospective customers. The SVP noted: "Our proposals are typically a very comprehensive 20 to 30 pages. Now we're able to pull in all the relevant details saved on our team folders in Dropbox. We can have our proposals ready to go for our prospects the next day. With Dropbox, we're 50% faster delivering proposals to our prospects and customers, which has decreased our time to close and increased sales." The SVP added that collaboration across multiple devices on these proposals greatly accelerated the process, as sales personnel often collaborated directly from the field.
- The VP of real estate in the advertising organization noted that the improved visibility into version history (and therefore better version control), in-Dropbox collaboration, simplified file locating, and external collaboration capabilities made their organization's key files readily accessible whenever needed by anyone across the workflow, which improved the consistency of daily operations. The VP highlighted an example where several large files and lease documents were needed by a landlord whose account manager had left the organization. With Dropbox,

- the organization could easily access the right version of the files in the moment of need, facilitating business despite the attrition.
- The director of IT at the conglomerate organization said that several distinct groups within the organization used Dropbox for their own purposes.
 - The conglomerate's architects and engineers working on the organization's real estate portfolio collaborated across multiple devices throughout their complex workflows.
 - Finance and accounting staff shared important files among their organization to facilitate the monthly closing tasks.
 - The organization's in-house agency, as well as marketing team, tasked with digital asset creation could share these large files externally with customers and vendors more efficiently. This accelerated feedback and consolidated and decreased the time to market for these assets.

"When our marketing team is working on digital media creation, they have other teams and external stakeholders that need to collaborate, edit, provide feedback, etc. Dropbox facilitates this diverse set of workflows in a secure manner."

Director of IT, conglomerate

- The CIO, global technology solutions of the animal health organization spoke to the potential for FTE savings at the team level resulting from productivity benefits for the individuals on the team: "If each of our users is saving 10%, our teams can achieve the same results with 10 FTEs versus 11 FTEs. Across our 1,200 users, this becomes material."
- Usage of Dropbox Paper yielded collaboration benefits at the design organization. The principal UX design consultant told Forrester, "Having that annotation ability in [Dropbox] Paper is really useful in getting collaboration from Dropbox at the project scale, especially over the lifecycle of a longer project, which could be a few months, with several people participating [on and off]."

Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

- Dropbox supports six marketing digital asset creation projects per year across the organization's marketing project teams including marketing assets and sales enablement materials (battlecards, brochures, etc.), which support revenue generation through increased sales pipeline. (Note: across the interviews, several Dropbox use cases were shared with Forrester. It should be noted that there are many potential sources of team project collaboration value beyond those quantified for the composite that were not modeled for this report).
- Each project requires part-time involvement across the entire team. Personnel (at \$35 per hour) spend 20 hours per week on average across the two-month-long project.
- Each project contributes to closing \$150,000 in revenue for the composite organization. This is a conservative estimate based on the value of the

"There are all kinds of documents we're accessing every day in Dropbox, and we never have to worry about losing them. Dropbox simplifies our workflows incredibly — we can update one file, and everyone has access to it instantaneously."

VP of real estate, advertising

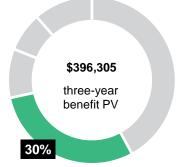
projects achieved across the interviewed organizations.

 Each project is accelerated by 10% with Dropbox, accelerating revenues associated with each project while saving an average of 520 FTE hours per project.

Risks. This benefit will vary among organizations based on:

- The value of the specific project or use case impacted by Dropbox efficiencies.
- The features and functionality within an organization's legacy content management solutions as it relates to potential for team efficiency improvements on Dropbox.
- The skill and capacity of an organization's personnel working on projects supported by Dropbox.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of just over \$395,000





ımpr	oved Team Collaboration				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of marketing project teams using Dropbox	Composite	3	3	3
B2	Projects per team per year	Composite	2	2	2
В3	Subtotal: Impacted projects per year	B1*B2	6	6	6
B4	FTEs per project team	Composite	30	30	30
B5	Hours on project-related work per week	Composite	20	20	20
B6	Average hourly rate per FTE	TEI standard	\$35	\$35	\$35
В7	Average project duration	2 months	0.167	0.167	0.167
B8	Subtotal: Personnel cost per project	B4*(B5*52 weeks) *B6*B7	\$182,000	\$182,000	\$182,000
B9	Revenue per project estimate (attributable sales pipeline)	Composite	\$150,000	\$150,000	\$150,000
B10	Subtotal: value per project	B8+B9	\$332,000	\$332,000	\$332,000
B11	Increased project velocity through improved collaboration	Interviews	10%	10%	10%
B12	Improved speed of collaboration (per project)	Interviews	\$33,200	\$33,200	\$33,200
Bt	Improved team collaboration	B3*B12	\$199,200	\$199,200	\$199,200
	Risk adjustment	↓20%			
Btr	Improved team collaboration (risk-adjusted)		\$159,360	\$159,360	\$159,360
	Three-year total: \$478,080		Three-year	present value: \$396,305	5

REDUCTION IN REWORK

Evidence and data. Interviewees told Forrester that redundant work within their organizations' Dropbox workflows was nearly nonexistent because of improvements to file navigation and collaboration flexibility across local and cloud files. Furthermore, accidently deleted files were recoverable on Dropbox, saving these files (and the time associated with their creation) should this occur.

organization spoke about the importance of version control and deleted file recovery for their developers using Dropbox. Developer teams had the ability to view and recover older versions of

their code through Dropbox, which saved effort. The SVP estimated that the organization recovered 50 to 75 large files per year on Dropbox. They said, "It really is a feature that saves us a lot of time, since these are files that would absolutely need to be rebuilt."

 Users at the conglomerate organization (across all of their diverse workflows) took advantage of Dropbox's version history and file recovery features. Its director of IT said: "Our users can see the version history of their main files for a year through the Dropbox Rewind feature. In some of the cases where we had accidents, we

have also been able to recover the files through this feature."

Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

- Before adopting Dropbox, each of the organization's 300 users spends an average of 30 minutes per month, or 6 hours per year, on file rework. This is a conservative calculation based on the interviews. Interviewees noted that under certain circumstances, this number could be much higher, driving a higher benefit.
- Ninety percent of all rework is avoided through Dropbox features such as Rewind and improved ease of access through permissions and team folders.
- The average hourly rate for a Dropbox user is \$35.

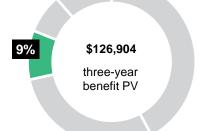
Risks. This benefit will vary among organizations based on:

 The ease of search and recovery features within an organization's legacy content management solutions as it relates to potential for rework reduction on Dropbox. "What we found is that it's not just the accidently deleted files we're recovering with Dropbox Rewind. In many cases we're getting value from files that were intentionally deleted but we later realized a need for."

SVP of worldwide sales, software

 The nature of an organization's workflows as it relates to the value of file recovery.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of just over \$125,000.



Redu	Reduction In Rework									
Ref.	Metric	Source	Year 1	Year 2	Year 3					
C1	Number of users	Composite	300	300	300					
C2	Average hours spent on rework per user per year on old solution(s)	Composite	6	6	6					
С3	Rework avoidance with Dropbox	Interviews	90%	90%	90%					
C4	Average hourly rate	TEI standard	\$35	\$35	\$35					
Ct	Reduction in rework	C1*C2*C3*C4	\$56,700	\$56,700	\$56,700					
	Risk adjustment	↓10%								
Ctr	Reduction in rework (risk-adjusted)		\$51,030	\$51,030	\$51,030					
	Three-year total: \$153,090		Three-year p	esent value: \$126,904						



FACILITATED USER MANAGEMENT

Evidence and data. Before adopting Dropbox, the interviewees' organizations' IT staff and team leads responsible for managing user access, permissions, and ensuring security faced challenges working on these tasks with legacy solutions. These included:

- Team leads (and IT staff in some cases) would frequently need to reassign access or permissions via cumbersome tools or email.
 Access by external parties as needed by certain workflows required additional effort in this regard.
- Onboarding new users to secure workflows required significant manual effort as access to view or edit these files required certain permissions.
- Managing file security was frequently an effort in guesswork, as limited visibility into file traffic and/or updates forced IT staff and team leads to manually track access and permissions to maintain governance.

Dropbox facilitated user access and permissions management through a centralized admin console. Interviewees spoke to the improved ease of managing users' (new and existing, internal and external) permissions, and security. As a result, FTE hours and/or headcount could be allocated towards other value-adding activities throughout the organization.

• The director of IT at the conglomerate spoke to benefits for both team leads historically responsible for assigning access and permissions and the IT team responsible for security posture. The director explained: "Most business teams have been able to rely on [IT] now to assign permissions for their users while maintaining the ability to view their team [members'] activity. So, from a user administration and onboarding standpoint, they save time and effort. From the IT perspective,

- we're able to monitor everything. From a governance standpoint, [IT] is in control."
- The CIO, global technology solutions at the animal health organization noted that Dropbox was easier to manage from a permissions standpoint than legacy tools and it saved hours of administration headaches. They said: "Dropbox is built with a governance construct where we can put in some rules that define who gets file permissions. On our [other tools] we're constantly getting [access request] emails that consume admin time."
- As a result of the centralized Dropbox admin console, the SVP of worldwide sales at the software organization estimated at least a half of an IT FTE headcount (for a smaller SMB) was avoidable through facilitated onboarding and administration activities.

"With Dropbox, all of our admin tools are in one location which saves IT significant amounts of time trying to manage access while also attempting to keep everything secure."

SVP of Worldwide Sales, software

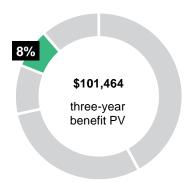
Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

 Two FTEs tasked with managing content, permissions, and governance save 20% of their effort though Dropbox' admin console. This productivity is reallocated to other areas of the business. The average annual salary for an administrative FTE is \$120,000 (IT and/or team leads).

Risks. This benefit will vary among organizations based on:

- The ease of management for an organization's legacy content management solutions as it relates to the potential for administrator productivity increases.
- The skill and capacity of the personnel managing their organization's content management solutions.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over \$100,000.



Facil	Facilitated User Management									
Ref.	Metric	Source	Year 1	Year 2	Year 3					
D1	Number of IT FTEs required to manage legacy solutions	Composite	2	2	2					
D2	FTE avoidance with Dropbox	Interviews	20%	20%	20%					
D3	Average annual salary for IT FTE	TEI standard	\$120,000	\$120,000	\$120,000					
Dt	Facilitated user management	D1*D2*D3	\$48,000	\$48,000	\$48,000					
	Risk adjustment	↓15%								
Dtr	Facilitated user management (riskadjusted)		\$40,800	\$40,800	\$40,800					
	Three-year total: \$122,400		Three-year p	resent value: \$101,464	1					

"Our IP and our code are our most valuable assets. The security controls in Dropbox give us confidence that these crown jewels of our organization will not leak."

SVP of Worldwide Sales, software

IMPROVED CONTENT GOVERNANCE

Evidence and data. Each of the interviewees described ways that Dropbox allowed their respective organizations to better adhere to security policies and maintain content governance, protecting valuable customer data, intellectual property, and other critical internal data. Features within Dropbox that interviewees highlighted include:

- Better visibility into user access and file traffic.
- Secure file sharing options (password protection, email).
- More control over permissions and the ability to configure default permissions adhering to data governance policies.
- Ransomware protection.
- Alerts and notifications for potential data leaks or suspicious activity.
- Multifactor authentication and single sign-on capabilities.

The interviewees provided the following examples specific to their organizations:

 The director of IT at the conglomerate highlighted the peace of mind Dropbox offered at the IT level because of the many users and lines of business in the organization. IT was able to maintain oversight of all user and file activity while still providing a frictionless experience to those working with the content. The director also highlighted ransomware protection as a benefit, telling Forrester: "In the cloud world, gone are the days where all our data is stored within the data center. Having Dropbox gives us that peace of mind that we can monitor unusual logins and unusual changes. Even in the case of a ransomware attack, we can protect ourselves and recover if needed."

- Employees, especially sales representatives, at the software organization were frequently traveling with their devices and accessing content, like customer data and valuable IP, from various unsecured networks. The SVP of worldwide sales noted that Dropbox allowed these users a level of protection that other tools did not when accessing this content, which highlighted Dropbox's adherence to modern encryption standards and secure file sharing capabilities.
- Dealing in sensitive customer information and legal documents, the advertising organization's VP of real estate noted that Dropbox allowed their users access to the files and content they needed, while keeping the sensitive data locked down. The VP said, "We can give our users access to the data they need without opening the entire lid of the cookie jar."

In a review of Forrester and notable third-party data sources, both attack volume and security breach severity appear to be rising for organizations that lack mature, modern security culture and tooling.

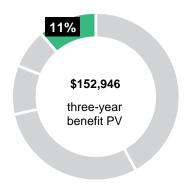


Forrester's Total Economic Impact practice estimates that firms are faced with an average of 1.8 material breaches per year with an average cost including 3,437 labor hours, \$269,550 in direct costs, and \$385,296 in business losses.



Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

- The average cost of a single material data breach is \$854,192, based on Forrester consulting data.
- The annualized average number of material data breaches at the composite organization is 1.8 per year. (See the callout box about the quantification of security breaches).



 A 5% improvement to the annualized impact of data breaches attributable to security and governance controls for the 300 users (dealing in sensitive information) in Dropbox.

Risks. This benefit will vary among organizations based on:

- The security features and functionality of an organization's legacy content management tools as it relates to the potential for improvement on Dropbox.
- An organization's size and industry as it relates to the cost and likelihood of unintentional or malicious data breaches.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of over \$150,000.

Ref.	Metric	Source	Year 1	Year 2	Year 3
E1	Average costs of response and notification, fines, damages, compliance costs, and customer compensation per material breach	Forrester Consulting	\$269,550	\$269,550	\$269,550
E2	Average lost business revenues and additional costs to acquire customers per material breach	Forrester Consulting	\$385,296	\$385,296	\$385,296
E3	Total estimated cost of a significant material breach (median)	E1+E2+E3	\$654,846	\$654,846	\$654,846
E4	Number of employees	Composite	1,000	1,000	1,000
E5	Estimated cost of a significant data breach per employee	E3/E4	\$655	\$655	\$655
E6	Average incidence of significant material breaches per year (median)	Forrester Consulting	2.5	2.5	2.5
E7	Annualized cost of data breaches	E1*E5*E6	\$1,637,115	\$1,637,115	\$1,637,115
E8	Reduction in likelihood of data leakage with Dropbox for business through improved content governance and security controls	Interviews	5%	5%	5%
Et	Improved content governance	E7*E8	\$81,856	\$81,856	\$81,856
	Risk adjustment	↓20%			
Etr	Improved content governance (risk-adjusted)		\$65,485	\$65,485	\$65,485
	Three-year total: \$196,454	Three-year	present value: \$162,85	11	



UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not quantified for this study include:

- Infrastructure and legacy solution cost savings. Some of the interviewees reported that their organizations experienced cost savings associated with replacement of legacy content management solutions or tools. Some of these sources of cost savings included content server (infrastructure) purchases and the related maintenance, labor costs, refresh costs, and solution costs. The conglomerate's director of IT told Forrester that migrating content to Dropbox from on-premises content management systems offset 3% to 5% of the organization's infrastructure spending, worth tens of thousands of dollars annually. This was even before considering the reduction of IT labor this reduction in infrastructure could yield.
- Improved employee experience. With Dropbox, users are equipped with a more robust set of collaboration tools that facilitate their day-to-day activities on key workflows. Beyond the benefits

"The entire Dropbox experience has improved IT efficiency across the board. We've also reduced IT infrastructure spend that would have gone to traditional network-attached storage or other solutions. But these solutions would not even have come close to what Dropbox has to offer."

Director of IT, conglomerate

quantified for this report, interviewees noted that employee feedback to Dropbox has been extremely positive and has reduced the amount of tedium often associated with file sharing and collaboration. The animal health organization's CIO, global technology solutions summarized: "Beyond the hard dollars impact of Dropbox, I think the most important thing we've seen is the increase in employee satisfaction with its [collaboration tools]."

FLEXIBILITY

The value of flexibility is unique to each customer.

There are multiple scenarios in which a customer might implement Dropbox and later realize additional uses and business opportunities, including:

- The value of additional and upcoming functionality. While the interviewees highlighted benefits for their organizations attributable to a significant Dropbox deployment, not every organization's users consistently take advantage of all of the features and functionality (current and beta) within Dropbox's portfolio of solutions. Additional future value may be unlocked for these users and organization in solutions such as Dropbox Sign and DocSend, as well as current and upcoming beta features.
- Future Dropbox software integrations. While interviewees spoke to the value of current in-Dropbox software integrations with many of the world's most utilized software suites, there may be additional value in future Dropbox integrations across organizations' workflows.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

Analysis Of Costs

Quantified cost data as applied to the composite

Tota	Total Costs									
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value			
Ftr	Dropbox subscription fees	\$0	\$95,040	\$95,040	\$95,040	\$285,120	\$236,350			
Gtr	Initial and ongoing Dropbox management	\$13,800	\$13,800	\$13,800	\$13,800	\$55,200	\$48,119			
	Total costs (risk- adjusted)	\$13,800	\$108,840	\$108,840	\$108,840	\$340,320	\$284,469			

DROPBOX SUBSCRIPTION FEES

Organizations pay a subscription fee to Dropbox on a per user per month basis. Factors that influence pricing include:

- The Dropbox team plan selected (Standard, Advanced, Enterprise).
- Additional functionality contracted, such as Dropbox Sign and DocSend.
- The required user count and storage.

Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

 The composite organization selects the Dropbox Advanced subscription for \$24 per user per month. This option includes unlimited storage, the most robust security features, and centralized administrative tools.

 For specific information for your organization, please contract Dropbox.

Risks. This cost will vary among organizations based on:

- The specific Dropbox plan and functionality contracted for.
- The number of Dropbox users in an organization.

Results. To account for these variances, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of just over \$235,000.

Drop	Dropbox Subscription Fees									
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3				
F1	Total Dropbox users	Composite	0	300	300	300				
F2	Monthly rate for Dropbox Advanced	List pricing	\$0	\$24	\$24	\$24				
Ft	Dropbox subscription fees	A1*A2*12 months	\$0	\$86,400	\$86,400	\$86,400				
	Risk adjustment	↑10%								
Ftr	Dropbox subscription fees (risk-adjusted)	\$0	\$95,040	\$95,040	\$95,040				
	Three-year total: \$285,120	Thre	e-year present v	alue: \$236,350						



INITIAL AND ONGOING DROPBOX MANAGEMENT

Interviewees quantified the personnel hours associated with onboarding and managing Dropbox on an ongoing basis. Collectively, interviewees told Forrester that onboarding users is nearly instantaneous. Managing users, permissions, and content governance on Dropbox is comparatively easy to legacy tools given centralized admin capabilities. Dropbox can be managed at the IT level, the individual team level, or both.

Modeling and assumptions. For the composite organization, Forrester makes the following assumptions:

- Two IT FTEs allocate 20% of their working hours for three months onboarding their users and content to Dropbox.
- Once deployed, Dropbox requires 5% of two FTEs to manage users, access, and content governance.
- The average annual salary of an FTE managing Dropbox for their organizations is \$120,000.

Risks. This cost will vary among organizations based on:

- The scope of an organization's Dropbox deployment (number of users, files, features, etc.)
- The skill and capacity of the FTEs onboarding and managing Dropbox.

Results. To account for these variances, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of just over \$45,000.

"Dropbox tends to be very intuitive. We don't need much internal support for it at all."

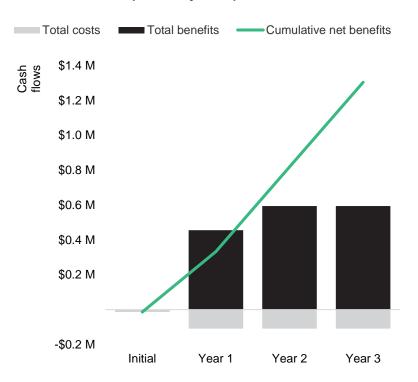
CIO, global technology solutions, animal health

Initia	Initial And Ongoing Dropbox Management								
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3			
G1	IT personnel managing Dropbox licenses and permissions	Composite	2	2	2	2			
G2	Percentage of working time spent on Dropbox-related activities	Interviews	20%	5%	5%	5%			
G3	Implementation duration/time on task (years)	Composite	0.25	1	1	1			
G4	Average annual salary	TEI standard	\$120,000	\$120,000	\$120,000	\$120,000			
Gt	Initial and ongoing Dropbox management	G1*G2*G3*G4	\$12,000	\$12,000	\$12,000	\$12,000			
	Risk adjustment	↑15%							
Gtr	Initial and ongoing Dropbox management (risk-adjusted)		\$13,800	\$13,800	\$13,800	\$13,800			
	Three-year total: \$55,200		Thr	ee-year present	value: \$48,119				

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Ana	Cash Flow Analysis (Risk-Adjusted Estimates)									
	Initial	Year 1	Year 2	Year 3	Total	Present Value				
Total costs	(\$13,800)	(\$108,840)	(\$108,840)	(\$108,840)	(\$340,320)	(\$284,469)				
Total benefits	\$0	\$455,590	\$594,505	\$594,505	\$1,644,599	\$1,352,160				
Net benefits	(\$13,800)	\$346,750	\$485,665	\$485,665	\$1,304,279	\$1,067,691				
ROI						375%				
Payback						<6 months				

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

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



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

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

Appendix B: Endnotes

¹ Source: "The Power Of A Content Platform Is In The Value Of The Apps It Delivers: Look Ahead To 2026," Forrester Research, Inc., September 8, 2021.

