The Total Economic Impact™ Of Google Workspace for Education Plus

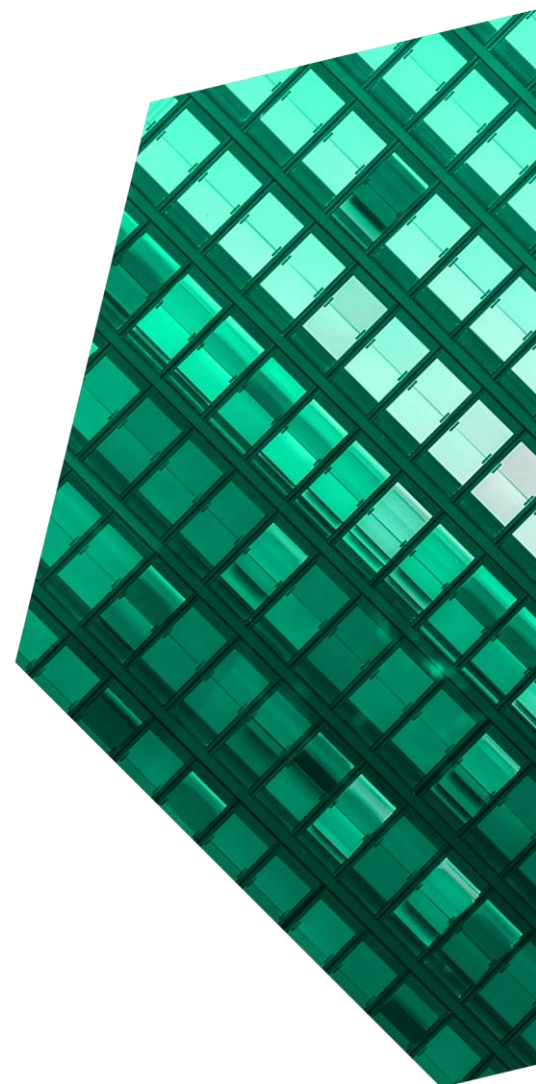Cost Savings And Benefits Enabled By Google Workspace for Education Plus

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Executive Summary

> Google Workspace for Education Plus is the most comprehensive edition of Google Workspace for Education, incorporating teaching, learning, and advanced security capabilities from across all editions. The suite of tools allows staff, teachers, and students to collaborate more efficiently and IT groups to provide enhanced security. Key benefits include improved efficiency for security and administrative tasks, direct savings from security and collaboration services, and improved teacher and student experiences.

More than 170 million students and educators around the world use Google Workspace for Education services to power collaboration, instruction, and security. Google offers multiple editions of Workspace for Education, starting with Google Workspace for Education Fundamentals. Education Fundamentals is offered free of charge for qualifying institutions, and it includes collaboration and communication tools such as Classroom, Docs, Sheets, Slides, Forms, Gmail, Google Meet, and more. Education Fundamentals also includes data loss prevention functionalities for Gmail and Drive, and is compliant with all current user privacy standards.

Google Workspace for Education Plus is a paid edition that expands upon the capabilities of Education Fundamentals, and it includes additional services such as attendance tracking, a security center and investigation tool, document approvals, additional meeting and livestream capabilities, and prioritized support. Google provides a comparison of all Google Workspace for Education editions to help decision-makers determine the best fit for their organization.

Google commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) organizations may realize by deploying Google Workspace for Education Plus (Education Plus).[1] The purpose of this study is to provide readers with a

KEY STATISTICS

Return on investment (ROI)
191%

Net present value (NPV)
$410K

framework to evaluate the potential financial impact of Education Plus on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed 18 decision-makers at 10 organizations with experience using Education Plus. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization.

These interviewees noted that prior to using Education Plus, their organizations worked with multiple legacy tools and solutions and many of which did not have the ease of management, range of functionality, or level of security and insights that their organizations required.

After investing in Education Plus, the interviewees' organizations experienced vastly improved security and ease of IT management, as well as improved collaboration and functionality for educators. Key

results from the investment include a near elimination of phishing attempts experienced, employee efficiencies in administration and security, and the ability to consolidate legacy third-party applications and software.

Some of the benefits discussed in this research are provided by features also included in Education Fundamentals. In these cases, Forrester has indicated that a particular feature is available in both Education Fundamentals and Education Plus.

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- **A 95% reduction in the number of phishing attempts experienced and a 98% reduction in IT labor to resolve phishing incidents.** The out-of-the-box security and email filtering of Education Plus significantly reduces the number of phishing-attempt emails that make it to inboxes and the number of phishing incidents that occur. For the composite organization, this increased security saves nearly 1,400 IT hours with the elimination of time previously spent manually searching for and deleting phishing emails and resolving incidents. Over three years, saved time from improved security is worth $73,000 to the composite organization, or approximately four work months for two FTEs.

Reduction in phishing incidents due to improved email security
95%

- **Reduced labor for administrative staff.** The time it takes to complete administrative functions

> **"Paying for [Education Plus] turns a good product into a really, really good product. I think given that it is the absolute core of every school's administration and every school's teaching and learning, it's not a nice-to-have. It's an absolute must-have for us schools now."**
> *IT business partner, K12, Europe*

like e-record requests is significantly reduced due to Education Plus's Vault search tool and the collaborative nature of Google Docs, Drive, and Calendar. The composite organization's administrative staff saves an average of 6 hours per project, amounting to 300 saved labor hours per year. Over three years, the administrative staff's time savings are worth $16,000.

- **Direct savings from retiring legacy security tools.** The Education Plus Security Center replaces third-party security tools used by educational institutions, providing direct savings to IT groups. For the composite organization, legacy tools included a data-loss prevention system and single sign-on solution. Organizations may also realize cost savings by avoiding services like spam filters or server maintenance. Over three years, the composite organization saves $168,000 by retiring legacy security tools.

- **Direct savings from retiring alternative collaboration software.** Education Plus leads to additional direct savings by eliminating the need for additional collaboration tools or cloud storage services. The composite organization saves $15 annually for each student who no longer needs access to an alternative collaboration suite, and it reduces their out-of-pocket cloud storage costs. Over three years, collaboration and cloud software savings amount to $368,000.

Benefits to the teacher and student experience. Benefits to teachers and students are not quantified for this study, but they include:

- **Improved teacher efficiency and reduced stress.** Teachers often request access to Education Plus. Manual labor is reduced in activities such as taking attendance, administering and grading tests, and communicating with students, parents, and administration. There is also decreased reliance on cumbersome third-party services.

- **Easier transitions between in-person and virtual learning.** Education Plus eases students' transitions between in-person activities, virtual learning environments, and independent and group homework completed outside of the classroom. As organizations plan to move to hybrid environments, they expect Education Plus to make the process easier for administrators and to provide a more seamless environment for teachers and students.

- **Additional tools and avenues for in-person and virtual learning.** Using Google Meet to record teaching allows students to learn at their own pace, and it frees up teachers to help students individually during class time.

- **Access to premium features.** The Education Plus access to increased Google Drive storage and Google Meet recording and livestream capabilities is particularly valuable to educators

and students. With additional Google Drive storage, educators spend less time managing students' cloud usage. Education Plus features like attendance tracking, breakout rooms, and Meet livestreams further saves educators time and improves students' experiences.

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

- **Enhanced ability for students and educators to engage with external subject matter experts.** With Google Meet's mobile dial-in option and Google's APIs, organizations can connect directly with researchers or doctors through the organization's existing platform, which eliminates the complexity and limitations of a segmented external platform.

Costs. Risk-adjusted PV costs include:

- **Education Plus licensing.** License fees for Education Plus are based on each organization's student enrollment. Staff and educator licenses are provided at no cost with a ratio of student-to-staff licenses. Organizations do not need to purchase additional educator and staff licenses. Over three years, Education Plus license costs for 15,000 students costs the composite organization approximately $196,000.

- **Cost of change management costs.** For organizations implementing Google Workspace for Education for the first time, IT teams host initial training sessions and provide change management help for educators and staff to migrate to Education Plus. The composite organization holds weekly staff and educator training sessions for the first 1.5 months, and it moves to quarterly training for the following three years. Including preparation, facilitation, and follow-up support, each training session takes 15 hours. The IT team spends an initial 200 labor hours helping some educators move their curriculums into Education Plus, although most

educators complete the move on their own. Over three years, the composite organization spends $18,000 in labor as it migrates to Education Plus.

The decision-maker interviews and financial analysis found that a composite organization experiences benefits of $625,000 over three years versus costs of $215,000, adding up to a net present value (NPV) of $410,000 and an ROI of 191%.

ROI
191%

BENEFITS PV
$625K

NPV
$410K

REDUCTION IN PHISHING INCIDENTS
95%

Benefits (Three-Year)

Employee efficiency from improved security	$72.6K
Employee efficiency from improved administrative tools	$16.2K
Direct savings enabled by Education Plus security features	$167.9K
Direct savings enabled by Education Plus collaboration features	$368.0K
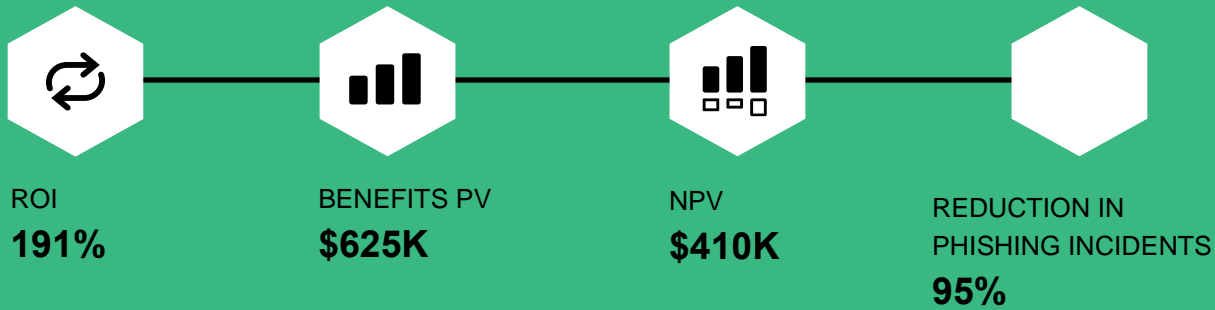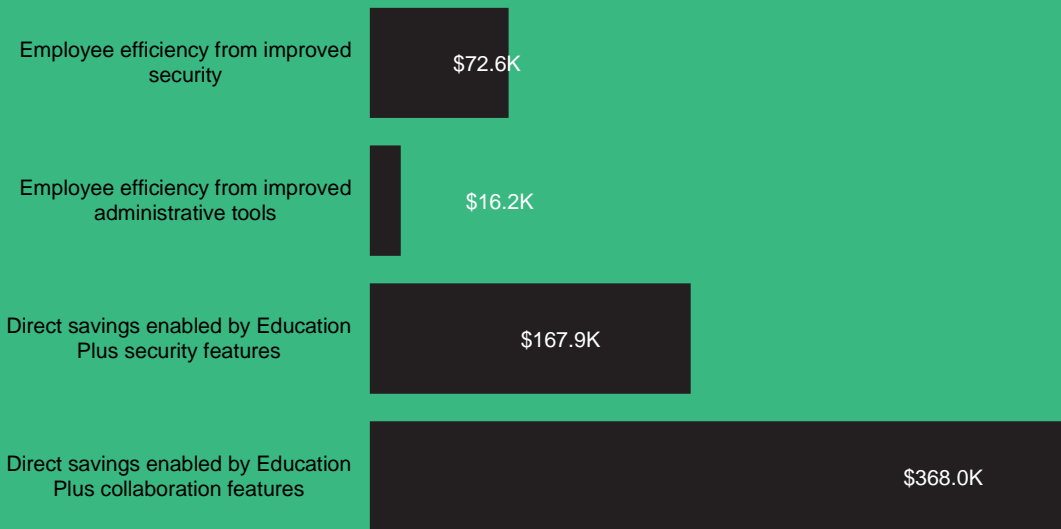
"[Education Plus is] a game changer, that's for sure. It changed the way people work, and it changed our culture. I have the impression comparing other solutions that they can't achieve the same level of success that Google achieved in providing an integrated framework for almost every aspect of the university."
Chief information officer, higher education, South America

"[Education Plus] is the easiest product to use. It has the lowest total cost for a school district."
Manager of technology, K12, North America

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 Google Workspace for Education Plus.

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 Education Plus can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Google 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 Education Plus.

Google 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.

Google provided the customer names for the interviews but did not participate in the interviews.

DUE DILIGENCE
Interviewed Google stakeholders and Forrester analysts to gather data relative to Education Plus.

DECISION-MAKER INTERVIEWS
Interviewed 18 decision-makers at 10 organizations using Education Plus 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 decision-makers.

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 Google Workspace for Education Plus Customer Journey

Interviewed Decision-Makers				
Interviewee	**Educational institution**	**Region**	**Number of teachers**	**Number of students**
Technology director	K12	Asia Pacific	40	200
Director	K12	Asia Pacific	200	1,000
Director of IT	K12	Asia Pacific	200	1,000
Teacher	K12	Asia Pacific	200	1,000
Head of digital	K12	Europe	1,000	10,000
Head of information technology	K12	Europe	1,000	10,000
IT business partner	K12	Europe	1,000	10,000
Chief information security officer	Higher education	Europe	2100	30,000
Product manager	Higher education	Europe	2,100	30,000
Manager of enterprise architecture	Higher education	North America	1,600	50,000
Manager of technology	K12	North America	800	8,000
IT specialist	K12	North America	800	8,000
Director of IT	K12	North America	3,000	50,000
Assistant director of IT	K12	North America	3,000	50,000
Director of IT infrastructure	Higher education	North America	6,000	9,000
Chief information officer	Higher education	South America	20,000	70,000
Network team manager	Higher education	South America	20,000	70,000
Technology control manager	K12	South America	500	11,000

KEY CHALLENGES

Before investing in Education Plus, interviewees' organizations relied on a variety of solutions and third-party tools to run their day-to-day operations. These included pen-and-paper data collection tools, on-premises email servers, and other tools. Educators often utilized different tools, which made training and IT support more challenging. IT departments often handled multiple free or low-cost infrastructure and security solutions, but these solutions could be unreliable and difficult to scale.

Most of the interviewees' organizations began their relationships with Google with Education Fundamentals, which is an edition of Google Workspace for Education that provides similar but less comprehensive features to qualifying educators at no cost.

In their prior environments, the interviewees' organizations struggled with common challenges including:

- **Legacy systems that were difficult and burdensome to maintain.** Existing on-premises and often aging solutions were complex and required constant administrative work to maintain and upgrade. Organizations often had very limited IT administrative staff and resources, and they were unable to monitor their systems effectively or address problems quickly.

- **Poor security and excessive IT labor to resolve phishing attacks and other security concerns.** Third-party tools provided poor security and left the organizations vulnerable to phishing attacks and other security breaches. Prior to moving to Education Fundamentals or Education Plus, users complained about high volumes of spam and phishing emails, and local mail servers didn't often automatically check for viruses. One interviewee said the high volume of phishing attacks forced their organization to completely shut down its email system several times a year to prevent the spread of a virus. To resolve security issues, IT teams worked with custom scripts and inefficient, lengthy resolution processes.

- **Limited functionality for collaboration, curriculum management, and student performance monitoring.** Interviewees said educators needed to work with multiple third-party tools to meet their organizations' needs like attendance tracking, assignment and quality management, and integrated video conferencing.

> **"Our teachers had no standardization. Maintenance and support were difficult because we had to cater to all these different groups. We're moving in standardizing and collaboration with Google Workspace. It definitely has helped with adoption, training, and support."**
> *Director of IT, K12, North America*

> **"We had to shut down our email several times a year because phishing attacks were so bad. Each time, I would be busy for two weeks trying to remediate."**
> *Manager of technology, K12, North America*

Often, these tools were cumbersome and did not provide the full functionality educators required.

- **Difficulty adapting to virtual learning environments for all faculty and students.** Prior to the onset of the COVID-19 pandemic, virtual teaching was a rarity. But in early 2020, most organizations began rapid transitions to virtual teaching. During the transitions, they needed to be able to pivot quickly and without a lot of change management. Students struggled to stay engaged.

INVESTMENT OBJECTIVES

The interviewees' organizations searched for a solution that:

- Was easy for educators to use and for IT professionals to manage. An IT director at a K12 school said: "For a teacher who is managing or teaching 30 students in their classroom, they want something that's easy to use, intuitive, [and] that they don't have to go through an hour of professional development training to be able to use."

- Integrated easily with existing systems and workstreams and required minimal change management.

- Provided enhanced security benefits and protection from phishing attacks.

- Offered improved customer service and support from Education Fundamentals.

- Presented more functionality and flexibility, especially with high-functioning video conferencing capabilities and cloud hosting options.

> **"[Google's] security center tools, [out-of-the-box] reporting, forensic tools, and especially the built-in tools to identify compromised accounts and to grab and deal with questionable emails were really the key drivers for us in acquiring [Education] Plus."**
> *Manager of enterprise architecture, higher education, North America*

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 18 decision-makers at 10 organizations that Forrester interviewed and 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 has 15,000 students. It uses single sign-on, data loss prevention, and data storage services. In addition, it currently has a third-party collaboration service that all students can access.

Deployment characteristics. The composite organization rolls out Education Plus to all educators, students, and staff starting in Year 1. While some students retain access to alternative collaboration suites or tools, the organization phases out its use for most students over three years.

Key assumptions

- **15,000 students**
- **Single sign-on service**
- **Data loss prevention service**
- **Data storage service**
- **100 custom reports per year**

Analysis Of Benefits For Security And Administration

Quantified benefit data as applied to the composite

Total Benefits

Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Employee efficiency from improved security	$29,197	$29,197	$29,197	$87,592	$72,609
Btr	Employee efficiency from improved administrative tools	$6,528	$6,528	$6,528	$19,584	$16,234
Ctr	Direct savings enabled by Education Plus security features	$67,500	$67,500	$67,500	$202,500	$167,863
Dtr	Direct savings enabled by Education Plus collaboration features	$129,375	$154,688	$163,125	$447,188	$368,013
	Total benefits (risk-adjusted)	$232,600	$257,913	$266,350	$756,863	$624,719

EMPLOYEE EFFICIENCY FROM IMPROVED SECURITY

Evidence and data. Interviewed IT leaders and staff noted that improvements to security from Education Plus resulted in a reduction in manual labor.

- Each organization that tracked phishing incidents saw a significant reduction in both phishing attempt emails that made it to inboxes and the number of phishing incidents that did occur. Interviewees from these organizations noted that after upgrading to Education Plus, their previously problematic phishing incidents dropped to virtually zero. This was largely attributed to Gmail providing better out-of-the-box security and filtering than the previously used email services and to Security Center improving monitoring and threat prevention capabilities.

- Interviewees from multiple institutions said IT staff had been using custom scripts to manually search for and delete emails each time there was a phishing incident. After this was completed, additional time was required for resolution. The total amount of time this process took varied by institution, but averaged close to 20 labor hours.

"Before Education Plus, if someone fell prey to an email scam of some sort, our teams might spend literally weeks' worth of hours remediating the collateral damage, reimaging machines, [or] fixing messed-up files. Hours and hours and hours [of work have] basically gone away with the overall Google security framework."
Director of IT infrastructure, higher education, North America

However, some major incidents took hundreds of labor hours to fully resolve. By using the investigation tool included with Education Plus, these teams only needed to spend a total of 15 to 30 minutes to resolve a phishing incident when it did occur.

"Before Education Plus, the process to remediate a phishing attack could take up to 24 to 36 hours. Now, literally, we can have it done in half an hour."
Assistant director of IT, K12, North America

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite organization previously experienced 75 phishing incidents each year, but this is reduced by 95% (or by about four incidents) with Education Plus.

- Prior to using Education Plus, the composite's average time to resolve a phishing incident was 20 labor hours. It reduces this by 98% (to just under 30 minutes) by using the security investigation tool included in Education Plus.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- Organizations that already have very few phishing incidents and are well-equipped to handle other security threats may not receive as much benefit of reducing labor with improved security with Education Plus.

- The impact of this benefit may vary based on the frequency and magnitude of phishing attacks, which varies depending on the type of institution and the sophistication of its existing security tools.

"Education Plus has given us a really strong basis for applying standardized rules across our schools. In the past, we would have needed to coordinate with 50-something network managers. Now, we can just set one policy to block sharing personal information, and we can do that really simply and effectively."
IT business partner, K12, Europe

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $73,000.

12%

$73,000
three-year
benefit PV
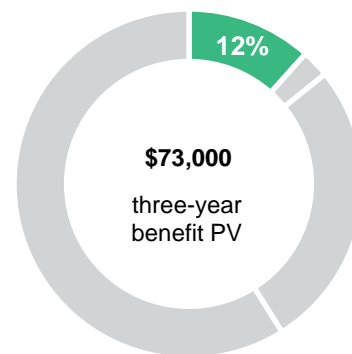
Employee Efficiency From Improved Security

Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Annual phishing incidents prior to Education Plus	Interviews	75	75	75
A2	Labor hours to resolve phishing incident prior to Education Plus	Interviews	20	20	20
A3	Total hours to resolve phishing incidents prior to Education Plus	A1*A2	1,500	1,500	1,500
A4	Reduction in phishing incidents after Education Plus	Interviews	95%	95%	95%
A5	Reduction in time to resolve phishing attack after Education Plus	Interviews	98%	98%	98%
A6	Reduction in labor hours to resolve phishing incidents after Education Plus	A3*A4*A5	1,397	1,397	1,397
A7	Percentage of time recaptured for security specialists	TEI Standard	50%	50%	50%
A8	Hourly rate for information security specialist (fully burdened)	Composite	$44	$44	$44
At	Employee efficiency from improved security	A6*A7*A8	$30,723	$30,723	$30,723
	Risk adjustment	↓5%			
Atr	Employee efficiency from improved security (risk-adjusted)		$29,187	$29,187	$29,187
	Three-year total: $87,561	**Three-year present value: $72,583**			

EMPLOYEE EFFICIENCY FROM IMPROVED ADMINISTRATIVE TOOLS

Evidence and data. Interviewees said that in addition to Education Plus making IT staff more efficient, it also reduced labor for administrative staff.

- Education Plus significantly shortened the amount of time that staff needed to compile reports for education record requests, student progress, and security incidents.

- A director of IT at a North American K12 school district said that staff reduced the time to fully complete an e-record request from two full days to 1 hour. He mentioned that Education Plus's Vault tool (which is included in both Education Fundamentals and Education Plus) was the major reason for this improvement because it became significantly easier to find records and relevant information for requests. This saved a

Hours to complete an e-record request

Before >10

After 0.15
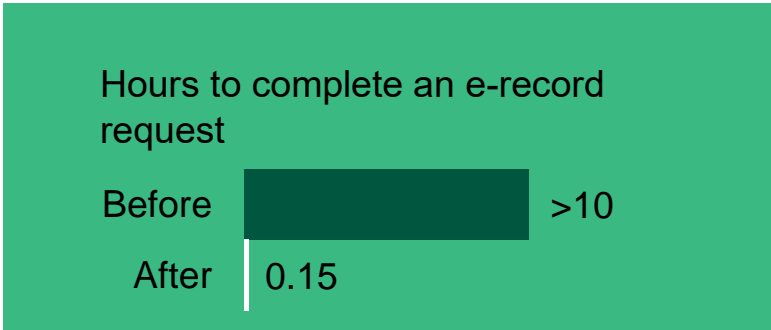
significant amount of effort for between 12 and 24 requests per year.

- Google Docs' collaborative function as well as having shared Google Drive and Google Calendar (which is included in both Education Fundamentals and Education Plus) access helped interviewees' institutions to improve administrative efficiency. Interviewees noted that these tools allowed for easier collaboration between administrative groups as well as

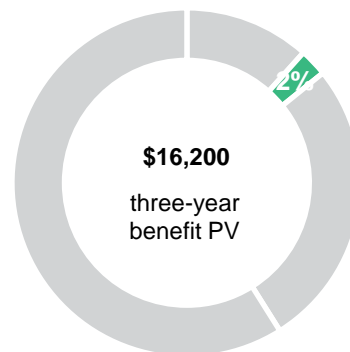individual staff members, which saved teams multiple hours each month.

Staff benefited from additional efficiency after moving to Education Plus because they gained access to more tools within the Google Workspace for Education platform that replaced some legacy services. These additional tools easily integrated into Google Docs, Google Drive, and Google Calendar. This consolidation into one platform removed the need for staff to manually transfer data between services, which saved them time and eliminated the risk of information being lost in transition.

> **"The ease of management is critical for us. Google is very easy to manage. I have an impression that other tools are not so easy."**
> *Chief information officer, higher education, South America*

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite organization uses Education Plus to improve efficiency on 50 educational record requests and additional administrative projects per year.

- Administrative staff can save an average of 6 hours per project where Education Plus is utilized, amounting to 300 saved labor hours per year.

- Because administrative staff members use a ticking system where work is easily interchangeable, they can fully reinvest the 300

saved labor hours to the benefit of the composite organization.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- Interviewees from smaller educational institutions did not report as significant of time savings for administrative tasks because there are fewer staff members to coordinate with and therefore less impact of improved efficiency.

- Smaller organizations with smaller administrative groups may not receive as much gained efficiency for their staff.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of $16,200.

$16,200
three-year benefit PV

Employee Efficiency From Improved Administrative Tools

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of custom administrative, educational, and security reports per year	Interviews	100	100	100
B2	Labor hours to compile each report before investing in Education Plus	Interviews	3	3	3
B3	Total labor hours to compile reports before investing in Education Plus	B1*B2	300	300	300
B4	Reduction in time to compile reports after investing in Education Plus	Interviews	80%	80%	80%
B5	Reduction in labor hours to compile reports after investing in Education Plus	B3*B4	240	240	240
B6	Hourly rate per IT operations FTE (fully burdened)	Composite	$34	$34	$34
Bt	Employee efficiency from improved administrative tools	B5*B6	$8,160	$8,160	$8,160
	Risk adjustment	↓20%			
Btr	Employee efficiency from improved administrative tools (risk-adjusted)		$6,528	$6,528	$6,528
	Three-year total: $19,584		**Three-year present value: $16,234**		

DIRECT SAVINGS ENABLED BY EDUCATION PLUS SECURITY PLATFORM

Evidence and data. The Education Plus Security Center replaced third-party security tools used by educational institutions, providing direct savings to IT groups.

- A North American university used Education Plus for single sign-on for all applications, which removed the need for an additional $150,000 license cost to the third-party solution.

- A North American school district avoided $30,000 per year in an email spam filter because Education Plus provided this functionality. The district saved an additional $80,000 because it no longer needed support to securely maintain the email server.

- A North American university saved $60,000 on an alternate data loss prevention solution

because Education Plus provided this functionality (which is included in both Education Fundamentals and Education Plus).

> **"We use [Education Plus] to avoid paying $60,000 for data loss prevention and $150,000 for an identity provider service each year. The value we get out of our relationship with Google is significant."**
> *Director of IT infrastructure, higher education, North America*

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite organization avoids using a third-party single sign-on solution that would have cost $30,000 per year.

- Education Plus removes the need for a data loss prevention service, saving the composite organization $45,000 per year.

- The composite organization had already migrated to a cloud environment and therefore does not require additional email support and security solutions.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- Some interviewees with smaller budgets noted that they either had not been using third-party security tools or they had been using free software. These institutions did not see the same cost savings benefit by investing in Education Plus, but they noticed large improvements to their security positions and the number of breaches.

- Readers should determine which of their institution's security services could be replaced by Education Plus and what the total savings of replacing these services would be.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $167,900.

$167,900

three-year
benefit PV

27%
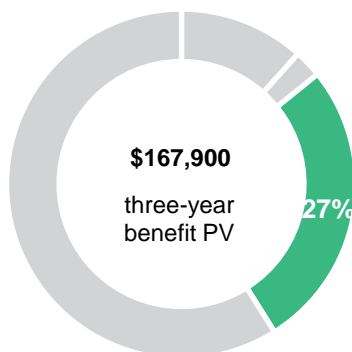
Additional legacy service savings

Institutions using Education Plus eliminated costs from their legacy security services including:

- Email security

- Cloud storage and server security

- Network security

- Security incident management services

- Identity management

- Data loss prevention

- Device management

- Storage/collaboration services with data location requirements

Direct Savings Enabled By Education Plus Security Platform

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Avoided cost for third-party single sign-on solution	Interviews	$30,000	$30,000	$30,000
C2	Avoided cost for third-party data loss prevention solution	Interviews	$45,000	$45,000	$45,000
Ct	Direct savings enabled by Education Plus security platform	C1+C2	$75,000	$75,000	$75,000
	Risk adjustment	↓10%			
Ctr	Direct savings enabled by Education Plus security platform (risk-adjusted)		$67,500	$67,500	$67,500
	Three-year total: $202,500	**Three-year present value: $167,863**			

DIRECT SAVINGS ENABLED BY EDUCATION PLUS COLLABORATION SUITE

Evidence and data. Education Plus provided interviewees' institutions with additional direct savings because they no longer needed alternative collaboration tools and cloud storage services.

- An interviewee from an Asia Pacific K12 institution reported that Education Plus was more affordable than alternate collaboration suites and educational platforms being considered.

- An interviewee from a North American K12 school district reported that Education Plus costs at least 50% less than alternative solutions.

- A North American university saved approximately $100 per student per year by moving to Education Plus. This saving was a result of no longer needing to provide those students with

Direct collaboration suite savings per student per year

$100

licenses to alternative educational platforms and cloud storage.

- Some interviewees, especially those at higher education institutions, noted that not all students and staff were able to completely transition from alternative collaboration suites. This was often limited to students studying and staff working in more technical fields in which specialized software might be needed.

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite organization saves $15 annually per student who no longer needs access to the alternative collaboration suite.

- Not all students are able to immediately move to Education Plus from the alternative collaboration

> **"We've managed to save significantly on various applications and programs by using Google for cloud-based [services]."**
> *IT business partner, K12, Europe*

suite. In Year 1, 9,000 of the 15,000 students fully migrate, and this increases to 12,000 students by Year 3.

- The composite organization no longer needs to pay an annual amount for $37,500 for cloud storage services by moving students and staff to Google Drive as a part of Education Plus.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- The number of students who no longer require access to specialized legacy tools will vary by institution type and student needs.

- One interviewee reported that their institution did not already have an alternative collaboration

suite and data storage tool, and therefore it was not able to save costs by retiring legacy solutions.

Results. To account for these risks, Forrester adjusted this benefit downward by 25%, yielding a three-year, risk-adjusted total PV of $368,000.

$368,000

three-year benefit PV

59%
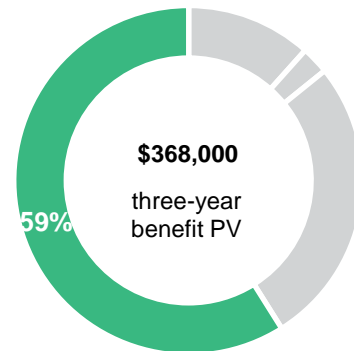
Direct Savings Enabled By Education Plus Collaboration Features					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
D1	Number of students fully transitioned to Education Plus	Composite	9,000	11,250	12,000
D2	License costs avoided per student	Interviews	$15	$15	$15
D3	Avoided student license costs	D1*D2	$135,000	$168,750	$180,000
D4	Avoided cost for data storage	Interviews	$37,500	$37,500	$37,500
Dt	Direct savings enabled by Education Plus collaboration features	D3+D4	$172,500	$206,250	$217,500
	Risk adjustment	↓25%			
Dtr	Direct savings enabled by Education Plus collaboration features (risk-adjusted)		$129,375	$154,688	$163,125
	Three-year total: $447,188		**Three-year present value: $368,013**		

Analysis Of Benefits To The Educator And Student Experience

SIGNIFICANTLY IMPROVED EDUCATOR EFFICIENCY WHICH REDUCES STRESS AND WORKLOAD

Interviewees said their institutions' decisions to invest in Education Plus was in part driven by a desire to support educators who had been working long hours and had their work made more difficult by the pandemic. In many cases, educators had directly requested that their administration provide them access to Education Plus.

- Administrators and educators credited Education Plus for providing relief to teaching staff in the form of substantial time and effort savings.

- Much of the manual labor associated with educators' work was removed after investing in Education Plus. This included taking attendance, administering and grading tests, coordinating with parents and administration, and communicating with students.

> **"[Before Education Plus] we would spend many hours reaching our students. We would need to call them by [an alternative messaging service] to have a discussion. We did this for my grade 5 class, and it was stressful and a lot of work."**
> *Teacher, K12, Asia Pacific*

- Educators and administrators from multiple institutions and regions said educators no longer needed to use cumbersome third-party apps to reach out to students individually. Instead, they could use Google Chat to send messages to their entire class, which saved them hours at a time.

- Decision-makers noted that because Education Plus combines educational tools into one platform, educators seamlessly moved between their tasks without the need to manually transfer information from one service to another, which they had previously needed to do.

> **"[Educators] should choose Education Plus because it gives you so many features that can be used together. You can do so much collaboration that cannot be used with other applications. Everything is integrated in Google's features."**
> *Teacher, K12, Asia Pacific*

ABILITY TO TRANSITION TO AND FROM VIRTUAL LEARNING MORE EASILY

Interviewees' institutions were in different states of virtual/in-person learning at the time the interviews were conducted, but administrators and educators noted that Education Plus allowed their institutions to adapt quickly to changing requirements.

- Several interviewees noted that changing government regulations required that students and educators move to or from virtual learning with little advance notice. Both educators and students said this transition was made easier by using Education Plus as the central learning platform because it offered tools and features that translated easily to both in-person and virtual environments.

- Many decision-makers indicated that their institutions were preparing for a future hybrid learning model and that Education Plus was critical in enabling educators to effectively manage this transition and in enabling students to continue receiving quality instruction.

"Google helps us to continue the learning process with our students. … We don't have any problem moving from one situation to another. Our core business today is in-person learning, but if we need to move to virtual learning, we are not going to have any trouble."
Technology control manager, K12, South America

IMPROVED IN-PERSON LEARNING

While Education Plus helped many institutions adapt to virtual learning during the pandemic, some interviewees noted that educators were able to use it to improve in-person learning for students after returning to the classroom.

- Students using Google Chromebooks or other devices in the classroom were able to use Education Plus to transition from in-person activities to independent and group homework completed outside of the classroom.

- A music educator at a European K12 institution recorded himself teaching his curriculum via Google Meet, which allowed his students to review videos at their own pace during class. He was then freed up during class to help students on an individual basis, which was not possible before investment in Education Plus.

ACCESS TO PREMIUM FEATURES

The above benefits were made possible by having access to premium features of Education Plus. Interviewees noted that a few specific features were particularly valuable to their institution's educators and students, and that drove their investment decisions.

- Another feature that both administrators and teaching staff valued was being able to use Google Meet to record and livestream videos. In addition, educators valued that Education Plus allowed for larger audiences, attendance tracking, breakout rooms, and live polling. They noted that prior to investment in Education Plus, their institutions had attempted to use third-party tools to provide the same function, but that they had difficulty managing different services. They preferred using Google Meet because it integrated with the rest of their institution's Education Plus tools.

- Educators and administrators noted that having expanded Google Drive storage with Education Plus was a major advantage of upgrading, and they said they no longer needed to spend as much time actively monitoring students' cloud storage usage. They also noted that students' experiences improved because they had access to more materials and could collaborate more effectively with other students.

UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not able to quantify include:

- **Additional benefit of improved security.** Interviewees observed additional benefits beyond saved labor of reducing phishing attacks and other security incidents, such as reducing cyber-insurance premiums, avoiding government penalties, and increasing stakeholder trust.

- **Prevention and mitigation of online bullying.** Education Plus's Vault tool (which is included in both Education Fundamentals and Education Plus) allowed administrators to easily search for key words and phrases in student interactions. Some interviewees noted that this helped their institution to address online bullying incidents and resolve both educator and parent concerns more effectively. One interviewee saw a reduction in bullying incidents when students knew their interactions could be monitored.

- **Ability to dial a local number using Google Meet.** A chief information security officer of a European university noted that staff interviewing candidates were able to use Google Meet by calling in a local phone number. This allowed staff to conduct interviews without requiring access to a computer, which both lessened the

burden on IT support and allowed for resources to be used more efficiently.

> **"Because we are [Education] Plus customers, we get additional storage per student. This is a huge amount for us."**
> *Manager of enterprise architecture, higher education, North America*

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement Education Plus and later realize additional uses and business opportunities, including:

- **Enhanced ability for students and educators to engage with external subject-matter experts.** A chief information officer of a South American university noted that their institution was able to use Google Meet directly inside its own healthcare services and allow patients to hold virtual sessions with nurses and doctors. The ability to use Google Meet's API meant that IT administrators did not need to rebuild the health care platform and that patients and health care workers could continue to work in the environment they were familiar with. Teams also benefited from a more secure and stable video conferencing platform than had previously been accessible.

- **Consistency of experience across devices.** Students used a range of devices, and interviewees noted that Education Plus offered a similar experience regardless of the type of hardware used, enhancing students' learning experiences. The consistency of Education Plus across hardware provided administration with flexibility in the type of learning ecosystems they supported.

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

"The consistency [of Education Plus] between one product to the next is there, so it's not a high learning curve for teachers and students. [There's] accessibility from anywhere around any device as well. We have [a range of devices] in our district. No matter which device you use, you'll have the same experience with Education Plus. That is important to us."
Director of IT, K12, North America

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs

Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Education Plus MSRP licensing cost	$0	$78,750	$78,750	$78,750	$236,250	$195,840
Ftr	Change management	$12,325	$2,550	$2,550	$2,550	$19,975	$18,666
	Total costs (risk-adjusted)	$12,325	$81,300	$81,300	$81,300	$256,225	$214,506

EDUCATION PLUS MSRP LICENSING COST

Evidence and data. Google charges license fees for Education Plus based on student enrollment. Free staff and educator licenses are provided at no cost within a ratio of student-to-staff licenses.

- Interviewees noted that the license cost per student was generally a few US dollars per month, and additional licenses for staff and educators were not required because Google provided them with enough free licenses.

- While interviewees noted that Education Plus still had the lowest total cost, they also noted that paying based on the number of students resulted in a higher cost than previous models based on the number of educators and staff.

**Modeling and assumptions.** Forrester assumes the following about the composite organization:

- The composite organization has a total of 15,000 students.

- The composite organization pays the list MSRP of $5 per student per year and does not receive a discount.

- The composite organization requires no additional licenses for educators and staff beyond the licenses provided at no cost based on the student-to-staff ratio.

> **"Moving to a paid model with Education Plus turns a good product into a really, really good product. Given it's the core of our administration and teaching and learning, it's right that we consider paying. If you want quality tools, then you have to invest in those tools. This isn't a nice to have, it's an absolute must-have for our schools."**
> *Head of digital, K12, Europe*

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- No interviewee reported that their institution pays more than the MSRP of $5 per student, and therefore risk of higher cost is assumed to be minimal.

Results. To account for this risk, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $196,000.

$196,000
three-year
cost PV
91%
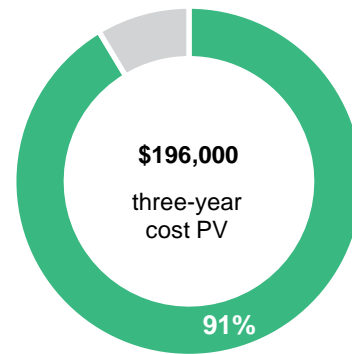
Education Plus MSRP Licensing Cost						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	Number of students	Composite		15,000	15,000	15,000
E2	Education plus MSRP per student per year	Interviews		$5	$5	$5
Et	Education Plus MSRP Licensing Cost	E1*E2	$0	$75,000	$75,000	$75,000
	Risk adjustment	↑5%				
Etr	Education Plus MSRP Licensing Cost (risk-adjusted)		$0	$78,750	$78,750	$78,750
	Three-year total: $236,250			**Three-year present value: $195,840**		

CHANGE MANAGEMENT

Evidence and data. Some interviewees noted that moving educators and staff to Education Plus required IT involvement in training and change management.

- Most interviewees, especially from smaller institutions, did not have to spend a meaningful amount of time on change management or educator training.

- An interviewee from a North American K12 school district noted that it took some of their institution's educators a few months to become fully comfortable with Education Plus. They said this was particularly true for more tenured educators who had become accustomed to legacy services. To assist with this transition, daily and then weekly training was made

"Education Plus is incredibly robust, but it's also easy to pick up and use at a base level as well — which is what some staff and students need. From there, you've got this firm footing to build on, and that's how it enables innovation."
IT business partner, K12, Europe

available for the first month and a half. These trainings were open to all staff members and were led by the IT group.

- Some interviewees at larger organizations noted that their staff took additional time during the initial transition to Education Plus to help educators move their curriculums and materials into the new platform. However, most educators were able to make this transition on their own without involvement from other staff.

- Educators who leveraged Google for Education's certification programs were able to transition much easier to Education Plus because they learned the necessary skills on their own rather than requiring additional help from IT and other staff members.

"Education Plus is just more intuitive than [an alternative collaboration suite]. … For a teacher who is managing or teaching 30 students in their classroom, they want something that's easy to use, intuitive, [and] that they don't have to go through an hour of professional development training to be able to use. They want something that they can pick up and use right away."
Director of IT, K12, North America

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite organization holds weekly staff and educator training sessions during the first month and half of the transition. This moves to quarterly training sessions for the following three years. Each training session takes a total of 15 labor hours for IT including preparation, facilitation, and follow-up support.

- The composite organization's IT group spends an initial 200 labor hours helping some educators move their curriculums into Education Plus. Most educators can complete this on their own.
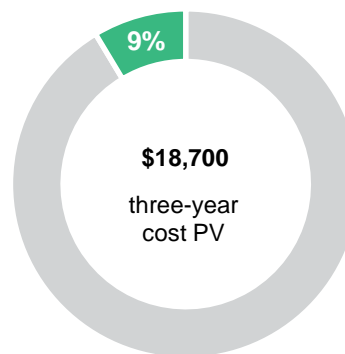
Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on the following factors:

- Educators who were not already comfortable leveraging technology in their classrooms had a more difficult time moving to Education Plus.

- Depending on the makeup of educators, change management and training may take longer and be more costly for an educational institution.

Results. To account for these risks, Forrester adjusted this cost upward by 25%, yielding a three-year, risk-adjusted total PV of $18,700.

9%

$18,700

three-year
cost PV

Change Management

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Staff training sessions	Interviews	6	4	4	4
F2	IT labor hours per staff training	Interviews	15	15	15	15
F3	Total IT labor hours per staff training	F1*F2	90	60	60	60
F4	Additional IT labor hours to assist with change management	Interviews	200	0	0	0
F5	Hourly rate per IT operations FTE (fully burdened)	TEI Standard	$34	$34	$34	$34
Ft	Change management	(F3+F4)*F5	$9,860	$2,040	$2,040	$2,040
	Risk adjustment	↑25%				
Ftr	Change management (risk-adjusted)		$12,325	$2,550	$2,550	$2,550
	Three-year total: $19,975			**Three-year present value: $18,666**		

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

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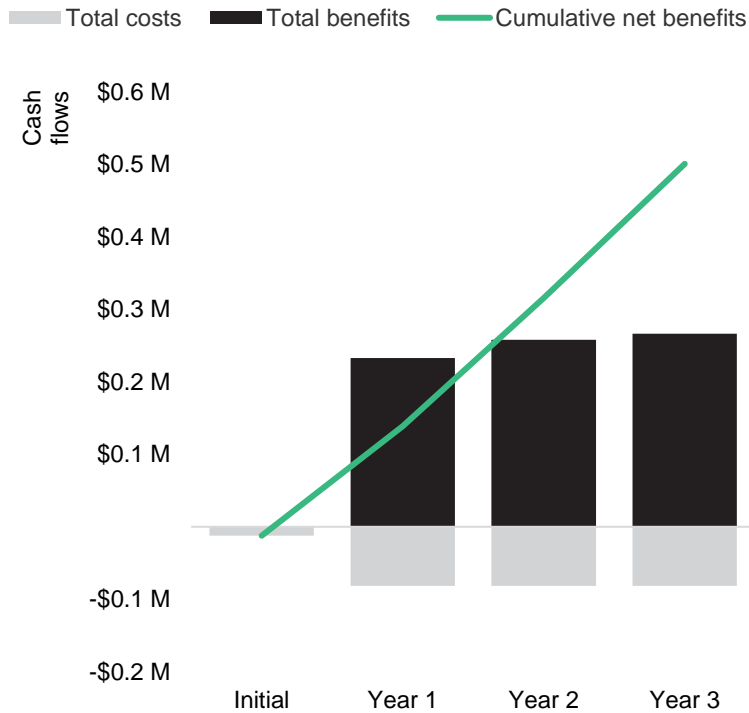
The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

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 Analysis (Risk-Adjusted Estimates)						
	Initial	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
Total costs	($12,325)	($81,300)	($81,300)	($81,300)	($256,225)	($214,506)
Total benefits	$0	$232,600	$257,913	$266,350	$756,863	$624,719
Net benefits	($12,325)	$151,300	$176,613	$185,050	$500,638	$410,213
ROI						191%
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

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[1] 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.