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The Total Economic Impact™ Of Zoom's Unified Communications Platform

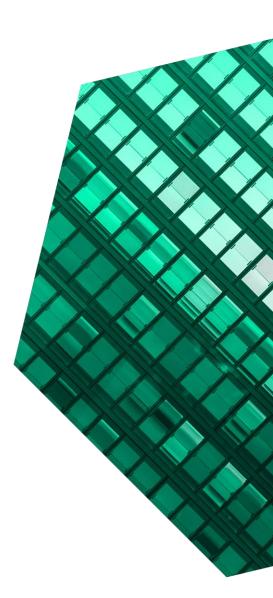
Cost Savings And Business Benefits Enabled By Zoom's Unified Communications Platform

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Executive Summary

Zoom for unified communications enabled organizations to add up to 52 weekly minutes worth of productivity per employee, reduce the time-to-value of sales by 70%, reduce IT troubleshooting time by 75%, and decommission a number of redundant technologies valued at up to tens of millions of dollars annually. It also improved organizational resilience during the COVID-19 pandemic, improved employee and customer satisfaction, and boosted employee collaboration.

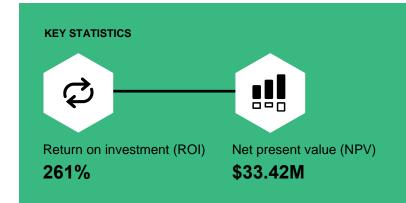
Zoom offers a cloud-based unified communications platform featuring videoconferencing via Zoom Meetings, telephony solutions via Zoom Phone, conference room video solutions via Zoom Rooms, and messaging via Zoom Chat. Zoom commissioned Forrester Consulting to conduct a Total Economic Impact[™] (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Zoom's unified communications platform.¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Zoom's unified communications platform on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed decision-makers with experience using Zoom from four organizations ranging from 5,000 employees to 255,000 employees. For the purposes of this study, Forrester aggregated the decision-makers' experiences and combined the results into a single composite organization.

Total benefits:

\$46.23 million





Prior to using Zoom, these decision-makers noted how their organizations spent heavily on multiple video and telephony solutions that were difficult to access or use for their employee end users. Additionally, legacy solutions had unreliable call quality, impacting both customer relationships and employee satisfaction. The poor software quality and security risks of these tools also created more work for the decision-makers' IT departments.

After deploying Zoom for unified communications, the decision-makers' organizations quickly boosted employee productivity, as Zoom was easy to deploy and use. Videoconferencing and call quality improved, benefiting customer relationships and employee satisfaction. Sales professionals needed fewer interactions with customers to make a sale, while the IT department became more efficient, using Zoom for virtual help desk operations. Lastly, decision-makers' firms saved up to tens of millions of dollars annually from decommissioning legacy video

and telephony solutions, while reducing costs related to employee-expensed personal Zoom accounts and employee travel.

KEY FINDINGS

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

Boosted employee productivity by up to 52
 minutes per employee per week. Zoom's ease
 of use, even for novices, helped employees
 adopt and begin using Zoom at a faster rate than
 prior solutions. This meant employees recouped
 productivity for meetings that were often skipped
 due to the difficulty of setting up prior solutions.
 Additionally, Zoom Rooms removed the delays
 caused by prior conference room video solutions'
 technical issues, making meetings more
 productive.

"After deployment, Zoom was heralded big-time internally, from the CEO on down. To be honest, it probably saved the CIO's job."

VP of IT, IT services

- Improved time-to-value of sales by 70%. Zoom enabled sales professionals to be more efficient with their customer calls, and the personalized nature of videoconferencing helped them close deals 70% faster than in their prior environment. Salespeople could then use recouped time for additional sales efforts, improving the profitability of their organizations.
- Reduced time for help desk to troubleshoot employee technology issues by 75%. Zoom also enabled organizations to set up a videoconference-based virtual help desk. This

allowed employees with technology issues to reach out to IT sooner and get their issue resolved 75% faster than they had prior to using Zoom. This not only saved time costs for IT but also boosted the productivity of employees, who could return to work faster. These savings were based only on Zoom's current offering and not on the upcoming Zoom Contact Center solution.

- Reduced redundant solution and travel expenses by nearly \$4 million annually. Zoom also enabled the decision-makers' organizations to save costs on several ongoing expenses, including:
 - Decommissioning multiple solutions for videoconferencing and telephony, saving millions of dollars annually.
 - Replacing preexisting, companyexpensed personal Zoom accounts, saving tens of thousands of dollars annually and improving compliance by reducing shadow IT.
 - Reducing travel expenses as much as \$1.9 million annually for one decisionmakers' firm.

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

- Fast adoption. Zoom was easier and quicker for employees to get up and running. This led to wider and faster adoption of Zoom when compared with prior solutions. The executive director from a financial services firm shared that after two months, they had 250,000 meetings and 25 million minutes on Zoom daily.
- Improved customer satisfaction and support.
 Zoom enabled organizations to improve their customer satisfaction and customer support operations by providing video-first interactions

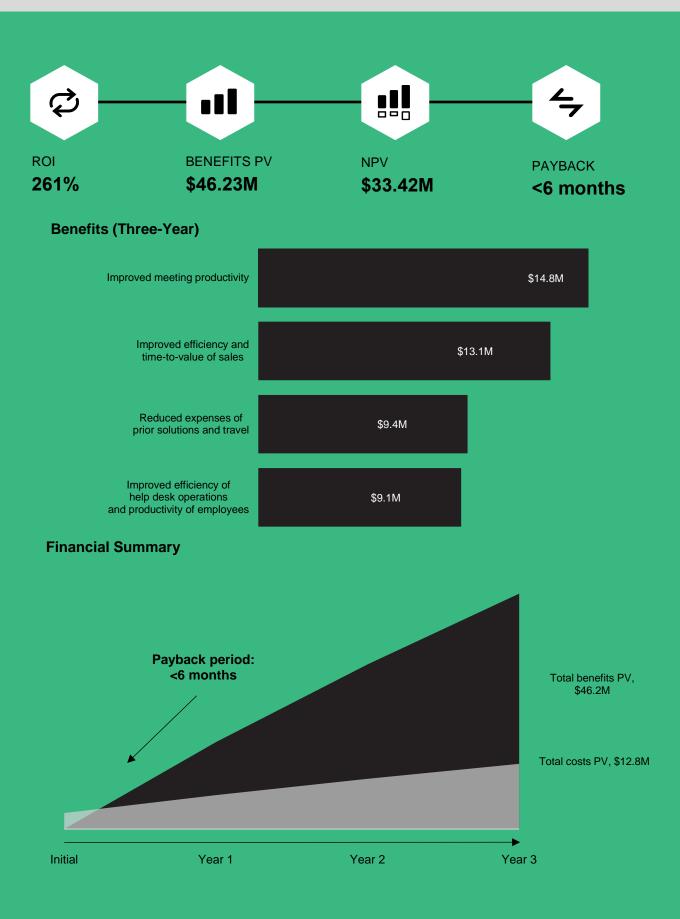
and better visibility into call center data for individual business units.

- Improved organizational resilience. With Zoom, organizations maintained operations and a consistent level of employee and IT productivity, even as these organizations shifted operations to remote or hybrid setups during the COVID-19 pandemic.
- Improved security and compliance. Investing in a corporate-level Zoom deployment also helped the decision-makers' firms reduce the prevalence of shadow IT, ensuring compliance with company and regulatory requirements.
- Zoom support. Zoom's support professionals not only helped organizations with their change management practices after implementing Zoom but also helped one customer integrate their preferred solutions into Zoom.

Costs. Risk-adjusted PV costs include:

- Licensing costs. Zoom solutions are charged on a per-user monthly basis. For the composite, with 18,000 Zoom Meetings and Zoom Chat users and 10,000 Zoom Phone users, licensing amounts to less than \$2.7 million annually. Zoom Rooms is priced at an additional \$45 per room per month.
- Implementation and deployment costs.
 Implementation and deployment for Zoom
 Meetings and Zoom Phone took approximately
 one month for four FTEs. Zoom Rooms had
 additional internal time costs for its deployment.
- Costs of training and ongoing management. Customers reported needing one hour to train employees on the new Zoom deployments. They also assigned several employees to manage Zoom on an ongoing basis. Ongoing management costs depended heavily on the number and type of Zoom solutions deployed.

The decision-maker interviews and financial analysis found that a composite organization experiences benefits of \$46.23 million over three years versus costs of \$12.81 million, adding up to a net present value (NPV) of \$33.42 million and an ROI of 261%.



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 Zoom's unified communications platform.

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 Zoom's unified communications platform can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Zoom 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 Zoom's unified communications platform.

Zoom 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.

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



DUE DILIGENCE

Interviewed Zoom stakeholders and Forrester analysts to gather data relative to Zoom's unified communications platform.

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DECISION-MAKER INTERVIEWS

Interviewed one decision-maker each at four organizations using Zoom's unified communications platform to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the decision-makers' 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 Zoom Customer Journey

Drivers leading to the investment in Zoom's unified communications platform

Interviewed Decision-Makers						
Decision-Maker	Industry	Region	Zoom Solutions And Users			
Senior director	Logistics	Global	4,500 Zoom Meetings users 2,800 Zoom Phone users 80 Zoom Rooms			
VP of IT	IT services	Global	11,000 Zoom Meetings users 8,000 Zoom Phone users			
VP	Financial services	North America	50,000 Zoom Meetings users 18,000 Zoom Phone users			
Executive director	Financial services	Global	278,000 Zoom Meetings users			

KEY CHALLENGES

Before deploying Zoom for unified communications, the decision-makers' organizations used competing videoconferencing and telephony solutions. In the case of videoconferencing, many of the organizations had invested in multiple solutions, with one organization paying for as many as four videoconferencing tools.

Despite the varied sizes of their organizations, the decision-makers noted how their firms struggled with common challenges, including:

 High costs of videoconferencing and telephony. The decision-makers shared that their organizations experienced high costs associated with their legacy videoconferencing and telephony solutions. For example, the VP from the financial services firm shared that their homegrown video solution was the number one IT cost within their \$21 billion and 50,000employee organization. Other decision-makers noted that their high costs came from investing in multiple conferencing solutions and the time cost for internal resources to maintain and troubleshoot these multiple solutions. Lastly, decision-makers consistently shared high expenses related to telephony, with annual costs of \$8 million for one firm and nearly \$20 million for another.

Poor connection and software quality. The decision-makers noted that their prior solutions lacked the quality of connectivity they desired. The VP of IT from the IT services firm shared that the prior solution led to widespread employee dissatisfaction, which was consistently expressed in employee surveys. Poor connection quality also had a negative impact on customer relationships. These prior solutions also suffered from poor software quality. The executive director from the financial services firm noted that its prior solution's coding was buggy, leading to extensive time costs for the IT team to troubleshoot.

"Before Zoom, we were paying for multiple technologies, including at least three internal solutions and two external solutions, all just for videoconferencing."

Executive director, financial services

"One time with our previous solution, our COO was dialing in to an all-hands meeting from home. The whole call was disrupted — you couldn't hear him anytime he tried to speak. Everyone was frustrated that our technology was so unreliable."

VP of IT, IT services

 Difficult to access and use. Decision-makers also reported that legacy solutions were difficult to access and use for end users. Video calls took an inordinate amount of time to set up, especially when they included external parties or required VPN or point-to-point connections to discuss sensitive material. This led to lost time, diminished productivity, and many planned meetings not even occurring.

"The difficulty using our prior solutions had a negative impact on customer and client relationships. We were getting a number of complaints and started to look unprofessional."

VP of IT, IT services

• Security concerns. Lastly, the decision-makers noted security concerns related to their prior environments. The executive director from financial services noted that its IT department was constantly patching legacy solutions for vulnerabilities and that any security concern uncovered required immediate attention.

SOLUTION REQUIREMENTS

The decision-makers' organizations searched for a solution that could:

- Be easily accessed and used by both employees and customers.
- Maintain consistently high connection quality.
- Reduce the burden on IT teams to troubleshoot bugs and remediate security vulnerabilities.
- Replace multiple solutions with a single platform for videoconferencing, telephony, board meetings, sales calls, analyst calls, webinars, and even virtual IT help desks and customer service.

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 four decision-makers 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 is a global B2B organization with 20,000 employees that generates \$8 billion in revenue annually. It engages in high-service sales processes that require salespeople to communicate directly with current and potential clients. In addition to these sales meetings and regular employee meetings, the composite also plans to use Zoom for board meetings, financial analyst calls, recruiting interviews, new-employee benefits meetings, webinars, customer support, and IT help desk calls, as the interviewed customers did as well.

Deployment characteristics. The composite replaces existing videoconferencing, telephony, and conference room video solutions with Zoom. The composite deploys Zoom Meetings to 90% of its employee base, or 18,000 end users. It deploys Zoom Phone to 50% of employees, or 10,000 end users. It also sets up 300 Zoom Rooms in conference rooms throughout its global offices.

Key assumptions

- \$8 billion in annual revenue
- 20,000 employees
- 90% Zoom meetings users
- 50% Zoom Phone users
- 300 Zoom Rooms

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 meeting productivity	\$6,117,750	\$5,826,150	\$5,826,150	\$17,770,050	\$14,753,864			
Btr	Improved efficiency and time-to-value of sales	\$5,250,000	\$5,250,000	\$5,250,000	\$15,750,000	\$13,055,973			
Ctr	Improved efficiency of help desk operations and productivity of employees	\$3,645,000	\$3,645,000	\$3,645,000	\$10,935,000	\$9,064,576			
Dtr	Reduced expenses of redundant solutions and travel	\$3,762,000	\$3,762,000	\$3,762,000	\$11,286,000	\$9,355,537			
	Total benefits (risk-adjusted)	\$18,774,750	\$18,483,150	\$18,483,150	\$55,741,050	\$46,229,950			

IMPROVED MEETING PRODUCTIVITY

Evidence and data. Decision-makers shared that investing in Zoom helped their employees become more productive in meetings with coworkers and with external parties. When using their organizations' legacy conferencing technologies, the decisionmakers noted that technical issues consistently kept employees from holding meetings or making the most of scheduled meeting time.

"Our prior solutions had daunting setup and other processes to make sure they were security-compliant with internal standards. A lot of people just couldn't figure out all the steps to get a meeting up and running, and they would give up."

Executive director, financial services

For example, prior solutions required first-time users to request approval and then get provisioned by IT, which usually was an overnight process. The daunting nature of the setup process kept employees from using approved conferencing technologies, relying instead on solutions they downloaded from the internet or reverting to phone calls. Often, employees did not even attend scheduled meetings because of setup difficulties.

Zoom helped mitigate lost productivity from these complex setup processes. Using Zoom's just-in-time account creation feature, decision-makers noted that employees could now bypass the approval and provisioning process of their previous solutions and easily join meetings well in time for them to start. Additionally, Zoom's ease of setup enabled these organizations to expand internal adoption of videoconferencing, so that organizations could reap the productivity benefits of all the accounts they were paying for.

Decision-makers also noted that legacy video solutions in conference rooms frequently prevented meetings from being productive. Any time a conference room required the use of videoconferencing technology, these solutions required a five to 10 minutes to get up and running. Some meetings could even be delayed as much as 20 minutes if technology issues needed to be troubleshot. With Zoom Rooms, decision-makers' organizations no longer experienced meeting delays from technology setup.

"We've been very happy with the user experience with Zoom. We have very talented people, and when they're given the right tools, like Zoom, they're far more productive."

VP of IT, IT services

Although it was difficult for them to quantify, the interviewed decision-makers also noted that Zoom further enabled employee productivity because employees could easily connect from any device, anywhere, anytime, with less difficulty than with other solutions. Employees could schedule and hold meetings while they were traveling for work or working from home.

Added productivity per employee:



Up to 52 minutes per week

Anywhere, anytime connectivity also increased employee collaboration. With Zoom, employees could more easily and frequently connect with their coworkers, whether in the same large building, in different buildings, or even on different continents.

"The ability to connect anywhere from any device at any time has been huge for us."

VP, financial services

Modeling and assumptions. For the composite organization, Forrester assumes:

- Ninety percent of the organization's 20,000 employees, or 18,000 individuals, have paid corporate Zoom accounts.
- Each employee recoups 30 minutes of productive meeting time the first time they sign in thanks to Zoom's just-in-time account creation.
- There is an average 10% annual employee turnover rate.
- The average fully burdened hourly rate of these employees is \$40.
- Seventy-five percent of all employees, or 15,000 individuals, engage in meetings in conference rooms regularly.
- Before deploying Zoom Rooms, these employees experienced a delay to an average of one meeting daily due to technical issues.
- Sixty-seven percent of meetings before deploying Zoom Rooms experienced a short delay of 7 minutes, on average.
- Thirty-three percent of these meetings experienced a long delay of 17 minutes, on average.
- Employee productivity was recouped at a rate of 25%.

Risks. The improvement to meeting productivity will vary with:

- The number of employees with corporate Zoom accounts.
- The number of employees engaging in in-person meetings.
- The length and number of prior delays to these meetings due to technical issues.

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 nearly \$14.8 million.

Impr	oved Meeting Productivity				
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Total employees	Composite	20,000	20,000	20,000
A2	New employees due to turnover	Composite	0	2,000	2,000
A3	Percentage of employees with Zoom accounts	Composite	90%	90%	90%
A4	Average hours recouped from just-in-time account creation	Composite	0.5	0.5	0.5
A5	Fully burdened hourly rate per general employee	TEI standard	\$40	\$40	\$40
A6	Subtotal: improved productivity from just-in-time account creation	A1*A3*A4*A5	\$360,000	\$36,000	\$36,000
A7	Percentage of employees regularly engaging in meetings in conference rooms	Composite	75%	75%	75%
A8	Prior number of annual meetings with short delays	Composite (67%*250)	168	168	168
A9	Minutes recouped from short delays with Zoom Rooms	Interviews	7	7	7
A10	Percentage of meetings with lengthy delays	Interviews (33%*250)	83	83	83
A11	Minutes recouped from longer with Zoom Rooms	Interviews	17	17	17
A12	Productivity recapture rate	TEI standard	25%	25%	25%
A13	Subtotal: improved productivity from Zoom Rooms	((A6*A7*A8*A9)+ (A6*A7*A10*A11))* (A5/60)*A12	\$6,437,500	\$6,437,500	\$6,437,500
At	Improved meeting productivity	A6+A13	\$6,797,500	\$6,473,500	\$6,473,500
	Risk adjustment	↓10%			
Atr	Improved meeting productivity (risk-adjusted)		\$6,117,750	\$5,826,150	\$5,826,150
	Three-year total: \$17,770,050	Three	e-year present va	llue: \$14,753,864	

IMPROVED TIME-TO-VALUE OF SALES

Evidence and data. The interviewed decisionmakers shared that Zoom enabled their organizations to improve sales performance. Thanks to the ease of connecting over Zoom and the value of connecting over video versus dial-in audio only, the decisionmakers attributed to Zoom an improvement in the time-to-value of sales.

For example, the VP at a financial services firm shared that before Zoom it took sales professionals anywhere from three to seven interactions to close a deal with a client. With Zoom, this number dropped by between 66% and 86% to a single interaction.

Zoom also enabled and accelerated sales by allowing multiple stakeholders to be present or pulled into meetings at short notice. For example, the same VP shared: "Before Zoom, we would meet with a client on-site or have a phone call, and often they would need to check with another stakeholder in order to close the deal. This could extend the single planned interaction out into multiple [interactions]. With Zoom, we just plan to have the additional stakeholder in the meeting, or they can join on short notice."

Improved time-to-value of sales:

70%



Modeling and assumptions. For the composite organization, Forrester assumes:

- The organization has a conservative total of 100 salespeople, all with Zoom accounts.
- Before Zoom, salespeople engaged in an average of five interactions with clients before a sale was made.

"Using the phone, it used to take between three and seven interactions to get a customer signed up. With Zoom, they're doing it in one interaction, and often getting other stakeholders on the call in real time to sort out any delays."

VP, financial services

- Zoom reduces the number of interactions to complete a sale by 70%.
- This additional time gained is reinvested in additional sales interactions with other clients. It takes approximately one week to complete the additional 3.5 interactions that sales professionals now have time for.
- An average of 10% of these additional calls result in a sale with an average value of \$25,000.
- The organization has a gross margin of 15%.

"Zoom empowers employees to do their job more efficiently and makes them faster, winning more deals."

Senior director, logistics

Risks. The improved time-to-value of sales will vary with:

• The number of sales professionals with Zoom accounts.

- The average number of interactions it takes for salespeople to close a deal.
- The choice to reinvest time savings into additional sales.
- The success rate of additional sales attempts.

- The average value of a sale.
- The organization's gross margin.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of more than \$13 million.

Improved Efficiency And Time-To-Value Of Sales

mpr	Sved Enterency And Time-TO-Value Of				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of sales professionals	Composite	100	100	100
B2	Prior number of sales interactions until action taken	Interviews	5	5	5
B3	Reduction in sales interactions with Zoom	Interviews	70%	70%	70%
B4	Reduced interactions from increased efficiency	B2*B3	3.5	3.5	3.5
B5	Additional interactions reinvested in other accounts per sales professional	B4*50 weeks	175	175	175
B6	Percentage of additional calls resulting in sales	Composite	10%	10%	10%
B7	Average revenue per sale	Composite	\$25,000	\$25,000	\$25,000
B8	Gross margin	Composite	15%	15%	15%
Bt	Improved efficiency and time-to-value of sales	B1*B5*B6*B7*B8	\$6,562,500	\$6,562,500	\$6,562,500
	Risk adjustment	↓20%			
Btr	Improved efficiency and time-to-value of sales (risk-adjusted)		\$5,250,000	\$5,250,000	\$5,250,000
	Three-year total: \$15,750,000		Three-year prese	nt value: \$13,055,97	3

IMPROVED EFFICIENCY OF HELP DESK OPERATIONS AND PRODUCTIVITY OF EMPLOYEES

Evidence and data. The decision-makers noted that they used Zoom for a variety of use cases beyond ordinary work meetings. One that consistently provided value was shifting IT help desk operations from on-site and in-person to virtual meetings via Zoom. Before Zoom, the interviewed decisionmakers' IT help desk operations required users to leave their desks to get the assistance they needed. The decision-makers noted that resolving employee issues could take anywhere between two hours and two days, depending on the urgency of the problem. With Zoom, these issues are now resolved in 30 to 60 minutes.

Decision-makers also described IT help desk improvement with Zoom when it came to remote employees. As the senior director at a logistics firm shared: "Zoom has really enabled our IT help desk to improve its customer service and user experience. For remote employees in particular, they can now see and talk to their IT support professional, which makes the interaction better for both of them. They no longer wait in a phone queue listening to elevator music."

Modeling and assumptions. For the composite organization, Forrester assumes:

- Each employee that now has a Zoom account used to experience two technological issues annually that required assistance from the IT help desk team when using prior solutions.
- Before deploying Zoom, these issues would take an average of 3 hours to resolve.
- Using Zoom for virtual help desk operations, these issues are now resolved in 45 minutes on average, a reduction of 75%.
- The IT help desk spends 50% of this time troubleshooting the issue while the remainder is wait time for the end user.
- The average fully burdened hourly rate for IT professionals is \$60.
- The productivity recapture rate for each end user is 50%.

Reduced time to resolve IT issues:

75%



"Our help desk's costs have dropped by over 50%, with Zoom responsible for 10% to 15% of those savings."

VP of IT, IT services

Risks. The improved efficiency of help desk operations and the resulting improved productivity of employees will vary with:

- The total number of Zoom users.
- The average number of IT issues that require IT help desk support.
- The percentage of resolution time that is IT labor time versus wait time for the end user.
- The fully burdened hourly rate of IT employees.
- The ability for employees to use their recouped time productively.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of almost \$9.1 million.

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Total Zoom users	Composite	18,000	18,000	18,000
C2	Average number of IT issues per employee annually	Composite	2	2	2
C3	Prior hours to resolution of IT issue	Interviews	3	3	3
C4	New hours to resolution of IT issue	Interviews	0.75	0.75	0.75
C5	Fully burdened hourly rate of IT help desk employee	TEI standard	\$60	\$60	\$60
C6	Percentage of time spent working	Composite	50%	50%	50%
C7	Subtotal: improved IT efficiency	C1*C2*(C3-C4)* C5*C6	\$2,430,000	\$2,430,000	\$2,430,000
C8	Fully burdened hourly rate per general employee	A7	\$40	\$40	\$40
C9	Productivity recapture rate	TEI standard	50%	50%	50%
C10	Subtotal: improved employee productivity	C1*C2*(C3-C4)* C8*C9	\$1,620,000	\$1,620,000	\$1,620,000
Ct	Improved efficiency of help desk operations and productivity of employees	C7+C10	\$4,050,000	\$4,050,000	\$4,050,000
	Risk adjustment	↓10%			
Ctr	Improved efficiency of help desk operations and productivity of employees (risk-adjusted)		\$3,645,000	\$3,645,000	\$3,645,000
	Three-year total: \$10,935,000		Three-year prese	nt value: \$9,064,57	6

REDUCED EXPENSES OF REDUNDANT SOLUTIONS AND TRAVEL

Evidence and data. Interviewed decision-makers shared that Zoom enabled their organizations to save on technology expenses by decommissioning their legacy solutions, negating the need for preexisting, employee-expensed Zoom accounts and reducing travel expenses. Zoom enabled most organizations to mostly or completely decommission their prior videoconferencing technologies. The decisionmakers shared decommissioning the below videoconferencing technologies and their associated savings:

 Internal videoconferencing tool at \$10 million savings annually, including labor (VP, financial services).

- External videoconferencing tool at \$8 million savings annually, including labor (VP, financial services).
- Hosted internal videoconferencing tool at \$6 million savings annually, including labor (executive director, financial services).
- Two external videoconferencing tools at \$900,000 savings annually, including labor (executive director, financial services).

The decision-makers whose organizations deployed Zoom Phone also described decommissioning their prior telephony solutions. With Zoom Phone:

 The VP at a financial services organization saved \$45 million over four years.

- The executive director at a financial services organization saved \$17 million annually.
- The senior director at a logistics company saved \$500,000 annually.

Additionally, Zoom Rooms enabled the senior director from the logistics firm to save gross costs related to conference room video solutions valued at upward of \$15,000 per month per room.

"Right off the bat, Zoom Rooms deployments were costing us 50% less than our prior setup."

Senior director, logistics

Beyond prior technologies, deploying Zoom also saved the decision-makers' organizations expenses related to travel and preexisting, employee-expensed Zoom accounts. With the latter, the executive director from financial services noted saving \$20 per month on 2,100 accounts, or more than \$500,000 annually. Importantly, this reduction also helped to improve the organization's security and compliance to an unquantified degree by reducing the prevalence of shadow IT and improving compliance with corporate and regulatory requirements.

For travel, the senior director for the logistics firm shared reducing these expenses by \$1.9 million, even before the COVID-19 pandemic, the responsibility for which he attributed 75% to 80% to Zoom. **Modeling and assumptions.** For the composite organization, Forrester assumes the following:

- Prior annual costs of decommissioned video infrastructure and software and telephony infrastructure and software of \$3.4 million.
- An eliminated cost from employees expensing their own individually purchased Zoom accounts valued at a total of \$20,000 annually.
- Reduced travel expenses of \$760,000 annually.

Risks. The reduction in expenses from prior solutions and travel will vary with:

- The total cost of prior video and telephony solutions and the percentage of these solutions decommissioned after deploying Zoom.
- The number of employees who previously expensed their individual Zoom accounts.
- The choice to reduce travel in favor of Zoom meetings and the resulting expense reduction.

"After deploying Zoom, our travel costs dropped by almost \$2 million. Not all of that is attributable to Zoom, but at least 75% is."

Senior director, logistics

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of close to \$9.4 million.

Redu	Reduced Expenses Of Redundant Solutions And Travel								
Ref.	Metric	Source	Year 1	Year 2	Year 3				
D1	Reduced cost of prior solutions	Interviews	\$3,400,000	\$3,400,000	\$3,400,000				
D2	Reduced pre-existing employee-expensed Zoom costs	Interviews	\$20,000	\$20,000	\$20,000				
D3	Reduced travel expenses	Interviews	\$760,000	\$760,000	\$760,000				
Dt	Reduced expenses of redundant solutions and travel	D1+D2+D3	\$4,180,000	\$4,180,000	\$4,180,000				
	Risk adjustment	↓10%							
Dtr	Reduced expenses of redundant solutions and travel (risk-adjusted)		\$3,762,000	\$3,762,000	\$3,762,000				
	Three-year total: \$11,286,000		Three-year prese	ent value: \$9,355,53	7				

UNQUANTIFIED BENEFITS

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

 Fast adoption rate. Decision-makers noted that Zoom's ease of use quickly led to widespread adoption compared to prior solutions that were used less broadly and took longer to adopt. The senior director from logistics said: "Because of Zoom's ease of use because it's frictionless, and [because] it works consistently, use exploded after deployment. We didn't need to build a big team to deploy at mass scale." The executive director from a financial services firm noted reaching 250,000 daily meetings and 25 million daily minutes on Zoom after only two months.

"Thanks to quick implementation and ease of use, our adoption rate was extremely high over a very short period of time."

VP of IT, IT services

- Improved customer satisfaction and customer relationships. The decision-makers shared that implementing Zoom enabled their organizations to establish better relationships with customers, improving customer satisfaction. The executive director from financial services said: "For our high-net-worth individuals, they don't want to do audio calls anymore. They want video. And we've found it provides overall better service to speak face to face."
- Improved customer support. Similarly, the interviewed decision-makers noted that Zoom Phone benefits call centers by providing better customer support and reducing an unquantified amount of costs. The senior director from logistics said: "Not only does combining video with voice provide a more personal approach to our customers, we've also been able to get deeper visibility into the call center data for our individual business units with Zoom Phone. Combined, this has helped stem customer defection and improve customer retention. Also, we haven't had to change any of our advertised local numbers after implementing Zoom Phone."

These results are based on using Zoom Phone for customer contact use cases, not on using the upcoming Zoom Contact Center solution.

"I get nonstop accolades about Zoom, about the support we've given folks with Zoom."

VP, financial services

 Improved employee satisfaction. The decisionmakers consistently said that Zoom's ease of use improved employee satisfaction. For example, the VP from the financial services industry shared that Zoom's ease of use made it the consistently highest-rated technology in employee surveys.

"One employee came to me and said, 'This is the first time the tech in my work life is on par with the tech in my personal life.""

Executive director, financial services

 Improved employee collaboration. Zoom also enabled employees at the decision-makers' organizations to better and more frequently engage with one another, improving collaboration. The executive director from financial services said: "Our workforce is distributed, and Zoom lets us connect from anywhere. Whether it's different buildings or working from home, we stay connected and ultimately collaborate more." "Zoom is doing a lot more for bringing together a very geographically dispersed workforce really seamlessly."

Executive director, financial services

- Improved security and compliance. The decision-makers also noted that investing in Zoom helped their organizations become more secure by reducing the prevalence of shadow IT internally. Employees frequently downloaded Zoom instead of the prior corporate-approved solution. The VP from financial services shared, "Before our corporate Zoom account, people were going out, downloading, and sometimes buying their own personal Zoom accounts without permission."
- Automated deployment of Zoom Phone. Those customers whose organizations deployed Zoom Phone also noted that the costs of deployment were much lower than for their prior telephony solutions. Cost savings accrued thanks to Zoom Phone's automated configuration feature. Not only did Zoom support some decision-makers' legacy phones and other connected devices, Zoom Phone automatically configured these devices via the cloud. Prior solutions required manual setup for every phone in use.
- Streamlined deployment of Zoom Rooms.
 Similarly, Zoom Rooms feature plug-and-play installation, which allowed decision-makers' organizations to deploy Zoom Rooms at a lower cost and an accelerated pace. The executive director from financial services shared that deploying Zoom Rooms was 50% cheaper than

the deployment costs of their prior conferenceroom video solution.

"Zoom was probably the most popular implementation we've done, just because it created a new capability that everybody was needing but [was] not easy to get.""

Senior director, logistics

 Enhanced support. Customers consistently considered Zoom's support an unquantified benefit they received from their investment. For example, the VP from financial services shared that out of their consideration set for videoconferencing solutions, no vendor supported integration with the firm's bring-yourown-device (BYOD) security tool. Whereas the other vendors they spoke with stated that they might consider developing an integration after six months of use, Zoom helped them integrate their preferred solution immediately.

"Zoom provided a lot of change management support. They helped make videos and communications materials. It helped with what was a big transition for us.""

VP of IT, IT services

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement Zoom's unified communications platform and later realize additional uses and business opportunities, including:

- Wide variety of use cases. Unlike their prior technologies, the decision-makers noted the breadth of use cases for which Zoom could be leveraged as a single platform. Beyond regular employee meetings, decision-makers' active Zoom use cases included:
 - Sales meetings.
 - Customer pitches.
 - Webinars.
 - Board meetings.
 - Financial analyst calls.
 - Recruiting interviews.
 - New-employee benefits meetings.
 - Customer support.
 - IT help desk calls.

"If we [had] stayed with our prior solutions, we would not have been able to do our jobs at all during the pandemic."

Executive director, financial services

 Organizational resilience. Zoom also improved the resiliency of decision-makers' firms. For example, the VP of IT from IT services said: "Zoom made it seamless for us to adopt remote work when the pandemic hit. It allowed team members and IT to be extremely collaborative and continue their work without disruption. Zoom was foundational to this."

 Seamless integrations. Decision-makers also noted Zoom's flexibility stemmed from its ability to integrate with other tools. For example, the executive director from financial services said: "A lot of our team wants to build using Zoom. For example, we're integrating Zoom into our website, document workflows, and calendaring. I have five different people wanting integrations into Zoom on any given day."

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

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs

TOLA	CUSIS						
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Total Zoom fees	\$0	\$3,082,200	\$3,082,200	\$3,082,200	\$9,246,600	\$7,664,975
Ftr	Costs of implementation and deployment	\$2,271,500	\$0	\$0	\$0	\$2,271,500	\$2,271,500
Gtr	Costs of training and ongoing management	\$864,000	\$806,400	\$806,400	\$806,400	\$3,283,200	\$2,869,397
	Total costs (risk-adjusted)	\$3,135,500	\$3,888,600	\$3,888,600	\$3,888,600	\$14,801,300	\$12,805,872

TOTAL ZOOM FEES

Evidence and data. The decision-makers described paying licensing fees for Zoom. For Zoom Meetings and Zoom Phone, licensing fees are based on the number of users each month. For Zoom Rooms, the fees are related to the number of deployed conference rooms monthly. A single Zoom Rooms license includes licensing for unlimited digital signage and scheduling displays.

Modeling and assumptions. For the composite organization, Forrester assumes:

 Total annual licensing fees for 18,000 Zoom Meetings users and 10,000 Zoom Phone users of \$2.64 million. • Three hundred Zoom Rooms at a per-room cost of \$45 monthly.

Risks. The total cost of Zoom licensing fees will vary with:

- The total number of Zoom Meetings accounts.
- The total number of Zoom Phone accounts.
- The total number of Zoom Rooms deployed.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of less than \$7.7 million.

Total	Zoom Fees					
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	Zoom Meetings and Zoom Phone fees	Interviews	\$0	\$2,640,000	\$2,640,000	\$2,640,000
E2	Zoom Rooms	Zoom	\$0	\$162,000	\$162,000	\$162,000
Et	Total Zoom fees	E1+E2	\$0	\$2,802,000	\$2,802,000	\$2,802,000
	Risk adjustment	10%				
Etr	Total Zoom fees (risk-adjusted)		\$0	\$3,082,200	\$3,082,200	\$3,082,200
Three-year total: \$9,246,600				e-year present	value: \$7,664,975	;

COSTS OF IMPLEMENTATION AND DEPLOYMENT

Evidence and data. The decision-makers shared experiencing internal time costs related to implementing and deploying Zoom Meetings, Zoom Phone, and Zoom Rooms. Their estimates for implementation and deployment time costs varied mostly due to internal operating practices rather than the size of the Zoom deployment:

- For the senior director at a logistics firm with 5,000 employees, implementation required 50% of the time of eight FTEs for two to four weeks.
- For the executive director at financial services organization with 255,000 employees, implementation took four FTEs one month.
- For the VP of IT at an IT services company with 17,000 employees, implementation required eight FTEs and one month.
- For the VP at a financial services organization with 41,000 employees, it took six months to onboard all employees and decommission all redundant solutions.

Decision-makers followed a similar approach with Zoom Meetings as they would have for rolling out any other software, including providing communications, trainings, and guides, all of which were handled by the product team that manages voice and video.

For Zoom Phone, the decision-makers experienced internal time costs related to migrating their existing configuration and processes, including porting their phone numbers with carriers, but they still managed this internally. For Zoom Rooms, decision-makers incurred internal implementation costs at an average of \$6,750 per conference room, which included equipment and labor costs. Implementation work included drilling into walls, running cable, and occasionally running electricity as well.

Modeling and assumptions. For the composite organization, Forrester assumes:

- One month to implement and deploy Zoom Meetings to 18,000 users.
- Four employees to implement and deploy Zoom Meetings.
- An average fully burdened hourly rate of \$60 for these employees.
- A cost of \$6,750 to implement and deploy each Zoom Room.

Risks. The total cost of implementation and deployment will vary with:

- The number of Zoom Meetings accounts.
- The number of Zoom Rooms and the complexity of the rooms to be enabled.
- The number of employees engaged in implementation and deployment.
- The fully burdened hourly rate of employees engaged in implementation and deployment.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of less than \$2.3 million.

Cost	s Of Implementation And Deployment					
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Hours to roll out Zoom Meetings and Zoom Phone	Interviews; 1 month	167			
F2	Employees needed to roll out Zoom Meetings	Interviews	4			
F3	Fully burdened hourly rate per employee	TEI standard	\$60			
F4	Subtotal: Zoom Meetings and Zoom Phone	F1*F2*F3	\$40,000			
F5	Total number of Zoom Rooms	Interviews	300			
F6	Average cost per Zoom Room	Interviews	\$6,750			
F7	Subtotal: Zoom Rooms	F5*F6	\$2,025,000		· ·	
Ft	Costs of implementation and deployment	F4+F7	\$2,065,000	\$0	\$0	\$0
	Risk adjustment	10%				
Ftr	Costs of implementation and deployment (risk-adjusted)		\$2,271,500	\$0	\$0	\$0
	Three-year total: \$2,271,500		Three-year	present value:	\$2,271,500	

COSTS OF TRAINING AND ONGOING MANAGEMENT

Evidence and data. The interviewed decisionmakers experienced costs related to training employees to use Zoom and managing Zoom on an ongoing basis. Training required one hour for each employee needing to be trained; ongoing management for Zoom Meetings, Zoom Phone, and Zoom Rooms required five FTEs.

Modeling and assumptions. For the composite organization, Forrester assumes:

- Each employee requires one hour of training for Zoom use at an average fully burdened hourly rate of \$40. New employees need training at an average employee turnover rate of 10% annually.
- Five FTEs manage Zoom Meetings, Zoom Phone, and Zoom Rooms on an ongoing basis.
 For Zoom Meetings and Phone, these are IT professionals. For Zoom Rooms, these are audiovisual or facilities professionals.

Risks. The total costs of training and ongoing management will vary with:

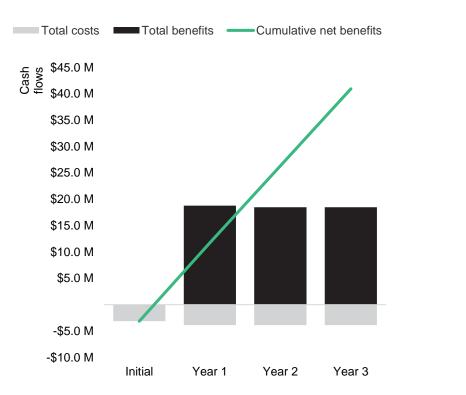
- Any potential investment in additional bandwidth or equipment from increased video usage.
- The total number of employees requiring training and their average fully burdened hourly rate.
- The number of Zoom Meetings users, Zoom Phone users, and Zoom Rooms, as well as the associated requirements to manage these solutions on an ongoing basis.

Results. To account for these risks, Forrester adjusted this cost upward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of less than \$2.9 million.

Costs Of Training And Ongoing Management								
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3		
G1	Costs of training	Interviews	\$720,000	\$72,000	\$72,000	\$72,000		
G2	Cost of ongoing management	Interviews	\$0	\$600,000	\$600,000	\$600,000		
Gt	Costs of training and ongoing management	G1+G2	\$720,000	\$672,000	\$672,000	\$672,000		
	Risk adjustment	↑20%						
Gtr	Costs of training and ongoing management (risk-adjusted)		\$864,000	\$806,400	\$806,400	\$806,400		
	Three-year total: \$3,283,200		Three	vear present va	lue: \$2,869,397			

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	(\$3,135,500)	(\$3,888,600)	(\$3,888,600)	(\$3,888,600)	(\$14,801,300)	(\$12,805,872)
Total benefits	\$0	\$18,774,750	\$18,483,150	\$18,483,150	\$55,741,050	\$46,229,950
Net benefits	(\$3,135,500)	\$14,886,150	\$14,594,550	\$14,594,550	\$40,939,750	\$33,424,078
ROI						261%
Payback (months)						<6

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 Sources are calculated for each total cost and benefit estimate. NPV Sources in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value Sources 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 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.

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