A Forrester Total Economic Impact™ Study Prepared For Mitel

The Total Economic Impact Of Mitel Virtual Solutions

Project Directors:

Michelle S. Bishop, Senior Consultant

Shaheen Parks, Senior Consultant

January 2012

FORRESTER

Headquarters | Forrester Research, Inc.
400 Technology Square, Cambridge, MA 02139 USA
Tel: +1 617.613.6000 | Fax: +1 617.613.5000 | www.forrester.com

Forrester Consulting
Making Leaders Successful Every Day

TABLE OF CONTENTS

About Forrester Consulting
Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit www.forrester.com/consulting.

Executive Summary

In October 2011, Mitel commissioned Forrester Consulting to examine the total economic impact and potential return on investment (ROI) enterprises may realize by deploying Mitel Virtual Solutions. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of deploying Mitel within their organizations.

Forrester interviewed representatives from *Organization A*, an educational organization that provides testing and certification services to state governments, other testing companies, and various public and private sector organizations. This organization, headquartered in North America, has four buildings and a fifth under construction in its corporate campus. The company also maintains 13 satellite offices throughout the United States. It is a privately held company with 600 employees.

Organization A had a 10-year-old voice over IP (VoIP) phone system that it had outgrown. It wanted to implement a unified communications (UC) system that had the flexibility and cost-effectiveness required for the organization's growth. It was also looking for a virtual solution that would maximize resources and provide almost-immediate disaster recovery in the event of failure. Upon careful evaluation, it chose not to invest additional resources in an upgrade of its old system. Instead, it considered a number of UC solutions and decided to implement Mitel, giving the educational organization the scalability to support future growth.

Mitel Virtual Solutions Brings Improved Scalability And Cost Efficiency

Forrester's Total Economic Impact™ (TEI) methodology captures and quantifies the voice of the customer relative to technology investments. In this study, we interviewed an enterprise about its experience in implementing Mitel Virtual Solutions for Unified Communications. Forrester's interviews and subsequent financial analysis found that the organization experienced the benefits, costs, and a risk-adjusted ROI summarized in Table 1.

Table 1
Three-Year Risk-Adjusted ROI

ROI	Payback period	Total benefits (PV)	Total costs (PV)	Net present value (NPV)
84%	7.8 months	$450,290	($245,140)	$205,150

Source: Forrester Research, Inc.

- **Benefits.** *Organization A* experienced the following benefits:
    - Productivity savings with UC and better user experience.
    - Cost avoidance of an alternative voice solution and corresponding annual support.

- Cost savings from utilizing SIP trunking.
- Failover savings from using software-based technology.
- Hardware and disaster recovery savings from virtualization infrastructure.
- IT administrative savings through faster recovery.
- Training cost avoidance.
- Cost savings from better scalability.
- Lower risk of loss from downtime.
- Increased flexibility for future growth and new capabilities.

- **Costs.** *Organization A* incurred the following costs:
  - Mitel software licenses and industry-standard hardware.
  - Mitel software maintenance.
  - Professional fees.
  - Labor costs for implementation.
  - Hardware costs for virtualization infrastructure.

Factors Affecting Benefits And Costs

Table 1 illustrates the risk-adjusted financial results that would be expected by the interviewed organization. The risk-adjusted values take into account *potential* uncertainty or variance in estimating the costs and benefits, with the aim of producing more conservative estimates. In that context, the following factors may affect the financial results that other organizations may experience:

- Implementation costs may vary for organizations depending on the scope of the implementation and the level of complexity of work required.
- The level of virtualization of an organization's environment may change degree of benefits achieved.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Mitel and delivered by the Forrester Consulting group.

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

TEI Framework And Methodology

Introduction

From the information provided in the interviews, Forrester has constructed a TEI framework for those organizations considering a Mitel implementation. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Approach And Methodology

Forrester took a multistep approach to evaluate the impact that Mitel Virtual Solutions can have on an organization. Specifically, we:

- Interviewed Mitel marketing and sales staff and Forrester analysts to gather data relative to Mitel and the communications software and solutions market in general.
- Interviewed a company currently using Mitel Virtual Solutions to obtain data with respect to costs, benefits, risk, and flexibility.
- Constructed a financial model representative of the interviews using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the interviews.

Forrester employed four fundamental elements of TEI in modeling the financial implications of deploying Mitel Virtual Solutions:

1. Costs.
2. Benefits to the entire organization.
3. Flexibility.
4. Risk.

Forrester's TEI methodology provides a complete picture of the total economic impact of technology investment decisions. Please see Appendix A for additional information on the TEI methodology.

Analysis

Interview Highlights

These interviews uncovered a number of important insights about the organization's experience with Mitel:

Organization A had implemented VoIP 10 years ago, but it had since outgrown its phone system. Its choices were to upgrade its current system or look at the marketplace. After researching a number of vendors in the market, it chose Mitel. Cost competitiveness and flexibility of programming were among the drivers for the organization in choosing Mitel.

- Scalability was another strong factor in its decision to go to Mitel. "With Mitel, we could manage and grow — it had everything we needed, yet it wasn't so basic that we could outgrow it in five years," the production manager for network operations said.

- *Organization A* had already implemented a virtual environment and seen the benefits of faster server restoration in instances of failure and/or maintenance from this approach. From its viewpoint, the real value of a virtual approach was to: 1) maximize resources and 2) achieve almost-immediate replication in the event of failure. Consequently, it wanted to roll out a similar approach to its voice network and looked for a solution with a strong virtual component. As it had virtualized using VMware, compatibility with VMware was also a major factor in its evaluation.

"Mitel was the only system that embraced the concept of virtual technology. It was fully functional and was, in fact, working in a virtual environment." (Production manager, network operations)

- The organization's phone system was supporting call center operations that were critical to the testing and certification services offered by the company. Consequently, it observed, "Dealing with critical systems as our telephones are, you need [recovery] immediately."

Framework Assumptions

The discount rate used in the present value (PV) and NPV calculations is 8%, and time horizon used for the financial modeling is three years. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their respective company's finance department to determine the most appropriate discount rate to use within their own organizations.

Costs

The main costs associated with the deployment of Mitel Virtual Solutions are: 1) Mitel software licenses and industry standard hardware; 2) Mitel software license maintenance fees; 3) professional fees; 4) internal labor costs for implementation; and 5) virtualization hardware costs.

Mitel Software Licenses And Hardware

The organization implemented Virtual Mitel Communications Director, Virtual Mitel Applications Suite, Virtual Mitel Contact Center Solutions, Virtual Mitel Border Gateway, and Virtual Mitel Unified Communicator Advanced for 400

phones. It rolled out two controllers for its system that were deployed on industry-standard servers. The total cost for the implementation's hardware and licenses was $180,000 over three years.

The organization also had sufficient VMware licenses to support the deployment, so *Organization A* did not incur additional virtualization software costs.

Mitel Software Maintenance Fees

Software maintenance fees are included in the software purchase price for Year 1, so the organization will pay $13,000 in annual software maintenance fees starting from Year 2 of its implementation.

Professional Fees

Organization A worked with a communications solutions provider that is a Mitel partner to implement the solution. The service provider initially brought in two people for a week of programming, and it brought in some additional people for the two-day deployment. The organization paid $36,000 in professional fees for implementation.

As maintenance fees for the service provider have remained the same when comparing the previous and post-Mitel environment, these professional maintenance fees are not included in the calculation.

Implementation Costs — Internal Labor

With most of the prework done by the service provider, 10 personnel from *Organization A* spent a total of 12 hours over the course of a weekend to deploy the Mitel Virtual Solution for 400 phones. At a fully loaded cost of $62,400 per full-time equivalent (FTE), the total implementation cost to the organization was $3,600.

Table 2
Implementation Costs — Internal Labor

Ref.	Metric	Calculation	Per period
A1	Number of people		10
A2	Hourly rate per FTE (fully loaded)	$62,400/2,080 hours	$30.00
A3	Hours — length of implementation		12
At	Implementation costs	A1*A2*A3	$3,600

Source: Forrester Research, Inc.

Note that calculation totals throughout the study may not reconcile because of rounding.

Hardware Virtualization Costs

Organization A estimates that out of the $35,000 in hardware that the organization had invested in its virtual environment, approximately 10% of that can be allocated to the Mitel Virtual Solution. This translates to $3,500 in hardware virtualization costs over three years.

Total Costs

The total cost of the Mitel deployment to the organization is $249,100 over a three-year analysis.

Table 3
Total Costs (Non-Risk-Adjusted)

Costs	Initial	Year 1	Year 2	Year 3	Total
Mitel hardware and licenses	$180,000				$180,000
Software license maintenance (yearly)			$13,000	$13,000	$26,000
Professional fees	$36,000				$36,000
Implementation costs	$3,600				$3,600
Virtualization cost allocation (hardware)	$3,500				$3,500
Total	($223,100)		($13,000)	($13,000)	($249,100)

Source: Forrester Research, Inc.

Benefits

In the interviews with *Organization A*, Forrester quantified these benefits: 1) end user productivity savings with UC and better user experience; 2) cost avoidance of an alternative voice solution and corresponding annual support; 3) failover savings from using software-based technology; 4) savings on training; 5) improved scalability leading to more cost-efficient disaster recovery; and 6) hardware savings from virtualization.

Other benefits include enhanced reliability, better flexibility for growth, and savings from moving to a SIP-based technology.

> *"The capabilities that Mitel had were really going to give us what we wanted to do in terms of growth potential."*
> (Production manager, network operations, educational testing and certification organization)

End User Productivity Savings With Unified Communications And Improved User Experience

With Mitel Unified Communicator Advanced, organizations have the capability to access and manage their voicemail, email, and fax messages from PCs, mobile devices, or tablets, which in turn can help simplify their day-to-day tasks and

gives these organizations the potential for end user productivity savings. Users have the capability to see that the person they are trying to contact is on the phone and have the choice to message their contacts instead. Mitel also gives end users the ability to readily conference people into audioconferencing and web collaboration.

These capabilities were some of *Organization A*'s considerations when choosing Mitel. It also acknowledged that it has yet to fully utilize these UC capabilities for the majority of its workforce, although it has seen some productivity improvements in its call center team.

> *"We were looking for a product with a strong call center component, and Mitel fit the bill."* (Production manager, network operations)

Organization A has a 25-person call center that sees high traffic during testing season. With the implementation of the Mitel Virtual Contact Center Solution, the organization observed an improvement in ease of use and management of its contact center. These benefits were centered on a better user interface (UI) and improved reporting features. The organization estimates that the easier UI has saved the five call center supervisors 30 minutes a day or 2.5 hours per week in report generation. At a fully loaded compensation of $24 per hour, this has saved the organization $15,600 per year.

In addition to these productivity savings, Mitel's contact center licenses were included in the overall Virtual Solutions licenses. The organization would have had to pay an additional $27,000 in call center management licenses for an alternative solution.

Overall call center savings to the organization through Mitel is $73,800 over a three-year analysis.

Table 4
Call Center Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
B1	Number of call center supervisors		5			
B2	Hourly rate per call center supervisor		$24.00			
B3	Number of hours (saved)	2.5 hours*52 weeks	130.0			
B4	Call center management licenses cost avoidance		$27,000	0	0	
Bt	Call center savings	(B1*B2*B3)+B4	$42,600	$15,600	$15,600	$73,800

Source: Forrester Research, Inc.

Cost Avoidance Savings — Hardware, Software, And Annual Support

By implementing Mitel to replace its previous voice system, the organization estimates that it has avoided the cost of spending $196,000 in hardware and licenses for an alternate solution as well as an additional $18,000 annually in maintenance. The total hardware, software, and maintenance cost-avoidance savings to the organization is $232,000 over a three-year period.

Table 5

Cost Avoidance — Hardware, Software, And Maintenance Fees

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
C1	Hardware and software licenses for alternative solution		$196,000			
C2	Maintenance fees for alternative solution			$18,000	$18,000	
Ct	Cost reduction — maintenance and support fees	C1+C2	$196,000	$18,000	$18,000	$232,000

Source: Forrester Research, Inc.

Savings From A Centralized Deployment Model

By implementing Mitel Virtual Solutions, the organization was able to deploy the solution in a centralized data center while still maintaining full business continuity and was able to avoid the cost of purchasing and implementing switches at its 13 satellite locations. By using Mitel's server-based and virtual solution instead of a hardware-based technology, the organization has saved $50,000.

Table 6

Savings From A Centralized Deployment Model

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
D1	Cost of switches for satellite offices		$50,000			
Dt	Cost avoidance — savings from a centralized deployment model	D1	$50,000	$0	$0	$50,000

Source: Forrester Research, Inc.

Savings From Using SIP Technology

The organization's previous voice network used PRI trunks. With *Organization A*'s move to Mitel, the organization was able to use SIP trunks instead. This saved the organization line charges of $1,000 a month for annual savings of $12,000. "Mitel's full integration with SIP technology was a major factor in choosing the Mitel product," the interviewed organization noted, adding that using SIP would have been challenging or, in some cases, a strongly discouraged option — with the other vendors it considered. "We were looking at using that technology, but everyone we talked to told us SIP wasn't ready for prime time." The organization was encouraged by Mitel's integrated SIP-based solution deployable in a virtualized data center and by talking to existing Mitel clients that had successfully deployed and implemented SIP technology.

Table 7
Savings From Using SIP Technology

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
E1	Monthly savings		$1,000			
E2	Number of months		12			
Et	SIP technology savings	E1*E2	$12,000	$12,000	$12,000	$36,000

Source: Forrester Research, Inc.

Hardware And Disaster Recovery Savings Because Of Virtualization

Without Mitel Virtual Solutions, the organization estimated that it would have had to purchase two additional servers at a cost of $5,000 per server to support the new voice system. To provide failover services for those two servers, the organization would have had to either purchase an additional server or buy failover services with a vendor to provide a hot-swappable server replacement within a 3-hour response time. These failover services would have cost the organization an additional $10,000 per year. Total hardware savings to the organization as a result of virtualization is $40,000 over three years.

Table 8
Server Hardware And Disaster Recovery Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
F1	Hardware and software licenses for alternative solution		$10,000			
F2	Maintenance fees for alternative solution		$10,000	$10,000	$10,000	
Ft	Server and disaster recovery savings	F1+F2	$20,000	$10,000	$10,000	$40,000

Source: Forrester Research, Inc.

IT Administration Savings — Recovery

In its previous environment, *Organization A* observed that "restoring the phone system when something goes wrong was manual and slow." The Mitel system takes advantage of VMware High Availability, so that system recovery that took 12 hours for one FTE on its old system now only took 15 minutes at most. This represents a 98% reduction in IT administrative time spent on phone system recovery through Mitel. Assuming two incidents annually, the organization saves 23.5 man-hours per year in recovery effort. At a fully loaded compensation of $50 per hour for an IT engineer, the organization will see IT administrative savings for recovery of $3,525 over a three-year analysis.

Table 9
IT Administrative Savings — Recovery

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
G1	Number of workers		1			
G2	Hourly rate per worker		$50			
G3	Number of hours (saved)	12 hrs. - 15 min.	11.75			
G4	Number of incidents per year		2			
Gt	Server and disaster recovery savings	G1*G2*G3*G4	$1,175	$1,175	$1,175	$3,525

Source: Forrester Research, Inc.

Lowering The Risk Of Loss From Downtime

The generally accepted method of valuing risk of losses from external and internal incidents is to look at an amount of potential loss, assume a frequency of loss, and estimate a probability for incurring the loss. *Organization A* noted that should its phone systems go down at certain critical times, such as when several clients are in the middle of testing, the organization could be liable for at least half a million dollars in fines. To be conservative, this number does not include the amount associated with remediation associated with loss of reputation and brand equity.

By choosing the Mitel solution where recovery is now faster in a virtualized environment, *Organization A* is able to minimize this loss. As the production manager for network operations observed: "That's why you buy insurance. We don't want that [phone system] crash. We wanted to choose a system that would minimize that potential and enable us to take the steps to recovery quickly. Mitel was the only one."

Conservatively assuming there is a 5% probability of downtime to occur at critical times with a potential $500,000 in penalties, the resulting avoided cost is $25,000 annually. Users of this study are encouraged to use this method with their own assumptions for potential penalty amounts, frequency, and probability.

Table 10

Lower Risk Of Loss From Downtime

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
H1	Potential exposure — most likely		$500,000			
H2	Probability of loss		5%			
Ht	Reduced risk of loss from downtime	H1*H2	$25,000	$25,000	$25,000	$75,000

Source: Forrester Research, Inc.

Training Cost Avoidance

Organization A observed that Mitel's phone system solution was easy to manage and grow with the current skill set of its operations workforce. "We liked that we could program [Mitel] without sending somebody out to get a four year degree in switch management," the production manager added. The organization estimated that by choosing Mitel instead of various alternative solutions, it has saved $10,000 in system management training for one FTE.

Table 11
Cost Avoidance — Training

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
I1	Cost of system management training for alternative solution		$10,000			
It	Cost avoidance — training fees	I1	$10,000	$0	$0	$10,000

Source: Forrester Research, Inc.

Cost Savings From Scalability

Organization A also noted that it chose to work with Mitel as it gave it better scalability in terms of the organization's growth. Its current server configuration with Mitel has the capacity to support 1,000 users at no additional hardware cost. It could also grow to 2,500 users with the addition of one more controller. Without Mitel, the organization noted that it would have to substantially invest in more hardware to support the same number of users.

The organization estimates that it has saved $10,000 in hardware for future growth by choosing the Mitel solution. The Forrester TEI financial model conservatively assumes that there is a 50% chance that the organization will grow to 1,000 users within three years. The total cost savings from improved scalability to the organization is $5,000 over a three-year analysis.

Table 12
Scalability Cost Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
J1	Hardware cost avoidance at 1,000 users				$10,000	
J2	Probability of growth				50%	
Jt	Scalability cost savings	J1*J2	$0	$0	$5,000	$5,000

Source: Forrester Research, Inc.

Total Benefits

Table 13 summarizes the quantified benefits from the organization's investment in Mitel's Virtual Solutions portfolio.

Table 13
Total Benefits (Non-Risk-Adjusted)

Benefits	Initial	Year 1	Year 2	Year 3	Total
Call center savings		$42,600	$15,600	$15,600	$73,800
Cost avoidance of alternative solution — hardware		$196,000	$18,000	$18,000	$232,000
Cost avoidance of a centralized deployment model		$50,000			$50,000
Savings from SIP technology		$12,000	$12,000	$12,000	$36,000
Hardware and disaster recovery savings from virtualization		$20,000	$10,000	$10,000	$40,000
IT administrative savings — recovery		$1,175	$1,175	$1,175	$3,525
Cost avoidance — training		$10,000			$10,000
Hardware savings from improved scalability				$5,000	$5,000
Lowering the risk of loss from downtime		$25,000	$25,000	$25,000	$75,000
Total		$356,775	$81,775	$86,775	$525,325

Source: Forrester Research, Inc.

Other Benefits Not Quantified

Other qualitative benefits cited by the companies interviewed but not quantified in this study include:

Increased Flexibility

Organization A noted that Mitel's capabilities gave it a lot of flexibility for new projects in the future. This would include the ability to implement mobile solutions to extend the corporate UC solution to its operation team's mobile devices. Another possible project was enabling remote-worker setups to give its call center personnel the ability to work from home. It also liked the fact that it had the opportunity in the future to use APIs to customize the Mitel solution and develop plug-ins as well as take advantage of Mitel's compatibility with a virtualized desktop.

Flexibility

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for some future additional investment. This provides an organization with the "right" or the ability to engage in future initiatives but not the obligation to do so. From our interviews, we've found that there are multiple scenarios in which a customer can deploy Mitel and later realize additional uses and business opportunities.

Although data for calculating the value of these flexibility options was insufficient when this study was conducted, our interviews identified areas that could produce flexibility options based on next-stage real options that have been described by the organization interviewed:

- *Organization A* can realize cost savings in the future when it chooses to fully utilize Mitel's mobile capabilities. The organization's production and network operations team uses smartphones, and with the Mitel implementation, it has the capability to set up these mobile devices as an extension of its employees' desk phones. This mobility strategy would bring additional productivity savings and faster responsiveness to the organization.
- Mitel also has the capability to provide *Organization A*'s employees with the ability to work from anywhere with a mobile solution. The organization noted that part of its disaster recovery plan for its phone system was to choose a system that would give it a work-at-home option particularly for its call center. Should the organization choose to implement this project in the future, it could potentially achieve more productivity savings and cost avoidance savings around SLA penalties.
- Should the organization choose to use Mitel's capability for conferencing and migrate these services from its current third-party carrier, *Organization A* also has the potential to realize lower operational costs for conferencing.

The value of flexibility is unique to each organization, and the willingness to measure its value varies from company to company (see Appendix B for additional information regarding the flexibility calculation).

Risk

Forrester defines two types of risk associated with this analysis: implementation risk and impact risk. "Implementation risk" is the risk that a proposed investment in Mitel may deviate from the original or expected requirements, resulting in higher costs than anticipated. "Impact risk" refers to the risk that the business or technology needs of *Organization A* may not be met by the investment in Mitel, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

Quantitatively capturing implementation and risk by directly adjusting the financial estimates results in more meaningful and accurate estimates and a more accurate projection of the ROI. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates. The risk-adjusted numbers should be taken as "realistic" expectations, as they represent the expected values considering risk.

The following implementation risk that affects costs is identified as part of this analysis:

- Internal labor needed for implementation and support may exceed initial estimates.

The following impact risks that affect benefits are identified as part of this analysis:

- Variability in end user productivity savings depending on the implementation of the call center management applications and the previous environment.
- Variability in cost avoidance and cost reduction savings based on the level of virtualization of an organization.

Table 14 shows the values used to adjust for risk and uncertainty in the cost and benefit estimates. The TEI model uses a triangular distribution method to calculate risk-adjusted values. To construct the distribution, it is necessary to first estimate the low, most likely, and high values that could occur within the current environment. The risk-adjusted value is the mean of the distribution of those points. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Table 14
Cost And Benefit Risk Adjustments

Costs	Low	Most likely	High	Mean
Mitel hardware and licenses	100%	100%	100%	100%
Mitel software license maintenance (yearly)	100%	100%	100%	100%
Professional fees	98%	100%	105%	101%
Implementation costs	100%	100%	115%	105%
Virtualization cost allocation (hardware)	98%	100%	105%	101%
Benefits	**Low**	**Most likely**	**High**	**Mean**
End user productivity savings	90%	100%	105%	98%
Cost avoidance of alternative solution — hardware	90%	100%	105%	98%
Cost savings from a centralized deployment	90%	100%	105%	98%
SIP technology savings	90%	100%	105%	98%
Hardware and disaster recovery savings from virtualization	90%	100%	105%	98%
IT administrative savings — recovery	90%	100%	105%	98%
Cost avoidance — training	90%	100%	105%	98%
Scalability cost savings	90%	100%	105%	98%
Lower risk of downtime loss	50%	100%	100%	83%

Source: Forrester Research, Inc.

Financial Summary

The financial results calculated in the Costs and Benefits sections can be used to determine the ROI, NPV, and payback period for the organization's investment in Mitel. These are shown in Table 15 below.

Table 15
Cash Flow — Non-Risk-Adjusted

Cash flow — original estimates						
	Initial	Year 1	Year 2	Year 3	Total	PV
Costs	($223,100)	$0	($13,000)	($13,000)	($249,100)	($244,565)
Benefits	$0	$356,775	$81,775	$86,775	$525,325	$469,341
Net benefits		$356,775	$68,775	$73,775	$276,225	$224,776
ROI	92%					
Payback period	7.5 months					

Source: Forrester Research, Inc.

Table 16 below shows the risk-adjusted ROI, NPV, and payback period. These values are determined by applying the risk-adjustment values from Table 14 in the Risk section to the cost and benefits numbers in Tables 3 and 13.

Table 16
Cash Flow — Risk-Adjusted

Cash flow — risk-adjusted estimates						
	Initial	Year 1	Year 2	Year 3	Total	PV
Costs	($223,675)	$0	($13,000)	($13,000)	($249,675)	($245,140)
Benefits	$0	$345,890	$76,390	$81,290	$503,569	$450,290
Net benefits		$345,890	$63,390	$68,290	$253,894	$205,150
ROI	84%					
Payback period	7.8 months					

Source: Forrester Research, Inc.

The data collected in this study indicates that deploying Mitel has the potential to provide a solid ROI through quantifiable cost avoidance savings, hardware and IT administration savings through virtualization, and productivity benefits. The risk-adjusted ROI of 84%, along with a payback period (breakeven point) of 7.8 months, raises confidence that the investment is likely to produce a positive outcome, especially after the risks and uncertainty that may affect the project have been considered, quantified, and incorporated into the business case.

In interviews with a Mitel customer, Forrester found that organizations can realize benefits in the form of:

- End user productivity savings with UC and better user experience.
- Cost avoidance of an alternative voice solution and corresponding annual support.
- Communications cost savings from utilizing SIP trunking technology.
- Failover savings from using software-based technology.
- Hardware and disaster recover savings from virtualization.
- IT administrative savings through faster recovery.
- Training cost avoidance.
- Cost savings from better scalability.
- Lower risk of loss from downtime.
- Increased flexibility.

Based on these findings, companies looking to implement Mitel can anticipate cost avoidance savings, hardware and IT administration cost savings through virtualization, improved call center productivity, and improved scalability. Using the TEI framework, many companies may find a potentially compelling business case to make such an investment.

Mitel: Overview

According to Mitel, Mitel provides businesses of all sizes with communications solutions that deliver enriched collaboration and productivity, unprecedented operating cost savings, simplified IT management, and enhanced security and business continuity. Mitel Virtual Solutions are part of the Mitel Freedom Architecture, designed to ensure that organizations can deploy UC — including virtualized UC — on existing infrastructures, and that they don't have to rely on any one vendor for an end-to-end, single-source UC solution.

The Mitel Freedom Architecture provides:

- **A single, cloud-ready software stream.** It's a software-based UC solution that plugs into existing IT frameworks without needing manufacturer-dependent hardware or relying on one vendor for an end-to-end, single-source UC solution.
- **Freedom from walled-garden architecture.** It fits with your existing network, processes, and other business applications.
- **An in-office experience anywhere.** Mobility solutions ensure that employees can be productive regardless of their location or device.

By deploying the Freedom Architecture-based Virtual Mitel Communications Director (vMCD), the industry's first fully virtualized voice processing software application, organizations add all of the benefits of data center virtualization to their voice communications, including reduced capital expenditures and operational and maintenance costs.

Built on a tightly integrated partnership with virtualization leader VMware, Mitel Virtual Solutions deliver best-in-class virtualized UC applications that can reside alongside other enterprise business applications in mainstream data center environments and on virtual desktops, delivering operational and capital cost savings. Tight integration of Mitel Unified Communications with VMware vCenter Management tools means you can manage all applications in the same way, giving you faster system deployment, a common management strategy, and a single business continuity plan across all of your business applications, including UC.

Mitel has also integrated its UC solutions with VMware View to give voice to the virtual desktop. Desktop virtualization is hugely significant for IT departments and end users alike. It takes applications, much of the data, and personalized configuration settings that have traditionally been stored on PCs and moves them to virtualized servers, enabling centralized desktop management and improved security and conformance and enabling users to be productive from anywhere, anytime.

Mitel Virtual UC Solutions consist of:

- **Virtual Mitel Communications Director (vMCD).** The foundation of Mitel Virtual UC Solutions is vMCD, a virtual telephony services platform. It provides IP-PBX features for small to large enterprises with powerful call handling, a profusion of UC features including mobility and conferencing, and simple management — enabling faster, more effective communication.

- **Virtual Mitel Applications Suite (vMAS).** vMAS is an easy-to-use and easy-to-manage UC applications suite. It delivers capabilities such as unified messaging; speech-enabled autoattendant; mobility; teleworking; sophisticated audioconferencing, videoconferencing, and webconferencing; and business reporting.
- **Virtual Mitel Unified Communicator Advanced (vUCA).** vUCA is a client for desktops and mobile devices that provides a single access point for all your business communication and collaboration needs. It provides real-time access to everyone in the organization, on or off the premises, and enhances the effectiveness of "in the moment" communications. vUCA delivers rich presence and availability; desk phone and softphone integration; corporate directory access; visual voicemail; secure instant messaging; and point-to-point video. Deployed as part of the virtual desktop, it gives users single sign-on to their UC and data applications. The UCA softphone enables media streaming in a VMware View environment.
- **Virtual Mitel Border Gateway (vMBG).** vMBG enables you to securely extend the corporate voice and data network through your firewall to virtually any location via a broadband connection. Establish secure workspaces with comprehensive threat protection, strict access control, and privacy, and enable teleworkers to work and collaborate productively from any location.
- **Virtual Contact Center Solutions.** Mitel's Virtual Contact Center Solutions ensure the delivery of excellent customer service that nurtures relationships. Agent and supervisor tools drive productivity in your contact center, and real-time and historical reporting ensure operational efficiency. Agents can use the contact center softphone as part of their VMware View virtual desktop.

Appendix A: Total Economic Impact™ Overview

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. The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility.

Benefits

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place 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. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

Costs

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the forms of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

Risk

Risk measures the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: 1) the likelihood that the cost and benefit estimates will meet the original projections, and 2) the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as "triangular distribution" to the values entered. At a minimum, three values are calculated to estimate the underlying range around each cost and benefit.

Flexibility

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprise wide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 8% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their respective organization to determine the most appropriate discount rate to use in their own environment.

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.

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 net present value of cash flows.

Payback period: The breakeven point for an investment. The point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A Note On Cash Flow Tables

The following is a note on the cash flow tables used in this study (see the example table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in Years 1 through 3 are discounted using the discount rate (shown in Framework Assumptions section) at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

Table [Example]
Example Table

Ref.	Category	Calculation	Initial cost	Year 1	Year 2	Year 3	Total

Source: Forrester Research, Inc.