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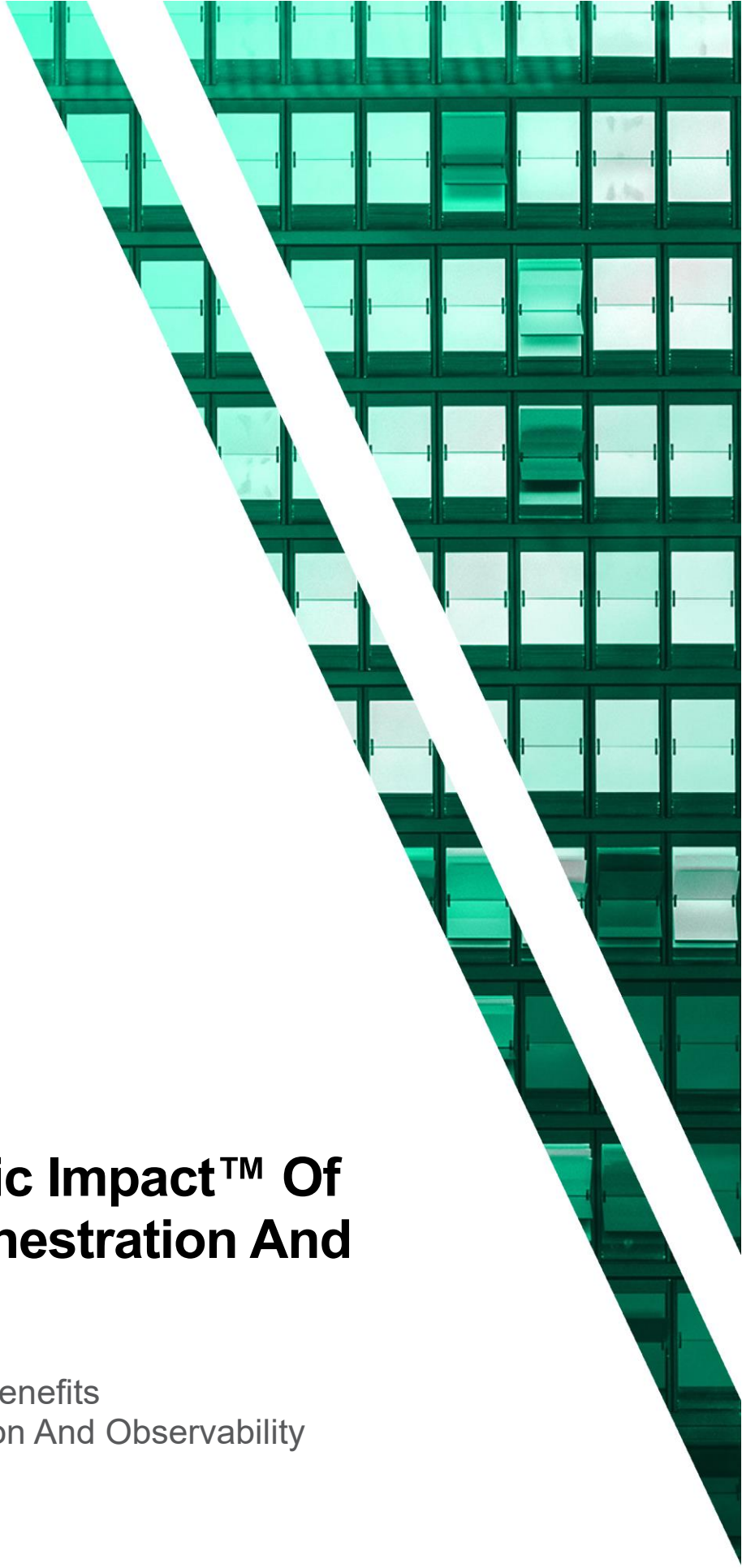

The Total Economic Impact™ Of Cutover Work Orchestration And Observability

Cost Savings And Business Benefits Enabled By Work Orchestration And Observability

SEPTEMBER 2021

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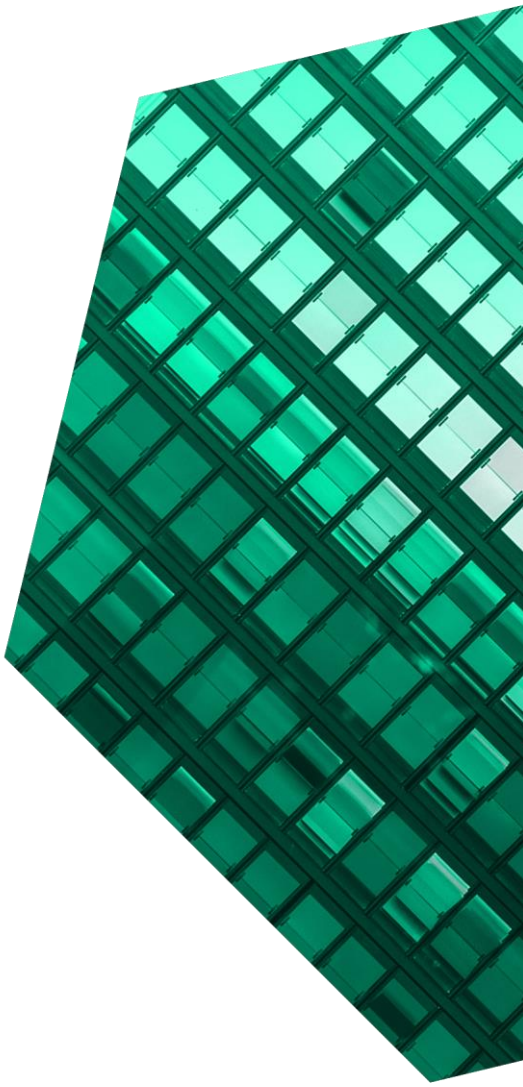
Consulting Team: Elina Bauwens



ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. For more information, visit forrester.com/consulting.

Executive Summary

As organizations continue to embrace digital transformation and adopt agile software development practices, executing critical events faster and with more confidence becomes vital. Cutover's Work Orchestration and Observability platform reduces event planning time by 25% to 50% and event execution time by 50%. In addition to time and cost savings, Cutover reduces risk by mitigating 20% of incidents, in turn improving employee experience and job satisfaction.

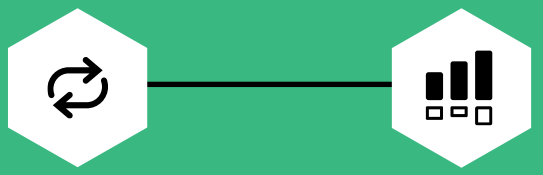
Cutover's Work Orchestration and Observability solution helps enterprises more effectively plan, orchestrate, and audit the human and automated activities that drive critical events. Cutover's products are aligned to use cases spanning Operational Resilience, Application Release Orchestration, Cloud Migration, and Platform Implementation.

Cutover commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Work Orchestration and Observability.[1] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Work Orchestration and Observability on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed seven decision-makers at four organizations with experience using Work Orchestration and Observability. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Prior to using Work Orchestration and Observability, the customers were doing a lot of manual work using disparate tools. This approach lacked visibility into planned events, increased risk during event execution, and hindered the auditing process.

KEY STATISTICS



Return on investment (ROI)
309%

Net present value (NPV)
$6.78M

After the investment in Work Orchestration and Observability, the customers have clearer oversight of all events, use a standardized approach to running events, have increased throughput, and can execute events with lower risk. Key results from the investment include reduction in planning and event execution time, reduction in risk associated with the events, and audit-related efficiencies.

KEY FINDINGS

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

- **Reduced event planning time up to 50%.** Customers saw a 25% reduction in event planning time during the tool's implementation year and, on average, a 50% reduction for following years. This results in recaptured productivity amounting to nearly $634,000 over three years.

- **Reduced event execution time by 50%.** Customers saw a 30% to 70% reduction in time to execute for each event, with an average of 50%. The additional time and cost savings amounted to more than $6.8 million for the composite organization over three years.
- **Mitigated event-linked incidents**. Customers highlighted that having Cutover Work Orchestration and Observability as part of their event planning gave them the opportunity to perform more comprehensive testing. As a result, they saw a 20% average reduction in incidents, that saved their organizations nearly $1.3 million over three years.
- **Increased audit efficiency by an average of 60%.** Being from a highly regulated industry, the interviewees highlighted having a clear audit trail as a key benefit of Cutover. On average, leveraging the tool reduces audit preparation time by 60%, for a savings of nearly $243,000 over three years.

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

- **Ability to react faster to changing business needs.** Respondents highlighted the value of being able to quickly pivot and orchestrate large-scale change programs during the COVID-19 pandemic.
- **Improvement in employee experience.** Employee satisfaction rose as users became more confident that events would be executed on time and without incidents. More efficient and predictable event orchestration also provided a better work/life balance for IT teams.
- **Improved transparency in decision-making.** The data provided by the tool enables users to more confidently make decisions and improve processes for the future.
- **Customer experience improvement.** Users were not only able to mitigate incidents and outages but also delivered more releases within a year, improving overall customer satisfaction.

“When you are executing an event, you have the ability to pass tasks without having somebody coordinate it on a call — Cutover does that for you. It means that the whole sequence of events is much more calm and controlled. Management can focus on things that are going wrong or things that we need to think about.”

Head of technology resiliency, financial services

“Cutover, combined with an oversight support model around it, is a phenomenal product. We can pretty much guarantee through rehearsals that [our] change will execute.”

Director of production management, financial services

Costs. Risk-adjusted PV costs include:

- **Software license fees.** Cutover Work Orchestration and Observability is priced per monthly active user, with per-user price savings as the user base scales**.** These fees totaled $1.5 million for the composite organization over three years.
- **Customer service support.** Cutover offers the option to purchase additional customer service support to enhance training, deliver onboarding, and provide ongoing optimization for the platform's use. The majority of customers Forrester spoke with purchased this add-on. This annual fee resulted in a cost of $326,000 over three years.
- **Integration costs.** Customers found that the value of leveraging Cutover Work Orchestration and Observability increased it was integrated with key IT systems such as single sign-on (SSO), collaboration, and IT service management (ITSM). The integrations for SSO and collaboration implemented by the composite organization resulted in a $165,000 fee.
- **Implementation and onboarding costs.** Forrester conservatively estimates that the composite organization dedicates three FTEs for three months to ensure a successful implementation, but the time and effort varies based on the complexity of the customers' IT landscape. In addition, we estimate the training time to take 1 hour per user, resulting in a total cost of $162,000 over three years.

The customer interviews and financial analysis found that a composite organization experiences benefits of $8.98 million over three years versus costs of $2.19 million, adding up to a net present value (NPV) of $6.78 million and an ROI of 309%.

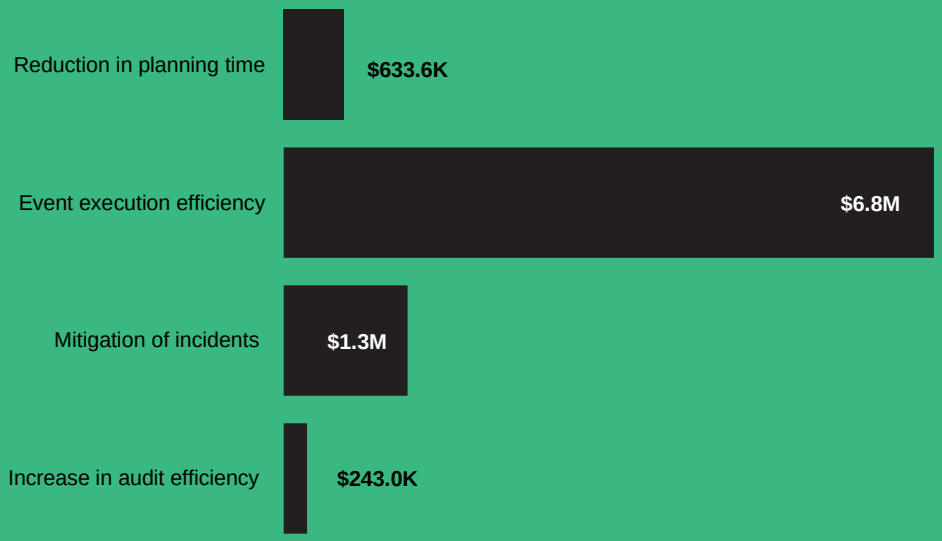
ROI
309%

BENEFITS PV
$8.98M

NPV
$6.78M

PAYBACK
12 months

Benefits (Three-Year)



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 Work Orchestration and Observability.

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 the Work Orchestration and Observability can have on an organization.

DUE DILIGENCE

Interviewed Cutover stakeholders and Forrester analysts to gather data relative to Work Orchestration and Observability.

CUSTOMER INTERVIEWS

Interviewed seven decision-makers at four organizations using Work Orchestration and Observability to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewed 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 interviewed organizations.

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 Cutover Work Orchestration And Observability Customer Journey

Drivers leading to the Work Orchestration and Observability investment

Interviewed Organizations

Industry	Region	Interviewee	Company size
Financial services	Headquartered in US	Head of global reliability and production management	60,000 employees
Financial services	Headquartered in UK	• Head of technology resiliency • Implementation and live proving lead	80,000 employees
Financial services	Headquartered in US	• Director of infrastructure management • Head of global markets production services	200,000+ employees
Financial services	Headquartered in US	Director of production management	200,000+ employees

KEY CHALLENGES

Prior to leveraging Cutover, the interviewees noted that their organizations were mainly using wikis, spreadsheets, and shared files to prepare and run events. This required a lot of manual work and many meetings to ensure alignment.

The organizations struggled with common challenges, including:

- **High risk associated with each event.** Because the organizations were unable to do testing and used multiple different tools to manage an event, there was a high risk of incidents negatively impact the execution of the event. This not only increased the risk of reputational damage for the department and the company but also impacted the mental well-being of employees and the overall employee experience.
- **Lack of oversight and visibility.** A key challenge for interviewees was getting a clear picture of all the changes and events that were happening within their organizations and understanding how they impact one another. When running an event, they also struggled with a lack of insight into how it was tracking, and the process to keep relevant stakeholders apprised was labor-intensive.

> **"We had the information across Word/Excel/wikis, and the work was mostly very manual and took so much time — it was just ineffective."**
>
> *Director of infrastructure management, financial services*

- **Lack of consistency.** The organizations had no consistent standards for managing events and lacked standardization across all recovery plans. This resulted in excess time spent understanding and learning the various approaches being used.

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 companies 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. A large, global financial services company with $55 billion in revenue and 90,000 employees.

Deployment characteristics. The organization runs 900 resiliency-management and release-management events each year. It initially leverages Cutover for operational resilience and expands over time to application release orchestration.

Key assumptions

- **$55 billion in revenue**
- **900 planned events per year**
- **$100,000 average IT salary**

“If you were to ask people what they were planning for perhaps two to three weeks in advance, there’d be no chance they’d be able to give that to you — so you are working on a week-to-week basis.”

Head of global reliability and production management, financial services

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total Benefits

Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Reduction in planning time	$15,848	$316,957	$475,435	$808,239	$633,556
Btr	Event execution efficiency	$332,804	$3,328,043	$4,992,065	$8,652,913	$6,803,611
Ctr	Mitigation of incidents	$63,391	$633,913	$950,870	$1,648,174	$1,295,926
Dtr	Increase in audit efficiency	$11,886	$118,859	$178,288	$309,033	$242,986
	Total benefits (risk-adjusted)	$423,929	$4,397,772	$6,596,658	$11,418,359	$8,976,079

REDUCTION IN PLANNING TIME

Evidence and data. A key goal for interviewees was to gain better oversight on all events. Customers highlighted several ways that Cutover Work Orchestration and Observability provided better visibility while reducing the preparation time needed, including:

- Leveraging Cutover reduced the amount and duration of preparation meetings because the tool enables users to collaborate in a single platform.
- Cutover's dashboards provided clear oversight for all planned events with the right level of detail for executives to consume, resulting in less time spent updating leadership.
- As teams created more runbooks, they saved time by repurposing existing runbooks.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

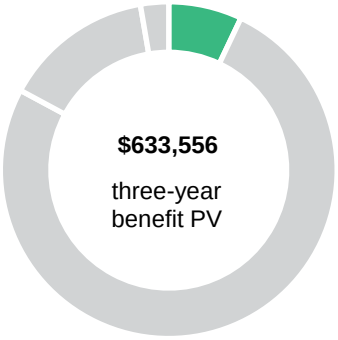
- An average of 16 hours per event is spent on planning.
- The organization runs 60 events in Cutover in the first year, increasing to 600 in Year 2 and 900 in Year 3.
- The average salary of an internal IT employee is $100,000; an additional 35% is added to reflect nonsalary elements such as benefits and bonuses.
- During the first year using Cutover, planning time is reduced by 25%, increasing to 50% in subsequent years as employees learn to use the tools and begin leveraging existing runbooks as a starting point.

"Key is the reduced amount of rework. If we do it right the first time, plan it, [and] rehearse it beforehand, that does away with any rework down the road or any failed implementations."

Director of production management, financial services

Risks. Efficiency gains depend on the scale and complexity of an organization's events, which will vary from company to company.

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 $634,000.



Reduction In Planning Time

Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Average planning time per event (hours)	Interviews	16	16	16
A2	Reduction in average planning time per event	Interviews	25%	50%	50%
A3	Number of events per year in Cutover	Interviews	60	600	900
A4	Total reduction in planning time (hours)	A1*A2*A3	240	4,800	7,200
A5	Average annual fully loaded salary for IT staff	Composite	$135,000	$135,000	$135,000
A6	Work hours per year	Assumption	1,840	1,840	1,840
A7	Average hourly rate for IT staff	A5/A6	$73	$73	$73
A8	Percent captured	100%			
At	Reduction in planning time	A4*A7*A8	$17,609	$352,174	$528,261
	Risk adjustment	↓10%			
Atr	Reduction in planning time (risk-adjusted)		$15,848	$316,957	$475,435
	Three-year total: $808,239			**Three-year present value: $633,556**	

EVENT EXECUTION EFFICIENCY

Evidence and data. The biggest benefit of Cutover Work Orchestration and Observability is the improvement in event execution efficiency. Events are executed faster, at lower cost, and with less risk. Customers highlighted several examples of how Cutover Work Orchestration and Observability ensured that events were executed more quickly, with more confidence and less risk of needing to roll back events or changes.

- By leveraging the tool, the organizations were able to test each event, identifying and fixing any issues while in the planning stages.
- The whole team no longer needed to attend a conference call to orchestrate the event, as the tool notifies teams of when they need to work on action item.
- The tool allowed teams to pivot quickly, readjust event timings, and proactively address critical needs.

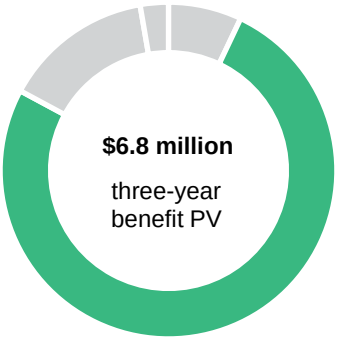
- Once a runbook has been used successfully, interviewees were confident that it would work for subsequent events; this allowed teams to run more events simultaneously.
- One interviewee noted that Cutover's platform enabled the team to increase the number of events they ran by 30%.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- The number of events run in Cutover in the first year is 60, increasing to 600 in Year 2 and 900 in Year 3.
- On average, 12 FTEs are involved in an event, and the average event duration is 14 hours.
- The average salary of an internal IT employee is $100,000; 35% is added to reflect nonsalary elements such as benefits and bonuses.
- Event execution time is reduced by 50%. For the interviewed customers, this ranged between 30% to 70%

Risks. Efficiency gains depend on how quickly an organization leverages the tool's full feature set and automation capabilities, as well as the scale and complexity of events, which will vary from organization to organization.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $6.8 million.



"Cutover gives you confidence to execute large-scale events in a standardized way."

Head of technology resiliency, financial services

Event Execution Efficiency					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
B1	Number of events per year in Cutover	Interviews	60	600	900
B2	Number of FTEs working on an event	Interviews and Forrester	12	12	12
B3	Average event duration in hours	Interviews and Forrester	14	14	14
B4	Reduction in average execution time per event	Composite	50%	50%	50%
B5	Total reduction in execution time (hours)	B1*B2*B3*B4	5,040	50,400	75,600
B6	Average annual fully loaded salary for IT staff	Composite	$135,000	$135,000	$135,000
B7	Work hours per year	Assumption	1,840	1,840	1,840
B8	Average hourly rate for IT staff	B6/B7	$73	$73	$73
B9	Percent captured	Assumption	100%	100%	100%
Bt	Event execution efficiency	B5*B8*B9	$369,783	$3,697,826	$5,546,739
	Risk adjustment	↓10%			
Btr	Event execution efficiency (risk-adjusted)		$332,804	$3,328,043	$4,992,065
	Three-year total: $8,652,913		**Three-year present value: $6,803,611**		

MITIGATION OF INCIDENTS

Evidence and data. Interviewees highlighted their ability to mitigate incidents during the planning and testing process.

- Of the incidents that occurred, most were identified and resolved during the testing and planning stage, with no deleterious impact on the event execution or the business.
- In addition to the recaptured productivity, interviewees also recognized the impact the reduction of incidents had on their organization's reputational risk.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- Prior to using Cutover, an average of four incidents occur per event; each takes 10 people an average of 2 hours to resolve.

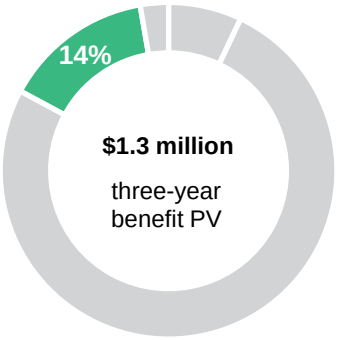
"Since Cutover, we haven't had any failed migrations or migrations that we had to roll back. Everything we've committed to, we have done."

Director of production management, financial services

- The average salary of an internal IT worker is $100,000; 35% is added to reflect nonsalary elements such as benefits and bonuses.
- After transitioning to Cutover, incidents are reduced by 20%. For the interviewed customers, this ranged between 10% and 50%, with an average of 20%.

Risks. Incident reduction depends on the complexity and scale of the events, as well as what other efforts have already been employed to mitigate incidents prior to the use of Cutover.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of close to $1.3 million.



Mitigation Of Incidents

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Number of incidents per year related to events covered by Cutover	Interviews	240	2,400	3,600
C2	Average number of people involved per incident	Forrester	10	10	10
C3	Average time needed to fix per incident (hours)	Interviews	2	2	2
C4	Reduction in number of incidents	Composite	20%	20%	20%
C5	Total reduction in incident resolution time	C1*C2*C3*C4	960	9,600	14,400
C6	Average annual fully loaded salary for IT staff	Composite	$135,000	$135,000	$135,000
C7	Work hours per year	Assumption	1,840	1,840	1,840
C8	Average hourly rate for IT staff	C6/C7	$73	$73	$73
C9	Percent captured	Interviews	100%	100%	100%
Ct	Mitigation of incidents	C5*C8*C9	$70,435	$704,348	$1,056,522
	Risk adjustment	↓10%			
Ctr	Mitigation of incidents (risk-adjusted)		$63,391	$633,913	$950,870
	Three-year total: $1,648,174			**Three-year present value: $1,295,926**	

AUDIT EFFICIENCY

Evidence and data. The decision-makers Forrester interviewed were all from the highly regulated financial services industry, where most or all events require a clearly visible audit trail. The interviewees highlighted the following improvements to audit efficiency:

- Being able to pull a detailed audit trail with time stamps of the event at the push of a button and no longer having to gather bits of information from disparate sources.
- Reducing time spent with auditors explaining the data.
- Having all backout plans standardized and readily available for auditors.

"Now we show the auditors the completed runbook from Cutover. They can then see the timestamps, what our plan was, when it was completed, [and] by whom."

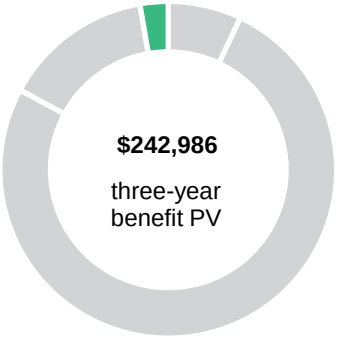
Implementation and live proving lead, financial services

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- One audit per event.
- Each audit takes 5 hours to complete.
- Audit prep time is reduced by 60%. For the interviewed customers, this ranged between 50% and 80%.
- The average salary of an internal IT worker is $100,000; 35% is added to reflect nonsalary elements such as benefits and bonuses.

Risks. Reduction in audit preparation time depends on the complexity and scale of an organization's events and the audit processes that were previously in place.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of nearly $243,000.



Increase In Audit Efficiency					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
D1	Number of audits per event	Composite	1	1	1
D2	Number of events	Composite	60	600	900
D3	Time spent on audit per event (hours)	Interviews	5	5	5
D4	Reduction in average audit prep time	Composite	60%	60%	60%
D5	Total reduction in prep time for audit (hours)	D1*D2*D3*D4	180	1,800	2,700
D6	Average annual fully loaded salary for IT staff	Composite	$135,000	$135,000	$135,000
D7	Work hours per year	Assumption	1,840	1,840	1,840
D8	Average hourly rate for IT staff	D6/D7	$73	$73	$73
D9	Percent captured	Interviews	100%	100%	100%
Dt	Increase in audit efficiency	D5*D8*D9	$13,207	$132,065	$198,098
	Risk adjustment	↓10%			
Dtr	Increase in audit efficiency (risk-adjusted)		$11,886	$118,859	$178,288
	Three-year total: $309,033			**Three-year present value: $242,986**	

UNQUANTIFIED BENEFITS

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

- **Ability to react more quickly to changing business needs.** Uncertain times require organizations to pivot quickly. The interviewees highlighted the benefit of being able to react to rapidly changing business and customer needs.
- **Improvement in employee experience.** With Cutover, employees have more confidence that their event will be executed on time and without incidents. This includes reduction in stress and improvement in well-being for both line staff and senior management. In addition, as events are often executed over a weekend, staff can achieve a better work/life balance due to clearer planning and visibility into when their work will be needed.

"CX is improved because we are more stable [and] we can roll out more releases each year, thus improving [customers'] experience with us. The more competitive we are, we are able to generate more revenue and do more innovation that provides better CX."

Head of global reliability and production management, financial services

- **Improved transparency in decision-making.** Through the clear, transparent data that Cutover provides, users are not only able to make better decisions during an event but also make decisions that improve future processes.
- **Customer experience improvement.** With fewer outages and incidents, fewer rollbacks, and the ability to deliver more releases each year, the experience for their customers improves.

FLEXIBILITY

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

- **Leveraging the tool outside of technology.** One interviewee noted that their company had successfully been able to orchestrate the launches of IPOs with Cutover.
- **Ability to orchestrate large change programs.** Multiple interviewees highlighted how they were able to react quickly and organize large change programs necessitated by the COVID-19 pandemic.

"Now many more users are skilled resources to control the change, assess the readiness, raise issues, [and] raise problems before they happen. They're much more in control of their destiny, rather than being dictated to all the time."

Director of production management, financial services

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs

Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Software license fees	$0	$168,000	$659,400	$1,121,400	$1,948,800	$1,540,210
Ftr	Customer service support	$0	$131,250	$131,250	$131,250	$393,750	$326,399
Gtr	Integration costs	$3,300	$17,600	$69,080	$117,480	$207,460	$164,655
Htr	Implementation and onboarding costs	$88,748	$7,704	$30,815	$53,927	$181,193	$161,734
	Total costs (risk-adjusted)	$92,048	$324,554	$890,545	$1,424,057	$2,731,203	$2,192,998

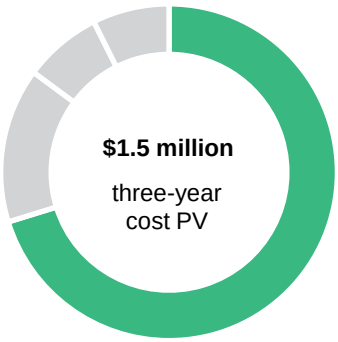
SOFTWARE LICENSE FEES

Evidence and data. Cutover Work Orchestration and Observability is priced per monthly active user. Users in this case are mainly technology professionals involved in planned releases or tests. The interviewees' organizations achieved per-user price savings as the user base scaled.

Modeling and assumptions. Forrester estimates that the composite organization has 80 monthly active users (MAU) during Year 1, increasing to 320 users in Year 2 and 560 users by Year 3.

Risks. This cost may vary among organizations based on the size of the Cutover contract, the organization's region, the type of organization, and changes over time.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of $1.5 million.



Software License Fees						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	License fees (1-200 MAUs)	Composite		$2,000	$2,000	$2,000
E2	Number of MAUs (1-200)	Composite		80	200	200
E3	License fees (201-400 MAUs)	Composite		$1,900	$1,900	$1,900
E4	Number of MAUs (201-400)	Composite		0	120	200
E5	License fee of MAUs (401-600)	Composite		$1,800	$1,800	$1,800
E6	Number of MAUs (401-600)	Composite		0	0	160
Et	Software license fees	(E1*E2)+(E3*E4)+(E5*E6)	$0	$160,000	$628,000	$1,068,000
	Risk adjustment	↑5%				
Etr	Software license fees (risk-adjusted)		$0	$168,000	$659,400	$1,121,400
Three-year total: $1,948,800			**Three-year present value: $1,540,210**			

CUSTOMER SERVICE SUPPORT

Evidence and data. Three-quarters of those interviewed leveraged the option to purchase additional customer service management support to aid with onboarding, training, and ongoing optimization of tool usage. This training and support happened onsite or virtually for individuals and teams, often including videos or quick guides to support users. One organization complemented this support with an internal center of excellence to ensure maximum value.

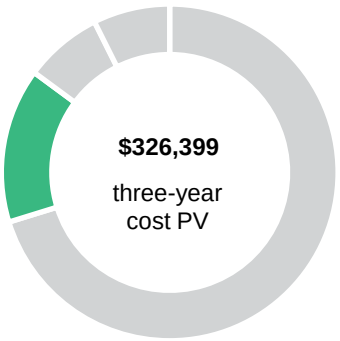
Modeling and assumptions. Forrester assumes that the composite organization will take advantage of the customer service add-on, which carries an annual fee of $125,000.

Risks. This cost may vary among organizations based on the size of the Cutover contract, the organization's region, the type of organization, and changes over time.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of $326,000.

"I think the untold benefit with Cutover is the support you get from them through their [customer service manager]."

Implementation and live proving lead, financial services



Customer Service Support						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
F1	Customer service management fees	Cutover	$0	$125,000	$125,000	$125,000
F2	Annual payment	Cutover		1	1	1
Ft	Annual fees	Cutover	$0	$125,000	$125,000	$125,000
	Risk adjustment	↑5%				
Ftr	Annual fees (risk-adjusted)	F1*F2	$0	$131,250	$131,250	$131,250
	Three-year total: $393,750			**Three-year present value: $326,399**		

INTEGRATION COSTS

Evidence and data. Cutover offers the option to integrate Work Orchestration and Observability with multiple different systems, including SSO, collaboration, ITSM, automation, etc. The interviewees found that the value of the tool increased if integrated. All of their organizations had:

- Integrated with single sign-on.
- Added one or two system integrations to enhance the value of the tool.

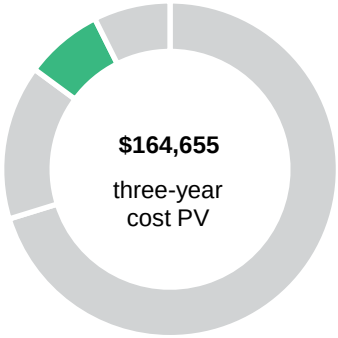
Modeling and assumptions. Forrester assumes that the composite organization will integrate Cutover with:

- Single sign-on from the beginning of the partnership.
- A collaboration tool, which is calculated as a percentage of annual recurring user fees.

Risks. The cost of integration will vary depending on:

- The type of system integration.
- The organization's IT landscape.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of $165,000.



Integration Costs						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
G1	SSO integration cost	Interviews	$3,000	0	0	0
G2	Collaboration tool integration	Assumption		10%	10%	10%
G3	Annual recurring user fees	Et		$160,000	$628,000	$1,068,000
G4	Collaboration tool integration cost	G3*G2		$16,000	$62,800	$106,800
Gt	Integration costs	G1+G4	$3,000	$16,000	$62,800	$106,800
	Risk adjustment	↑10%				
Gtr	Integration costs (risk-adjusted)		$3,300	$17,600	$69,080	$117,480
	Three-year total: $207,460			**Three-year present value: $164,655**		

IMPLEMENTATION AND ONBOARDING COSTS

Evidence and data. According to the decision-makers Forrester interviewed, their organizations' implementation time and effort depended on the complexity of their IT landscape, security architecture and operations environment, and how accustomed they were to cloud implementations. The implementation time and effort ranged from three weeks to six months, with team sizes from two to four people.

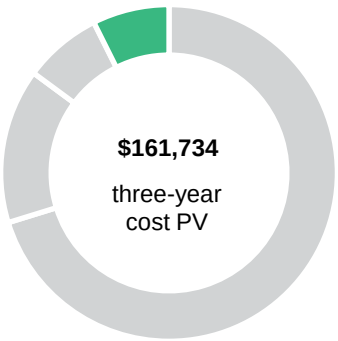
Modeling and assumptions. Forrester estimates that the composite organization's implementation will include:

- Three months of work for three people at 80% of the time.
- An average salary of an internal IT employee of $100,000; 35% is added to reflect nonsalary elements such as benefits and bonuses.
- An hour spent on training for each user.
- An additional 20% of staff trained to use the system in addition to the number of monthly active users.

Risks. The cost of implementation and training will vary with:

- The number, amount of time committed, and fully loaded hourly rate of internal stakeholders involved in implementation and training.
- The complexity of the organization's IT landscape and security architecture guidelines.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of $162,000.



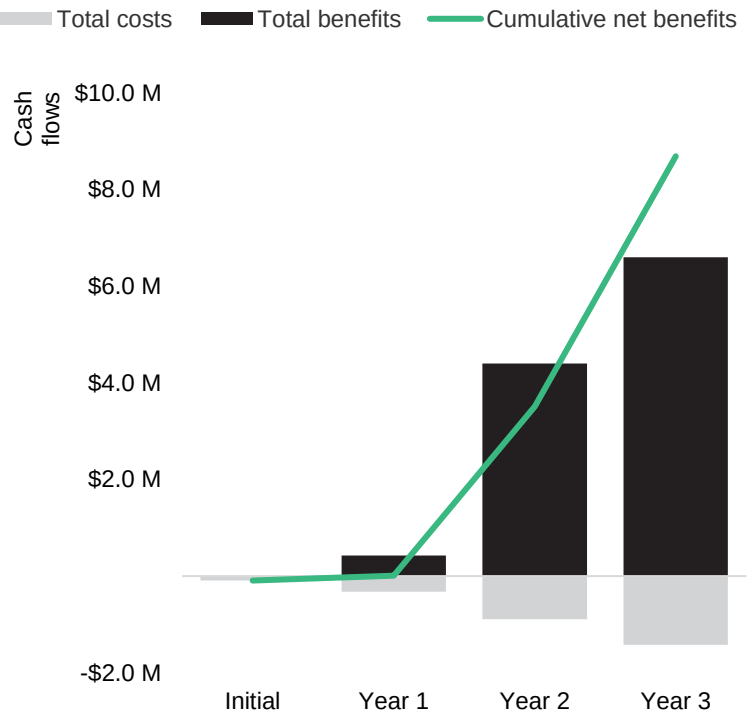
Implementation And Onboarding Costs

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
H1	Number of FTEs involved in implementation and training	Composite	3	100	400	700
H2	Average annual fully loaded salary for IT staff	Composite	$135,000	$135,000	$135,000	$135,000
H3	Work hours per year	Assumption	1,840	1,840	1,840	1,840
H4	Average hourly rate for IT staff	H2/H3	$73	$73	$73	$73
H5	Time to implement the solution (hours)	3 months, 80% of time	384			
H6	Subtotal: total cost of implementation	H1*H4*H5	$84,522	$0	$0	$0
H7	Average time spent on training (hours)	Composite		1.00	1.00	1.00
H8	Subtotal: total cost of training	H1*H4*H6	$0	$7,337	$29,348	$51,359
Ht	Implementation and onboarding costs	H4+H6	$84,522	$7,337	$29,348	$51,359
	Risk adjustment	↑5%				
Htr	Implementation and onboarding costs (risk-adjusted)		$88,748	$7,704	$30,815	$53,927
	Three-year total: $181,193			**Three-year present value: $161,734**		

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	($92,048)	($324,554)	($890,545)	($1,424,057)	($2,731,203)	($2,192,998)
Total benefits	$0	$423,929	$4,397,772	$6,596,658	$11,418,359	$8,976,079
Net benefits	($92,048)	$99,376	$3,507,227	$5,172,601	$8,687,155	$6,783,081
ROI						309%
Payback						12 months

Appendix A: Total Economic Impact

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

TOTAL ECONOMIC IMPACT APPROACH

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

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

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

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

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

PRESENT VALUE (PV)

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

NET PRESENT VALUE (NPV)

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

RETURN ON INVESTMENT (ROI)

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

DISCOUNT RATE

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

PAYBACK PERIOD

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

Appendix B: Endnotes

[1] 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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