FORRESTER®

The Total Economic Impact™ Of AWS Marketplace

Cost Savings And Business Benefits Enabled By AWS Marketplace

MAY 2022

A FORRESTER TOTAL ECONOMIC IMPACT™ STUDY COMMISSIONED BY AMAZON

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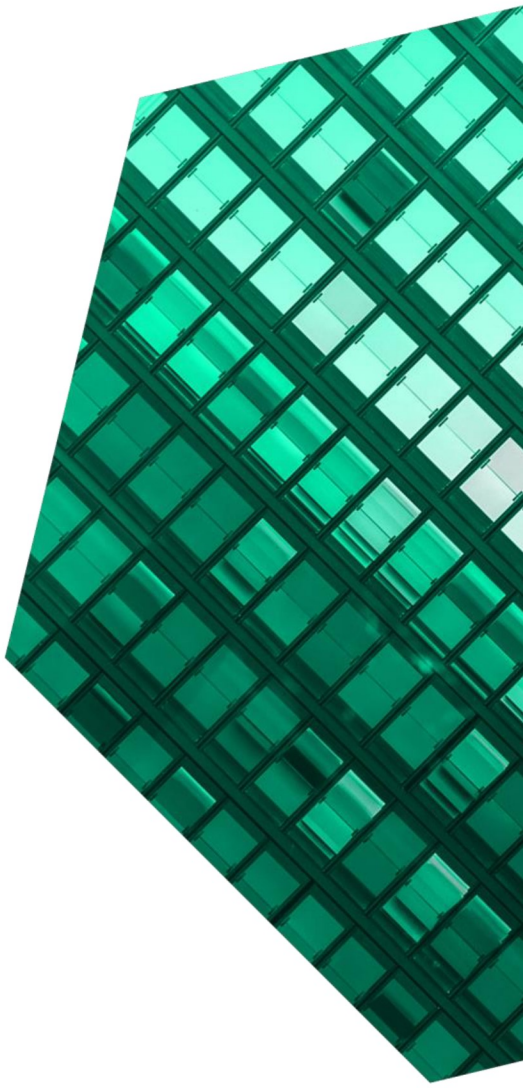


ABOUT FORRESTER CONSULTING

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

Many organizations struggle with outdated and cumbersome procurement processes. Organizations who shifted their software procurement to AWS Marketplace were able to drive efficiency throughout the entire procurement process, save on licensing fees by transitioning to more flexible licensing models, and vet and onboard new vendors with less effort than traditional practices.

Amazon Web Services (AWS) Marketplace is a cloud marketplace that enables buyers to search, select, purchase, and deploy software, data products, solutions, and services in a cloud environment. It complements traditional procurement workflows and allows buyers to experience a variety of financial benefits that both help lower bottom line costs and eliminate time intensive efforts.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed ten representatives with experience using AWS Marketplace. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a multimillion-dollar company with global operations and a 10-person procurement team.

Prior to using AWS Marketplace, these interviewees noted how their organizations struggled to identify and procure new software solutions quickly and effectively. Legacy procurement processes were slow, inefficient, locked customers into fixed contracts, and required lengthy vendor vetting, onboarding, and integration processes.

KEY STATISTICS

Return on investment (ROI)	Net present value (NPV)
550%	**$3.70M**

After driving procurement through AWS Marketplace, the interviewees found that they were able to eliminate several steps from their procurement practices, gained increased flexibility in their software spending, and better utilized their contractual spending with AWS.

KEY FINDINGS

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

- **Increasing licensing flexibility, leading to 10% reduction in licensing costs.** Shifting from a perpetual license pricing model to one more aligned with user consumption empowers buyers in AWS Marketplace to negotiate more favorable terms of use for their software products. This

allows the composite organization to save almost $1 million in the modeled period.

- **Consolidating steps and increasing visibility into procurement practices, leading to $2 million in efficiency savings.** By purchasing software solutions through AWS Marketplace, the composite organization experiences several time-saving benefits. The organization finds that it is able to consolidate its invoicing processes and reduce the time spent performing these tasks by 50%. Additionally, using AWS Marketplace reduces the process to search for and evaluate new vendors. Legacy procurement processes require employees to conduct in depth requests for proposals from vendors before completing a competitive analysis of these vendors. AWS Marketplace allows the composite organization's buyers to access all the relevant information in one place and streamlines the process of comparing these vendors, reducing the time spent on these tasks by 66%. Finally, by using standardized contract templates developed in collaboration with the buyer and seller community, organizations can accelerate negotiations and move to product deployment more quickly. These efficiencies lead to a total savings of over $2 million over the modeled period.
- **Recapturing 25% of at-risk spend with Amazon by combining third-party spend with native services.** The composite organization finds that purchasing software through AWS Marketplace allows it to fulfill a portion of its committed spending with AWS. Before AWS Marketplace, the organization had struggled to use the capabilities of AWS to their fullest extent, causing it to miss commitments and forfeit discounts. Making purchases through AWS Marketplace allows the composite organization to count these purchases towards its committed spend and attain discounts that it would have lost otherwise.

"For a lot of Marketplace items, it's beneficial to just go from nothing to purchased, spun up, and accepting a private offer in AWS Marketplace. We're able to get up and go quickly, as opposed to negotiating the whole agreement. The streamlined process is the biggest benefit."

— Senior manager of IT procurement, IT services management

- **Improves vendor onboarding processes, leading to a 75% reduction in onboarding effort for new vendors.** The composite organization experiences an easier vetting and onboarding process for new vendors with AWS Marketplace. By using vendors from the AWS Marketplace catalog, the composite realizes significant time and effort savings by removing the need to independently vet and investigate vendors. AWS taking on much of this burden allows the composite organization to buy and deploy software faster, leading to time savings that are worth over $62,000.

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

- **Improving time-to-deployment for new solutions**. Purchasing software through AWS Marketplace enables the composite to reduce the time it takes to deploy solutions. This allows users to experience the benefits of these solutions sooner than they could in legacy procurement workflows.
- **Improving workflows to complete software updates.** The composite finds that the increased visibility provided by AWS Marketplace makes software updates easier for developers to complete, allowing them to reduce the time they spend completing these tasks and focus on more valuable activities.

Costs. Risk-adjusted PV costs include:

- **Implementation and training costs.** The composite organization's staff spends an average of 120 hours planning to use AWS Marketplace, educating users, and executing some change management workflows for affected business units.
- **Relationship management costs.** The composite organization's staff spends time each month with the AWS Marketplace team to create long-term strategies and identify new opportunities to use AWS Marketplace within the organization.

The decision-maker interviews and financial analysis found that a composite organization experiences benefits of $4.38 million over three years versus costs of $673,085, adding up to a net present value (NPV) of $3.70 million and an ROI of 550%.

ROI
550%

BENEFITS PV
$4.38M

NPV
$3.70M

PAYBACK
<6 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 AWS Marketplace.

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 AWS Marketplace can have on an organization.

DUE DILIGENCE

Interviewed Amazon stakeholders and Forrester analysts to gather data relative to AWS Marketplace.

INTERVIEWS

Interviewed ten representatives at organizations using AWS Marketplace to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION

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

FINANCIAL MODEL FRAMEWORK

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

CASE STUDY

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

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Amazon 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 AWS Marketplace.

Amazon 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.

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

The AWS Marketplace Customer Journey

Drivers leading to the AWS Marketplace investment

Interviews

Role	Industry	Annual Revenue	Number of Employees
Director of procurement	Food service	$5.6 billion	34,000
FinOps lead	Software vendor	$50 million	1,300
Senior manager of IT procurement	IT service management	$3.5 billion	34,000
IT supervisor	Government agency	$6 billion	1,200
Director of expense management	Financial services	$5.7 billion	6,000
Business development manager	Software vendor	$3 billion	7,000
Director of third-party risk management	Financial services	$475 million	1,000
Senior business manager	Multi industry conglomerate	$81.4 billion	110,000
Global supply chain consultant	Cosmetics	$35 billion	88,000
Vice president of cloud and data center solutions	Technology services	$2.3 billion	2,000

KEY CHALLENGES

Prior to investing in AWS Marketplace, interviewees' organizations typically relied on traditional procurement processes for all software purchases. These involved stakeholders getting input from procurement, IT, and legal teams while attempting to purchase software through direct channels.

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

- **Inefficient procurement processes.** The interviewees found that legacy procurement processes involved excessive steps and required input from many stakeholders. This delayed procurement processes significantly. One interviewee described how lengthy the process to purchase software solutions was prior to shifting to AWS Marketplace by saying: "Our procurement processes were often delayed because we have so many levels of bureaucracy. We had to start off with our internal paperwork, [that] then had to go up the chain of command to get the purchase approved. Once that's done, we then had to create a requisition within our system and get additional level of approvals. Once all this was finally done, it would go through the procurement process. Each vendor had to go through several levels of approval before the PO [purchase order] is cut and sent over. So, there were a lot of hoops to jump through, lot of things that we had to do internally before we get anything, and that process took us quite a while."

- **Insufficient AWS spending to fulfill commitments.** Several of the interviewees noted that, prior to driving purchases through AWS Marketplace, their organizations struggled to fully utilize their spending commitments to AWS. These interviewees found that this led their organizations to either lose a portion of their investments or led them to attempt to increase their use of AWS in areas of their organization that may not have been fully prepared. These interviewees desired a solution that allowed their organizations to make better use of their AWS spending commitments without expanding their use of AWS prematurely.
- **Limited licensing models leading to wasted spend.** Traditional software procurement practices limited the interviewees' organizations' opportunity to optimize subscription costs. Variations in workflows and changes in employee needs on a year-to-year basis often led to organizations paying for excess licenses with limited visibility into overages. The interviewees stated that finding a solution that could provide more visibility into software usage and increased flexibility for licensing costs on an annual basis was a priority.
- **Split and redundant vendor spending.** Many of the interviewees pointed to a plethora of disparate software solutions as a major challenge that their organizations' IT departments faced. Tracking procurement across teams and departments proved to be a challenging task and often led to organizations investing in multiple solutions that served the same purpose. One interviewee described these challenges by saying: "We had a multitude of smaller vendors and ended up with something like 20,000 different software vendors. One of the ideas was that we would try and consolidate and rationalize which were needed and which weren't. [It] looked like AWS Marketplace [had] that sort of consolidation point that would give us more visibility into our vendor usage."

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 ten interviewees and is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization is a multibillion-dollar organization with global operations. It traditionally does software procurement through direct conversations with software vendors. This requires procurement teams to gather relevant information internally to access the extent of the software deployment needed, engage the supplier, and negotiate a contract. Legal, procurement, IT, and the internal line-of-business users of the software being purchased then vets the contract. This causes drawn out procurement processes and limits the composite organization's flexibility with their software spending. The organization has a dedicated team of 10 individuals tasked with procurement, software, and invoice management.

Deployment characteristics. The composite organization initially begins use of AWS Marketplace by driving four software procurements through the service in their first year. In subsequent years, the organization expands its use of AWS Marketplace to include six new software solution procurements in Year 2 and eight procurements in Year 3. The software solutions deployed on AWS are a combination of net new solutions and established products that are purchased through AWS Marketplace for the first time.

Key assumptions

- **Multibillion-dollar organization**
- **Global operations**
- **10-person procurement team**

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	Licensing cost savings	$270,000	$405,000	$540,000	$1,215,000	$985,875
Btr	Procurement efficiencies	$598,332	$938,732	$1,312,631	$2,849,694	$2,305,948
Ctr	AWS discount attained through AWS Marketplace spend	$212,500	$425,000	$637,500	$1,275,000	$1,023,385
Dtr	Vendor onboarding efficiencies	$16,200	$25,515	$35,721	$77,436	$62,652
	Total benefits (risk-adjusted)	$1,097,032	$1,794,247	$2,525,852	$5,417,130	$4,377,860

LICENSING COST SAVINGS

Evidence and data Prior to using AWS Marketplace, interviewees noted that their typical procurement processes provided their organizations with limited visibility into their software costs. For larger organizations, it was common for different business groups to pay different amounts for the same software products. As one interviewee described, “Previously, we may have had six or seven different subsidiaries using the same product, but every one of those was paying a different price.” Using AWS Marketplace for software procurement gave the interviewees’ organizations a central space for all business groups to access a particular product and gave procurement teams the ability to ensure that all groups were getting the best price possible for each solution. One interviewee described this by saying, “[With AWS Marketplace,] we’ve been able to go in and analyze who is using what products and then basically help that particular group get the best price across the board for all of those purchases.”

The previous lack of visibility also resulted in interviewees’ organizations signing multiyear contracts with limited flexibility to adjust for annual changes in software usage. For example, many retail interviewees’ organizations had to commit to annual software licenses when they had limited times of peak usage. This resulted in wasted license fees for a large percentage of the year. Transitioning these solutions to AWS Marketplace allowed the interviewees’ organizations to utilize a consumption-based pricing model offered by many vendors on AWS Marketplace. This enabled them to increase and decrease the number of licenses they were paying for more frequently and allowed them to realize significant cost savings. One interviewee described these costs savings by saying, “A lot of the vendors that we’ve purchased through the [AWS] Marketplace offer licensing that could be paid by the hour or paid by the month. So, we’re only paying for extra licenses during that month or two that we need [them]. [During] the rest of year, we’re running at reduced capacity. That can help us save a large amount of money.”

Modeling and assumptions. For the financial model, Forrester assumes the following:

- The composite organization initially uses AWS Marketplace to facilitate the procurement of four different software solutions. This effort expands to incorporate six procurements in Year 2 and eight procurements in Year 3.
- The average cost of a software license fee for the composite organization is $750,000.
- The licensing flexibility provided by AWS Marketplace and the improved negotiations enabled by enhanced visibility allows the composite organization to reduce it's spending on these solutions by 10%.

Risks. The following factors may affect the extent to which an organization experiences these benefits:

- The extent to which software procurement is processed through AWS Marketplace.
- The average cost of a software licensing contract will vary based on the type of software required and the scope of the software deployment.

Reduction in licensing costs

10%

- A buyer's ability to negotiate contracts on an annual basis and the extent to which legacy procurement processes involve direct dealings with software providers.

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 $986,000.

Licensing Cost Savings

Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Software deployments with AWS Marketplace	Assumption	4	6	8
A2	Average cost of software licensing fees prior to using AWS	Interviews	$750,000	$750,000	$750,000
A3	Software licensing costs prior to using AWS	A1*A2	$3,000,000	$4,500,000	$6,000,000
A4	Reduction in licensing costs enabled by AWS Marketplace	Interviews	10%	10%	10%
At	Licensing cost savings	A3*A4	$300,000	$450,000	$600,000
	Risk adjustment	↓10%			
Atr	Licensing cost savings (risk-adjusted)		$270,000	$405,000	$540,000
	Three-year total: $1,215,000		**Three-year present value: $985,875**		

PROCUREMENT EFFICIENCIES

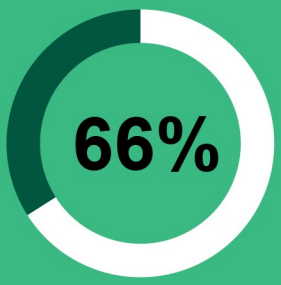
Interviewees noted several efficiency gains that using AWS Marketplace brought to their organizations. These gains varied from consolidating invoice management tasks to partially eliminating lengthy legal reviews by using the provided standard terms and conditions template (Standard Contract for Marketplace, or SCMP) provided by AWS Marketplace. The next several subsections will cover each efficiency gain in more detail and describe how the composite organization experienced these gains.

Invoicing efficiencies

Evidence and data. With legacy procurement and billing, employees at the interviewees' organizations were often inundated with invoices from software vendors used across departments. It was common for those responsible for invoice management to spend time reaching out to various line-of-business owners in an attempt to verify what solutions were being used, who was using them, and if the invoicing information provided by the solution vendor was correct. The senior business manager for an electronics manufacturer highlighted this issue by saying: "In our legacy billing workflow we would have to deal with the additional procurement and billing involvement. A vendor would send us an invoice and we would need to process it. I would have to confirm that invoice, our teams have to process the invoice, and then someone has to approve the payout."

AWS Marketplace delivers invoices in one consolidated portal, which allowed interviewees' organizations' employees to easily process and confirm invoices from registered vendors. This streamlined these workflows and allowed employees to focus on more business-critical tasks. The senior business manager for an electronics manufacturer shared how using AWS Marketplace has improved their invoicing processes: "If I get an invoice through AWS Marketplace, [each vendor is] just another line item in that invoice and I'm able to save time by eliminating those excess steps."

Time saved processing invoices



Modeling and assumptions. For the financial model, Forrester assumes the following:

- Legacy invoicing workflows involve 10 employees dedicating a minimum of 8 hours of work each month to tracking and approving software invoices. This time increases to 10 hours in Year 2 and 13 hours in Year 3.
- Consolidating vendor invoices to one central portal allows the employees to reduce the time spent on these tasks by 50%.
- The average hourly salary for the employees dedicated to these tasks is $34 with 5% annual inflation.

Risks. The following factors may affect the extent to which an organization experiences these benefits:

- Legacy invoicing practices will impact the extent to which AWS Marketplace will reduce manual efforts associated with these workflows.
- Hourly salary will vary by the individuals involved in these processes, industry, and location of the organization.

Procurement time savings enabled by AWS Marketplace

Evidence and data. The interviewees' organizations experienced additional time savings in their software search and procurement processes. In legacy states, procurement employees would spend extensive time searching for software vendors, conducting lengthy RFPs, and conducting time-consuming internal

reviews and evaluations. These prolonged procurement processes delayed the positive effects these solutions could provide.

This arduous process was described by one interviewee who said: “You could have five or six different levels of people having to agree that we need a software solution. [First] the person that requested the funds [and then], depending on how big that dollar amount is, it could go all the way up to the CFO.”

AWS Marketplace enabled these organizations to reduce aspects of their approval process by streamlining the search for software, allowing for easy comparison, and removing aspects of vendor authentication and validation.

The CIO of a software security organization described it: "Certainly, there’s time savings. They are scrolling through the catalog and they just pick the category, [narrowing down the list] and then they have five, six, seven options. That takes minutes, seconds, and then they’re just [completing a] search on Google for characteristics to go with comparisons, they’re asking their friends, the companies. They’re to the final step of selection within minutes versus having to manually call and figure out who is in the market, who are the seven people I got to call. [they don’t have to] call them, set appointments, meet a salesperson. All those steps just take a tremendous amount of time." These essential time savings for organizations enabled them to realize the benefits of the software they deploy more quickly.

Modeling and assumptions. For the financial model, Forrester assumes the following:

- Thirty employees have input into the procurement process in the legacy workflows. Typically, this included line-of-business users and individuals from IT, procurement, and legal teams.
- Most legacy procurement workflows take several months to complete. However, only a certain percentage of that time is actual working time. For this analysis, 160 hours of working time is dedicated to processing and executing software procurements.
- The composite organization initially conducts four software procurements with AWS Marketplace in Year 1, six in Year 2, and eight in Year 3.
- The average hourly salary for the employees involved in these workflows is $50 with 5% annual inflation.
- The efficiencies enabled by identifying, purchasing, and deploying software through AWS Marketplace allows the organization to reduce the time spent on these activities by 66%.

“The fact that we can leverage the AWS Marketplace templates and use their approved terms and conditions allows us to streamline our purchasing of a lot of different software.” *Senior manager of IT procurement, IT services management*

Risks. Legacy procurement practices will impact the extent to which AWS Marketplace will reduce manual efforts associated with these workflows, as well as the extent to which an organization will experience these benefits.

Contract drafting time savings enabled by AWS Marketplace

Evidence and data. Many of the interviewees detailed how their organizations expedited legal review processes by using the standard terms and conditions templates for software purchase

agreements that AWS Marketplace makes available to users. Users at the organizations could amend templates and attach addendums to cover specific requirements while they still benefitted from the accelerated time-to-contract the templates offer.

Legacy procurement workflows often required organizations' teams to draft new contracts for each purchase. That could require multiple levels of approval from the organization buying the software as well as from the sellers themselves. This created additional roadblocks that prolonged software deployment and delayed the benefits these solutions provided. One customer described how the contract terms and conditions provided by AWS Marketplace can help streamline procurement processes: "These templates supplement our procurement process with a cleaner and faster mechanism to procure various software products. I don't have to pull the suppliers' terms of agreement and review them. I can simply say: 'The Amazon template works. Let me just go ahead and buy it under the Amazon agreement.'"

Modeling and assumptions. For the financial model, Forrester assumes the following:

- The 30 employees involved with identifying, procuring, and deploying new software solutions are ultimately the same individuals who must draft and finalize the usage contract with the software vendor.
- In legacy workflows, these employees spend an average of 10 hours drafting, revising, and agreeing on a set of terms and conditions per procurement.
- The templatized terms and conditions provided by AWS can standardize a significant portion of these software licenses agreements, reducing the manual effort to draft these documents by 90%.
- The average hourly salary for employees involved in drafting these contracts is $50 with 5% annual inflation.

Risks. The extent to which an organization experiences these benefits will be affected by its ability to use the standard terms and conditions. Vertical, geographical, and organizational philosophies influence that ability. The extent to which a customer needs to customize each contract will reduce the time savings organizations can experience.

Results. To account for all of the aforementioned risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of over $2,000,000.

Procurement Efficiencies

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of employees involved in invoicing prior to using AWS Marketplace	Assumption	10	10	10
B2	Time spent processing invoices prior to using AWS Marketplace (hours per month)	Interviews	8	10	13
B3	Average hourly salary of employees involved in invoicing	TEI standard	$34.00	$35.70	$37.49
B4	Total cost of process prior to using AWS Marketplace	B1*B2*B3*12	$32,640	$42,840	$56,228
B5	Reduced manual effort enabled by AWS Marketplace	Interviews	50%	50%	50%
B6	Subtotal: Total cost of processing invoice using AWS Marketplace	B4*B5	$16,320	$21,420	$28,114
B7	Number of employees involved in procurement process	Assumption	30	30	30
B8	Time spent on procurement activities per deployment prior to AWS Marketplace (hours)	Assumption	160	160	160
B9	Average hourly salary of employees involved in procurement	TEI standard	$50.00	$52.50	$55.13
B10	Total number of yearly procurements	Assumption	4	6	8
B11	Total cost of procurement process prior to AWS Marketplace	B1*B8*B9*B10	$960,000	$1,512,000	$2,116,800
B12	Time savings enabled by AWS Marketplace	Interviews	66%	66%	66%
B13	Subtotal: Procurement time savings enabled by AWS Marketplace	B11*B12	$633,600	$997,920	$1,397,088
B14	Employees involved in contract drafting	Assumption	30	30	30
B15	Time to draft contract in legacy state (hours)	Interviews	10	10	10
B16	Reduction in effort to draft contracts	Interviews	90%	90%	90%
B17	Average hourly salary for employees involved in contract drafting	B9	$50.00	$52.50	$55.13
B18	Subtotal: Contract drafting time savings enabled by AWS Marketplace	B10*B14*B15*B16*B17	$54,000	$85,050	$119,070
Bt	Procurement efficiencies	B6+B13+B18	$703,920	$1,104,390	$1,544,272
	Risk adjustment	↓15%			
Btr	Procurement efficiencies (risk-adjusted)		$598,332	$938,732	$1,312,631
	Three-year total: $2,849,694		**Three-year present value: $2,305,948**		

AWS DISCOUNT ATTAINED THROUGH AWS MARKETPLACE SPEND

Evidence and data. In addition to efficiency benefits, many of the interviewees pointed to AWS Marketplace as a potential source of savings for their organizations. These organizations had AWS spend commitments they needed to hit in order to earn discounts the following year. Some interviewees struggled to hit their commitments and forfeited large contractual discounts. Driving software procurement through AWS Marketplace allowed these organizations to count their software investments towards their overall AWS spend. This was a benefit to many customers as several experienced periods when their organizations struggled to meet their committed spend, causing some discounts to be lost. One customer described these savings and said: "We've made commitments to AWS that we're going to spend a certain amount of money with them every year and our Marketplace purchases count toward that spend. Besides getting a great deal, AWS [Marketplace] gives us the credit for spending that money and gives us additional discounts."

Modeling and assumptions. For the financial model, Forrester assumes that the composite organization has a $1 million AWS discount that it attains by hitting its spend commitment. With AWS Marketplace, the organization is able to meet some of its commitment gap, ensuring that it earns the discount. Only a portion of the discount attainment is achieved via AWS Marketplace, as the organization has other AWS spending. As the composite increases the scale of its use of AWS Marketplace, the spending in AWS Marketplace drives a larger portion of discount attainment.

Risks. The following factors may affect the extent to which an organization experiences these benefits:

- The size of the spend gap with AWS will vary based on organizational philosophy and needs. Some of the interviewees noted that they would attempt to find creative or new ways to use their allotted AWS spend.
- The total discount amount will vary based on individual contracts.

At-risk spend recaptured with AWS Marketplace

25%

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of over $1,000,000.

AWS Discount Attained Through AWS Marketplace Spend

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	AWS discount at risk of loss prior to using AWS Marketplace	Composite	$1,000,000	$1,000,000	$1,000,000
C2	Percentage of discount recapture attributed to AWS Marketplace spending	Interviews	25%	50%	75%
Ct	AWS discount attained through AWS Marketplace spend	C1*C2	$250,000	$500,000	$750,000
	Risk adjustment	↓15%			
Ctr	AWS discount attained through AWS Marketplace spend (risk-adjusted)		$212,500	$425,000	$637,500
	Three-year total: $1,275,000		**Three-year present value: $1,023,385**		

VENDOR ONBOARDING EFFICIENCIES

Evidence and data. Finally, the interviewees' organizations found that using AWS Marketplace improved the process to vet and onboard new vendors. Legacy workflows required extensive vetting by legal and procurement teams. Additionally, there was significant work required to connect new vendors to established invoicing solutions. One interviewee described these challenges: "Previously, when a new vendor would send a PO, we would spend time matching that PO to an invoice. When their first invoice comes through, we would have to do the reverse. Doing a three-way match and going through all of those steps was a significant waste of time."

AWS Marketplace removes many of the extra steps previously associated with these workflows for vendors in its catalog. Customers rely on Amazon's expertise to vet vendors, allowing them to avoid time spent on consuming investigations and further streamlining the procurement processes. One interviewee described these efficiencies: "Whenever we were previously onboarding a new vendor, we had to get their W9 and send that through a whole process to make sure that they are a legitimate vendor. If you're using AWS, this information is already there. AWS is not going to allow an untrustworthy company to do business on the [AWS] Marketplace. So that validation is already there. There's a vetting that happens on AWS that we can avoid."

Modeling and assumptions. For the financial model, Forrester assumes the following:

- A team of 15 employees is involved in legacy vendor vetting and onboarding workflows. These employees investigate new vendors, ensure their validity, and connect them to legacy invoicing solutions and workflows. These employees are typically working in the procurement, IT, and legal departments.
- Employees spend an average of 8 hours performing vendor onboarding tasks. The composite organization onboards four vendors in Year 1, six vendors in Year 2, and eight vendors in Year 3. Procuring software through AWS Marketplace enables the composite organization to reduce the time spent on these tasks by 75%.

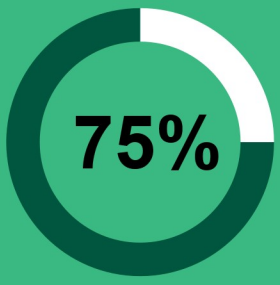
- The hourly salary for employees involved in the vendor vetting and onboarding process is $50 with 5% annual inflation.

Risks. The following factors may affect the extent to which an organization experiences these benefits:

- Internal vendor onboarding processes will vary on an organizational basis.
- The ability to offload vendor vetting tasks to the AWS Marketplace team.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over $62,000.

Reduction in effort needed to onboard new vendors



Vendor Onboarding Efficiencies

Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Employees required for vendor onboarding prior to using AWS Marketplace	Interviews	15	15	15
D2	Time spent onboarding vendor in legacy state	Interviews	8	8	8
D3	Frequency of vendor onboarding	A1	4	6	8
D4	Hourly salary for employees in vendor onboarding	TEI standard	$50.00	$52.50	$55.13
D5	Cost of vendor onboarding prior to using AWS Marketplace	D1*D2*D3*D4	$24,000	$37,800	$52,920
D6	Reduction in effort to onboard new vendors with AWS Marketplace	Interviews	75%	75%	75%
Dt	Vendor onboarding efficiencies	D5*D6	$18,000	$28,350	$39,690
	Risk adjustment	↓10%			
Dtr	Vendor onboarding efficiencies (risk-adjusted)		$16,200	$25,515	$35,721
	Three-year total: $77,436	**Three-year present value: $62,652**			

UNQUANTIFIED BENEFITS

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

- **Improving time-to-deployment for new solutions.** The interviewees found that their organizations were able to experience the benefits of the solutions they purchased faster with AWS Marketplace than they could in legacy states. This led to a plethora of benefits for end users and was a driving factor behind expanding software purchased within AWS Marketplace.

  One interviewee said: "As soon as the deal is complete, users are able to log in through the provider and start getting access to the solution immediately. They can get these products stood up pretty quickly. Having everything operating in the AWS environment already allows us to set up solutions and recognize their benefits more quickly. I think there's clear business benefit in terms of the acquisition time."

- **Improving workflows to complete software updates.** Some of the interviewees found that shifting procurement and hosting of certain software products using AWS Marketplace enabled their development teams to complete software updates more efficiently. One interviewee described how AWS Marketplace lays out a clear upgrade plan for developers to follow, something that legacy procurement and deployment workflows failed to provide. Another interviewee noted: "Upgrading our AWS solutions just simplifies the process significantly. It takes the unknown and makes it known by providing a clear upgrade path as we go forward. It's just faster and simpler. In the past, a lot of our solutions were not upgraded proactively because there wasn't a clear path. [That] left us with solutions that were missing new capabilities."

FLEXIBILITY

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

- **Integration with legacy procurement software.** Several of the interviewees described how integrating AWS Marketplace with their organizations' established procurement software solutions could drive additional value and visibility in both solutions. One of the interviewees said: "If we tied AWS Marketplace into [our] existing procurement process, we'll have advocates from the procurement team and some from audit function and general usage. Having that in place in a familiar environment makes it very easy to get penetration rates on usage and make more informed decisions."

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

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs

Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Implementation and training time	$414,000	$86,250	$90,563	$95,091	$685,903	$638,697
Ftr	AWS marketplace relationship management	$0	$13,200	$13,860	$14,553	$41,613	$34,388
	Total costs (risk-adjusted)	$414,000	$99,450	$104,423	$109,644	$727,516	$673,085

IMPLEMENTATION AND TRAINING TIME

Evidence and data. The interviewees stated that their organization's teams spent time planning for and executing the change management tasks required for procurement via AWS Marketplace. Individuals from IT, procurement, legal, and line-of-business users usually undertook these tasks.

The interviewees' organizations' teams also spent time educating users on how to properly search, identify, and procure software through AWS Marketplace. As these organizations expanded their use of AWS Marketplace to new aspects of their organization, they also expand their training efforts to ensure a cohesive use of AWS Marketplace.

Modeling and assumptions. For the financial model, Forrester assumes the following:

- The composite dedicates a team of 10 individuals to planning for and executing change management workflows for groups affected by AWS Marketplace procurement process. These employees spend 120 hours planning and executing the change management tasks associated with implementing AWS Marketplace. The average hourly salary for these employees is $50 with 5% annual inflation.
- 200 employees participate in 30 hours' worth of training on how to alter legacy workflows to use AWS Marketplace. An additional 50 users undergo the same training as the composite organization expands its use of AWS Marketplace.

Risks. The following factors may affect the extent to which an organization experiences these costs:

- The extent to which organizations need to implement change management workflows to address changes in procurement processes.
- The number of employees involved in training and their hourly salary.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of over $628,000.

Implementation And Training Time						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	Employees involved in AWS Marketplace planning and change management tasks	Interviews	10	0	0	0
E2	Time spent performing implementation and change management tasks (hours)	Interviews	120	0	0	0
E3	Hourly salary for involved employees	TEI standard	$50	$50.00	$52.50	$55.13
E4	Implementation costs	E1*E2*E3	$60,000	$0	$0	$0
E5	Employees involved in AWS Marketplace training	Interviews	200	50	50	50
E6	Time spent in training (hours)	Interviews	30	30	30	30
E7	Training costs	E5*E6*E3	$300,000	$75,000	$78,750	$82,688
Et	Implementation and training time	E4+E7	$360,000	$75,000	$78,750	$82,688
	Risk adjustment	↑15%				
Etr	Implementation and training time (risk-adjusted)		$414,000	$86,250	$90,563	$95,091
Three-year total: $685,903		**Three-year present value: $638,697**				

AWS MARKETPLACE RELATIONSHIP MANAGEMENT

Evidence and data. Interviewees said their organizations spent time working with representatives from AWS to identify new opportunities and discuss ways to better use the full capabilities of AWS Marketplace.

Modeling and assumptions. For the financial model, Forrester assumes the following:

- 10 employees spend an average of 2 hours each month interacting with the AWS Marketplace team. These employees spend time managing their AWS Marketplace deployments and identifying new opportunities.
- The average hourly salary for employees responsible for managing this relationship is $50 with 5% annual inflation.

Risks. The management time needed for this relationship will vary based on organizational goals and needs. This risk may affect the extent to which an organization experiences these costs.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of over $34,000.

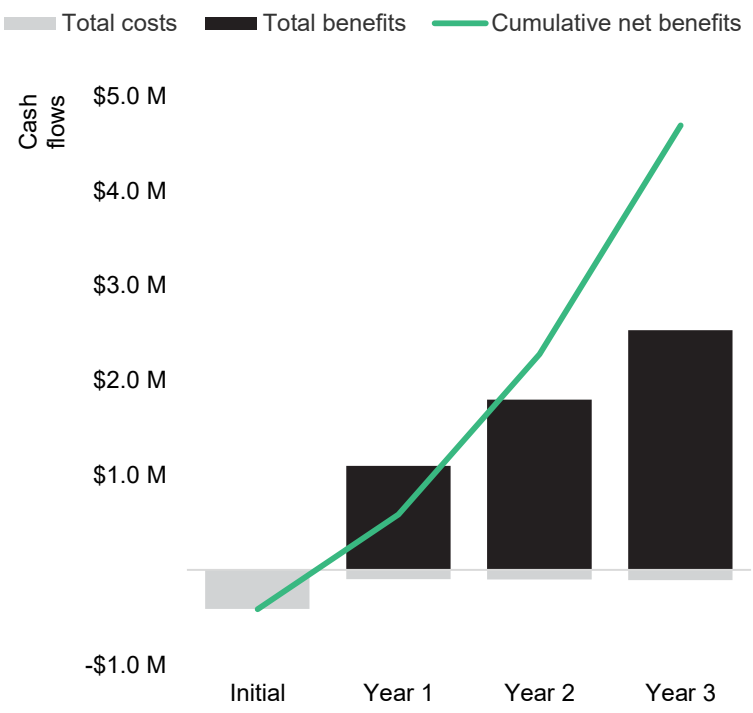
AWS Marketplace Relationship Management

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Employees dedicated to maintaining AWS marketplace relationship	Interviews	0	10	10	10
F2	Time spent in monthly meetings with AWS teams	Interviews	0	2	2	2
F3	Hourly cost of employees involved AWS marketplace management	TEI standard	$0	$50.00	$52.50	$55.13
Ft	AWS marketplace relationship management	F1*F2*F3	$0	$12,000	$12,600	$13,230
	Risk adjustment	↑10%				
Ftr	AWS marketplace relationship management (risk-adjusted)		$0	$13,200	$13,860	$14,553
	Three-year total: $41,613			**Three-year present value: $34,388**		

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	($414,000)	($99,450)	($104,423)	($109,644)	($727,516)	($673,085)
Total benefits	$0	$1,097,032	$1,794,247	$2,525,852	$5,417,130	$4,377,860
Net benefits	($414,000)	$997,582	$1,689,824	$2,416,208	$4,689,614	$3,704,775
ROI						550%
Payback period						<6 months

Appendix A: Total Economic Impact

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

TOTAL ECONOMIC IMPACT APPROACH

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

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

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

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

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

PRESENT VALUE (PV)

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

NET PRESENT VALUE (NPV)

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

RETURN ON INVESTMENT (ROI)

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

DISCOUNT RATE

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

PAYBACK PERIOD

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

Appendix B: Endnotes

[1] 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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