A Forrester Total Economic Impact™
Study Commissioned By Amazon
October 2017

The Business Case For Next-Generation AWS Managed Services Providers (MSPs)

A Total Economic Impact™ Analysis For Amazon Web Services (AWS) Partner Network (APN) Partners

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October 2017

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Business opportunities abound for partners who build next-generation AWS practices:

Year 3 managed services gross margin (%):

57%

Year 3 practice gross margin (%):

50%

Year 3 practice operating margin (%):

35%

Executive Summary

The traditional managed services provider (MSP) business model is rapidly evolving as customers increasingly demand comprehensive cloud-native solutions that reduce costs, improve business agility, increase security, and empower organizations to focus on their goal of delivering unparalleled customer experiences that drive growth. As customers pursue best-of-breed cloud strategies, traditional IT service providers are quickly realizing that they need a new set of skills, capabilities, processes, and services to help their customers design, migrate, run, manage, and optimize their infrastructure and applications in the cloud. As a result, traditional MSPs, whose legacy business was focused primarily on managing hardware and delivering on-premises solutions, are rapidly shifting their business models and acquiring new skill sets and proficiencies to meet their customers' increasingly sophisticated business requirements. These next-generation MSPs have developed a unique set of skills and capabilities that enable them to design, build, migrate, run, and optimize cloud and digital solutions that increase business agility, drive innovation, and improve business performance.

AWS commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study to examine and demonstrate the business opportunity and return on investment (ROI) that Amazon Web Services (AWS) Partner Network (APN) partners may realize by developing or expanding their practice areas to include next-generation professional and managed services across the customer engagement life cycle. The purpose of this study is to provide partners with a framework to evaluate the potential business opportunity of building a next-generation practice by delivering a diverse range of AWS managed services, cloud strategy and migration services, proprietary value-add software solutions, and complementary third-party applications.

To better understand the revenues, margins, expenses, and risks associated with a next-generation AWS managed services practice, Forrester interviewed eight existing partners with multiple years' experience delivering next-generation services for AWS customers.

Partner Revenue and Margin Opportunities

The table below shows the present value (PV) risk-adjusted gross margins available to MSPs at Year 3 of the analysis. This revenue opportunity analysis, built on a composite partner representative of the partner interviews, is intended to be used as a framework for partners to understand the total business potential associated with building a comprehensive next-generation AWS practice.

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Financial Summary Showing Three-Year Risk-And PV-Adjusted Results

ROI
138%

Total Gross Profit (PV)
$36.7 million

NPV
$21.3 million

Payback
14 months

- **Next-generation professional services: plan, design, build, and migrate.** As customers embark on their journey to the cloud, consulting partners have several interrelated professional service business opportunities where they can leverage their unique next-generation skill sets, proficiencies, systems, and intellectual property (IP) to build long-lasting customer business relationships. Customer cloud initiatives generally began with an upfront strategic consulting engagement focused on understanding their customers' desired business outcomes, assessing their existing infrastructure and operations, and building best-of-breed cloud strategies, including DevOps transformations. Successful strategy engagements ideally positioned consulting partners for subsequent design, build, and migrate engagements, many of which spanned multiple years and had multimillion-dollar price tags. Over our three-year analysis, comprehensive next-generation professional services made up 64% of the composite APN partner's total gross profit.

- **Next-generation managed services: run, operate, and optimize**. Consulting partners built, packaged, and sold robust portfolios of next-generation AWS managed services at a variety of price points and service levels to meet the diverse and sophisticated workload management and optimization needs of today's technology buyers. Our analysis found that consulting partners had success selling next-generation managed services following successful migration engagements, with several consulting partners indicating that they saw attach rates as high as 60% to 80% across their entire managed services portfolio. Furthermore, these managed services offerings provided consulting partners with sticky, high-margin annuity revenue streams. Over the three-year analysis, next-generation managed services accounted for 22% of the composite APN partner's total gross profit.

- **AWS consumption resale and business support services**. To truly provide end-to-end services to their cloud customers, the majority of MSP partners interviewed for this study resold AWS consumption and provided billing aggregation, reserved and spot instance services, and business support to their AWS customer base. Over the three-year analysis, AWS consumption resale and business support accounted for 7% of the composite APN partner's total gross profit.

- **Complementary third-party applications sales**. APN partners can resell third-party applications and solutions that complement and augment their customer's AWS and business environments. While APN partners varied significantly in the specific third-party software brands they resold, our interviews revealed that next-generation partners could attach several common solutions to AWS deals, including security monitoring, alerting, and management; cloud cost management; and data management, analytics, and data visualization applications. Notably, several APN partners wrapped third-party applications into their managed services offerings instead of reselling them, enabling them to adopt a premium pricing model.

- **Value-add IP sales**. In addition to reselling third-party applications, many APN partners leveraged their strong existing software development and engineering skills to build and deliver a variety of proprietary horizontal- and vertical-specific software applications on AWS. While attach rates were modest at around 30% of migrated customers, value-add IP sales brought 80% gross margins and accounted for 6% of the composite partner's total gross profit over the three-year analysis.

Year 3 Risk- And PV-Adjusted Revenue And Margin Opportunity (USD)		
REVENUE CATEGORY	**YEAR 3 GROSS PROFIT**	**YEAR 3 GROSS MARGIN %**
Next-generation professional services: plan, design, build, and migrate	$19,247,250	45%
Next-generation managed services: run, operate, and optimize	$7,528,715	57%
AWS consumption resale and business support services	$2,317,390	7% to 10+%
Complementary third-party applications sales	$240,774	20%
Value-add IP sales	$1,468,800	80%

The composite APN partner three-year pro forma revenue and margin opportunity chart below shows the potential revenue and gross margin opportunities available to next-generation APN partners, as applied to the composite partner. It depicts the holistic business opportunity for partners that offer end-to-end next-generation AWS products, services, and complementary solutions.

Next-Generation APN Partner Pro Forma Revenue And Margin Opportunity: Three-Year Analysis (USD)						
REF.	REVENUE CAT.	METRIC	CALC	Year 1	Year 2	Year 3
PL1	Next-generation professional services: plan, design, build, and migrate services	Strategy, planning, assessment, and advisory consulting		$925,000	$1,250,000	$1,425,000
PL2		Initial design, rebuild, migrate, and deploy engagement revenue		$3,525,000	$9,412,500	$10,012,500
PL3		Follow-on design, rebuild, migrate, and deploy engagement revenue		$0	$10,966,667	$31,150,000
PL4		Total next-generation professional services revenue		$4,450,000	$21,629,167	$42,587,500
PL5		Next-generation professional services gross margins		$1,647,063	$8,880,969	$19,247,250
PL6		Next-generation professional services gross margin %	PL5/PL4	37%	41%	45%
PL7	Next-generation managed services: run, operate, optimize	Basic managed services		$118,800	$878,790	$1,963,146
PL8		Premium managed services		$297,000	$2,468,400	$6,082,920
PL9		Custom application and data platform managed services		$138,402	$1,656,211	$5,024,943
PL10		DevOps managed services		$60,000	$300,000	$780,000
PL11		Less churn		$(8,895)	$(163,555)	$(642,737)
PL12		Total next-generation managed services revenue		$605,307	$5,139,845	$13,208,272
PL13		Total next-generation managed services gross margin		$287,521	$2,685,569	$7,528,715
PL14		Total next-generation managed services gross margin %	PL13/ PL12	48%	52%	57%
PL15	AWS resale and business support	Total annual AWS consumption resale gross sales (churn-adjusted)		$1,300,883	$8,922,692	$19,311,585
PL16		Total AWS resale and business support margins		$156,106	$1,070,723	$2,317,390
PL17	Third-party applications and value-add intellectual property	Total third-party application sales		$259,205	$687,976	$1,267,230
PL18		Total value-add proprietary solution sales		$600,000	$1,200,000	$2,040,000
PL19		Third-party application gross margin		$49,249	$130,715	$240,774
PL20		Value-add proprietary solution gross margin		$432,000	$864,000	$1,468,800
PL21	Grand total	**Total all revenues**	PL4+PL12+PL16 +PL17 +PL18	$6,070,618	$29,727,711	$61,420,392
PL22		**Total all gross margin**	PL5+PL13+PL16 +PL19+PL20	$2,571,938	$13,631,976	$30,802,929
PL23		**Total gross margin %**	PL22/PL21	42%	46%	50%

Partner Investments

Direct service and solution delivery costs included salary expenses for software developers, solution architects, engineers, and delivery consultants, which are included in the gross margin calculations outlined in the Revenue and Margin section of this document. Beyond these costs, interviewed partners made a number of strategic investments to establish, grow, and scale their AWS next-generation managed services practices. The expense analysis table below outlines the investments made by the composite partner to build and scale its next-generation AWS practice.

- **Staffing expenses.** These are incremental salary and human resource expenses for sales professionals, end user and technical support staff, and practice leads responsible for driving the growth and profitability of the next-generation managed services business.
- **Marketing expense.** This is the incremental annual marketing spend needed to build brand awareness and educate the marketplace on the partner's next-generation AWS service and capability portfolio. Annual marketing spend ranged between 3% to 8% of gross sales over the three-year analysis.
- **Solution research and development (R&D) and practice build-out expenses**. These are the initial and ongoing research and practice development investments made by the composite partner to build automated cloud migration and managed services capabilities, develop internal processes and systems to streamline service operations, and preparation and audits for the organization to gain AWS next-generation managed services program eligibility.
- **Training expenses**. These are ongoing training and certification expenses needed to build the partner's next-generation capabilities and grow the number of AWS certifications held by its consultants, architects, engineers, and developers.
- **General and administrative (G&A) expenses.** G&A expenses for the composite partner are assumed to be 5% of gross sales each year of the analysis.

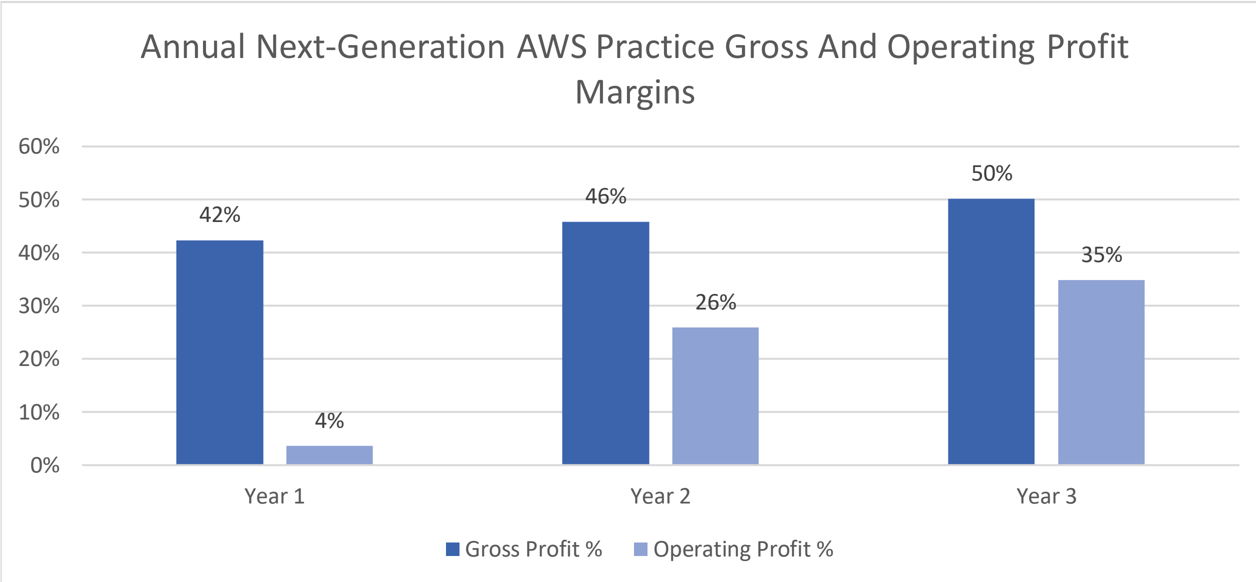
Expense Analysis (USD)

REF.	METRIC	CALC	Initial	Year 1	Year 2	Year 3
CST1	Staffing expenses	Htr		$1,466,456	$2,378,354	$3,499,597
CST2	Marketing spend	Itr		$509,932	$1,248,564	$1,934,742
CST3	Solution research and development (R&D) and practice build-out expenses	Ktr	$1,320,690	$0	$675,938	$696,216
CST4	Training expenses	Jtr		$73,377	$136,042	$233,538
CST5	General and administrative expenses	Lt		$303,531	$1,486,386	$3,071,020
CST6	**Total costs**	**Sum(CST1:CST5)**	**$1,320,690**	**$2,353,296**	**$5,925,282**	**$9,435,113**

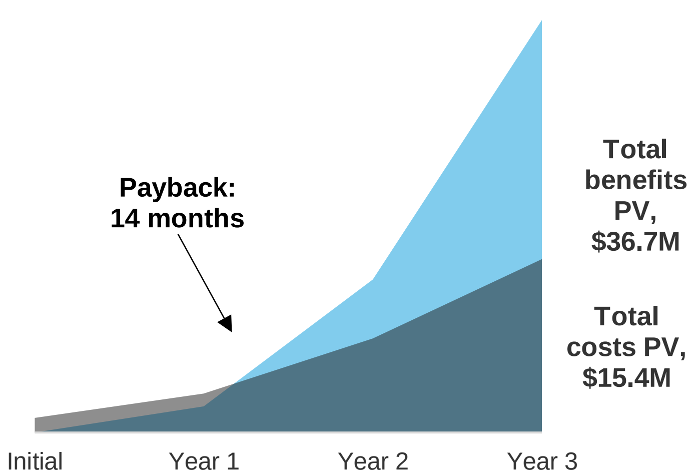
Next-Generation Partner Business Outcomes

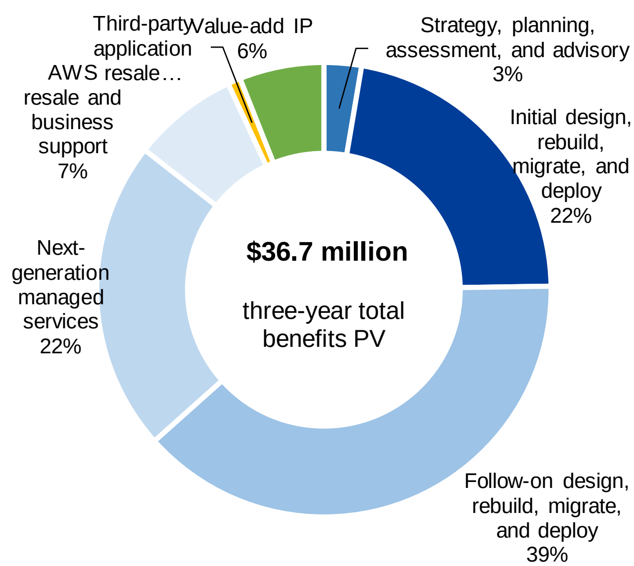
Forrester's interviews with eight current AWS next-generation APN partners and subsequent financial analysis found that a composite partner based on these interviews experienced total risk- and present value-adjusted gross profits of $37.9 million over three years versus risk- and present value-adjusted investment and overhead expenses of $15.5 million, adding up to a net present value (NPV) of $22.4 million and an ROI of 144%. As seen in the table below, by Year 3 of the analysis, the composite APN partner saw practicewide gross margins of 51% and operating margins of 36%.

Gross And Operating Profit Analysis



Financial Summary





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TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those partners building out a next-generation AWS services practice.

Forrester took a multistep approach to evaluate the business impact of next-generation services for APN Partners:

DUE DILIGENCE
Interviewed AWS stakeholders and Forrester analysts to gather data relative to AWS and associated public cloud managed services opportunities.

CUSTOMER INTERVIEWS
Interviewed eight partners selling AWS next-generation services and solutions to obtain data with respect to costs, revenues, margins, and risks.

COMPOSITE APN PARTNER
Designed a composite partner 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 business impact of AWS next-generation services: margins, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

Analysis

Interview Highlights

For this study, Forrester conducted eight interviews with existing AWS MSP partners with experience developing, selling, and delivering next-generation AWS services and solutions. Forrester interviewed founders, CEOs, presidents, executive vice presidents (EVPs), general managers (GMs), and directors at AWS MSP partner organizations.

Partner Characteristics

The interviewed partners had the following characteristics in common:

- **Partners were highly focused on delivering end-to-end next-generation services across the customer engagement life cycle.** Partners indicated that they found the most success when they became their customers' trusted cloud partner. By acquiring strong cloud expertise and building a robust portfolio of next-generation cloud solutions, partners were able to form multiyear business relationships generating high-margin recurring and annuity revenue streams. One partner indicated that 60% to 70% of its professional services revenue came from follow-on engagements, noting, "We try and find companies that want a long-term partner, so they want to work with us on multiple engagements and multiple different projects, platforms, and initiatives."

> "We try and find companies that want a long-term partner, so they want to work with us on multiple engagement and multiple different projects, platforms, and initiatives."
>
> *EVP, NA partner*

- **Partners were investing heavily to build out next-generation capabilities and deep AWS expertise.** While partners came from varied backgrounds, ranging from traditional IT outsourcing to born-in-the-cloud experts, all partners indicated that they were continually investing heavily in training, AWS certifications, product and service research and development, and talent acquisition. One partner indicated, "I don't want anyone working in the AWS business that isn't certified by AWS." Beyond AWS certifications, the most successful partners built deep and rich subject matter expertise outside of their core migration capabilities, particularly in high-demand technology domains, including big data management, DevOps, cloud and enterprise security, artificial intelligence, and the internet-of-things (IoT).

> "What I've seen now is that skill is the number one inhibitor. The enterprises have the same problem that all of us have, which is we just don't have enough people with the right skills to help them with Amazon who have the certifications and things like that."
>
> *EVP, NA partner*

- **Partners were building and scaling new solutions to help their customers become more agile and innovative.** While the conversation around the benefits of cloud had historically focused on reducing or avoiding IT and infrastructure costs, partners noted that customers were increasingly expecting more value from their cloud partners. Partners indicated that their customers were increasingly expecting their cloud partners to assist them in empowering their developers to deliver better customer experiences and in unlocking agility and innovation in their businesses.

> "The customer's preference is around innovation and release velocity and all those good things. We have a number of different kinds of agile operations offerings that include having shared to dedicated teams working without the working kind of partnership for customers."
>
> *Cofounder, EMEA partner*

Key Partner Challenges

The interviewed partners faced a set of common business challenges, including:

- **Evolving enterprise cloud-buying patterns and challenging sales cycles**. Partners revealed that customers tended to adopt a piecemeal approach on their journey to the cloud, often preferring to spread cloud migration efforts over multiple years. While this meant smaller engagement sizes on the front end of the customer engagement life cycle, partners who invested in building long-lasting business relationships and demonstrated their strong cloud expertise were ultimately rewarded with large follow-on engagements and, in many instances, high-margin managed services contracts. Notably, given customers' piecemeal cloud migration preferences, long sales cycles, and customers' reluctance to commit to managed services early on in their cloud journey, partners almost always initiated customer cloud journey initiatives with thorough strategy and road mapping work.

- **The convergence of infrastructure-as-a-service (IaaS) commoditization and growing customer expectations.** Partners interviewed for the study noted that infrastructure-focused, lift-and-shift professional and managed cloud services were quickly becoming commoditized. At the same time, customer expectations about the impact of cloud on their organizations were growing, requiring partners to obtain new skills and capabilities and deliver next-generation, value-add solutions that deliver on the cost savings, operational efficiency, enhanced security, and business agility outcomes enabled through cloud transformation.

- **Shifting business requirements, models, and value propositions.** Our interviews with system integrators, IT outsourcers, and other traditional IT service providers who built a next-generation managed services practice demonstrated several business model, skill and capability, and value proposition challenges that they needed to address. In order to make this transition, partners adopted new pricing models, engaged in partner-to-partner solution delivery when faced with a skill or solution gap, and built unique service offerings leveraging emerging technologies, including machine learning and artificial intelligence.

"Customers typically like to bite off pieces of the elephant under these large programs, rather than going with one large massive program. Generally, we see three-year, four-year engagement lengths. They usually prefer a series of smaller projects."

Associate director, global partner

"We're focusing on how we can provide next-generation managed security services, leveraging new technologies such as artificial intelligence."

EVP, NA partner

Partner Best Practices and Success Factors

In the face of growing customer expectations around their cloud transformation initiatives, partners made a series of strategic business decisions, business model shifts, and service and solution investments to better win, serve, and retain customers with their next-generation AWS capabilities. Forrester identified the following key partner best practices:

- **Continually invest in the development of tools, scripts, reusable frameworks, and assets.** The most successful partners made continual research and development investments in scripting, tooling, and IP to automate and streamline the delivery of their cloud migration and managed services offerings. These investments enabled partners to rapidly scale their practices as customer demand grew, while concurrently boosting the profitability of their service offerings.

"You can't just expect traditional infrastructure outsourcing folks to manage new services in AWS. It's a whole different kind of paradigm, especially when you're looking at managed services."

Global business development director, global partner

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- **Differentiate and drive competitive advantage through deep, diversified technical expertise**. Partners recognized that they needed to continually invest in training staff and acquire additional AWS certification in order to differentiate themselves in the marketplace and deliver on the true value proposition of next-generation cloud services. Furthermore, several innovative partners built core competencies and assets in highly demanded technology areas, including cloud migration, big data, security, artificial intelligence, DevOps, and the internet-of-things, helping them position themselves as industry leaders, further driving competitive advantage. Interestingly, partners found the most success when employing a diverse range of technical backgrounds within their organizations, spanning both cloud-native and traditional enterprise IT management.

“If you have people who grew up 100% in the legacy world, they tend to struggle with cloud-native. And the corollary is if you have people who are totally raised in the cloud-native world, they tend not to really understand the tier 1 enterprise workloads and some of the enterprise-level requirements around them.”

GM, global partner

- **Offer customers a diverse set of next-generation services across the customer engagement life cycle.** As partners were seeking to become more invested and embedded in their customers’ success in the cloud, they were quickly building out robust, end-to-end next-generation professional and managed services offerings. As seen in the figure below, service offerings were built to align with the customer engagement life cycle and were uniquely designed to execute complete cloud transformation initiatives that improve business agility, reduce costs, increase enterprise security, and drive operational efficiencies.

- **Engage in partner-to-partner collaboration and joint go-to-market initiatives to expand your value proposition**. Partners with skill or capability gaps often found it useful to build horizontal alliances with other APN partners to deliver end-to-end next-generation services. This was especially prevalent for partners that didn’t have the capabilities to build or refactor custom applications.

“We make recommendations around refactoring, and we’ll bring in partners where applicable. Sometimes, the customers are able to do that refactoring themselves. Typically, we’re just dealing with migrating the infrastructure piece to AWS.”

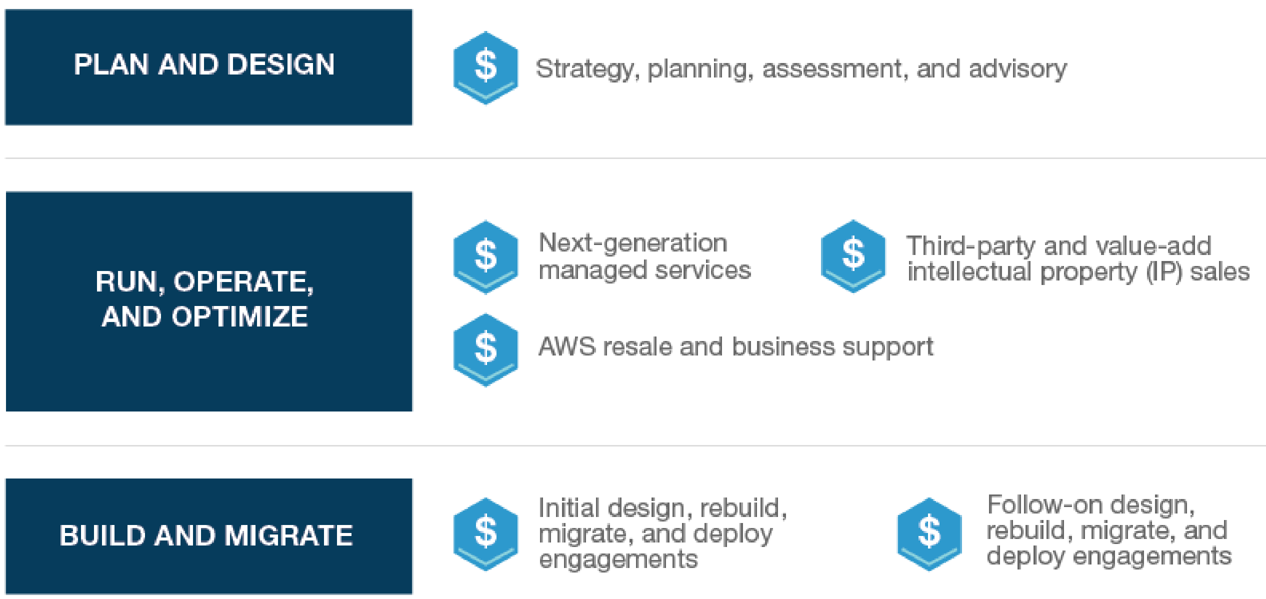
VP of marketing, NA partner

- **Implement new incentive programs to drive sales outcomes and technical staff proficiency development**. As partner revenue models shifted away from large, upfront revenue inflows associated with hardware and perpetual licensing sales toward software-as-a-service (SaaS) recurring revenue streams, partners needed to develop new sales compensation programs that incentivized the right behaviors and key performance indicators (KPIs). Many partners realigned their sales compensation strategies to reward monthly recurring margin levels and renewal rates, often offering sales performance incentive funds (SPIFs) to drive sales of strategic solution offerings that drive higher margins. While cloud partner sales commission models could compensate based on long-term contract values, providing similar incentives to their legacy, hardware-based sales model, the improved profitability and vast upselling and cross-selling opportunities associated with cloud services made monthly commission structures more attractive for ambitious sales staff. Furthermore, monthly recurring margin-based sales compensation models better aligned to the cash flow cadence of cloud service revenue realization. Lastly, partners often offered incentives to technical staff who accrued AWS certifications, encouraging engineers, developers, and solution architects to gain the critical skills and capabilities needed to deliver next-generation services.

- **Explore emerging pricing models to drive revenue growth and build long-lasting business partnerships**. Partners were exploring new managed services pricing models that better aligned their fee structure with their customers’ desired business outcomes and key performance metrics. A number of partners adopted fixed-fee managed services pricing models rather than traditional per virtual machine (VM) or percentage uplift over AWS spend pricing schemas, enabling them to generate predictable annuity revenue streams while better aligning their pricing to each customer’s desired business outcomes. In addition, these fixed-fee pricing models often included a base fee paid upfront to the partner to initiate the service, which helped subsidize customer onboarding costs. Pricing model innovation helped partners gain their customers’ trust by avoiding any perceived conflicts of interest, enabling partners to grow their managed services attach rates while concurrently growing their average managed services contract values.

- **Form long-lasting customer relationships that drive repeat business and annuity revenue streams**. Given the customer trend toward gradual migrations to the cloud, partners need to build and foster long-term business relationships with their clients. As such, many partners were focused on onboarding relatively modest numbers of net-new customers each year and were more focused on closing follow-on migration and managed services opportunities within their existing client bases. Given the challenging sales cycle for net-new customers and the higher hit rate for multiyear cloud migration and next-generation managed services contracts with satisfied existing customers, partners were able to reduce customer acquisition costs and catalyze revenue growth by forging long-term customer cloud partnerships.

Next-Generation Business Opportunities Across The Customer Engagement Life Cycle



Composite Partner

Based on the interviews, Forrester constructed a TEI framework, a composite AWS next-generation APN partner, and an associated business opportunity economic analysis. The composite partner is representative of the eight companies that Forrester interviewed as part of this study. The composite partner is used to present the aggregate financial analysis in the next section and has the following characteristics:

Net-new customers per year
Year 1: 15 new customers
Year 2: 19 new customers
Year 3: 23 new customers

- The composite is a US-headquartered organization with operations across North America and Western Europe and a satellite office in Southeast Asia.
- During the first year of the analysis, the composite partner brought in 15 net-new customers. The organization saw annual net-new partner growth of 25% and 20% in years 2 and 3, respectively. The modest number of net-new customers onboarded each year is consistent with the composite partner's approach of building long-term, highly profitable business partnerships with strategic clients.
- The organization delivers a comprehensive next-generation AWS solutions and services portfolio, consisting of professional services to plan, design, build, and migrate a customer's infrastructure and applications to AWS; next-generation managed services to manage, operate, and optimize the cost and performance of a customer's AWS workloads; and a variety of third-party and proprietary applications to augment and complement its customers' AWS deployments and business environments.
- The partner developed several vertical-specific proprietary software applications on AWS and currently packages and sells these solutions across its AWS customer base.

Financial Analysis

COMPOSITE PARTNER REVENUE AND MARGIN OPPORTUNITIES

Total Gross Margins (USD)						
REF.	**REVENUE CAT.**	**Year 1**	**Year 2**	**Year 3**	**TOTAL**	**PRESENT VALUE**
Atr	Strategy, planning, assessment, and advisory engagements	$307,563	$415,625	$473,813	$1,197,000	$979,076
Btr	Initial design, rebuild, migrate, and deploy engagements	$1,339,500	$4,023,844	$4,755,938	$10,119,281	$8,116,424
Ctr	Follow-on design, rebuild, migrate, and deploy engagements	$0	$4,441,500	$14,017,500	$18,459,000	$14,202,216
Dtr	Next-generation managed services	$287,521	$2,685,569	$7,528,715	$10,501,805	$8,137,296
Etr	AWS resale and business support services	$156,106	$1,070,723	$2,317,390	$3,544,219	$2,767,899
Ftr	Third-party application resale	$49,249	$130,715	$240,774	$420,738	$333,698
Gtr	Value-add IP	$432,000	$864,000	$1,468,800	$2,764,800	$2,210,308
	Total benefits (risk-adjusted)	$2,571,938	$13,631,976	$30,802,929	$47,006,844	$36,746,918

Next-Generation Professional Services: Plan, Design, Build, And Migrate

Partners interviewed for the study indicated that there are several distinct professional services offerings associated with the next-generation business opportunity. The majority of customer journeys to the cloud started with an initial strategic consulting engagement, where next-generation APN partners would gain a thorough understanding of each customer's desired business outcomes, construct cloud decision frameworks and business cases, assess the customer's existing infrastructure, and educate and engage the customer on the realm of cloud possibilities.

Partners that successfully demonstrated their skills and competencies during this upfront cloud strategy, planning, assessment, and advisory engagement positioned themselves for significant design, build, migrate, and deploy work in coming years. Ultimately, next-generation APN partners saw all three of these professional services offerings as the base for building long-lasting business relationships with customers. As one partner put it: "The ideal scenario begins when we do an engagement with the clients quite early on in their client journey, helping them with their cloud strategy. Then we do the migration work, and then, at the back end of that, the customer will come into one of our different operating models, and we'll manage it for them going forward."

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite partner expects risk-adjusted total benefits to be a PV of more than $36.7 million.

"The ideal scenario begins when we do an engagement with the clients quite early on in their client journey, helping them with their cloud strategy. Then we do the migration work, and then, at the back end of that, the customer will come into one of our different operating models, and we'll manage it for them going forward."

Co-founder, EMEA partner

Strategy, Planning, Assessment, And Advisory Engagements

Our interviews revealed that the majority of customers began their journey to the cloud with an upfront strategic consulting engagement focused on understanding the customer's desired business outcomes, assessing the customer's existing infrastructure, and building a strategy that defines which workloads should be migrated to the cloud and in what order. Often, this phase of the customer engagement life cycle involved building business cases and cloud decision frameworks to gain organizational buy-in, where partners would help their customers clearly define the desired business outcomes of cloud transformation, which often included business agility, innovation, and cost savings. Since the majority of customers moving to the cloud preferred to adopt a more piecemeal approach in their journey to the cloud, these engagements helped customers identify quick wins, which could help them rapidly demonstrate the immense business value of cloud across their organizations.

To model the revenue and margin impact of strategy, planning, assessment, and advisory services for the composite partner, Forrester made the following assumptions:

> "The strategy phase is where you educate and engage the customer on what the realm of possibilities are. You really help them think through their existing infrastructure, tool sets, and processes, and determine how much of that can be or should be leveraged in a cloud environment. You determine those foundational services that really need to be in place for these organizations to be able to effectively migrate to the cloud."
>
> *EVP, NA partner*

- Strategy, planning, assessment, and advisory engagements were segmented into three scope categories to reflect the varied needs and requirements of the composite partner's client base. These categories have been titled small scope, medium scope, and mass migration. These scope categories align with common customer approaches to cloud transformation as uncovered during the partner interviews.
- Average engagement revenue varied significantly across project scopes, starting at $50,000 for a small scope strategy engagement and growing to $100,000 for a mass migration strategy engagement.
- While small and medium scope projects saw significant traction during Year 1 of our analysis, no mass migration engagements were sold during Year 1 due to the longer sales cycle and procurement complexity associated with these larger engagements. As outlined in the table below, several mass migration deals were sold in years 2 and 3 of the analysis.
- Average project gross margin was benchmarked at 35%. Project gross margin includes all direct delivery costs, including project consultants, engineering resources, and materials.

Strategy, planning, assessment, and advisory engagement revenue and pricing models varied across interviewed partners. Several partners indicated that revenue and margins may be lower for these engagements in competitive situations, particularly when the subsequent design, build, migrate, and deploy service opportunities were on the table. To account for these risks, Forrester adjusted this gross profit category downward by 5%, yielding a three-year risk adjusted total PV of $979,076.

Strategy, Planning, Assessment, And Advisory Engagements: Calculation Table (USD)					
REF.	**METRIC**	**CALC.**	**Year 1**	**Year 2**	**Year 3**
A1	Small scope strategy, planning, assessment, and advisory deals		8	9	11
A2	Moderate scope strategy, planning, assessment, and advisory deals		7	8	9
A3	Mass migration strategy, planning, assessment, and advisory deals		0	2	2
A4	Average small scope strategy engagement revenue		$50,000	$50,000	$50,000
A5	Average moderate scope strategy engagement revenue		$75,000	$75,000	$75,000
A6	Average mass migration strategy engagement revenue		$100,000	$100,000	$100,000
A7	Total strategy, planning, assessment, and advisory engagement revenue	(A1*A4)+(A2*A5) + (A3*A6)	$925,000	$1,250,000	$1,425,000
A8	Average project gross margin %	35%	35%	35%	35%
At	Strategy, planning, assessment, and advisory engagements	A7*A8	$323,750	$437,500	$498,750
	Risk adjustment	↓5%			
Atr	Strategy, planning, assessment, and advisory engagements (risk-adjusted)		$307,563	$415,625	$473,813

Initial Design, Rebuild, Migrate, And Deploy Engagements

Partners indicated that successful strategy, planning, assessment, and advisory engagements inevitably led to higher revenue design, rebuild, migrate, and deploy engagements. The majority of partners interviewed for this study noted that the lion's share of their customers adopted a piecemeal approach to cloud adoption, preferring to move only a modest number of workloads to AWS during the initial phase to generate "quick wins" with near immediate business impact. For customers just beginning their journey to the cloud, several partners labeled this professional services phase as a "proof of concept."

Partners noted that a confluence of customer, marketplace, and technology dynamics necessitated next-generation cloud migration professional service solutions that went well beyond the realm of a simple "lift-and-shift." As one partner put it, "We typically find that we need to rebuild each customer's environment, so that it is taking advantage of the cost savings, scalability, and security enabled through AWS." As such, these engagements often included operating system regeneration, application refactoring, and other initiatives to ensure each customer's workloads are designed, architected, and migrated in a cloud-native way.

"Typically, customers adopt a piecemeal approach. They ask us to help define their cloud strategy, define their operating model, and then engage us for smaller engagements that go on, using a multiyear type approach."

Associate director, global partner

"We typically find that we need to rebuild each customer's environment, so that it is taking advantage of the cost savings, scalability, and security enabled through AWS."

VP, marketing, NA partner

For the composite partner, this analysis assumes a varying number of deals and engagements across project scope categories, which are documented in lines B1 through B3 in the table below. In modeling the revenue and margin impact of upfront design, rebuild, migrate, and deploy engagements for the composite partner, Forrester assumed the following:

- Average initial design, rebuild, migrate, and deploy engagements varied in price across scope categories, ranging from $112,500 for a small scope engagement to $2.7 million for the initial component of a mass migration engagement.
- No mass migration engagements were sold during Year 1 due to the longer sales cycle and procurement complexity associated with these larger engagements. Several mass migration projects were sold in years 2 and 3, as seen in the table below.
- Average project gross margins grew from 40% in Year 1 to 50% in Year 3 of the analysis. Partners revealed that they were able to bolster the gross margins on their migration projects over time by building out repeatable, automated migration processes and systems.

Upfront design, rebuild, migrate, and deploy engagement revenue and margins will vary depending on a number of factors, including average hourly billable rates and the unique project scopes defined by each client. As such, this revenue and margin category was risk-adjusted and reduced by 5%. Over the three-year analysis period, design, rebuild, migrate, and deploy engagement gross profit totaled a three-year risk-adjusted PV of over $8.1 million.

Initial Design, Rebuild, Migrate, And Deploy Engagements: Calculation Table (USD)

REF.	METRIC	CALC.	Year 1	Year 2	Year 3
B1	Net-new small scope design, rebuild, migrate, and deploy engagements		8	9	11
B2	Net-new moderate scope design, rebuild, migrate, and deploy engagements		7	8	9
B3	Net new mass migration design, rebuild, migrate, and deploy engagements		0	2	2
B4	Average small scope design, rebuild, migrate, and deploy revenue per deal		$112,500	$112,500	$112,500
B5	Average moderate scope design, rebuild, migrate, and deploy revenue per deal		$375,000	$375,000	$375,000
B6	Average mass migration design, rebuild, migrate, and deploy revenue per deal		$2,700,000	$2,700,000	$2,700,000
B7	Total initial design, rebuild, migrate, and deploy engagement revenue	(B1*B4)+(B2*B5)+ B3*B6	$3,525,000	$9,412,500	$10,012,500
B8	Average project gross margin %		40%	45%	50%
Bt	Initial design, rebuild, migrate, and deploy engagements	B7*B8	$1,410,000	$4,235,625	$5,006,250
	Risk adjustment	↓5%			
Btr	Initial design, rebuild, migrate, and deploy engagements (risk-adjusted)		$1,339,500	$4,023,844	$4,755,938

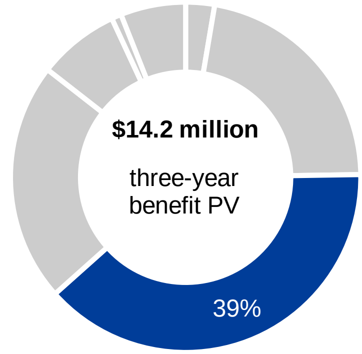
Follow-On Design, Rebuild, Migrate, And Deploy Engagements

As mentioned earlier, partners found that the vast majority of customers adopted a piecemeal approach to cloud adoption, migrating a modest number of workloads to the cloud to help their organizations generate a series of quick wins. Often, this meant delaying the migration of legacy applications and complicated workloads that required significant refactoring and reengineering work. For partners, this represented a massive business opportunity; by demonstrating sophisticated cloud expertise and strong cloud strategy, design, and migration competencies, partners were able to build long-lasting, highly profitable business partnerships with their customers. Several partners interviewed for the study indicated that follow-on design and migration work represented between 60% and 70% of their professional services business.

In modeling the economic impact of follow-on design, rebuild, migrate, and deploy projects for the composite partner, Forrester made the following assumptions:

- Our analysis assumes a varying number of deals and engagements across project scope categories, which are documented in lines C1 through C3 in the table below. As the vast majority of partners noted that the migration cadence spanned multiple years with larger pushes in subsequent engagements, we assumed that all initial engagements converted into larger follow-on engagements.
- Consistent with our findings, 50% of follow-on engagements were assumed to extend an additional year and are calculated as part of the Year 3 follow-on engagement deal count.
- Since follow-on engagements generally covered more complex workloads and legacy applications, average follow-on design, rebuild, migrate, and deploy engagement revenue was higher than the revenue for the initial engagement across all cloud migration scope categories. These projects generally required custom application development, application recoding and refactoring, and significant workload reengineering and architecture rework. As such, the average follow-on engagement revenue ranged from $350,000 for a small scope engagement to $6.3 million for the follow-on component of a mass migration initiative.
- Follow-on engagement average gross margins grew for 40% in Year 1 to 50% in Year 3 of the analysis, as a result of the composite partner's continual investments in building and leveraging repeatable, automated migration processes and systems.

Follow-on professional service revenue and margins can be affected by a number of variables, including workload complexity, average hourly billable rates, and competitive pressure to reduce engagement prices. To account for these risks, Forrester adjusted this revenue and margin category downward by 10%, yielding a total risk-and present value-adjusted gross profit of over $14.2 million.



Follow-on migration engagements: **39%** of total gross profit

> "We typically help larger businesses move to the cloud and, as a result, it's very hard to win those customers. However, when you do win these deals, there's a number of ongoing follow-on project opportunities."
>
> Cofounder, EMEA partner

> "We see professional services really as an entry point for two types of revenues, recurring revenue and annuity revenue. Recurring revenue for us is defined as a consulting engagement that goes longer than 12 months, while annuity revenue generates monthly recurring revenue for our ongoing services."
>
> *Executive Director, APAC partner*

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Follow-on Design, Rebuild, Migrate, And Deploy Engagements: Calculation Table (USD)

REF.	METRIC	CALC.	Year 1	Year 2	Year 3
C1	Small scope segment follow-on engagements		0	8	13
C2	Moderate scope segment follow-on engagements		0	7	12
C3	Mass migration segment follow-on engagements		0	0	2
C4	Small scope segment: follow-on engagement average deal size		$350,000	$350,000	$350,000
C5	Moderate scope segment: follow-on engagement average deal size		$1,166,667	$1,166,667	$1,166,667
C6	Mass migration segment: follow-on engagement average deal size		$6,300,000	$6,300,000	$6,300,000
C7	Total follow-on design, rebuild, migrate, and deploy engagement revenue	(C1*C4)+(C2*C5)+(C3*C6)	$0	$10,966,667	$31,150,000
C8	Average project gross margin %		40%	45%	50%
Ct	Follow-on design, rebuild, migrate, and deployment	C7*C8	$0	$4,935,000	$15,575,000
	Risk adjustment	↓10%			
Ctr	Follow-on design, rebuild, migrate, and deployment (risk-adjusted)		$0	$4,441,500	$14,017,500

Next-Generation Managed Services

All partners interviewed for the study were rapidly building out a variety of managed services offerings to meet the diverse and sophisticated workload and application management and optimization requirements of their customers. Our interviews revealed that end customers often didn't recognize the need for next-generation managed services at the inception of their cloud strategy and migration efforts, which resulted in long sales cycles. Given this lengthy and challenging sales cycle, successful partners started the managed services conversation very early with customers, making granular, workload-level management and optimization recommendations during the strategy, advisory, design, and migration phases of the customer engagement life cycle.

Given the diversity and uniqueness of each customer's infrastructure and application environment, partners built robust portfolios of managed services at various price points and support levels to meet the needs of their customers. Furthermore, different workloads within each customer's environment required varying degrees of support, which provided another avenue for partners to demonstrate their deep and rich cloud expertise and grow the penetration of their managed services offerings.

Partners offered a variety of core infrastructure managed services, including cost assurance and optimization, availability and scalability services, limited security monitoring, billing aggregation, and light support. Gold-level infrastructure services go well beyond the basic services to include backup services, patching, dynamic monitoring, application performance monitoring, alerting, remediation, and premium technical support. Premium services also bundled in a number of complementary third-party applications, including analytics, security,

"We are laser focused on our managed services. It's the fastest growing part of our business, and we've had more and more customers gravitating towards them. These services enable us to prove much more value to our clients."

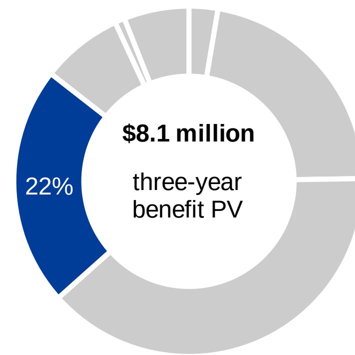
EVP, NA partner

"We help our customers determine whether a workload is better suited for consolidated billing, basic infrastructure services, silver-level management, or premium, end-to-end managed services."

GM, global partner

and patch management solutions, to augment their customers' public cloud environments. Lastly, partners saw custom application and data management, monitoring, and performance optimization as a significant area for continued managed services annuity revenue growth.

While pricing managed services as a percentage of AWS spend was the dominant partner monetization model at the time of the interviews, many partners were exploring and implementing new pricing models that better aligned their fee structures with their customers' business goals and objectives. Notably, several partners were actively adopting fixed-fee and performance-based pricing models that enabled partners to generate predictable annuity revenue streams, while firmly embedding partners within their customers' cloud transformation objectives. In particular, a number of partners were actively building, marketing, and selling DevOps-as-a-Service and Analytics-as-a-Service offerings to their installed customer bases, which packaged proprietary and third-party applications and tooling with value-add services for a fixed monthly fee.



Next-generation managed services: **22%** of total gross profits

For the composite partner, the analysis assumes that its managed services offerings attach to migration deals at varying degrees over the three-year forecast period. In modeling the business impact of the composite partner's next-generation managed services solutions, Forrester assumed the following:

- Next-generation managed services fell into three core categories for this analysis: core managed services; gold-tier managed services; and custom application and data management services as explained above. Actual managed services tiers and pricing models varied across interviewed partners, with several partners offering more "a la carte" style offerings with an array of itemized options.
- Overall attach rates for infrastructure- and application-oriented next-generation managed services grew from 45% of migrated workloads in Year 1 to 65% of migrated workloads in Year 3. The overall attach rate includes all core, gold-tier, and custom application and data management services.
- While core managed services represented 40% of overall managed services sold in Year 1, this number shrank to 30% of all managed services sold as customers migrated more complicated applications and infrastructure to AWS over the analysis period. Core managed services had a 19.5% overall attach rate by Year 3 of the analysis as seen in the table below.
- Gold-tier managed services was the most commonly adopted managed services offering, remaining at 50% of all managed services sold over the analysis period. Gold-tier managed services had an overall attach rate of 32.5% by Year 3 of the analysis as seen in the table below.
- Custom application and data managed services grew in adoption over the three-year analysis, reaching an overall attach rate of 13% by Year 3 of the analysis.
- DevOps managed services, or DevOps-as-a-Service, grew from an attach rate of 5% of AWS migration deals in Year 1 to 15% of AWS migration deals in Year 3. The composite partner's DevOps-as-a-Service offering leveraged a fixed-fee pricing model averaging $10,000 in monthly revenue per deal, including licensing and support for a number of third-party tools used in service delivery.
- Gross margins grew from 50% in Year 1 to 60% in Year 3 as the composite partner built out scripting, tooling, and IP to automate and streamline its managed services delivery.
- The composite partner saw average annual churn of 5%. Churn reported by partners was very low.

Year 3 Cumulative Risk- And PV-Adjusted Revenue And Margin Opportunity (USD)			
MANAGED SERVICE OFFERING	**YEAR 3 ATTACH RATE (OF TOTAL MIGRATED WORKLOADS)**	**PRICING STRUCTURE**	**EXAMPLE MANAGED SERVICE COMPONENTS**
Core managed services	19.5%	50% of AWS spend	• Cost assurance and optimization, availability and scalability services, light security monitoring, billing aggregation, and light support
Gold-tier managed services	32.5%	100% of AWS spend	• Core services plus backup services, patching; dynamic infrastructure monitoring; application performance monitoring, alerting, and remediation; premium end user and technical support; and suite of value-added third-party applications to complement their cloud deployments
Custom application and data managed services	13%	233% of AWS spend	• Highly customized application and data monitoring and management solutions. • Includes compliance-as-a-service and management of DevOps tooling and environment.
DevOps managed services (DevOps-as-a-Service)	15%	$10,000 fixed fee per month	• DevOps toolsets and automation; continuous integration and continuous deployment (CI/CD) pipeline management, tools, and processes; management; configuration management; monitoring; break fix

As seen in the table below, the composite partner's annuity managed services revenue grows quickly over the three-year analysis period. It is important to note that managed services revenues and margins will vary significantly based on a number of factors, including the average monthly managed services charge, actual customer attach and churn rates, the amount of automation and repeatable business processes that are embedded within a partner's managed services delivery model, and discounting for larger deals. To account for these factors, Forrester adjusted this revenue and margin category downward by 5%, yielding a total risk- and present value-adjusted gross profit of $8.1 million.

Next-Generation Managed Services: Calculation Table (USD)					
REF.	**METRIC**	**CALC.**	**Year 1**	**Year 2**	**Year 3**
D1	AWS infrastructure managed services revenue: core (cumulative)		$118,800	$878,790	$1,963,146
D2	AWS infrastructure managed services revenue: gold-tier (cumulative)		$297,000	$2,468,400	$6,082,920
D3	Custom application and data platform managed services (cumulative)		$138,402	$1,656,211	$5,024,943
D4	DevOps-as-a-Service		$60,000	$300,000	$780,000
D5	Total managed service churn (cumulative)		$8,895	$163,555	$642,737
D6	Total next-generation managed services revenue	D1+D2+D3+ D4-D5	$605,307	$5,139,845	$13,208,272
D7	Average managed services gross margin %		50%	55%	60%
Dt	Next-generation managed services	D6*D7	$302,653	$2,826,915	$7,924,963
	Risk adjustment	↓5%			
Dtr	Next-generation managed services (risk-adjusted)		$287,521	$2,685,569	$7,528,715

AWS Resale And Business Support Services

From the interviews, we learned that partners were targeting customers where they had an opportunity to provide end-to-end next-generation services. As such, the majority of partners resold AWS consumption as part of their holistic services offering. Partners who actively resold AWS consumption often packaged their AWS reselling services with their managed services offerings.

Partners indicated that they were able to deliver value-add services to resale customers beyond billing aggregation and business support by leveraging reserved instances (RI) to optimize their customer's cloud cost structure. Often, partners would provide reserved and spot instance recommendation, procurement, and management services to customers as part of a broader cost and operational optimization managed service. These were generally included in top-tier, premium managed services offerings. Notably, partners differed significantly in their strategies for monetizing these resale services, with several partners indicating that they would aggregate customers to bolster their service margins, while others pass on the savings directly to their customers as part of their broader value proposition.

In modeling the economic impact of AWS consumption resale and business support services, Forrester made the following assumptions:

- Monthly AWS consumption resold to customers varied across the three project scopes. Small scope migrations had an average monthly AWS consumption of $10,000 per month; moderate scope migrations had an average monthly AWS consumption of $20,000 per month; and mass migrations had an average monthly AWS consumption of $160,000.
- Since partners continually supported their clients' journeys to the cloud through subsequent follow-on migration and deployment engagements, Forrester conservatively assumed that cloud spend grew by 40% year-over-year for customers expanding their cloud deployments.

"We actually actively manage reserved instances through our top-tier service for our customers, and it's part of our optimization service."

EVP, NA partner

"We go through and make some recommendations on RI purchases, and in most cases, we'll purchase for them and manage their RIs. I think that that's going to increase. We're starting to advertise that a little bit more. It's certainly a big benefit for customers."

VP of marketing, NA partner

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- The composite partner generated a 7-15% gross margin on AWS consumption and business support combined. It is important to note that partner resale and business support margins varied depending on each partner's strategy for leveraging reserved and spot instances, along with their overall strategy for packaging and pricing these solutions.
- The composite partner saw average annual churn of 5%. Churn reported by partners was very low.

Over the three-year analysis, total AWS resale and business support margins yielded a total risk- and present value-adjusted gross profit of nearly $2.8 million.

AWS Resale And Business Support Services: Calculation Table (USD)

REF.	METRIC	CALC.	Year 1	Year 2	Year 3
E1	Number of net-new AWS resale deals sold annually		15	19	22
E2	Total monthly AWS consumption		$220,000	$658,000	$926,800
E3	Total annual AWS consumption resale gross sales (churn-adjusted)		$1,300,883	$8,922,692	$19,311,585
E4	Total annual AWS consumption resale business support margin		$156,106	$1,070,723	$2,317,390
Et	AWS resale and business support	E4	$156,106	$1,070,723	$2,317,390

Third-Party Application Resale

Partners revealed that they were often able to resell third-party applications and solutions that complemented and augmented their customer's AWS workloads and use cases. While the actual third-party brands and applications resold to customers varied across all interviewed partners, our interviews revealed that security monitoring, alerting, and management; cloud cost management; and data management, analytics, and visualization applications were common solutions that could be resold and attached to AWS migration deals.

It is important to note that several partners interviewed for the study bundled or leveraged third-party application in their managed services offerings. In modeling the business impact of third-party application sales for the composite partner, Forrester made the following assumptions:

- Security and cloud cost management application sales attached to 30% of the migration deals sold by the composite partner. This conservative figure assumes that a significant portion of the partner's AWS customer base will receive security and cost optimization services through their managed services contracts.
- Data management, analytics, and visualization applications attached to 10% of AWS migration deals in Year 1, growing to 20% of all migration deals in Year 3.
- Average gross margins on third-party application sales were assumed to be 20%.

Forrester realizes that actual attach rates and realized gross margins will vary significantly across partners. As a result, Forrester risk-adjusted this revenue and margin item downward by 5%. Over the three-year analysis period, total complementary third-party application sales yielded a total risk- and present value-adjusted gross profit of $333,698.

Third-Party Application Resale: Calculation Table (USD)

REF.	METRIC	CALC.	Year 1	Year 2	Year 3
F1	Security application sales		$194,400	$440,640	$725,760
F2	Cloud cost management software sales		$7,805	$53,536	$115,870
F3	Data management and analytics software sales		$57,000	$193,800	$425,600
F4	Total third-party application sales	F1+F2+F3	$259,205	$687,976	$1,267,230
F5	Third-party application resale gross margin	20%	20%	20%	20%
Ft	Third-party application resale	F4*F5	$51,841	$137,595	$253,446
	Risk adjustment	↓5%			
Ftr	Third-party application resale (risk-adjusted)		$49,249	$130,715	$240,774

Value-Add IP

Partners interviewed for the study built and delivered a variety of proprietary horizontal- and vertical-specific software applications that added value to their customer's business environments. Horizontal value-add intellectual property (IP) included predictive billing and cloud cost optimization, and cloud monitoring, alerting, and management solutions that helped augment the cost and operational effectiveness of their customers' AWS environments. Horizontal value-add IP was often bundled into partners' managed services offerings while several partners wrapped these solutions exclusively into premium, gold-tier service lines.

> "We will often offer industry vertical applications, such as financial services, insurance, and healthcare compliance applications, as a service from the AWS catalog. You might call us a next-generation independent software vendor (ISV)."
>
> *GM, global partner*

In addition, partners built a number of vertical-specific applications that addressed and solved common industry challenges and pain points experienced by partners' existing client bases. Several partners indicated that they were actively building IP on AWS around industry business challenges and were in the process of packaging, marketing, and selling these solutions to their AWS customer bases. The conversation around industry-specific value-add IP, which encompassed a diverse array of solutions around insurance claims, health records, and market segment and business data management, often was catalyzed during customer engagements, and these solutions were generally add-on sales that attached to AWS next-generation services deals.

In calculating the business impact of packaging and selling value-add IP, Forrester made the following assumptions for the composite partner:

- Value-add IP attached to 30% of net-new AWS deals sold each year.
- Revenue per value-add IP deal was, on average, $10,000 per month.
- An 80% gross margin for value-add IP was used in this analysis.

Gross margins and attach rates will vary significantly across industries and software categories, and, as such, this benefit was risk-adjusted downward by 10%. Over the three-year analysis period, the composite partner generated total risk- and present value-adjusted gross profit of over $2.2 million.

Value-Add IP: Calculation Table (USD)					
REF.	METRIC	CALC.	Year 1	Year 2	Year 3
G1	Number of value-add IP licenses sold annually		5	10	17
G2	Average monthly revenue per license		$10,000	$10,000	$10,000
G3	Number of months per year		12	12	12
G4	Total annual value-add IP revenue	G1*G2*G3	$600,000	$1,200,000	$2,040,000
G5	Value-add IP gross margin	80%	80%	80%	80%
Gt	Value-add IP	G4*G5	$480,000	$960,000	$1,632,000
	Risk adjustment	↓10%			
Gtr	Value-add IP (risk-adjusted)		$432,000	$864,000	$1,468,800

Flexibility

The value of flexibility is clearly unique to each partner, and the measure of its value varies across organizations. There are multiple scenarios in which a partner might choose to invest in its next-generation AWS managed services practices and later realize additional revenue and margin opportunities.

At the confluence of multiple customer, market segment, and technological trends and forces lies a number of business opportunities to drive future growth and profitability. Partners that continue to build out novel next-generation managed services offerings in highly demanded technology areas, such as compliance management, data management, analytics, and DevOps, will be able to drive additional high-margin annuity revenue streams into their businesses. Furthermore, pricing model innovation will provide forward-thinking APN partners with new levers to pull in gaining customer trust, growing managed services demand, and improving managed services penetration.

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a 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.

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Total Costs (USD)

REF.	COST	Initial	Year 1	Year 2	Year 3	TOTAL	PRESENT VALUE
Htr	Incremental staffing expense	$0	$1,466,456	$2,378,354	$3,499,597	$7,344,407	$5,928,023
Itr	Practice marketing spend	$0	$509,932	$1,248,564	$1,934,742	$3,693,238	$2,949,046
Jtr	Training expenses	$0	$73,377	$136,042	$233,538	$442,957	$354,599
Ktr	Solution research and development and practice build out expenses	$1,320,690	$0	$675,938	$696,216	$2,692,843	$2,402,393
Ltr	Total G&A expenses	$0	$303,531	$1,486,386	$3,071,020	$4,860,936	$3,811,657
	Total costs (risk-adjusted)	$1,320,690	$2,353,296	$5,925,282	$9,435,113	$19,034,382	$15,445,718

Beyond the direct service delivery costs, including the salary expenses for software developers, solution architects, engineers, and delivery consultants, which are included in the gross margin calculations in the Revenue and Margin section of this case study, partners made a number of strategic investments in their next-generation AWS practices. The composite partner made the following investments to establish, grow, and scale its next-generation AWS practice.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of just over $15.4 million.

Incremental Staffing Expense

The partners interviewed for this study revealed varied incremental staffing requirements for their organizations' next-generation AWS practices. While born-in-the-cloud partners often had the existing sales, support, and engineering resources in-house as they built out their practices, partners with more traditional IT managed services backgrounds indicated that they often needed to hire new talent with robust cloud, application development, and solution architecture capabilities. Since all partners interviewed for this study had existing AWS businesses that predated their next-generation AWS offerings, the majority of partners cross-trained existing resources in addition to acquiring incremental talent.

The incremental salary and benefit expenses for incremental sales professionals, presales engineers, technical and end user support personnel, and practice leads needed to grow and scale the composite partner's next-generation managed services practice are identified below in the table titled "Incremental Staffing Expenses: Calculation Table." Note that all staff salary expenses include the salary overhead burden rate, which is assumed to be 25% in this analysis.

Forrester realizes that salaries will vary by region, skill set, exact position, and tenure with the company. As such, incremental salary expenses have been risk-adjusted upward by 5%. Over the three-year analysis, incremental salary costs totaled a PV of just over $5.9 million.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

Staff Salary: Assumptions		
POSITION	BASE COMPENSATION	FULLY LOADED SALARY
Practice/engineering leads	$ 147,575	$184,469
Sales staff	$100,000	$125,000
Engineers for presales	$115,000	$143,750
Project engineers	$107,000	$133,750
Software developers/solution architects	$125,000	$156,250
Technical and end user support personnel	$56,000	$70,000

Incremental Staffing Expenses: Calculation Table (USD)					
REF.	METRIC	CALC.	Year 1	Year 2	Year 3
H1	Number of incremental sales people		3	6	9
H2	Number of incremental presales engineers		1	3	5
H3	Number of dedicated end user and technical support personnel		2	4	8
H4	Number of practice leads		4	4	4
H5	Overhead rate		25%	25%	25%
H6	Sales staff average annual compensation (fully loaded)	Fully-burdened rate (25%)	$125,000	$128,750	$132,613
H7	Presales engineer average annual compensation (fully loaded)	Fully-burdened rate (25%)	$143,750	$148,063	$152,504
H8	End user and technical support staff salary expense (fully loaded)	Fully-burdened rate (25%)	$70,000	$72,100	$74,263
H9	Practice leads staff salary expense (fully loaded)	Fully-burdened rate (25%)	$184,469	$190,003	$195,703
Ht	Incremental staffing expense	(H1*H6)+(H2*H7)+(H3*H8)+(H4*H9)	$1,396,625	$2,265,099	$3,332,950
	Risk adjustment	↑5%			
Htr	Incremental staffing expense (risk-adjusted)		$1,466,456	$2,378,354	$3,499,597

Practice Marketing Spend

AWS next-generation managed services partners adopted a variety of marketing strategies and tactics to generate leads, cultivate marketing qualified leads, and convert opportunities in their pipelines. At the front end of the marketing funnel, partners made significant programmatic advertising investments, building well-thought-out digital advertising campaigns to increase next-generation services awareness and generate leads. In order to convert leads into opportunities and closed deals, partners invested heavily in thought leadership content, deep dive technical events, and interactive tools that could rapidly deliver personalized estimates for prospects.

Annual marketing spend

3% to 8% of gross sales

For the composite partner, Forrester assumed that annual marketing expenditures were 8% of gross sales in Year 1 of the analysis, as it built out thought leadership content and invested heavily in digital advertising to educate the marketplace on its next-generation AWS capabilities. As the organization's annual gross sales grew and its services became more mature in subsequent years of the analysis, the partner benchmarked its annual marketing spend at 4% and 3% of gross sales in years 2 and 3, respectively.

Given the variance in partner marketing strategies, tactics, and budgets across interviewees, Forrester risk-adjusted this figure upward by 5%. Over the three-year analysis, the composite partner spent a total of just under $3 million on marketing after adjusting for risk and present value.

Practice Marketing Spend: Calculation Table (USD)

REF.	METRIC	CALC.	Year 1	Year 2	Year 3
I1	Total gross sales		$6,070,618	$29,727,711	$61,420,392
I2	Marketing spend as a percentage of sales		8%	4%	3%
It	Practice marketing spend	I1*I2	$485,649	$1,189,108	$1,842,612
	Risk adjustment	↑5%			
Itr	Practice marketing spend (risk-adjusted)		$509,932	$1,248,564	$1,934,742

Training Expenses

Partners interviewed for the study were heavily invested in training and building their staff's next-generation skill sets and growing the number of AWS certifications held by their consultants, architects, engineers, and developers. Partners saw AWS certifications as a means of differentiating themselves from their competition and demonstrating their deep technical expertise and unique value proposition in building performance-enhancing, fully cloud-native solutions for current and prospective customers. As such, partners indicated that they were able to leverage their AWS certifications and associated technical domain expertise in areas including big data management, DevOps, cloud and enterprise security, and artificial intelligence, to forge highly profitable, multiyear cloud transformation partnerships with their customers.

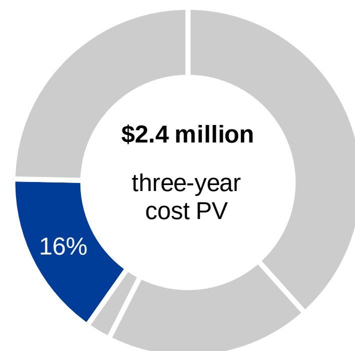
For the composite partner, Forrester assumed that it put between 25 and 75 consultants, engineers, solution architects, and software developers through five days of AWS training each year. It is important to note that the majority of partners received significant training support through the Amazon Partner Network (APN), while others had built internal training and incentive programs to encourage staff to gain additional certifications. Exact training requirements will vary across personnel depending on their background, baseline AWS expertise, and their on-the-job experience delivering next-generation AWS projects and services. To account for these variations, Forrester risk-adjusted this expense item upward by 10%, resulting in a three-year total PV of $354,599.

"Over the years of gaining our several Competencies that AWS has rolled out, that's enabled us to really position ourselves as a leader within the managed consulting space. It really helped us focus all of our go-to-market efforts on AWS. We've been able to accelerate that business something like 587%."

VP, marketing, NA partner

Training Expenses: Calculation Table (USD)					
REF.	METRIC	CALC.	Year 1	Year 2	Year 3
J1	Number of engineering and support staff put through AWS training and certification annually		25	45	75
J2	Average fully burden daily rate per resource		$534	$550	$566
J3	Number of days spent training, studying, and obtaining AWS		5	5	5
Jt	Training expenses	J1*J2*J3	$66,707	$123,674	$212,308
	Risk adjustment	↑10%			
Jtr	Training expenses (risk-adjusted)		$73,377	$136,042	$233,538

Solution Research And Development And Practice Build-Out Expenses



All next-generation APN partners interviewed for the study made heavy upfront and ongoing investments in automating their cloud migration and managed services capabilities through tooling and scripts. In addition, the majority of partners interviewed for the study invested in their AWS monitoring, reporting, and billing systems, helping them automate and streamline their service operations. These continual investments enabled partners to scale their next-generation AWS services while concurrently improving the profitability of their services offerings. One partner explained, “We make people and capital investments to automate our managed services, because you don’t want to deliver a managed service with a bunch of humans. Ideally your managed service is code so that whether it’s one client or a hundred clients, you just click a button.”

> “Ideally your managed service is code so that whether it’s one client or a hundred clients, you just click a button.”
>
> *GM, global partner*

Furthermore, several partners invested further in building and selling industry-specific proprietary applications that they offered as a service to their customers from the AWS catalog around common industry challenges and pain points. Lastly, all partners interviewed participate in the AWS Managed Service Provider (MSP) Partner Program and incurred related auditing, travel, and preparation expenses as they went through the third-party audit process to assess their capabilities and readiness for this program.

For the composite partner, the analysis assumes that a team consisting of eight full-time equivalent (FTE) solution architects and software developers are fully dedicated to building out the organization’s managed services and value-add IP offerings, and associated scripts and tooling required to automate and streamline the delivery of these solutions. In subsequent years of the analysis, the composite partner dedicates four additional FTEs that continued to build out, manage, and maintain the organization’s portfolio of assets, tools, and IP. Lastly, the partner spends an additional $7,800 for its AWS MSP Program third-party audit, which is inclusive of all preparation, auditing fees, and travel costs.

In order to account for variation in solution architect and developer salaries, Forrester risk-adjusted the composite partner’s R&D expenses upward by 5%. Over the three-year analysis, the composite partner invested a total of just under $2.4 million to build out its next-generation practice and solution portfolio.

Solution Research And Development And Practice Build-Out Expenses: Calculation Table (USD)						
REF.	**METRIC**	**CALC.**	**Initial**	**Year 1**	**Year 2**	**Year 3**
K1	Number of solution architect and developer resources		8		4	4
K2	Average annual salary		$125,000		$128,750	$132,613
K3	Overhead rate		25%		25%	25%
K4	AWS MSP Partner Program audit expenses		$7,800			
Kt	Solution research and development and practice build-out expenses	(K1*K2)*(1+K3)+K4	$1,257,800		$643,750	$663,063
	Risk adjustment	↑5%				
Ktr	Solution research and development and practice build-out expenses (risk-adjusted)		$1,320,690	$0	$675,938	$696,216

Total G&A Expenses

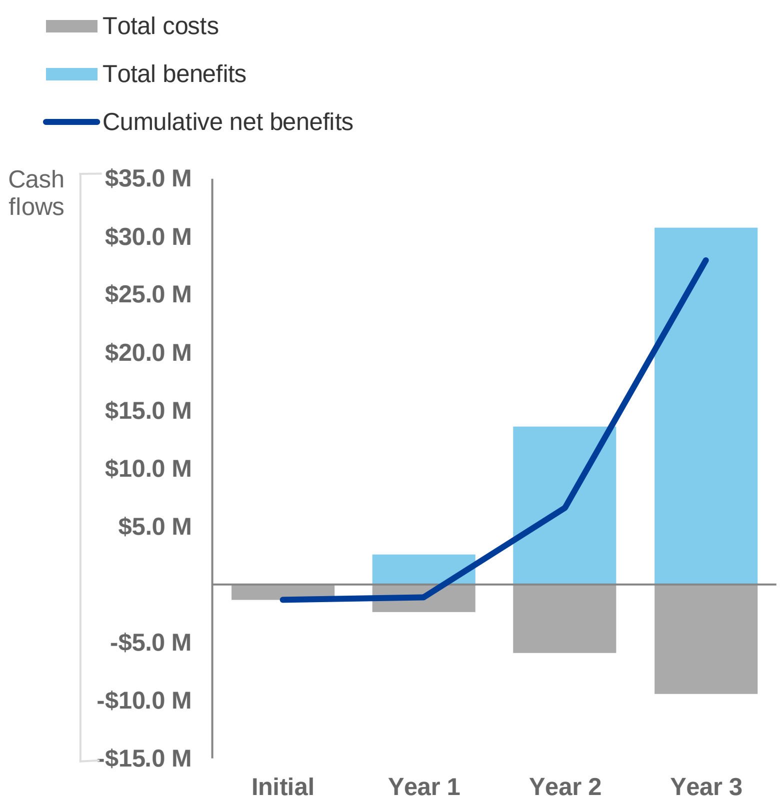
For the composite partner, Forrester assumes that general and administrative expenses, which include finance staff and overhead expenses, averaged 5% of annual gross sales. Over the three-year analysis, the composite partner spent a total of just over $3.8 million on general and administrative costs after discounting these cash flows to present value.

Total G&A Expenses: Calculation Table (USD)					
REF.	**METRIC**	**CALC.**	**Year 1**	**Year 2**	**Year 3**
L1	Total gross sales		$6,070,618	$29,727,711	$61,420,392
L2	G&A expenses (% of gross sales)		5%	5%	5%
Lt	Total G&A expenses	L1*L2	$303,531	$1,486,386	$3,071,020

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 Margin and Cost section.

Cash Flow Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	($1,320,690)	($2,353,296)	($5,925,282)	($9,435,113)	($19,034,382)	($15,445,718)
Total gross profits	$0	$2,571,938	$13,631,976	$30,802,929	$47,006,844	$36,746,918
Net profits	($1,320,690)	$218,642	$7,706,694	$21,367,816	$27,972,462	$21,301,200
ROI						138%
Payback period						14 months

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Amazon Web Services: Overview

The following information is provided by Amazon. Forrester has not validated any claims and does not endorse AWS or its offerings.

About Amazon Web Services (AWS):
Amazon Web Services (AWS) is a highly reliable, scalable, low-cost infrastructure platform in the cloud that powers over one million customer organizations, including enterprise, government, and startup businesses, in 190 countries around the world. Launched in 2006, Amazon Web Services officially began offering developer customers access to web services — now widely known as cloud computing — based on Amazon's own back-end technology platform.

Technology innovation has always been at the heart of the company culture, driving the growth of Amazon.com. After more than a decade building and running the highly scalable web application, Amazon.com, the company realized it had developed a successful core competency operating massive scale technology infrastructure and data centers and embarked on a much broader mission to serve a new customer segment — developers and businesses — with a platform of web services.

AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 70 services that range from compute, storage, networking, database, analytics, application services, deployment, management and mobile.

To learn more about AWS, visit http://aws.amazon.com.

About the AWS Managed Service Provider (MSP) Partner Program:

The Amazon Web Services (AWS) Managed Service Provider (MSP) Partner Program recognizes AWS Partner Network (APN) Partners who embrace a new approach to providing cloud managed services and who are experts who can unlock agility and innovation for their customers. Partners in this program have been assessed for their capabilities to fulfill their customers' full life cycle needs: plan/design >> build/migrate >> run/operate >> optimize. The rigorous process of the program validation audit is designed to support MSP Partners' continual development and to give customers a means to confidently identify those APN Partners who have raised the bar with next-generation managed services.

Please see the MSP Program webpage (https://aws.amazon.com/partners/managed-service/) to learn more about the program and to download the full list of program criteria.

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.