

Accelerate business growth with artificial intelligence

How 4 innovators are automating processes and reducing costs to evolve



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Operating in the age of accessible artificial intelligence

Artificial intelligence (AI) is the science of developing algorithms and the statistical models computer systems use to automate a wide range of tasks. Thanks to the growth of cloud computing, the rise of compute power and data volumes, and the arrival of no-code app development, AI is suddenly accessible to all. Unlike human tasks, which require explicit instructions, AI relies on patterns and inference, which can be used to scale, unlock new revenue streams, and solve operational challenges more efficiently than ever.

Small and medium-sized businesses (SMBs) across nearly every industry are using AI to achieve positive business results. For many, AI has become a core component of their operations. According to IDC, spending on AI in the United States will grow to \$120 billion by 2025, representing a compound annual growth rate (CAGR) of 26 percent over the 2021–2025 forecast period.¹

Amazon Web Services (AWS) is playing a pivotal role in the advancement of AI, providing the broadest and most complete set of AI services for businesses of any size. More than a hundred thousand AWS customers are using AI in

finance, healthcare and life sciences, manufacturing, media and entertainment, the public sector, retail, technology, and many other industries.

Categorizing artificial intelligence objectives

SMBs have successfully leveraged AI across three essential categories of critical business objectives:

- 1. Improving customer experience
- 2. Accelerating innovation
- 3. Optimizing business operations

This eBook features success stories from AWS SMB customers that have achieved transformative results across one or more of these categories with the help of accessible AI tools.

^{1 &}quot;Spending on Artificial Intelligence Solutions Will Double in the United States by 2025, According to a New IDC Spending Guide," IDC, March 17, 2022

SUCCESS STORIES

Improving customer experience

Many growth-minded organizations are turning to the intelligent, predictive powers of AI to enhance the customer experience and improve customer engagement. If customer service and support via contact centers are critical for your business, you're likely to find practical inspiration in the following two success stories. Read on to see how Lion Parcel and Gevme are demonstrating the power of AI to elevate customer satisfaction scores.





Enhance customer outcomes with faster data insights

<u>Lion Parcel</u> is a rapidly growing logistics company (with a 98 percent national market share) providing integrated delivery services to customers across Indonesia's 17,000 islands. The company also delivers to 25 countries from more than 7,000 service points throughout Indonesia.

Opportunity

Until 2019, Lion Parcel was running its business with on-premises infrastructure. The following year, it migrated its core systems to AWS to leverage the flexibility of limitless infrastructure scaling and pay-as-you-go pricing. With this and other moves, Lion Parcel is currently bolstering its technology to enable data-driven decisions that differentiate the company from its domestic and international rivals.

Solution

At the start of 2021, Lion Parcel formed a dedicated team to build a data pipeline on AWS and worked with <u>AWS Partner Deloitte</u> on design and implementation. Lion Parcel had previously experimented with building a data lake on premises. However, the performance did not meet the company's business expectations. For example, to run a delivery report, Lion Parcel had to wait 15 minutes for the data to load. On AWS, the same report takes less than a minute.

Lion Parcel uses <u>Amazon Simple Storage Service</u> (Amazon S3) as a data lake for structured and unstructured data, <u>AWS Glue</u> for data transformation and cleansing, and <u>Amazon Redshift</u> as a data warehouse. Improved visualization for reporting and the application of AI using <u>Amazon SageMaker</u> to segment customers were identified as the first use cases for the data pipeline.

Results

- Near real-time data: Users can extract the up-to-the-moment data they need directly from the data warehouse
- Rapid reporting tools: The cloud-based system facilitates access to reporting data for all credentialed employees
- Driven by AI: The company improved customer segmentation using deeper analysis driven by AI
- " With AWS, we can scale highperforming servers to train and create data models then scale down after, which makes ML more cost efficient."

Probosetyo Krishna, Head of Engineering, Lion Parcel



Transform virtual events into customizable experiencess

Gevme is the flagship solution from GlobalSign.In, an event technology company with a mission to connect people through experiential event planning tools online. The Gevme technology platform provides end-to-end solutions for managing virtual, face-to-face, and hybrid meetings and conferences. The GEVME Live version of the platform enables immersive experiences with personalized recommendations for event participants.

Opportunity

GlobalSign.In built the Gevme platform on AWS in 2015 and leveraged the agility of the AWS Cloud to go to market securely with GEVME Live. Speed was critical when building GEVME Live to retain existing customers by offering a digital alternative to carrying out planned conferences in 2020 and beyond.

The ability to spin up Amazon Elastic Compute Cloud (Amazon EC2) instances for experimentation in a matter of minutes on AWS—and delete them just as fast when engineers found a better method—was key to building GEVME Live in less than six months. GEVME Live uses Amazon Chime for breakout sessions, as well as for watch parties for product demos, and features "serendipity rooms" designed to promote spontaneous interaction.

Solution

Particularly with fully virtual events, the first concern of organizers—and potential customers—is data security. Gevme uses <u>AWS Key Management Service</u> (AWS KMS) to encrypt data at rest and in transit and <u>AWS WAF</u> to filter application traffic. To track user activity and logs, which simplifies the compliance process, the company uses <u>AWS CloudTrail</u>. Gevme also follows AWS best practices for security in the cloud, including dual-factor authentication and separation of roles via security groups.

Results

- Prioritized data security: The Gevme platform ensures data security and compliance with encryption and logging best practices
- Al-powered recommendations: Conference participants regularly receive session recommendations powered by Al
- Application efficiency: Once a developer pushes new code, it's reflected in the system within 10 minutes or less
- " AWS had all the tools we needed to create next-generation virtual event software and networking opportunities."

Veemal Gungadin, Founder & CEO, GlobalSign.In



IMPROVING CUSTOMER EXPERIENCE

Solutions to improve customer experience

Virtual agents and chatbots >

Amazon Bedrock

Amazon Lex

Amazon Polly

Al-enabled contact center >

Amazon Connect

<u>Amazon Transcribe</u>

Call Analytics

AWS CCI

Personalization >

Amazon Bedrock

Amazon Personalize

Prepare data, and build, train, and deploy machine learning models with Amazon SageMaker

Organizations that want to develop their own models can execute against any of the above use cases with <u>SageMaker</u>. The end-to-end service provides pre-built models and purpose-built tools for every stage of the Al lifecycle and even includes no-code tools for business analysts to generate machine learning (ML) predictions.



SUCCESS STORIES

Accelerating innovation

Businesses also leverage AI to help accelerate innovation across their products, services, and applications. This can enable team members to accomplish more—regardless of their ML skill level—while driving efficient resource management and helping to keep costs low. Read on to discover how Tape Ark is leveraging AI to help its customers take control of their paper-based data.





Invent an out-of-the-box data archiving solutions

As the world's leading specialist in tape-to-cloud migration, <u>Tape Ark</u> is now helping its customers take control of their paper-based data. The company is bringing the management of archived data into the twenty-first century by automating the migration of aging corporate information to the public cloud.

Opportunity

Tape Ark is on a mission to help organizations manage their backup data and corporate documents by leveraging analytics and Al. After determining that storing and reviewing paper documents in archive boxes is a pain point for many companies, the company began reimagining the way physical data could be stored offsite.

Solution

To simplify the labor-intensive document auditing process, a dedicated team of data scientists, engineers, and business experts from Tape Ark and AWS Professional Services went to work in 2020 on an AI-based solution.

Using <u>Amazon Textract</u>, the team built the Rapid Box Indexer, which intelligently extracts text, handwriting, and data from virtually any document. <u>Amazon Rekognition</u> is utilized to automate image and video analysis using ML and speech recognition software, while <u>Amazon Comprehend</u> enables entity detection and sentiment analysis. <u>Amazon S3</u> is used to store and protect data, while <u>AWS Lambda</u> enables very fast information processing.

Users can now see three layers of data—video, image, and text—inside each box via the Tape Ark portal and with searchable tags. Armed with these insights, it is much easier to decide which documents to keep, digitize, or destroy.

Results

- 20 times lower warehousing costs: The company achieved substantial cost savings over traditional physical archiving systems by digitizing data and storing it in the cloud
- Three layers of data: Users can leverage text, image, and video to redefine the limits of archiving and document processing
- Low-value task solutions: The ML-based solution automates manual, repetitive tasks such as data entry and data indexing

"The AWS ProServe team introduced us to a new way of thinking, a suite of emerging AWS products, and were extremely collaborative. It is great to work with a likeminded team who really want to address the customer's problem."

Kyle Evans, Chief Commercial Officer, Tape Ark



ACCELERATING INNOVATION

Machine learning services for accelerating innovation

Amazon SageMaker offers an end-to-end service to build, train, and deploy ML models for any use case with fully managed infrastructure, tools, and workflows



Make machine learning more accessible

Enable more people to innovate with ML through a choice of tools—integrated development environments (IDEs) for data scientists and no-code visual interfaces for business analysts



Prepare data at scale

Access, label, and process large amounts of structured data (tabular data) and unstructured data (photos, videos, and audio) for ML



Accelerate machine learning development

Reduce training time from hours to minutes with optimized infrastructure. Boost team productivity up to 10 times with purpose-built tools



Streamline the machine learning lifecycle

Automate and standardize MLOps practices across your organization to build, train, deploy, and manage models at scale



SUCCESS STORIES

Optimizing business operations

With its ability to process massive amounts of data quickly and intelligently, AI can help SMBs streamline operations, automate processes, and predict business outcomes. This can help improve productivity and augment team capabilities. Continue reading to explore how Frollo is leveraging AI to transform the financial customer experience.





Open the door to better, faster banking operations

<u>Frollo</u> is a purpose-driven fintech on a quest to help people feel good about money. As Australia's first open banking intermediary, Frollo has made over 25 million open banking API calls to date.

Opportunity

Frollo wanted to enable banks to go beyond their current capacity and develop a real engagement model that provides more money management and budgeting features for customers. The Frollo Data Enrichment API provides data enrichment solutions such as categorizing customer transactions and identifying merchants. This API and supporting ML models sort consumer spending into more than 60 categories, such as travel, taxes, and groceries.

Solution

Cloud-based ML has been instrumental in accelerating development of the Frollo platform, and <u>Amazon SageMaker</u> has been a core element of its ML strategy. Frollo is now running most workloads on AWS, having chosen the platform for its data and analytics capabilities, built-in security controls, and ML tools. With SageMaker, Frollo's team of data scientists can build their own ML algorithms and retain control over training their datasets.

Results

- Improved accuracy: Frollo achieves a 95% accuracy rate for ML models that categorize transactions
- Better performance for customers: Frollo enables banks to return credit results in 20 seconds instead of 3–5 minutes
- Improved security and reduced risk: Frollo solutions secure product reference data for banks and reduce risk in loan origination
- " With Amazon SageMaker, we've never had an issue with application limits or performance. We're now measuring an end-to-end latency for transaction categorization and merchant identification of 1,500 milliseconds."

Tony Thrassis, CIO, Frollo



OPTIMIZING BUSINESS OPERATIONS

Solutions to optimize business operations

Intelligent document processing >

Amazon Augmented Al (Amazon A21)

Amazon Comprehend

Amazon Comprehend

Medical

Amazon Recognition

Content Moderation

Amazon SageMaker

Amazon Textract

Fraud detection >

Amazon Fraud Detector

Amazon SageMaker

Supply chain optimization >

Amazon Bedrock

Amazon SageMaker Canvas

Amazon SageMaker





Start realizing the value of AI today

Agile, budget-minded businesses of all sizes have leveraged the unmatched selection of AWS AI services to solve their operational challenges and accelerate innovation. Learn how the right solution can help you gain maximum value from an AI investment.

Start your Al journey with AWS >

