Task 1:

Read at least one case study or stories of companies that got benefitted from AWS according to your interest field and then create a blog/article of the same .

DSP Invests in AWS Cloud for Long-Term Gains

20 Years of Experience in India’s Financial Markets

Access to Indian financial markets is rapidly expanding, and mutual funds are a top choice for both seasoned and first-time investors. According to the Association of Mutual Funds in India (AMFI), assets under management in Indian mutual funds have grown fourfold over the last decade, reaching $345 billion in August 2020.

DSP Investment Managers (DSP) is one of the premier asset management companies in the country, with over 20 years of experience in investment excellence. The business became an independent Indian entity in 2018 after a reverse acquisition.

Building New Platforms and Capabilities In-House

The reverse acquisition ushered in a new era of digital transformation for DSP. The firm set its sights on building data-driven platforms and began shifting away from its reliance on third-party vendors and hardware. It aimed to shore up its developers’ ability to execute new deployments in-house to support the company’s core business. Like most mutual fund firms in India, DSP was running its infrastructure on premises but faced scalability constraints and integration limitations with its legacy systems.

“Many new technologies such as containers and machine learning are strategized for our transformation projects, and it became clear that the only way to do rapid testing—and at a reasonable cost from a research and development perspective—was to move to the cloud,” says Ashish Bajaj, Chief Technology Officer at DSP Investment Managers.

Finding Right-Fit Services with the Right Vendor

Mutual funds are highly regulated and go through periodic audits to adhere with regulations from the Securities and Exchange Board of India. As such, DSP’s IT team wanted to ensure enterprise-grade security on the cloud, including advanced disaster recovery and high-availability architecture.

This was DSP’s first foray into architecting on the cloud, and it looked to vendors for advice on best practices. After a six-month proof of concept comparing cloud providers, DSP chose Amazon Web Services (AWS) for the active support received. “With AWS, there was always someone listening to us,” Bajaj recalls. “There was also a high level of collaboration between our team and AWS, and this accelerated the team’s learning process on the cloud because AWS was invested in our transformation journey.”

Building Enterprise-Grade Security Controls

In addition to real-time support from AWS teams, DSP relies on several monitoring tools to assess its cloud architecture for security and compliance, including [AWS Config](https://aws.amazon.com/config/) and [Amazon Inspector](https://aws.amazon.com/inspector/). Additionally, the firm uses [Amazon GuardDuty](https://aws.amazon.com/guardduty/) to enable automatic blocking of potential malicious activity and [AWS Identity and Access Management](https://aws.amazon.com/iam/) (IAM) for role-based access control.  
  
These solutions, as well as other cloud-native services, have helped DSP meet operation system benchmarks defined by the Center for Internet Security (CIS), a community-driven nonprofit that issues best-practice guidelines. Fraud is a big concern for investors in India as well as global investors looking to invest in the country. By meeting CIS Benchmarks and adhering to guidelines set by regulatory bodies, DSP instills confidence in its product portfolio.

DSP’s disaster recovery strategy is a cornerstone of its security and backup framework. The firm uses [Amazon Relational Database Service](https://aws.amazon.com/rds/) (Amazon RDS) to provision multi-AZ database instances, which has reduced its recovery time objective (RTO) and recovery point objective (RPO), both key measures of resiliency.

Teamwork and Dedication for a Complex Migration

Migration to the AWS Cloud was completed by the end of 2019, thanks to ongoing efforts by the firm’s IT team to ensure a robust infrastructure foundation. At present, DSP is the first asset management company in India to migrate more than 90 percent of its critical and non-critical workloads onto AWS. With 40 DSP offices in India and more than 50 separate applications, many of which are connected to third-party intermediaries or partners, substantial planning for the migration was required.

But despite the complexity, the IT team planned and achieved a smooth migration within four months, upgrading most of the firm’s 50 applications along the way. “The support of AWS, who was by our side during the entire process, was remarkable. AWS understood the gravity of the situation: If our systems go down for just a minute, it could lead to a significant financial, regulatory, and reputation loss,” Bajaj says.

Shifting Focus to Data-Driven Platforms

By exiting the data center and associated maintenance burdens, DSP’s IT team has gained 25 percent more time to devote to new projects. Migration to the AWS Cloud has also enabled the remote management of application infrastructure, and DSP anticipates an even further reduction in resources to manage its infrastructure, down to 50 percent of previous levels.

Furthermore, DSP is building a data platform using [Amazon Redshift](https://aws.amazon.com/redshift) to democratize access to data that can augment its investment products and fund allocation. Developers are building a data lake that will serve as a single source of truth for all data within the organization. With AWS, DSP’s developers can choose from a range of open-source solutions such as PostgreSQL to eliminate costly database and software licensing fees. This frees up capital, as well as time, for data-driven initiatives.

“We are experimenting with a lot of new ideas and supporting technologies to strategically build our business over the next couple years. It’s critical that these experiments are conducted as fast as possible so we can introduce more innovative solutions to the market,” Bajaj says.  “AWS has consistently recommended solutions for the future—such as machine learning—rather than focusing only on solutions for our current IT objectives. This is essential for a firm like ours aspiring to transform the business through technology.”

About DSP Investment Managers

DSP Investment Managers is one of the premier asset management companies in India. The company possesses a 20-year track record of investment excellence and is part of DSP Group, one of the oldest and most respected financial services firms in India.

Benefits of AWS

* Achieved migration with updates for 50 applications in 4 months
* Reinforces enterprise-grade, best-practice security controls
* Reduces RTO and RPO for disaster recovery
* Reduces manpower for infrastructure maintenance by 25%
* Enables rapid testing of new technologies
* Integrates with open-source tools to cut licensing costs