

Three ways to increase your AWS return on investment with IBM Cloud

Amazon Web Services cloud and Data

Introduction

Amazon Web Services (AWS) was one of the early public cloud innovators and remains a popular platform for companies seeking to quickly acquire cloud resources. Your first projects on AWS could have been efforts to cut costs or provide development teams with resources for experimentation; however, your AWS environment is now likely far more complex than you initially imagined.

The need to build your cloud environment, the expectation of shifting nearly all of your workloads and data to AWS, and the lack of open-source support are making companies reevaluate their cloud investments. Businesses aren't abandoning their AWS investments; instead, they are beginning to develop a hybrid and multicloud strategy that will give them the ability to have continued success.

The need for a business-ready cloud

The Amazon cloud ecosystem includes hundreds of partners and independently developed services. However, businesses are increasingly requiring cloud platforms that are pre-integrated and designed to work together – companies don't have time to assemble, secure, and create scalable clouds on their own or pay for integrators to do it. Instead, there is a need to have the best of both worlds – the tools and services that developers require combined with a framework and platform that provides consistency and predictability that the business needs.

Analyze your data wherever it resides without moving it all to the cloud

While AWS provides innovative tools and database technologies, the company focuses on the assumption that customers will want to move all of their workloads to an AWS-based data platform in the public cloud. There are indeed circumstances where this is a good solution – especially for businesses that have the luxury of being able to start from scratch and move all of their data workloads to a single vendor's environment. However, most complex businesses cannot transform their data sources in this way. There are often a variety of data silos across departments. These may include data from vertical packaged applications, enterprise transactional databases, and data warehouses or data marts.

The complexity of data silos mean that it is difficult for an enterprise to consolidate all of its data workloads into a single public cloud environment. Besides, the cost of moving so many complex workloads to a single platform may be too costly. Even more problematic is the requirement to adhere to compliance and security requirements. Moving your data to a centralized repository should not be a prerequisite to building machine learning and AI-powered applications. Who has the time and budget to move all corporate data to a single repository? If data is replicated in multiple locations for analytics, how do you ensure security and data integrity? Is your security organization going to allow you to move the most sensitive corporate data to the cloud?

Innovate and discover talent by using opensource technologies

Finally, companies are seeing the business value of adopting open technologies and working with vendors that fully support open source. One of the primary reasons why businesses are using open source technologies is that they gain access to large pools of excellent and creative developers ready to bring value on day one. Developers don't need to learn vendor-specific platforms when a vendor adopts open technologies. In addition to gaining access to top talent, it's easier to find partners and incorporate existing technology with non-



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proprietary technology. For example, many emerging independent software vendors (ISVs) take an open-source approach because they don't want to limit themselves to a specific ecosystem.

A large bank must reinvent itself to meet changing customer expectations

Let's look at a large bank with more than \$100 billion in total customer deposits. The bank has grown through acquisitions and therefore has a variety of different databases, industry-specific data-driven applications, and data services hosted in a variety of locations. Business leaders are required to understand the relationship between all of these disparate data sources so they can better understand changing customer requirements as well as the financial health of the business. With the technological advances and the advent of artificial intelligence and machine learning models, it is now possible for IT professionals to better understand customer trends as well as threats and opportunities. Because the bank has locations across the United States and some international locations, the business must be able to manage compliance requirements in a variety of geographies. IT leaders also have to protect the security of customer data. The company needed to modernize the way applications were designed so that data could be managed in a more consistent and predictable manner.

In addition to modernizing applications, the company also needed to choose technology partners to form a reliable cloud platform. The company had two main priorities when evaluating cloud technology vendors:

1. A cloud platform that was pre-integrated so that this shift to the cloud would show quick results. Leadership needing to prove that this move to the cloud was worth the investment and wanted development teams to focus on projects that would directly impact customers rather than creating a cloud technology stack.
2. A streamlined approach to data that could bring together data from across teams and data sources. The management team needed to have a clear understanding of all of the business data and how that data impacts success. Also, leadership needs to be able to trust the output from machine learning models, meaning data must be vetted, cleansed, and up to date. At the same time, data needed to be secure and masked to follow regulatory guidelines. While leadership received business insights, development teams could use this cross-team data to build customer-facing AI-driven applications that significantly improved the customer experience.

How IBM Cloud Pak for Data enhances the value of the bank's AWS implementation

The bank made the decision to use AWS as its primary public cloud platform because developers were familiar with the platform, some of the acquired entities were already standardized on AWS and there are many available APIs and tools available on the Amazon cloud. While this approach met the needs of the technical team, the platform fell short when it came to management expectations. Business leaders required the ability to have a unified approach to data management across teams to get an accurate real-time view of the business. The IBM Cloud Pak for Data provided a unified, open-source approach that was architected to operate seamlessly on top of AWS. This approach allowed developers to leverage the data framework while still using all of the native APIs offered on AWS. In addition, the same Cloud Pak can work in the same way across clouds. This is important since many businesses are dependent on more than one public cloud.



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With AWS, customers are encouraged to focus on efforts on AWS proprietary data services. In contrast, IBM Cloud Pak incorporates OpenShift as a layer on top of AWS. The advantage of the Cloud Pak for Data is that it provides the business with a cloud-native unified environment that sits on top of any cloud and provides consistent integration and automation based on a data supply chain and managed AI lifecycle management. Therefore, the Cloud Pak platform provides consistent automation to handle data duplication, easy data search, and data quality and manageability across data sources.

Depth of Understanding in the converging financial services and fintech industry

As customers begin to move to the industrial cloud, it is imperative that their technology partners have a deep understanding of changes in the market and the requirements for the insurance market. Without the depth of knowledge of the market, it is challenging for a business to adopt emerging technologies such as cloud services and artificial intelligence to customers' needs. One of the benefits that IBM brings across many important markets is a team of experienced professionals who are able to work directly with customers to transform their IT environment so that it can be ready to compete as markets change.

Conclusion

Smart businesses are enhancing their initial cloud investments with new technologies that prepare them for the future. While it is clear that Google Cloud Platform has many innovative capabilities it is clear that well-established businesses with a strong customer base need to be able to move quickly and efficiently.

The IBM cloud framework with offerings such as Cloud Paks and cloud solutions for industry offers an open source-based approach that is flexible enough to enable customers to leverage various innovative tools without sacrificing the need to streamline implementation.

Many companies are seeking out vendors that adhere to open standards, are built for business, and use technology to leverage data no matter where it resides. The advantage of open source and an open ecosystem is the ability to take advantage of the sophistication of AI offerings from a variety of innovative vendors and applying those services to a broad set of approaches that allow you to select services that best match your business requirements.