Increasing the value of your microsoft Azure investment with IBM Cloud Pak for Data

Introduction

Microsoft Azure is a popular cloud platform designed especially for Microsoft's transitional legacy customer base of businesses that have moved to Office 365. Your initial Azure projects are probably based on an evolution of your need to add cloud services to your Microsoft environment. You may have selected Microsoft's Azure cloud to support your efforts to create a hybrid cloud computing environment. Initially, many businesses migrate SQL databases and other data to the Microsoft Cloud. As cloud computing becomes the foundation for application development and deployment as well as data management and AI-based applications, the requirements of a cloud environment are more complex than initially understood.

Many cloud vendors, for example, require you to move your data into pre-defined databases or the cloud before you can use cloud-based analytics tools and create AI applications. However, who has the time and budget to move all corporate data to a single repository? Furthermore, problems can quickly emerge when you begin to transfer data. 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? Additionally, what are the financial implications of needing to store all of your data in multiple locations?

At the same time, you need to think about getting the maximum value from your analytics and AI projects. If teams can only analyze the data that resides within a single location, the value of their efforts will be limited. The power of machine learning and AI is to detect patterns in data that you might not even know exist. Therefore, if you limit the amount of data analyzed, you are already limiting the potential value.

Innovative companies are leveraging technology that allows teams to analyze data no matter where it resides – across multiple clouds and data that resides within the data center. IBM's Cloud Pak for Data can quickly integrate with Microsoft Azure and allows businesses the ability to analyze data no matter where it resides. This means that clients using Microsoft Azure along with IBM's Cloud Pak for Data can analyze data stored on Microsoft Azure, on premises, within SaaS applications, and data on other cloud platforms. Why would you want to use the IBM Cloud Pak for Data on top of the Microsoft Azure cloud platform? Simply put, your business needs to build on your cloud computing investments by creating a multicloud approach to advanced data and AI capabilities.

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

While Azure offers many innovative traditional database SQL services on the cloud, businesses need to move fast with AI and take an integrated and holistic approach to data management. You simply don't have the time, nor do you have the budget to abandon existing data investments to build a new data platform for the cloud. Businesses need to adopt a multicloud and hybrid data approach across a variety of data silos. In addition to the implementation complexity, it is far too risky to take sensitive data and move it to a new cloud without compliance and security protections.

Therefore, 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?

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Adopt open source technologies to find the best talent and technology partners for your company

Finally, many 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 who are 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-proprietary technology. Emerging partners with new approaches to business problems don't want to limit themselves to a specific ecosystem. For example, why would an emerging company want to only work with businesses that choose a specific cloud vendor?

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 an acquisitive strategy. In just a few years the bank transformed itself from a regional retail bank to a large national bank with multiple lines of service as well as several international branches. As you can imagine, the bank has also acquired a complex IT environment, with disconnected databases, multiple industry-specific applications, and data spread out between multiple on-premises and cloud 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 as well as some international locations, it is imperative that the business be able to manage individual state as well as international compliance requirements. 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 needed 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 and understanding of all of the business data and how that data impacts success. In addition, leadership need 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. In addition to giving leadership business insights, development teams could use this cross-team data to build customer-facing AI-driven applications that customers expect.

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

The bank was already using a number of Microsoft cloud services, including Office and Teams, as its primary public cloud platform. In addition, many of the acquired businesses were standardized on .NET and Azure. 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. Business leaders required the ability to have a unified approach to data management across business segments 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 Azure. This approach allowed developers to leverage the data framework while still using all of the native APIs offered on Azure. 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.

With Azure, customers are encouraged to focus on efforts on Azure proprietary data services. In contrast IBM Cloud Pak incorporates OpenShift as a layer on top of Azure. 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, 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.

Conclusion

Smart businesses are enhancing their initial cloud investments with new technologies that prepare them for the future. While it is clear that Azure includes many critical business productivity offerings, businesses need more control and insight over their cross-team data.

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 various innovative vendors and applying those services to a broad set of approaches that allow you to select services that best match your business requirements.

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