IBM **Bluemix**®

Hybrid Cloud Is About Choice

Businesses leveraging hybrid cloud have the freedom to be more agile, delivering better customer experiences, and supporting new business models.

Introduction

There are widely divergent points of view on how cloud can and should be used to support your enterprise. That's an essential discussion to have, because which cloud strategy you adopt—and how you implement it— can be a deciding factor in accelerating business results.

Creating a hybrid cloud environment that leverages secure enterprise systems of record allows companies to accelerate and simplify application delivery and experience faster service innovation and time to market.

This paper explores how to improve business agility to innovate and deliver customer experiences that enhance your competitiveness with hybrid cloud solutions.

The View Of Cloud Is Changing

For most of the last decade, IT-driven cloud strategies have been led by economics, perceived simplicity, and speed of deployment. This has led to results in discrete pockets of cloud implementation that may address an immediate need, but are not necessarily part of an overall business strategy for the long term for many companies.

As cloud has become a standard way of doing business, leading enterprises are looking to the cloud as a tool for innovation and business transformation. Those who successfully use the cloud to achieve growth will have a mature, strategic view of how best to implement and integrate it across their organizations.

All approaches to cloud have advantages. There's the straightforward simplicity of public cloud services, versus the increased security and control of a private cloud behind your firewall. There are hybrid cloud approaches in which public or private clouds, or a combination of the two, are fully integrated with traditional, on-premises IT and centrally managed through a single platform.

As cloud strategies mature and the business benefits of implementing cloud throughout the organization become clear, hybrid cloud has emerged as the consensus choice to support business growth. Nearly half of enterprises already use some form of hybrid cloud and 72% of enterprises are expected to pursue a hybrid strategy[1].

But the decision of which cloud strategy to adopt is only part of the equation. Equally important is how the plan gets implemented—whether the cloud can be integrated, secured, managed, and leveraged to deliver its full potential.

> *"Even those companies with a hybrid cloud strategy don't have defined steps for implementing cloud-native applications (73%), application migration (64%) or even a cloud management platform (63%)."*
> **– Forbes Tech blog[2]**

Cloud Maturation

At one time, cloud computing was largely seen as a means of scaling an enterprise's compute capability without burdensome CAPEX costs of server hardware and support infrastructure. The central role of the cloud was seen as a means to extend what an enterprise was already doing at lower cost of ownership. Now, cloud is about much more:

Tap into the transformative power of data—Hybrid cloud solutions allow enterprises to use business analytics based on a proprietary databases and then readily leverage open and third-party input—such as unstructured data—to deliver the customer experiences to capture a large market share.

Open for innovation—A hybrid cloud encourages development within any environment. Access to open APIs allows users to incorporate third-party innovations and disruptive technologies into new applications.

Speeding discovery of new business processes—Hybrid cloud solutions make it easy to deploy new business models and technologies like cognitive analytics, which have the power to transform businesses.

IBM

A Strategic Tool For Business Success

Strategic adopters of hybrid clouds are seeking accelerated business results. Enterprise business leaders who use cloud frame technology discussions around becoming more agile, transforming their businesses to deliver better customer experiences, and supporting new business models.

A cloud that offers freedom of choice gives businesses the ability to seamlessly align data, cloud resources, and traditional IT with business processes. This allows enterprises to more easily implement new business models and respond with agility to market shifts, competitive threats, and customer demands.

The speed of change brought on by many new business models makes it essential to select an environment suited to each workload. Sustaining speed across an application's full cycle of development, testing, production, and maintenance often requires hybrid infrastructure options with greater choice and flexibility.

Strategic adopters of hybrid clouds are seeking accelerated business results through:

Increased business agility—Having choices makes a difference to business leaders because it helps them adapt to change quickly and become more proactive. A consistent, seamlessly integrated hybrid environment that's open and transparent empowers enterprises to dynamically innovate with new services and create new business models to gain market share and enhance customer retention.

Greater service innovation—Productive development based on insight is the cornerstone of rapid response to market shifts and customer demands. Hybrid cloud provides the tools and platform for the entire enterprise to engage collaboratively and efficiently in value creation, speeding innovation, and reducing time to market.

Faster, more accurate decision making—Analytic insight can fuel every employee interaction, decision, application, and process to differentiate and disrupt. Combining analytics with the cloud enables the business to compete in new ways, by revealing hidden trends and correlations in data from both within and outside the enterprise.

Improved customer experiences—Customers expect applications and services to be fast, responsive, and secure. Through high levels of control, reliability, availability, performance, and the optimal deployment platform for each workload, a hybrid cloud can help the enterprise to meet these demands consistently.

Lower total cost of ownership with faster ROI—With the cloud, it's about much more than initial economics—it's about making smarter investments for the long term. A hybrid approach to cloud makes it easier for the enterprise to experiment and optimize infrastructure use, thereby enhancing the value of IT investments beyond day one.

> *"Most enterprise IT departments now manage applications across multiple environments in a dizzyingly complex overall IT architecture. They also must constantly reevaluate their unique mix of on-premises, private cloud, and public cloud infrastructure to meet new business goals and determine how applications can be migrated to the public cloud in a cost-effective way. This is no small feat."*
> – Cloud Tech News[3]

IBM

Open Development In An Industrialized Hybrid Cloud Fuels Innovation

Until recently, software engineers took primary responsibility for understanding APIs. Nowadays, the scenario is changing rapidly. As the world is rewritten in code, many enterprises are thinking holistically about how they deliver improved customer experiences.

Thanks to the rise of the open API economy, not every solution needs to be built in-house, on one cloud platform, or using a specific set of tools. Leading enterprises are taking an API-first approach to building their business strategy. As public APIs become ubiquitous, their networks more powerful, and their code more stable and mature, they facilitate the creation of higher-value systems on top of them.

These APIs not only enable new business models and facilitate the creation of new systems, they also represent a transformation of labor. Public APIs allow developers to either enhance an offering they are building by incorporating an API, which provides a mechanism to enhance owned properties and services.

Or it allows them to contribute to an ecosystem of capabilities within an offering that the original vendor could never possibly have imagined, built, or financed themselves, which facilitates participation in other ecosystems and platforms.

> *Application programming interfaces (APIs) are everywhere around us today. Just think – every time you "like" a post or send a friend request on social media, you are talking to an API. The API economy is everywhere.* [4]

Enterprises with access to the proper tools, services, APIs, runtimes, solutions, and delivery models at every stage—all backed by a cloud that delivers flexibility, performance, scalability, and cost-effectiveness—is more productive by far. IBM's cloud strategy is based on flexibility, visibility, and control, backed by the experience, expertise, and portfolio to execute on that vision.

Unlike vendors that rely on others to fill capability gaps, IBM can support enterprise cloud strategy from end to end: IBM delivers public and dedicated cloud services through a resilient and transparently managed global data center network with robust security that places data where enterprises need it to be.

IBM delivers all the tools and resources needed to accelerate business results. IBM embraces the open API economy by giving developers a unified platform and rich catalog of services tuned for their needs. Testing, feedback and optimization are enhanced with automated, real-time analytic insights on application performance–on any platform, at any point in the DevOps cycle.

Learn More About IBM's Hybrid Cloud Options

Bluemix provides granular control to delegate a broad catalog of cloud resources to your team in one dedicated/local/hybrid environment. Download this solution brief to see real life examples of Bluemix Local, Bluemix Dedicated, and Bluemix Hybrid in practice.

DOWNLOAD NOW

IBM

References

[1] "Gartner Says Nearly Half of Large Enterprises Will Have Hybrid Cloud Deployments by the End of 2017." Gartner press release. October 1, 2013
http://bit.ly/1xkuHiV

[2] McKendrick, Joe. "Everybody Is Hot On Hybrid Cloud, Even If They Don't Quite Understand What It Is." Forbes blog, December 7, 2014
www.forbes.com/sites/joemckendrick/2014/12/07/everybody-is-hot-on-hybrid-cloud-even-if-they-dont-quite-understand-what-it-is/

[3] "Private vs. public vs. hybrid cloud: Which one to choose?" Logicworks Cloud Tech News blog. March 27, 2015.
http://www.cloudcomputing-news.net/news/2015/mar/27/private-vs-public-vs-hybrid-cloud-which-one-to-choose/

[4] Flora, Douglas. "Bulding for the Open API Economy." Bluemix blog, May 10, 2016.
https://developer.ibm.com/bluemix/2016/05/10/building-for-open-api-economy/

IBM