

White paper

Protecting your organization and enabling future-ready financial services is a balancing act: Hybrid IT is the answer

New technologies in banking, investing and other areas have dramatically changed the financial services sector in recent years. From online trading to mobile banking to digital currencies such as bitcoin and new models such as open banking, the business of money today is faster, bigger and more complex than ever before, with innovative new players and offerings ushering in one wave of digital disruption after another.



Introduction

New technologies in banking, investing and other areas have dramatically changed the financial services sector in recent years. From online trading to mobile banking to digital currencies such as bitcoin and new models such as open banking, the business of money today is faster, bigger and more complex than ever before, with innovative new players and offerings ushering in one wave of digital disruption after another.

Hybrid IT, which entails a perfect balance of cloud and on-premise – including legacy – IT, can help financial services organizations better manage these and other challenges to remain competitive in a complex, globalized market. It enables improved efficiency, greater agility and easier adoption of digital technologies that today's customers have come to expect.

The financial sector today is a volatile and fast-evolving landscape. New technologies are driving a lot of changes but so too are other factors. In the wake of the 2007-2008 global financial crisis, rapidly growing cybersecurity risks, geopolitical uncertainty and other challenges, the industry is becoming subject to a far more complicated and stringent regulatory regime than in the past. This makes it tougher than ever for businesses to stay compliant, operationally efficient and profitable.

A Hybrid IT model allows banks and other financial organizations to offer state-of-the-art, cloud-based and digital services while also reaping value from legacy systems and data in entirely new ways. It enables them to better keep up with evolving customer demands while at the same time meeting strict new requirements set by regulators. Done right, Hybrid IT can help make complex systems easier than ever to deploy and manage. In fact, you could describe Hybrid IT as the digital backbone that allows the old to work with the new.

Fujitsu works with many financial services customers around the world who have successfully pursued this approach to bring their systems and operations into the digital age. Let's look at some of the key issues they have encountered and how Fujitsu is able to help.

Changing landscape

As financial services organizations of all kinds move into the digital age, the expanding volumes of data they gather about customers have heightened concerns about privacy and security. High-profile and high-value cyberattacks have also helped to bring these issues front and center for law enforcement authorities, law-makers and regulators.

For instance, Europe will soon see the new General Data Protection Regulation (GDPR) come into effect that will impose strict new requirements – and steep penalty costs for non-compliance – on organizations that deal with the personal and sensitive information of EU citizens. For financial services businesses, such new rules will add new requirements on top of many other existing regulations they already must comply with. In retail banking and insurance, the GDPR will affect everything from on-boarding for new customers to disposal of legacy paper records. Hybrid IT can help organizations already behind in GDPR planning and deployment to adopt solutions more quickly.

Meanwhile, customers of financial services businesses are developing ever-higher service expectations. Gone are the days when, for example, someone had to physically walk or drive to a nearby bank branch to transfer funds from one account to another or to apply for a new credit card. Today's banking, insurance and investment customers expect to be able to conduct transactions and manage their accounts whenever they want, from any device and from any location.

With a new field of digital-only startups now offering such services, traditional businesses in the financial sector are under pressure to update and innovate their offerings to remain competitive and enhance their customer experience. Digital disruption is enabling new kinds of cross-industry competitors, digital aggregators, comparison sites and challenger banks, as well as new areas of service offered by tech giants such as Amazon, Apple, Facebook and Google.

While such innovation stands to result in lower costs and better experiences for customers, it poses a large challenge for existing firms with legacy infrastructures that need to become more agile, more automated, more digital and lower-cost more quickly.

Through new requirements, regulators continuously seek to encourage digital disruption that promotes new entrants, forces existing players to adapt and drives lower costs for customers. For example, a European regulatory change adopted in 2015 – the revised directive on payment services, or PSD2 – aimed to foster innovative payment methods in the EU.



Some companies respond to such challenges by creating new digital programs or teams on top of old ones. However, rather than providing solutions, these responses can often result in a two-speed business, where the new parts don't align well with the other existing parts of the organization. Rather than true digitalization, this can end up becoming more of a 'digital veneer' on top of business as usual.

Hybrid IT, by contrast, can help organizations successfully and completely bridge the gap between old and new ways of working. It enables them to respond quickly and reduce costs, essentially allowing them to overcome the disadvantages of starting with legacy systems instead of from scratch. With the addition of advanced automation,

artificial intelligence and Internet of Things technologies, Hybrid IT can enable many new applications and services, from bots for personalized customer assistance without human intervention, to remote sensors for monitoring valuable assets around the globe.

For example, Fujitsu Cloud (as part of a Hybrid IT model) can be the enabling platform for innovative IoT solutions, which can, for example, allow an insurance company to provide services via remote home monitoring when a customer is away on holiday. If IoT sensors detect, say, a water leak in the kitchen, a service center can be automatically alerted and a plumber immediately dispatched to make repairs. An emergency claim can then be initiated and settled before the customer even returns home. Behind the scenes, Hybrid IT makes it possible, via data analytics, to seamlessly manage and make sense of all the data generated at every step along the way.

With over 5,000 Hybrid IT implementations globally, Fujitsu understands first-hand the many benefits such approaches can deliver. So let's explore further how this might look in action.

Implications for financial services

Deployed with the right technologies and know-how, a Hybrid IT model offers financial services organizations a way to get the best of all worlds: traditional, cloud and digital. This requires next-generation cloud platforms that enable new, digital technologies such as IoT, AI, Big Data and blockchain. However, it also requires having a technology partner with both the expertise and a vendor-agnostic approach to deliver Hybrid IT Orchestration and Managed Services across multiple platforms.

Without the integrated capabilities such platforms and services support, many businesses would find it too difficult and complex to manage these solutions and draw the best value from them. This is particularly true if they've already made past investments in cloud-based technologies from a variety of providers.

Rather than requiring financial enterprises to pursue an all-or-nothing approach – all cloud instead of all legacy, for instance – a hybrid solution enables the two to work seamlessly in tandem and provides the flexibility and balance to suit any financial services organization and its individual requirements. It also allows users to put older systems to new uses in ways that were previously not possible. They can, say, confidently keep vital, historical data on on-site mainframes while also seamlessly joining up those systems with new digital services that run safely and securely in the cloud. Where suitable, such systems enable organizations to benefit from the agility of the cloud without the need for a large-scale migration from legacy systems.

Many of these new services are made possible with the support of APIs, which allow new value to be reaped from legacy data via mobile apps and other digital solutions powered by cloud services. For example, a bank with critical financial records in a mainframe database can use APIs to deliver innovative new offerings to customers via the cloud. Such a Hybrid IT approach could allow a lender to, say, email customers personalized videos that sum up their specific mortgage and home equity details and offer them new services to put that equity to use. In this way, legacy data once accessible only via traditional systems can provide banks with a foundation for new cross-selling and up-selling opportunities, facilitating growth in increasingly competitive markets.

Hybrid IT can also provide solutions to regulatory and compliance challenges such as those that will arise when the GDPR takes effect in 2018. While many organizations in the financial sector, like businesses in other industries, have embraced offshoring and outsourcing for key services, directives such as the GDPR could require them to move much of their customer data closer to home. Adopting a Hybrid IT model – particularly using cloud platforms with global scale and local presence – will make it easier for them to relocate and manage such information to comply with regulations.

Hybrid IT solutions and benefits

Let's look more closely at real-world Hybrid IT in action. For example, Fujitsu builds many of its solutions on its Cloud Service K5 platform, which is designed from the ground up to enable enterprise-level digital transformation. With a foundation of open-source technology, K5 allows enterprise users to quickly and easily scale up and down depending upon their changing needs and workloads.

Unlike proprietary platforms offered by many other providers, K5 also supports multiple cloud environments, including those of Bare Metal and VMWare, and is fully interoperable with many other services such as AWS, Azure and Oracle, with its OpenStack architecture minimizing investment risk of vendor lock-in.

Fujitsu also offers its Hybrid IT Managed Services for a wide variety of such partners and third-party platforms, to help organizations get the most value out of any existing cloud investments and deal with the complexity of a multi-cloud world.

Financial services organizations are undoubtedly seeing the benefits of Fujitsu's Hybrid IT services today. Here are just some examples:

Reaching new levels of operational efficiency

Hybrid IT enables organizations to respond more quickly and flexibly to a host of unexpected changes. For example, one Fujitsu customer hit hard by the financial crisis needed to close multiple offices, at the same time relocating vital data and services from those locations to other sites. A mobility solution based on a Fujitsu Cloud solution allowed the business to manage those changes smoothly and efficiently, which made possible the sale of billions of pounds' worth of property assets, greatly benefitting the company's bottom line.

In addition, large financial services organizations are benefitting from the increased speed and efficiency that Fujitsu's Cloud Service K5 offers in the application development cycle. Due to K5's open-source core, organizations are finding it extremely easy to rapidly build, develop and test proofs of concept on the platform. With the support of K5's single, common architecture, enterprises can then move these proofs of concept easily from public to private cloud. If the proof of concept works, users can scale quickly to gain an edge over competitors. And if the proof of concept doesn't work, they can fail fast at low cost. Either way, efficiencies are achieved.

Uncompromising on reliability, compliance, risk-reduction and security

With a foundation built on multiple data center locations, all accessible via the cloud, Hybrid IT also enables users to keep business-critical financial systems online despite disruptive events. This has proved invaluable for disaster recovery: if one data center site is knocked offline, services can be seamlessly transferred to another site without any noticeable impact on customers.



Or consider another type of systemic shock such as Brexit. Coupled with their existing concerns about data sovereignty and security, some financial-sector organizations are facing decisions about how to host their sensitive customer data in the safest, most compliant locations and avoid the potential risks of other sites. Anticipating such moves, Fujitsu has chosen to support its Hybrid IT services from four different data center sites across Europe, making its K5 offering 'Brexit-proof'.

Other features that help make K5 a 'safe pair of hands' in times of change include its global scale, 99.99 per cent availability and enterprise-focused design for critical, must-not-fail systems.

Enhancing customer and employee experiences

One bank Fujitsu works with was able to roll out a pilot process using distributed ledger technology, or blockchain, to validate transactions. The system has currently reduced validation times from as long as three days to under an hour. Any financial services organization that handles transactions has a similar potential to reap such benefits, dramatically improving customer and employee experiences as a result.

Yet another financial institution used K5 to digitalize its services for high-value customers, allowing it to roll out a device-agnostic, mobile wealth management solution; it also launched a similar mobile solution for employees that enables them to make critically important financial decisions quickly from anywhere. Essentially mobile-banking- as-a-service, or MBaaS, this solution uses APIs to connect disparate sources of data on legacy systems, and deliver all of the information that investors and employees need in real time via an easy-to-use dashboard.

In fact, Fujitsu's 'Finplex' approach, which is built on top of Cloud Service K5, is designed specifically to support such innovative, digital open banking programs, particularly by leveraging today's rapidly-growing API economy.

Driving costs down... and growth up

So how else are APIs being used in connection with Fujitsu's Hybrid IT model?

With the aid of APIs and its built-in Apigee API management and predictive analytics software, Cloud Service K5 makes it possible for enterprises to bring legacy data into the cloud era without having to actually migrate away from traditional systems. This can help financial services businesses reap considerable new value from data currently locked away in old systems of record.

Using APIs, for instance, one public-sector organization Fujitsu works with was able to integrate its legacy mainframe systems with a private cloud solution to better identify reporting errors and fraud. Deployed over about seven months, this Hybrid IT solution enabled the customer to recognize more than £500 million in new revenues over the previous year. Had it built a new system from scratch to migrate data away from mainframes, the agency would have required twice as much time and budget.

With the help of APIs and Hybrid IT, users can also reap new value from existing data in legacy systems to launch new services more quickly and efficiently. One large Fujitsu customer in the UK used such a solution not only to help it build loyalty among its most valued users but to pave the way for new up-selling and cross-selling opportunities to drive further revenue.

Conclusion

With so many changes – expected and unexpected – happening so quickly in the global financial services sector, it's more important than ever for organizations to be flexible, nimble and able to innovate at a moment's notice. Hybrid IT enables them to do this quickly, efficiently and seamlessly, no matter what a company's current IT infrastructure looks like.

What challenges are currently facing your organization, and how can a Hybrid IT solution help? Contact Fujitsu today at askfujitsu@ts.fujitsu.com to learn more about what benefits Hybrid IT can deliver for your business.

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