



MOVE BEYOND COMPLIANCE

A cloud hierarchy model to help financial services and insurance companies on the path to innovation

E-book guide for financial services and insurance companies looking to realise the opportunities of cloud adoption



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INTRODUCTION

To become market leading you need to move beyond compliance

To survive in today's complex and competitive market, financial services and insurance (FSI) organisations need to get the most out of their IT infrastructures. They can no longer view their IT systems as a cumbersome regulatory burden. Instead, they must look beyond compliance and view them as a way of facilitating more efficiencies, better decision making, and greater innovation. If they are able to optimise their underlying infrastructure and achieve these benefits, they can thrive in challenging market environment and set themselves on the path to digital transformation.

In this e-book we discuss a 4-tiered model that provides FSI organisations with a framework to achieving digital transformation. While much has been written about the lower level of the model, security and compliance, if companies really want to become market-leading, they need to 'move beyond compliance' and overcome the challenges associated with the other levels of the hierarchy.

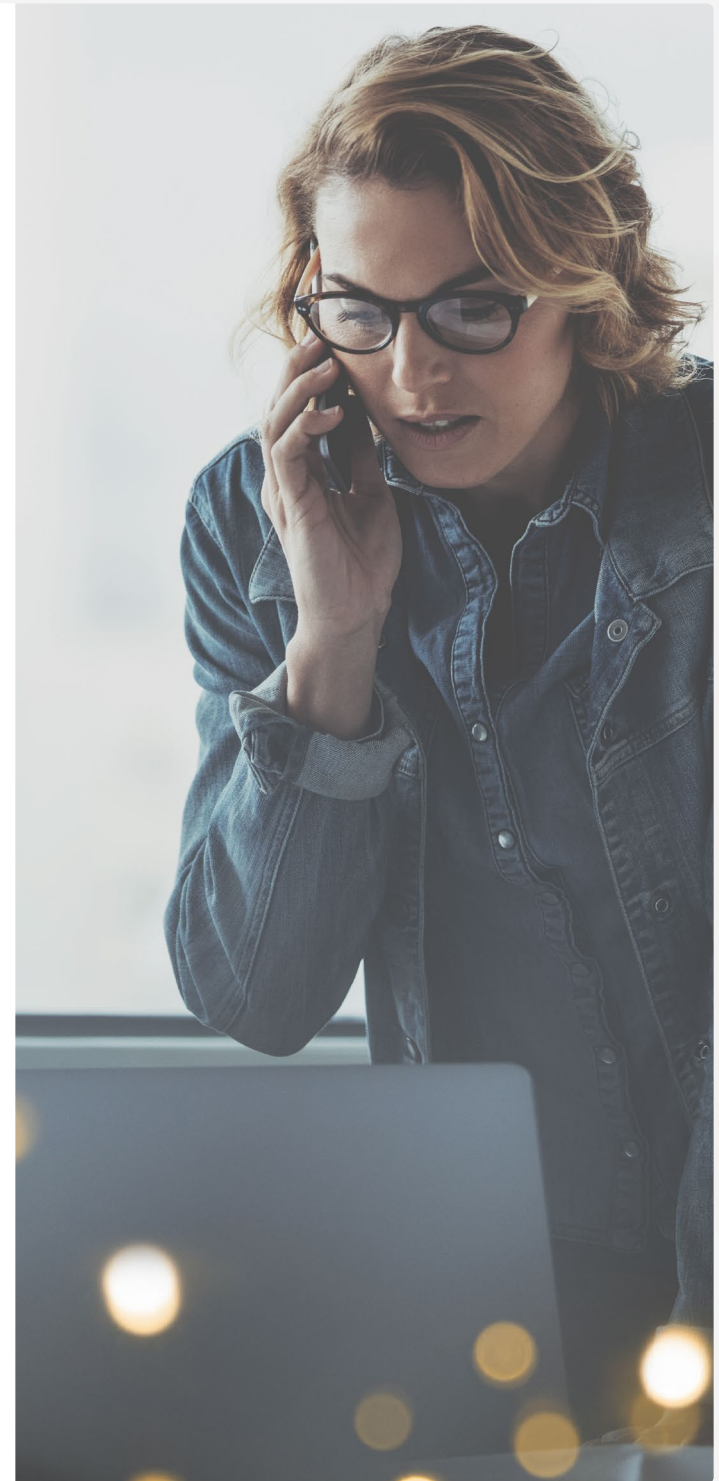
A PATH TO SUCCESS WITH THE CLOUD

A perfect storm is holding companies back

A perfect storm of increased regulation, the need to be more innovative, whilst keeping costs down, all against the backdrop of a competitive market full of new agile players, means traditional, slow-moving FSI companies need to find ways of getting ahead of the competition.

They can no longer view their technology systems as just another business function. Effective and efficient technology needs to become central to what an FSI company does. The current Chairman of Goldman Sachs, Lloyd Blankfein goes even further when he was famously quoted as saying, "we are a technology company".

The key to achieving this, involves the optimisation of underlying IT infrastructure and embracing of cloud-enabled technologies. By harnessing the power of the cloud, FSI companies have the ability to put in place a solid foundation from which they can build a modern technology-centric organisation that will help them deal with an uncertain and ever-changing marketplace.



THE CLOUD HIERARCHY OF NEEDS

A framework to help spark innovation and achieve digital transformation

Concerns around security and compliance continue to be a major stumbling block for the FSI industry. The sheer amount of information and data that requires complex regulatory oversight, often in multiple jurisdictions, combined with the high-profile nature of data breaches, has made this area not only very onerous but also very visible.

It makes sense then, that much of the attention given to adopting cloud technologies in FSI has been dedicated to security and compliance. However, in today's competitive landscape, compliance is increasingly being viewed as a necessary hygiene requirement; a baseline obligation that is expected from customers and regulators.

If companies really want to become market leading and achieve digital transformation, they need to look for ways their IT systems can deliver tangible benefits, instead of viewing them purely as a potential cost. Three additional areas emerge that provide huge opportunities for FS organisations. Together with security and compliance they form a 'hierarchy of needs' which draws parallels to Maslow's famous hierarchy model. It provides a simplistic explanation of the key areas FSI companies need to consider when optimising their IT infrastructures and capitalising on cloud-enabled technologies – from basic requirements all the way through to innovative opportunities.



THE CLOUD HIERARCHY OF NEEDS

A path to digital transformation

The hierarchy consists of four main levels, starting with compliance, moving all the way through to innovation. To implement an effective cloud-enabled strategy an FSI company needs to negotiate challenges in each of these levels to be able to take full advantage of cloud technologies and achieve digital transformation.

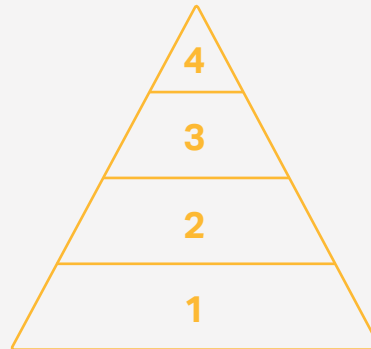
LEVEL 1: SECURITY AND COMPLIANCE

This is the baseline obligation for firms looking to move to the cloud. It is an important basic requirement that when they adopt cloud technologies they protect their business from internal and external threats and remain compliant with regulations.

LEVEL 2: OPERATIONAL EFFICIENCY

The first consideration in 'moving beyond compliance' that requires an FSI firm to look for ways to maximise the opportunities cloud provides for operational efficiency, taking advantage of its scalability and flexibility.

DIGITAL TRANSFORMATION



LEVEL 3: DECISION MAKING

FSI companies can take their organisations to the next level by harnessing the power of their data. Using cloud technologies, they are more able to achieve deeper insights and make more informed decisions.

LEVEL 4: INNOVATION

The final stage is innovation. If an FSI company can achieve the other levels of the hierarchy, they are then more readily able to turn their IT platforms into a tool that can disrupt the market through the development of modern applications.

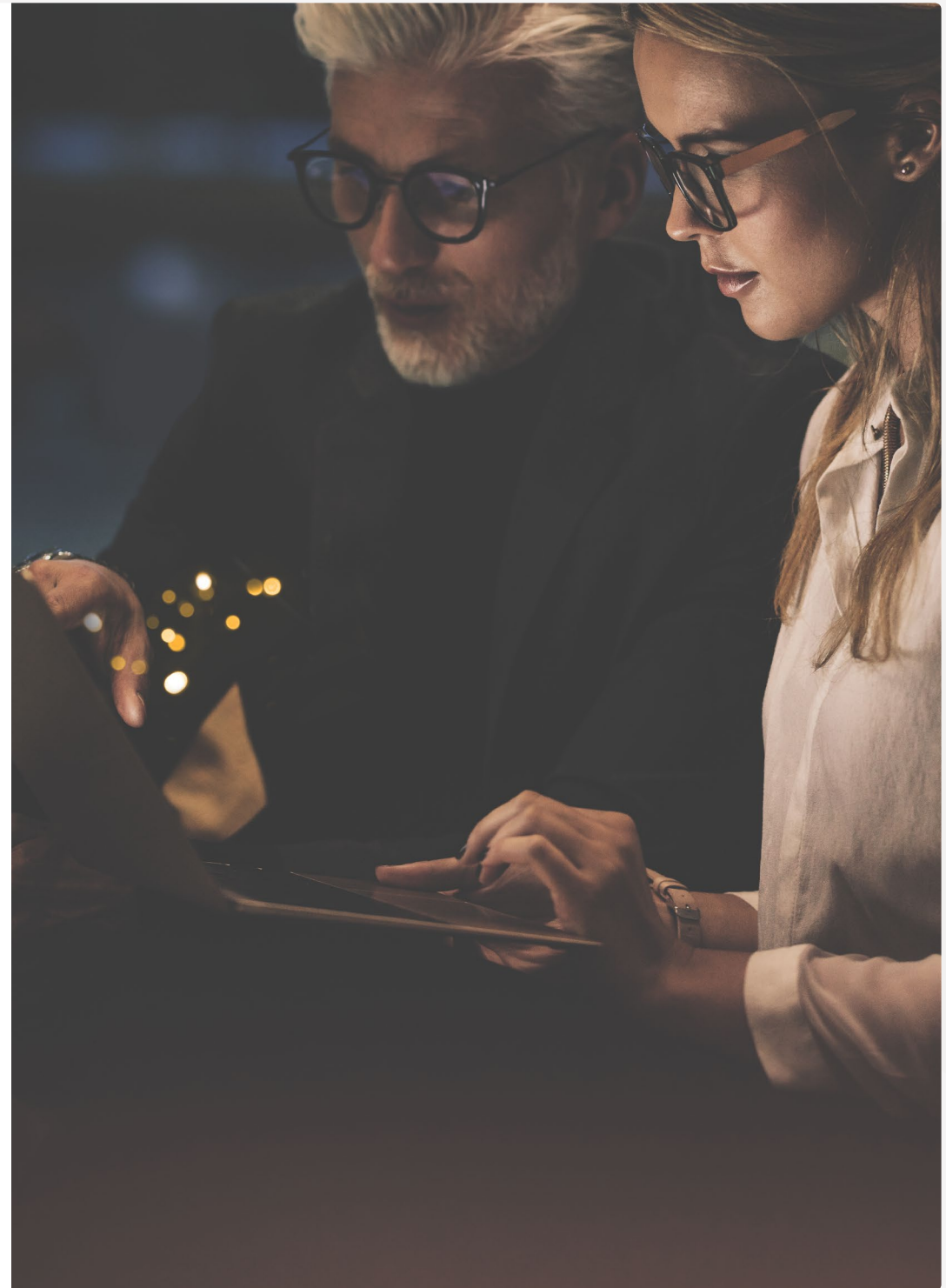
Let's now discuss each level of the hierarchy, look at some of the key issues facing FSI companies at each stage and explore how they can be addressed.



LEVEL 1: SECURITY AND COMPLIANCE

A secure and compliant platform provides a launching pad to start the cloud journey

Security and compliance is one the most fundamental considerations for an FSI organisation's IT infrastructure. In an increasingly uncertain operating environment characterised by volatile political influences, rigorous regulatory oversight, and a growing threat of cyber-attack, means that now more than ever its important companies have the right systems in place to protect their sensitive data from internal and external threats. The risk of legal, financial and reputational damage to organisations makes it extremely important to be fully compliant with industry and region-specific certifications. It's also imperative that they have processes in place to avoid any downtime periods. If FSI companies want to implement an effective cloud strategy, they need to be mindful of some of the key security challenges facing the industry.





LEVEL 1: SECURITY AND COMPLIANCE

The regulatory landscape is becoming more complex

FSI regulations address a wide range of concerns, including privacy, disclosure, fraud prevention, anti-money laundering, anti-terrorism, anti-usury lending and anti-lending discrimination. It is a complex landscape due to the number of institutions around the world that affect FSI organisations, especially where laws are put in place not only by the federal government, but also at a state, regional and city level in certain countries.

Azure benefits

FSI companies can securely extend on-premises backup storage and data archiving solutions to the cloud, reducing cost and complexity. Through automation, IT departments and compliance teams can efficiently support numerous audit demands and can also set up automatic updates and real-time notifications to take human error out of administrative tasks. In addition, machine learning tools can assist as early warning systems to help monitor things in real time, like credit risk.

Checklist:

Address regulatory complexity with greater visibility and monitoring using the cloud.

- ☐ Gain a deep understanding of what's going on across core systems.
- ☐ Continually analyse data flows to detect and resolve issues.
- ☐ Allows for ongoing reporting and monitoring of activities.
- ☐ Ensures close oversight so malicious activity can be addressed.



LEVEL 1: SECURITY AND COMPLIANCE

Business continuity is growing in importance for regulators

As global financial institutions are becoming increasingly reliant on the cloud, using it to store customer-account data and help run their underlying systems, leading regulators are becoming increasingly concerned about what might happen if an FSI company's IT system goes down or the company itself collapses. Business continuity services are therefore a growing area of focus for regulators as they seek to ensure critical data, applications and infrastructure are always on and available.

Azure benefits

Using the cloud, FSI companies can protect their data and applications to avoid costly business interruptions. With traditional methods such as tape libraries and secondary sites falling behind, many organisations are extending backup targets to the cloud. The cloud offers back-up, storage and disaster recovery services so companies can build solutions that protect important data with unmatched durability and security.

Checklist:

Develop a well-managed continuity plan using the cloud, which ensures your organisation keeps running, even when downtime occurs.

- ☐ System that can back up and continuously replicate data.
- ☐ Ability to replicate storage across locations for high speed recovery.
- ☐ Makes sure data storage is compliant.
- ☐ Ability to develop compliant ready applications.



LEVEL 1: SECURITY AND COMPLIANCE

Companies need to take more responsibility for security

Security in the public cloud is a shared responsibility and follows a 'shared security model', which means clients have an important role to play in public cloud security. Whilst cloud providers like Microsoft offer security for the overall global cloud infrastructure and foundational services in the public cloud, clients still need to take significant steps on their own to protect themselves.

Azure benefits

Using Azure, an FSI company can embed security into the cloud environment through a partnership approach. Microsoft gives companies a broad range of tools they can use to better protect their customers and their data, such as VPC Service Controls which help prevent data exfiltration as a result of breaches or insider threats. By building on a strong foundation of security tools in Azure, companies can fully protect themselves.

Checklist:

Take more responsibility with a well planned and executed cloud strategy with robust security measures built in.

- ☐ Take full control over your IT infrastructure.
- ☐ Be fully aware of where your data resides.
- ☐ Align your IT infrastructure with your business strategy - public vs hybrid cloud.
- ☐ Infrastructure can be managed across all applications and workloads.

There is more
to leading
the way than
security and
compliance

**To achieve digital transformation it's
necessary to manage costs, make better
decisions and become innovative.**

In the following sections we explore the next three steps to leading the way beyond security and compliance by deep diving into cloud cost management, better decision making enabled through data and analytics, and modern app innovation.

LEVEL 2: EFFICIENCY

To move beyond compliance, you must drive things forward with greater efficiency

Being lean and efficient is especially important for FSI companies as they face significant internal pressures to keep costs under control and compete with new nimble and agile market entrants. Financial institutions have traditionally been expensive to operate and require significant amounts of compute resources to handle mass amounts of data. Further to this, they often require large volumes of power at peak times so they can meet demanding regulatory timelines, such as Solvency II or Basel III. However, traditional IT infrastructure is no longer fit for purpose. Paying for expensive computing hardware and resources needed to keep up with regulations at a constant rate is no longer cost efficient. FSI companies need to look for ways they can use cloud technologies to improve efficiency and get ahead of the competition.





LEVEL 2: EFFICIENCY

Competition for internal resources is fierce

Competition within an organisation can often be just as fierce as the competition in the external market. Finite internal resources means corporate functions need to prove their worth. This is particularly important for IT departments where costs can be substantial. They, therefore, need to show real value and achieve efficiencies so that they can secure future investment in IT projects.

Azure benefits

The FSI industry has been at forefront of advancing grid computing in areas such as pricing, market positions, risk management, and other business critical operations. By taking these compute-intensive workloads out of the data centre and into cloud, IT departments can deliver increased speed, scalability, and cost-savings for their organisations and prove their worth to company leadership.

Checklist:

Increase your operational efficiency and prove your worth by utilising cloud technologies.

- ☐ Removes the need to spend huge sums on purchasing, updating and maintaining onsite IT infrastructure.
- ☐ Significantly reduces reporting timelines for the business.
- ☐ Reduces the costs of managing and running the overall IT organisation.
- ☐ Allows an IT department to become more agile and prove their worth to the company leadership.



LEVEL 2: EFFICIENCY

A holistic view of costs can be difficult

Many FSI companies are global enterprises which means they have multiple target demographics and markets. They, therefore, struggle to get a unified view of the costs associated with their IT infrastructure and keep them under control. Furthermore, FSI companies operate in a way that requires peaks and troughs in compute usage which means they require a flexible solution that allows them increase compute power at certain times.

Azure benefits

Using the cloud, FSI companies can track resource usage and manage costs across all environments with a single, unified view, while accessing rich operational and financial insights. It is also possible to implement governance policies for effective enterprise cloud cost management and increase accountability with cost allocation and chargebacks. All of which improve the return on the cloud investment through continuous cost optimisation and industry best practices.

Checklist:

Gain a more unified view of your infrastructure costs through a well managed cloud environment.

- ☐ Provides a greater visibility of costs and an ability to track spending and historical trends using a unified platform.
- ☐ Ability to attribute resource costs to specific departments, projects or applications, which aides with budgeting.
- ☐ Allows for flexibility by turning up the compute power when they need it and turn it off when you don't.
- ☐ Enhances overall IT utilisation with a pay-per-use model with on-demand resources.



LEVEL 2: EFFICIENCY

Human resources are often not being used efficiently

The FSI industry requires highly skilled but also often highly expensive human resources to operate. However, numerous studies have shown that highly skilled people are spending large amounts of their time on manual tasks. FSI companies require that their IT departments operate in a more efficient way, so they are not swamped with infrastructure concerns, software upgrades or day-to-day issues.

Azure benefits

With the cloud, FS companies no longer need to manage physical data centres and servers. Instead, they can treat the infrastructure as code and spend more resources on improving product quality and better serving customers. This provides them with the flexibility and time to ask more questions of the incoming data and discover ways to improve overall market strategies.

Checklist:

Using the cloud, make best use of skilled employees within the IT organisation and in core business functions

- ☐ Allows IT to focus on value adding tasks instead of administrative ones.
- ☐ Improves the quality of work of their employees because they have more time.
- ☐ Ensures employees in core business functions are not dealing with technical issues.
- ☐ Automation tools that are available with the cloud can further enhance worker productivity.

LEVEL 3: DECISION MAKING

Light the path ahead with better decision making, using the power of data and analytics

The growing amount of data, along with an FSI company's effort to turn it into something useful, has often been referred to in the industry as an 'analytics arms race'. FSI companies have an opportunity to take advantage of large amounts of data from internal and external sources, however, knowing how best to gather, retain and use this data is often a key challenge for organisations. Businesses who can use their data effectively, in a way that provides clear insights from which informed decisions can be made, can get ahead of the competition. Furthermore, FSI companies require actionable insights to be accessible, accurate and cost-effective. This is only possible with IT infrastructure that supports and enhances actionable insights with accessible in-depth analysis for decision makers.





LEVEL 3: DECISION MAKING

Getting and accessing data in one place is difficult

The global nature of many FSI firms means that data often resides in many different locations. These might be on-premises or in the public cloud, making it hard to make any sense of disparate sources of information and get any clear insights. Furthermore, it is often difficult to connect to this data from certain locations or remote devices, making the accessibility of actionable insights challenging.

Azure benefits

Using Azure Storage services, provides an FSI company with world-wide storage and retrieval of any amount of data at any time. Secure cloud storage services protects the data infrastructure, allowing an organisation to integrate on-premises data with cloud data to form crucial insights. Data integration can also be accelerated with data connectors from Azure Data Factory and are supported by leading information management tools.

Checklist:

Consolidate disparate data sources and access it from any location using a cloud-enabled data platform.

- ☐ Ability to connect data from any location or any device.
- ☐ Allows employees to gain deeper insights using data from more than one location.
- ☐ Enables quicker decisions by accessing data from anywhere.
- ☐ Strategic and operational decisions can be adjusted due to a more complete view of things.



LEVEL 3: DECISION MAKING

Trouble producing clear reporting for actionable results

Many FSI businesses are having to manually generate reports from multiple different data pools, combined with the technical nature of the industry, this makes reporting extremely confusing and likely to contain errors. FSI companies need reporting that can be quickly generated and that contains the right level of in-depth analysis but can be easily understood by individuals who might not be from a similar technical background.

Azure benefits

Using the cloud FSI companies can integrate big data from across the enterprise value chain and use advanced analytics in real time to optimise performance and save money. People in different departments can work together to plan, monitor, report on, and analyse financial and operational performance, empowering business leaders to make better, faster, more collaborative decisions.

Checklist:

Transform complex data into actionable results to improve your decision making across business processes.

- ☐ Generates extensive and interactive reports for insights into performance.
- ☐ Makes data insightful and user-friendly using visual reports.
- ☐ The ability to transform data into results that are understandable across the entire organisation.
- ☐ Uncovers potential threats early which allows detrimental issues to avoided.



LEVEL 3: DECISION MAKING

Sensitive data needs to be transferred in a secure way

FSI companies have access to huge amounts of sensitive data but accessing it or moving it in a way that is reliable and secure can pose challenges. Companies require a reliable and secure connection between their various data sources.

Azure benefits

By migrating on-premises applications, workloads and databases to the cloud, allows FSI organisations to make decisions based on specific business, technical and regulatory requirements instead of technical complications or limitations. They also have an option to use hybrid cloud to deploy to the locations that work best for them – whether that be on-premises, in the cloud or both.

Checklist:

Take advantage of data connectivity using the cloud, so you can more easily manage your data.

- ☐ Ability to run performance-heavy applications with large volumes of data.
- ☐ Take advantage of a high-performance connection between cloud environments.
- ☐ Enhances security and reliability with a dedicated private internet connection.
- ☐ A secure connection avoids any downtime and ensures the business is always on.

LEVEL 4: INNOVATION

Spark bright ideas and greater innovation with modern cloud-enabled applications

New market players in the form of fintech and insurtech firms are driving FSI companies to be more innovative. These new agile players are making it important for established players to embrace cloud-enabled technologies to remain competitive. Customer-centricity is a theme that comes up frequently in the industry to help organisations achieve this. Not only does this require that new and legacy applications are built with cloud in mind, it also drives the need for the underlying IT infrastructure supporting development processes to be as efficient as possible. FSI companies must take full advantage of modern app development, future proofing their businesses and delivering applications that support a more customer-centric approach.





LEVEL 4: INNOVATION

Existing applications are running on outdated technology

With many FSI businesses struggling to keep up with agile new players it is important that existing applications do not become outdated. Many FSI organisations are running their legacy applications on old technology which means they are not getting the most out of them. This is a particular concern for established players who are potentially wasting a great deal of brand equity they have built up over many years with solutions that were once considered leading edge but now appear old and outdated.

Azure benefits

FSI companies can migrate on-premises applications from their local data centre to public cloud infrastructure and take advantage of benefits, such as greater elasticity, self-service provisioning, redundancy and a flexible, pay-per-use model. These cloud environments provide a variety of benefits such as cost savings and increased scalability.

Checklist:

Future-proof your business by modernising existing apps by making them cloud-enabled.

- ☐ Counters perceptions in the market that legacy applications are outdated.
- ☐ Protects brand-equity of established solutions.
- ☐ Boosts the performance of existing applications.
- ☐ Be more customer-centric by being able to serve customers better.



LEVEL 4: INNOVATION

The cloud is still on the periphery and not part of new product development

In addition to the modernisation of existing applications it also important FSI companies make sure new applications are built as cloud native. A reluctance by many organisations to fully embrace the cloud means that the majority of cloud-enabled technology is being used for business processes that might be considered non-core, such as CRM, HR, or financial accounting. If they want to get ahead of the competition, cloud technologies need to become a central part of new IT initiatives, especially the development of new products and services.

Azure benefits

A company can enhance customer-centricity and satisfy changing customer demands by building cloud-native apps. Cloud-native applications benefit from microservices and are containerised. With microservices, every application is actually a collection of small services that implement capabilities, run processes, and communicate, all of which can be deployed, adjusted, scaled, independent of the other application services.

Checklist:

Satisfy new customer-centric pressures by making cloud an important part of your product roadmap.

- ☐ It provides and ability to build new cloud native apps that benefit from the scalability of the cloud.
- ☐ Counters against the agile fintech and insurtech players in the market.
- ☐ Cloud-enabled applications are faster, more reliable and cost-efficient.
- ☐ Makes the business future proof, so they can compete in the long term.



LEVEL 4: INNOVATION

There is a need to bring modern apps to market quickly

In a quest to be more customer-centric, FSI companies need to develop and deploy innovative applications, for a demanding market quickly and at high-frequency. This requires that their development processes are as efficient as possible. A DevOps approach achieves this but typically puts significant burdens on shared development and test data environments, and deployments may take place in physical structures that are in high demand among disparate teams and departments.

Azure benefits

Using the cloud, FSI firms can draw on computing power as needed and speed up development and deployment times. Companies can bring cross-platform functionality to the dev-test environment and use preferred coding language to natively build and test applications on the devices and platforms already used. Companies can manage the environment with agility and decide whether they want to allow self-provisioning by developers or maintain centralised control.

Checklist:

Improve the productivity of your development processes and increase the speed to market of new and existing applications.

- ☐ Gets products to market faster by speeding up the development process.
- ☐ Greater efficiency means a reduction in costs that can be spent on new projects.
- ☐ Allows developers to spend more time on innovation.
- ☐ Customer satisfaction is enhanced as clients are getting apps at greater frequency and speed.

CONCLUSION

Move beyond compliance by setting yourself on a path to innovation and lead the way

To survive in today's complex and competitive market, FSI companies need to get the most out of their IT infrastructure and achieve digital transformation. The key to accomplishing this, involves the optimisation of underlying IT infrastructure and embracing of cloud-enabled technologies. But the road to success is not a straightforward process. FSI companies need to overcome a number of challenges to become market leaders.

Although much of the attention in embracing cloud technologies has focused on security and compliance issues, if they want to be market leaders, they also need to consider how their IT systems can facilitate more operational efficiencies, better decision making, and greater innovation.

Using the 4-tiered model we call the 'cloud hierarchy of needs', just discussed, helps them achieve this. It provides organisations with a framework that 'moves beyond compliance' and considers how they can be more efficient, use data and analytics for better decision making and achieve innovation through modern app deployment. If FSI companies can address these issues, they can set themselves on a path beyond compliance and achieve digital transformation using the cloud.

Get in touch with Sentia and let us help you lead the way by taking advantage of all the benefits of well executed cloud strategy.

AZURE BY SENTIA

Why choose Sentia as your Azure provider?

We are a gold level Microsoft partner and a certified Azure Expert Managed Service Provider. We offer fully managed, monitored and reported cloud services, providing continuous compliance and 24/7 support. Our experts can set up and manage the IT architecture completely, or we can focus on handling the operational workload within your existing infrastructure. Either way, Sentia's specialists ensure your IT architecture is empowering your business to grow.



Transition and migration management

We will guide you with the right mix of cloud infrastructure, platform, and software to support your organisation in making a successful transition to the cloud without business interruption so you can realise tangible long-term results.

- Workload migration
- Modern app transition
- Datacentre migration
- Transition and migration support



Operations management

We help improve productivity by managing the cloud infrastructure your applications run on, so your developers can focus on delivering innovative applications with the peace of mind of working within an optimised IT environment.

- Performance optimisation
- Agile change and deployment management
- Documented DevOps processes
- 24/7 365-day monitoring and support



Security and compliance management

Through our security and compliance services we ensure your organisation is protected from internal and external threats. In addition, we provide data governance and reporting so you can meet compliance requirements.

- Dedicated or shared server resources
- Patch and backup management
- A/V, next-gen firewall and DDoS protection
- Security and recovery assessment



Cost management

We deliver efficiencies by maximising your cloud potential while controlling your costs. We help you work in a more cost-efficient way thanks to the flexibility of the cloud. We also offer cost optimisation services so you can monitor and visualise your cloud spend and improve accountability.

- Cost management services
- Pay-per-use model
- Azure Cost Optimisation
- Cloud infrastructure assessment

To find out how to move beyond compliance and benefit from a cloud adoption strategy

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