How to reap the benefits of cloud in the banking and financial services sector

With strict regulatory requirements, privacy concerns, and security threats on one hand, and high customer expectations, increasing data volumes to process, and a significant installed base on the other, the banking and financial services (BFS) sector is in a unique and challenging position.

This position offers a target rich opportunity to improve. One of the levers to achieve improvement is the increased adoption of cloud services, which provide the means for your organization to become truly customer centric. To capture the full potential and innovate fast, change is required, including the redesign of value chains, end-to-end operating models, and how you work.

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Looking back: the rationale behind adopting cloud in the BFS Sector

The data-driven nature of the BFS sector made it an early adopter of technology. Starting with automating back-office processes, which typically happened independently in each department, which resulted in a decentralized and siloed infrastructure. To benefit from scale, an effort was made to consolidate. Consequently, data centers arose, usually self-owned. The next step was sharing capacity through virtualized servers that hosted multiple applications from different departments within the data centers.

Then cloud was introduced, offering the same services off-premises, but on a much larger scale than individual institutions could imagine. This development was taken up by early cloud adopters in the BFS sector, with the intent to capture the benefits of scale. However, in order to capture the desired economies of scale and reduce costs, a different approach to capacity management was required. Not all adopters mastered capacity management in cloud nor in the on-premises set up, leading to some disappointment about the benefits achieved.

The next wave of cloud adoption was fueled by the promise of 'infrastructure as code', as part of software delivery pipeline automation. This enabled organizations to eliminate waste as a consequence of handovers between Dev and Ops, while adopting the DevOps agile way of working.

The promised benefits of fully adopting cloud services are numerous. From leveraging cloud's agility to bring functionality to the market quicker, to increased elasticity that ensures IT infrastructure can be scaled based on real-time demand. From eliminating upfront infrastructure investments and wasted resources by only paying for what your organization consumes, to increasing speed and providing access to innovation. Together this increases productivity, accelerates the development of new services, and improves customer experience, while handling larger data volumes from multiple sources and deriving insights to better respond to customer requests and regulatory requirements.

To reap the benefits cloud offers, certain conditions need to be met, which requires serious changes in IT as well as business.

"While the benefits are numerous, few organizations experience the full potential of cloud."

Monique Wagenmaker-Oudijk

Consulting Lead, Banking and Financial Services Benelux, Cognizant

Implementing cloud services

Implementing cloud services requires organizations to assess their current architecture – both business, as well as technical – including recognizing how each component supports the current business and operating model.

If your organization is serious about the move to cloud, this is an ideal opportunity to redesign your business and IT architecture to take a customer centric approach. This should be both compliant and secure, as well as beneficial to IT and business. This requires a significant change in approach, since historically applications were designed to increase productivity of internal processes. Later these were tuned to enable 'straight through processing', where clients were seduced to engage in banking processes through web forms. Although the experience has been significantly improved by most organizations, the historic set up of supporting processes is frequently inside-out, hampering agility and speed, preventing organizations from living up to their promise of customer centricity.

Cloud technologies and solutions provide access to standards that are scalable. To use them, you have to be willing to (re)design supply chains to serve customers' needs, making use of the components available. Doing so provides a unique opportunity to break with the past and rebuild a sustainable business model for the future. This requires defining a simplified end-to-end value chain model with a consistent break-down into components.

The next step is choosing the type of cloud services that best fit each of the components and how to bring these together. Innovation in the cloud moves at a high pace, making a consistent break-down of the end-to-end business and IT value chains important. The design needs to be consistent and should allow for components to be easily plugged in and out.

Implementing and managing cloud services successfully requires new skills and the capability to manage processes, preferably through multiple lenses such as business, data, and IT.

A new way of working is required to manage the dynamics surrounding cloud services and the ecosystem. This could build upon some of the old dynamics, if this clearly focused on managing the balance between quality, volume, and cost.

What is required are procedures that ensure cloud is used efficiently to maximize the benefits. Cloud financial management (FinOps) should be part of the cloud governance that continuously manages and optimizes consumption patterns. For example, will you be consuming cloud services 24/7, or only during working hours in the Benelux, or some combination of the two? Your cloud services should be contracted accordingly.

Autonomous teams that work with cloud need to continuously revisit which services to consume. The trade-offs each team makes need to be based on new possibilities and expected additional benefits versus any additional costs in the long run, including the cost of change. This type of consideration, which means taking a broader perspective than simply evaluating traditional functional and non-functional requirements, is a completely new challenge for teams working with cloud.

"Cloud is more than just technology. It's a new way of working."

Alok Chaurasia

Market Lead Banking, Financial Services and Insurance, Belux, Cognizant

Managing end-to-end change

When it comes to technology, there is a need to adapt to a new way of working. Teams need to take full ownership of the pipeline, for example, functionals and non-functionals that encompass proper testing, but also security, privacy, and continuity. And it requires your teams to continuously monitor their consumption patterns and resulting costs.

On the business side, consistent, coherent, and versatile business architecture needs to support each value chain and customer journey. This will enable fast and flexible technological support that taps into the opportunities offered by solutions and innovations in the cloud ecosystem.

Mastering both of the above will enable your organization to benefit from the full potential of cloud to improve customer centricity, pivoting processes from pushing customers through the organization's internal administration flow to focusing on how to assist customers through their life events with frictionless services that fulfill customer needs.

Innovation through regulation

Trust is at the heart of the BFS sector. This means that security and privacy – of data, applications, and processes – is of vital importance. When it comes to cloud solutions, early adopters worked with regulators to obtain official approval to use cloud services, ensuring that all the required security, compliance, and privacy measures were in place. Most applications can be properly managed in the cloud if adequate transparency, monitoring and control, security, identification and access, encryption of data, and performance are in place. In other words, in order to use cloud services, the BFS sector needs to master full control over its financial supply chain.

This is also a focal point of the Digital Operations Resilience Act (DORA) and Schrems II ruling: all banks and financial institutions should be in control of all the links in their supply chain at all times – and be able to prove it. This can pose a particular challenge if using multiple clouds.

Irrespective of challenges, cloud adoption enables the processing of the increasingly large data volumes required to improve the customer experience and comply with regulatory demands. Large data volumes are generated at the customer journey touchpoints and can be used to enable relevant customer interactions. Regulatory demands increasingly require instant access to data, as well as the ability to process significant volumes. For example, the ECB BIRD and IReF (ESCB Integrated Reporting Framework) initiatives, risk models and the requirements for battling financial crime. By using cloud services, organizations gain access to secure and scalable storage and the processing power they require. And, as long as consumption is managed adequately, the cost is affordable.

This is an opportunity to get a step ahead of the evolving regulatory landscape by fully understanding the reasoning behind the regulations and subsequent requirements. Regulation could potentially serve as an accelerator for innovation. Meeting regulatory demands requires mastering all the layers and steps from defining the risk-based approach, to policies, processes, data and execution, and the business and IT components that support them. The ability to monitor and manage

will enable organizations to adequately fight financial crime, address privacy concerns, manage risk, and much more. If done well, end-to-end, this will also provide a foundation to serving your customers in a customer centric fashion. This foundation reflects a future proof operating model.

Looking at the future of cloud in the BFS Sector

Cloud services can enable your organization to offer customer-centric services that are cost efficient and secure, and they can support your compliance with regulatory requirements. Adopting cloud services requires changing how your organization operates. It can be challenging to implement these changes. On the other hand, this is a target rich opportunity to remove legacy systems that were originally designed inside-out and now hamper your ambition to implement a customer-centric approach. In other words, adopting cloud services provides an opportunity for business and IT to join forces around a common goal of developing customer centric value chains that are compliant and secure by design.

The cloud ecosystem provides continuous exposure to the latest innovations, benefiting your organization. The ease with which autonomous teams can consume cloud requires good governance to be able to control and monitor how cloud services are introduced, set up, and consumed for the sake of effectiveness, efficiency, security, and compliance throughout your organization. The experienced experts from Cognizant can help you define, design, and execute your cloud journey and manage the change end-to-end.

Is your organization ready to fully reap the benefits from cloud?

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Cognizant has the broadest knowledge and experience with applications across a wide range of technologies, platforms, and languages and has been helping IT and business leaders drive results at speed and scale for over 25 years. We have been recognized as a leader in Application Transformation, Application Modernization, Next-gen ADM and Automation by reputed research and advisory firms. Our vibrant partner ecosystem with leading technology vendors helps drive innovation. Wherever you are in your application modernization journey, and whatever your end goals are, Cognizant can help.

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