



# How secure is your sensitive data?

by Duncan Alexander, Product Director – Core Banking, Luxoft

Hogan-powered, mainframe hybrid cloud enablement does a great job securing your most valuable business asset: your data. It's common knowledge that a data security breach brings heavy penalties, reputational damage and could even mean curtains for the unfortunate bank.

Hogan has been safeguarding the banking sector for more than four decades. Over 40 banks and card processors use applications from the Hogan Banking Suite to execute the data processing for their core banking business. Today that means processing over \$5 trillion in deposits, which makes it one of the most prominent core banking systems in the world.

The flexibility and dynamic nature of the Hogan core banking applications allows you to select a cost-effective

data-processing environment that best meets your needs for scalability, availability, data security and other prime qualities.

Not surprisingly, the Hogan-powered, mainframe hybrid cloud concept is a popular choice for banks. It allows banks to secure sensitive data in a fully customizable private cloud infrastructure or remain with on-premises mainframes and move less-sensitive assets to one or more highly versatile, low-cost public cloud resources.

## Main benefits of mainframe hybrid cloud in banking

Here are just some of the benefits of hybrid cloud enablement:

- **Better business agility:** Fail fast, learn faster
- **Greater access to locked-in funds:** Shift from CapEx to OpEx
- **Extra scalability:** Dial storage infrastructure up and down at will. Avoid vendor lock-in and only pay for what you use
- **Automation and stronger productivity:** Upgraded operational efficiency and lower costs. User-friendly dashboards
- **Advanced analytics:** Real-time predictive analytics enables personalized customer delivery
- **More engaging user experience:** Enhanced customer communication
- **Deeper partner relationships:** More productive collaboration

Without transforming legacy systems and introducing a passion for personalization, even simple things like providing a 360-degree view for customers across their deposits, saving and investment accounts are beyond reach. Mainframe hybrid cloud for banking can deliver the speed and agility required to strengthen user engagement. And speed, agility and simplification are vital characteristics in extreme markets because the more time it takes to process data from multiple sources, the more the bank is prey to unnecessary risk.

Deploying hybrid clouds at edge servers cuts network latency. Also, a highly adaptable and permanently available core infrastructure plus less network downtime, which will elevate the user experience to a whole new level.

However, cloud enablement can prove challenging.



# Watch out for roadblocks

Completing the transformation on time, within budget and without error is a tough ask. Especially when the **decades old, highly customized, on-premises tech stack** has been adapted several times in a reactive rather than a strategic manner and **sensitive data is haphazardly held in silos** across the organization. This slows business progression and subverts the adoption of Agile methodology. The risk of large-scale **data loss** is unsettling, so streetwise decision-makers partner with migration experts with a proven record, like Luxoft.

Recent world events obliged consumers to leap from bricks-and-mortar business establishments to online services (cash transactions dropped by **18%** between 2019 – 21 while digital payment methods rocketed), prompting banks to reconsider the management of their **burgeoning workloads**. The vast majority of traditional financial institutions opted to keep their mainframe-based core system of record and take the mainframe hybrid cloud approach to modernization.

**Skill shortages** and having to recruit special talent from the same limited pool as everyone else (including significant cross-industry players) delay the integration of new technologies and push up spending on software and services. An increase in tech provider charges (to cover higher salaries) was behind 2022's expected 9.6% growth in software spending to **\$806.8 billion** and the increase in global IT services spending to \$1.3 trillion. Overspending on the need for more appropriately skilled staff fractures business continuity and eventually could lead to the total failure of the enterprise.

Many banks feel there's a **misalignment of strategic goals** and a **lack of trust** between their IT departments and the business. Some say cloud enablement presents too many **compliance issues** to resolve. Also, intense rivalry with **pure-play disruptors** and more digitally mature organizations with hybrid cloud advantages can lead to a **loss of focus** and hasty technological investment.



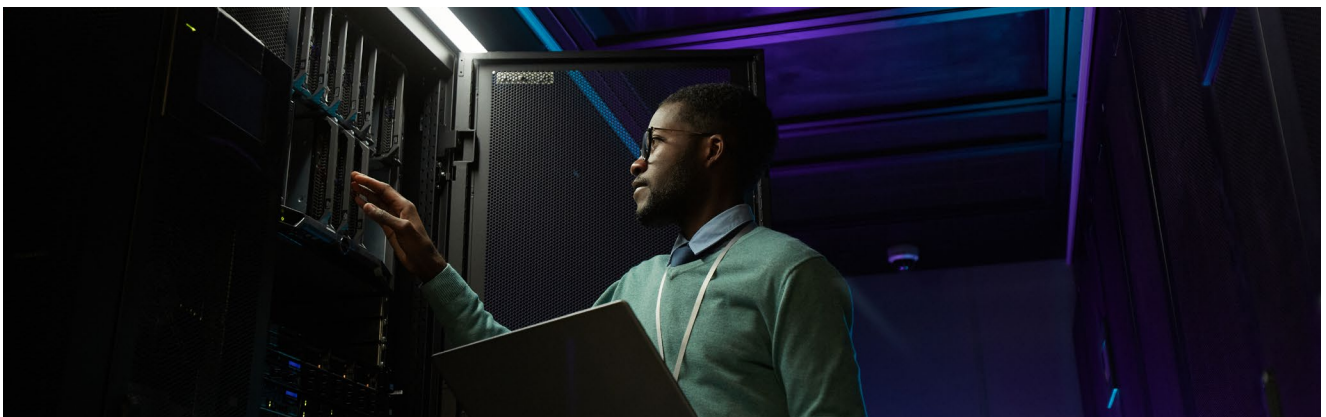
# Greenfield or progressive transformation?

Maintaining ancient monoliths and legacy systems is an expensive business and disproportionately absorbs hard-to-come-by IT resources. Also, retaining outdated technologies with code and manual delivery issues delays the development of new products and services.

Although digital modernization eases cloud deployment, total commitment is risky and expensive for large-scale operations. In July 2022, Gartner predicted that worldwide IT spending would hit \$4.5 trillion by the

end of the year, 3% more than in 2021. Server budgets were forecast to experience 16.6% growth in 2022 “as hyperscalers build out their data centers.” And Gartner expected cloud spending to grow from an 18.4% increase in 2021 to 22.1% in 2022.

But choosing to save money by making marginal enhancements instead of progressively modernizing legacy systems and architecture from the ground up is a false economy.



## Starting from scratch or being pragmatic?

A greenfield strategy gives Agile teams a blank sheet of paper, lifting current restrictions and engaging the collective imagination. Avoiding a complete re-platforming by adopting progressive change capitalizes on what the bank owns and knows already, while optimizing the core and innovating around it (e.g., selecting elements for cloud deployment).

Mainframe hybrid cloud enablement offers tailored solutions that drive operational efficiency and revenue growth while reducing the total cost of ownership (TCO). This is achieved by ensuring optimal alignment between core and new systems, using public and private clouds judiciously and improving the customer experience. However, while a private cloud can address compliance challenges and quell the fear of losing control, firewalls and other access issues hinder teamwork and innovation.

The juxtaposition of a wide range of technologies means ensuring hybrid cloud interoperability is critical. Here's a checklist to help achieve and maintain hybrid cloud infrastructure interoperability:

- Adopt open cloud standards (i.e., IEEE interoperability criteria)
- Ringfence multiple cloud systems with cost-saving adapters, dispensing with an extra data center for integration
- Upgrade your existing architecture. By not doing so, a legacy system/hybrid cloud approach can lead to significant inefficiencies

As banks assume a mainframe hybrid cloud position, DevOps becomes a critical factor in their greater agility.

# DevOps — these days, every business is a software business

DevOps integrates and automates the work of software development and IT operations. This industry aligns people, processes and tools and shares several working principles with Agile methodology, including joint ownership, workflow automation and rapid feedback.

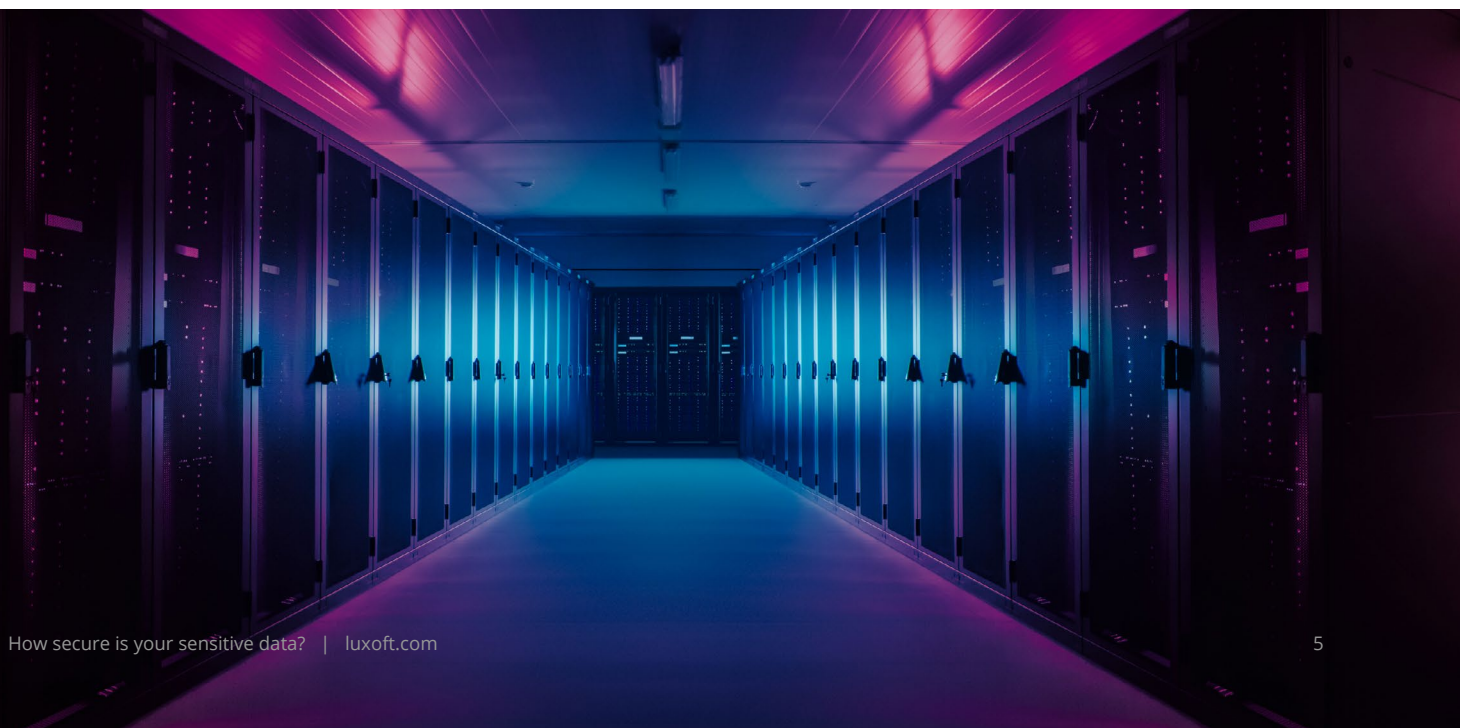
Technologically mature organizations that run on DevOps principles outperform their competitors by

some distance (**86%** of participants in an HBR survey agreed that it's important to develop and deliver new software quickly). Also, because their developers are well paid and content, innovating and applying modern best practices, their employers are better able to attract and retain the best talent.

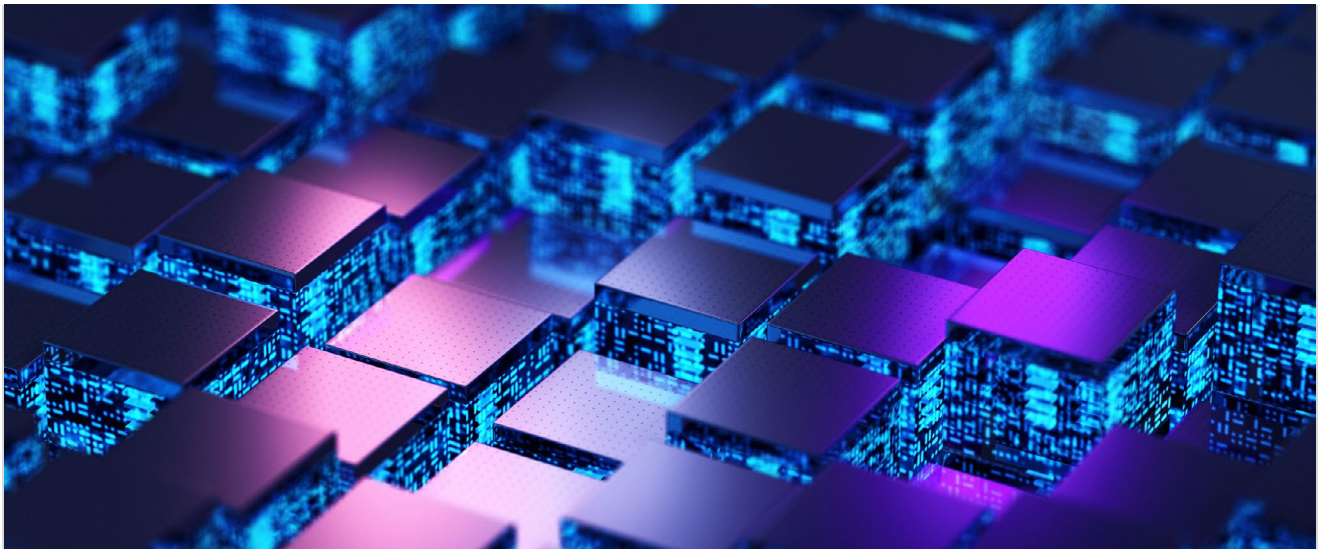
## Quality software is the key to mainframe hybrid cloud success

DevOps helps shorten and standardize the systems' development lifecycle by continually developing, testing and implementing software in short, recurring steps and automating entire processes. User expectations power the continuous development economy (customers engage with partners via their continuous integration/continuous delivery of software — CI/CD), and technology is a market facilitator. So, delivering top-quality software is central to the success of the whole mainframe hybrid cloud initiative.

Technologically speaking, DevOps tools are the new black, and analysts expect them to sustain double-digit growth as banks focus on streamlined delivery and automated provisioning. The global DevOps market is estimated to grow at a rate of 18.3%, from \$5.30 billion (2020) to **\$20.31** billion (2028). And 85% of financial institutions surveyed claimed cloud computing would be "important" to "very important" technology for their business over the next 3 – 5 years.







## Hyper-activity

Automation, or **hyper-automation** to be precise, has accelerated into cognitive systems territory. Cognitive systems like robotic process automation (RPA), low-code application platforms (LCAP) and AI intuit, understand, execute and learn on the job. Many are flattening bumps (from support to advice) in the financial customer experience, but such systems are not specialist IT tools (process agnostic). Gartner predicts that by 2024, **nearly half** of all new RPA clients will come from business buyers.

Once a nice-to-have, hyper-automation has become a definite must-have. Accordingly, in 2022, Gartner forecast that the global market for technology that enables hyper-automation would reach **\$596.6 billion** by the end of the year (up from \$481.6 billion in 2020).

Every organization is looking to optimize customer engagement across the industry spectrum. **Hyper-personalization** uses every conceivable internal and external data source to enable banks to better know their prospects and customers. Of the banks surveyed, **64%** claimed that advanced analytics and AI would significantly impact the banking business in 2022. However, only 20% considered themselves proficient in those disciplines (51% stated they were incapable).

Finally, meaningful third-party collaboration relies on cloud-enabled **hyper-connectivity**, which requires a modern core architecture with the latest technologies to flourish.

## The tough get going

It sometimes takes a trigger event to initiate mainframe hybrid cloud implementation, so first, develop a project proposal. To achieve a consensus, coordinate differentiation strategies and through-the-line business growth tactics, appointing a senior decision-maker as your cloud advocate. The advocate's purpose is to share the benefits of adopting a mainframe hybrid cloud model with all organizational departments, appropriate staff levels and influencers.

A joint IT and business task force should analyze obstacles, opportunities (plus business cases) and the risk of being late to the party while prioritizing and monitoring progress. Consider integrating mainframe hybrid cloud with other systems and technologies, plus its broader impact on the value chain and your ability to create an extraordinary customer experience.

# Keeping everyone in line

To keep the enterprise actions in line with strategic goals, you must develop guidelines for cloud services. Robust cloud governance enhances data security by ensuring that all implementations are aligned with agreed internal regulations and compliance directives, heading off risks before they can affect services. To mitigate internal risks completely, an authorization management system will guarantee who has access to sensitive data.

Furthermore, building a transparent partnership ecosystem with access to best-of-breed solutions will accelerate profitable product innovation and development.

Drive your hybrid cloud organizational reach and schedule as hard as possible, rooting out any shortcomings or vulnerabilities along the way and evaluating important soft issues such as recruitment and up-skilling.

## Like to learn more?

A mainframe hybrid cloud approach enhances experimentation, awareness and speed, taking collaboration to an entirely new level. Mainframe hybrid cloud is the future. So, if you'd like to find out how Luxoft can help you leverage mainframe hybrid cloud benefits and create even better business outcomes for your organization, visit [luxoft.com/industries/banking/hogan-hybrid-cloud-solution](https://luxoft.com/industries/banking/hogan-hybrid-cloud-solution) or [contact us](#).

# About the author



## **Duncan Alexander**

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Duncan leads several existing and new core banking products and services within Luxoft's global Banking Division. He has over three decades' experience in the application of business technology to achieve strategic goals across multiple industries, including banking, insurance, retail, travel and logistics. Duncan has provided strategic advisory services and delivered mission-critical systems as a strategic partner to clients and held senior positions within several large enterprises. His main area of focus is the realization of business benefits for our clients from digital transformation.

## About Luxoft

Luxoft is the design, data and development arm of DXC Technology, providing bespoke, end-to-end technology solutions for mission-critical systems, products and services. We help create data-fueled organizations, solving complex operational, technological and strategic challenges. Our passion is building resilient businesses, while generating new business channels and revenue streams, exceptional user experiences and modernized operations at scale.

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