Bridging the gap between tech, finance and people

A global provider of universal banking and digital financial software solutions explains how the financial services sector is harnessing the power of AI, blockchain and quantum computing to meet customer expectations in a new digital era



INTERVIEW WITH
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How have you seen the financial sector evolve in terms of digital transformation in recent years?

One of the most significant changes has been the rise of digital and on-the-go banking, which has introduced innovative solutions like peer-to-peer payments, digital lending and cross-border transactions powered by blockchain technology. We have also seen the integration of artificial intelligence (AI) and machine learning (ML) technologies, supported by cloud computing and big data.

Open banking technology and API connectivity have allowed third-party fintechs to build and become part of a globally interconnected financial ecosystem. Tech giants like Apple and Google have influenced the financial services landscape with the emergence of embedded finance, which now comes built into every device and operating system, blurring the lines between everyday technology and finance.

Can you describe some of the major technological advancements ICS Financial Systems has introduced to the financial sector?

ICSFS has made substantial contributions to the financial sector through its flagship solution, ICS BANKS. Over the past few decades, ICSFS has led the global movement towards Islamic banking, being one of the first banking technology providers to digitalise Sharia-compliant financing and deliver Islamic neobanks. A notable milestone for ICS BANKS solutions is the embedding of blockchain technology into its payment systems, enhancing data exchange and transaction management with increased security and transparency. This was exemplified by the successful implementation of the first cross-border payment in the Middle East based on Oracle blockchain technology, marking the beginning of a new era in global banking.

ICSFS has also modernised core banking systems by incorporating essential services such as real-time processing, automation, advanced data management, and analytics; in addition to a long list of digital services that enables financial services providers to tailor products and reach more customers, significantly enhancing financial inclusion.

How do you envision the role of technology evolving in the financial sector over the next few years? What upcoming innovations are you most excited about?

Technology will reshape everything from customer experiences and customer service to back-end operations. Several key trends and innovations will drive this change, with AI and ML at the forefront. These technologies will become more sophisticated, enabling hyper-personalised financial services, predictive analytics for customer behaviour, and advanced fraud detection. AI-powered virtual assistants will likely manage most customer interactions, offering instant, tailored support as well as improved product reach. We expect AI-driven investment strategies to democratise wealth management by providing low-cost, algorithm-based financial planning.

While blockchain is already being used in cross-border payments, secure transactions, and data exchange, its role is expected to expand, forming the backbone of more decentralised financial ecosystems. Quantum computing, though in its infancy, could revolutionise financial modelling, risk assessment, and cryptography, offering the ability to process vast amounts of data at unprecedented speeds. Meanwhile, with the growing focus on sustainability, financial institutions will leverage advanced technologies to track, measure, and enhance the environmental and social impact of investments.

In what ways do your solutions help banks and financial institutions personalise their customer interactions?

Using machine learning, advanced analytics, and intelligent reporting, ICS BANKS empowers banks to gain valuable insights into customer behaviour, preferences, and financial history. This data-driven approach allows financial service providers to offer bespoke financial products, services, and recommendations that cater to individual customer needs. For instance, banks can suggest tailored loan products, investment opportunities, or savings plans that align with a customer's financial goals and spending habits. ICS BANKS also facilitates personalised communication through the customer's preferred channels, such as email, SMS, or mobile apps. This helps build stronger relationships and ensures a more relevant and engaging banking experience.

What are some of the most common challenges banks face when implementing new technology solutions?

Today's financial ecosystem requires interconnectivity between different financial service providers, fintechs, and regulatory bodies, which dictates new and evolving integration requirements. Banks therefore frequently encounter several common challenges, such as integrating with legacy systems, ensuring data security and regulatory compliance while managing costs at the same time. Many banks still rely on outdated core systems, making it difficult to incorporate modern technologies without disrupting existing operations. ICS BANKS addresses this issue by offering modular, scalable solutions that offer seamless integration via its Open Banking Platform, enabling banks to upgrade specific components without overhauling their entire infrastructure.

> "WE EXPECT AI-DRIVEN INVESTMENT STRATEGIES TO DEMOCRATISE WEALTH MANAGEMENT"

To address data security and privacy concerns, our solutions incorporate advanced security features including multi-layered authentication, encryption, and fraud detection, while providing tools to ensure compliance with international financial regulations such as AML and IFRS 9. Our multi-award-winning and scalable solutions can be tailored to fit any organisation, regardless of size and business module. ICS BANKS includes a complete suite of software solutions related to conventional, Islamic, and digital banking, covering vital banking sectors such as investment banking, microfinance, retail, and corporate banking solutions, to name a few.

Large-scale technology upgrades often require considerable financial investment. ICS BANKS' modular solutions and different deployment options reduce upfront infrastructure costs and allow banks to scale services based on demand without complexity. This flexible pricing model enables institutions to adopt the technology they need in a cost-effective way.

How can financial institutions improve their technology infrastructure to enhance customer experience?

Adopting cloud-based solutions is a pivotal strategy for financial institutions, providing scalability, faster service deployment, and the capacity to process real-time transactions, all while significantly reducing operational costs. Cloud computing not only enables round-the-clock service availability but also offers secure data storage, enhancing both efficiency and customer satisfaction.

Robust cybersecurity measures, such as encryption and multi-factor authentication, are essential, especially when adopting cloud-based or AI-driven tools. Additionally, thorough staff training and proactive change management are crucial for ensuring employees can fully leverage these new technologies, resulting in a smoother transition and improved customer service.

How do your solutions help banks and financial institutions manage and leverage customer data while ensuring privacy and security?

To ensure data privacy and security, ICS BANKS integrates multi-layered security mechanisms, including encryption, multi-factor authentication, and role-based access controls. These measures help protect sensitive customer data from unauthorised access and potential cyber threats.

Additionally, the platform's compliance with international standards and regulations, such as GDPR and IFRS, ensures that data management practices are aligned with global privacy and security requirements. ICS BANKS also offers real-time monitoring and fraud detection capabilities through advanced algorithms, which continuously analyse transactions to identify suspicious activities and mitigate risks.

> "ADOPTING CLOUD-BASED SOLUTIONS IS A PIVOTAL STRATEGY FOR FINANCIAL INSTITUTIONS"

How do you see the competition from fintech companies and tech start-ups influencing the demand for your technology solutions?

As a comprehensive banking solutions provider, we view fintechs and tech start-ups not as competitors but as partners in creating a reliable, innovative, secure, and diverse financial ecosystem that enhances financial inclusion and customer engagement.

The rise of fintech has undoubtedly transformed the banking technology sector, driving innovation and disruptive growth while reshaping customer expectations and user experience. To maintain our edge in this rapidly evolving market, ICSFS prioritises innovation, flexibility, and customer-centricity. Our solutions facilitate incremental adoption of new technologies without overhauling existing systems or disrupting operations.

Crucially, we build strong partnerships with our clients, providing tailored solutions that address specific business challenges while ensuring regulatory compliance and robust security. Therefore, we look at the rise of fintechs as a growth opportunity for our business as well as for our current and new clients. This is due to the high scalability and modularity of our banking solutions, which allows us to dynamically add new business trends at affordable costs.

How important is collaboration with banks and financial institutions in developing new technology solutions? Can you provide an example of a successful collaboration?

Collaboration with banks and financial institutions is crucial in developing new technology solutions and innovations, as it allows for a deeper understanding of real-world challenges and operational needs. By working closely with financial institutions, technology providers like ICSFS can create tailored solutions that not only address the specific requirements of each institution but also push the boundaries of innovation in the financial sector.

A prime example of a successful collaboration is ICSFS's development of a digital Islamic lending platform in partnership with various financial institutions. This platform revolutionised the loan application process by integrating advanced algorithms, real-time data analysis, and automated risk assessment models. By working closely with financial institutions and credit bureaus, ICSFS was able to streamline the entire loan lifecycle – from application to disbursement – allowing for faster approvals, reduced processing times, and enhanced security.

What advice would you give to banks and financial institutions that are looking to improve their technology infrastructure and digital capabilities?

We would suggest adopting a customer-centric, security-focused approach coupled with advanced and flexible technology solutions. One of the first steps is to embrace cloud-based and scalable platforms that provide the flexibility and cost-efficiency necessary to manage growing transaction volumes, swiftly deploy new services, and alleviate the burden of maintaining physical data centres.

Institutions should prioritise an omnichannel experience that allows customers to access services anytime, anywhere, and on any device. This seamless experience can be enabled by advanced technologies such as open API architecture. AI-driven technologies should also be at the core of this transformation, supporting tools like chatbots, virtual assistants, and personalised financial recommendations. Scalable system architectures and Open Banking platforms allow for such additions quickly and hassle-free. As digital capabilities expand, so do the risks of cyber threats and data breaches.

For this reason, robust cybersecurity measures like encryption, multi-factor authentication, and AI-powered fraud detection are essential.

What are your company's long-term goals for its role in the financial sector's digital transformation and how will you measure success?

We aim to lead the way in helping banks and financial institutions adopt next-generation technologies to drive operational efficiency, enhance customer experiences, and promote sustainable growth. We will continue to enhance our flagship banking solution, ICS BANKS, by incorporating emerging technologies as they are released. We will measure success through key performance indicators including improved operational efficiency, customer satisfaction, and market expansion. By focusing on continuous innovation, scalability, and customer success, we aim to solidify our position as a leading partner in shaping the future of the financial sector's digital transformation. ■