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Creative data technology

# The Global Fintech Landscape:

Challenges, Collaboration,  
and Cloud

E-Book



## Introduction

While the Covid-19 pandemic brought about significant challenges and disruption for many organisations, for the fintech sector it also sparked dramatic growth as consumer banking and spending habits changed and traditional financial services institutions recognised the increased need for digitalisation.

With that, global fintech has gone from strength to strength, reaching a record \$98 billion of investment<sup>1</sup> in the first half of 2021, up from \$87.1 billion in H2 2020. There has also been an increase in fintechs being recognised as 'unicorns', with more than 150 fintechs worldwide<sup>2</sup> now fitting the criteria of being valued at least \$1 billion.

In the US, Robinhood, Stripe, and Chime have had great success at rivalling more traditional and established financial institutions, while across the pond in Europe, fintechs like Revolut, Starling, and Monzo have become household names. In fact, according to EY<sup>3</sup>, almost two-thirds (64%) of consumers have used one or more fintech platforms, highlighting that these players continue to jostle for primacy in the banking landscape.

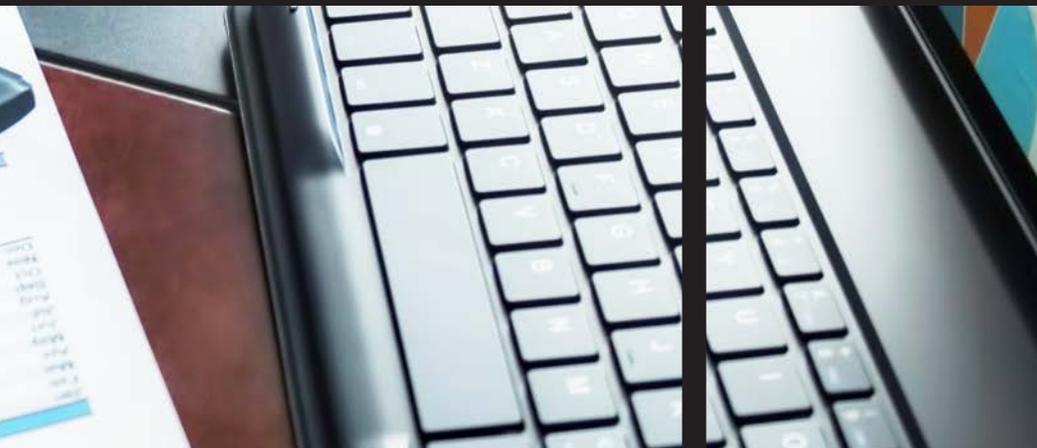
Often thought of to be more agile and innovative than more traditional financial services institutions, fintechs are delivering significant value to consumers and businesses alike and have reshaped how some interact with financial services.

However, despite the success experienced by many fintechs, these organisations still tend to face a range of challenges, whether that's implementing the right technology, competing for new customers, or scaling the business.

**To understand the challenges around getting the technology 'right', priorities for the coming year, and perceptions on collaboration with more traditional institutions, InterSystems surveyed over 500 senior decision makers within fintechs from 12 countries globally, including North and South America, the UK and Ireland, Singapore, and Australia.**



**Global fintech investment up from \$87.1 billion in H2 2020, to a record \$98 billion in H1 of 2021**



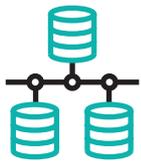
<sup>1</sup> <https://home.kpmg/uk/en/home/media/press-releases/2021/08/covid-19-sparks-digital-investment-boom-in-uk-fintech.html>

<sup>2</sup> <https://fintechlabs.com/the-157-fintech-unicorns-of-the-21st-century-march-2021-update/>

<sup>3</sup> [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/banking-and-capital-markets/ey-global-fintech-adoption-index.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/banking-and-capital-markets/ey-global-fintech-adoption-index.pdf)



### Top 3 biggest technical challenges



**81%**  
data



**40%**  
security



**39%**  
cloud support / multi-cloud  
deployment & administration

### Technology Priorities for a Post-Covid World

An overwhelming 81% of fintechs surveyed reported data issues are their biggest technical challenge, with 41% struggling to leverage data for analytics, machine learning, and artificial intelligence, and 40% unable to connect to customers' applications and data or legacy systems.

With data largely considered to be the lifeblood of any organisation, these challenges could have significant implications for fintechs, ranging from impeding their ability to deliver the products and services their customers require to impacting their ability to comply with regulations.

Yet, despite these challenges, fintechs' sights are firmly set on the future and with that they are setting out clear technology priorities to adapt to the changing landscape. For more than a third (34%) of fintechs the biggest technology priority of the next 12 months is improving security, which is a key consideration for consumers, businesses, and banks alike when it comes to adopting new financial solutions and services.

Also topping the list of priorities for the coming year are updating IT infrastructure (30%) and customer experience (27%), which in some respects go hand in hand as consumers expect more intuitive, personalised, and digitised offerings.

Only a quarter (25%) of fintechs say their primary initiative is adding new features or services, suggesting that they are primarily focussed on getting the basics right before they explore new avenues.

### Top three technology priorities for fintechs next year



**1**  
Improving  
security



**2**  
Updating IT  
infrastructure



**3**  
Improving the  
customer experience



## Getting the Technology Right

To make the most effective use of the new technology adoption, fintechs must first overcome issues with their existing IT infrastructure, particularly in light of the data challenges being experienced.

Encouragingly, almost all fintechs (91%) are planning to invest in new technology over the next 12 months, some of which will help them to overcome these current data challenges and focus on their priorities such as improving security and customer experience. For instance, over half (51%) expect to invest in cloud, 48% plan to invest in data management, and 45% want to implement AI and ML.

Investment in data fabric technology was also cited as a future technology investment by 42%. Implementing this new architectural approach will allow fintechs to begin to connect their data silos and gain a consistent, accurate, real-time view of their enterprise data assets.

Additionally, the use of a data fabric will enable B2B fintechs that sell their solutions to enterprise financial services organisations to create a dynamic bi-directional gateway between their applications and their enterprise customers' production applications, legacy systems, and data silos. This approach will help those fintechs to ensure that their solutions can be quickly and easily integrated within their customers' existing environments, which is particularly beneficial for fintechs looking to collaborate with banks.

Ultimately, the use of data fabric technology will empower both B2C and B2B fintechs to better meet customer demand, enhance agility, and improve competitiveness, which is the main driver of implementing new technology for more than half (55%) of respondents.

However, implementing new technology comes with its difficulties for many fintechs, with the main barriers revealed to be a lack of flexibility within their current environment to integrate new technology (54%) and a lack of internal expertise or skills (51%).

**Fintechs must look at solutions which will address these challenges while continuing to leverage their existing infrastructure. This approach would allow existing legacy applications, data, and data management technology to remain in place, thereby removing complexities and the need to rip and replace their current infrastructure.**

## Capitalising on technology investment



**52%**  
improve scalability  
and reliability



**48%**  
increase agility



**47%**  
enable better integration with  
customers & third parties



## Fintechs and the Cloud

Looking at the types of applications, it is surprising that only 39% of fintechs offer a cloud-based managed service available in multiple public clouds. 30% reported that they find cloud support to be a significant challenge, likely due to a lack of knowledge and expertise internally, particularly with regards to security, cost-management, data-locality, and the integration of various services.

Only 23% offer a hybrid (cloud + on premise) application. With the majority of fintechs wanting to collaborate with traditional banks in some way, this hybrid approach, along with service decoupling in bounded contexts, clear end-points contracts, standardisation, and domain-driven-design, will help fintechs to ensure their offering is more appealing to incumbent banks.

Many modern data management platforms now have the capability to be used in SaaS/multi-cloud environments with the technology built into their applications and solutions from the ground up, making it easier for fintechs to use data management technology while supporting multiple deployment environments, including hybrid and multi-cloud.

Additionally, this approach to cloud will help fintechs achieve key drivers of investing in new technology, such as improving scalability and reliability (52%) and increasing agility (48%).



### Fintechs could work with banks to



Improve customer experience and engagement



Increase agility / speed to market



Achieve improved customer analytics

### Collaboration within the financial services sector

Looking at exactly how fintechs hope to work with banks, over a third (34%) think they should lease their applications to banks using a SaaS model. Whether they choose to work with banks or not, 61% of fintechs expect their organisation to have a positive impact on the finance sector by introducing technology into the market that can enable new ideas and opportunities. Meanwhile half (50%) believe banks can get value from the relationships as it would allow them to focus on their core areas of expertise and differentiation.

While fintechs have often been associated with challenging the status quo, there is an equal split in how fintechs perceive the impact they will have on the market, with 50% expecting to increase competition and 50% saying they will increase collaboration.



## Conclusion

Investment in fintechs is growing, as is the number of fintechs in existence. These entities, with their innovative solutions, have begun to provide significant value for both the businesses and consumers they serve. However, as the research shows, they still have many substantial technical challenges to overcome, including issues with data, cloud support, and inflexibility in their current infrastructure, which if not addressed could stall their progress.

**With its advanced analytics capabilities, including embedded AI and ML, data platforms like InterSystems IRIS can help fintechs to resolve their data management and integration concerns and undertake the data fabric initiatives needed to connect their data silos and gain a consistent, accurate, real-time view of their enterprise data assets. Furthermore, fintechs will be empowered to create the innovative, AI and ML-enabled applications that more traditional financial institutions struggle to provide, even if they don't have access to data scientists.**

Taking this approach and adopting next generation data platform technology will allow fintechs to connect to their customers' wide range of applications and data systems, and achieve much-needed access to real time, bi-directional data.

In doing so, fintechs can ensure their offering meets the needs of their customers and also capitalise on the opportunities to collaborate with traditional financial institutions as they continue their digitalisation journey. It will also arm fintechs with the capabilities to take on a variety of new initiatives, from offering more personalised services tailored to individual customers to streamlining processes and improving compliance with regulations. In doing so, fintechs will be able to continue to build on the momentum they have gained during the pandemic. Whether they want to disrupt the market or strengthen it by collaborating with the incumbents, this will allow fintechs to continue to grow their customer base, expand their offering, and demonstrate to both customers and banks the value of their offerings.

**For more information visit: [intersystems.com/fintech-research](https://intersystems.com/fintech-research)**

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