NAVIGATING EXTREME UNCERTAINTY TO DRIVE GROWTH: TOP FINANCIAL SERVICES TRENDS

A BJSS White Paper

The past few years have taught us the futility of predicting the future. Yet it is evident that the prevailing uncertainty of the past few years will continue into the coming years. While the pandemic may now seem like a distant memory, new (and ongoing) crises have emerged. Now more than ever it's crucial for the financial services industry to leverage technology to drive innovation.

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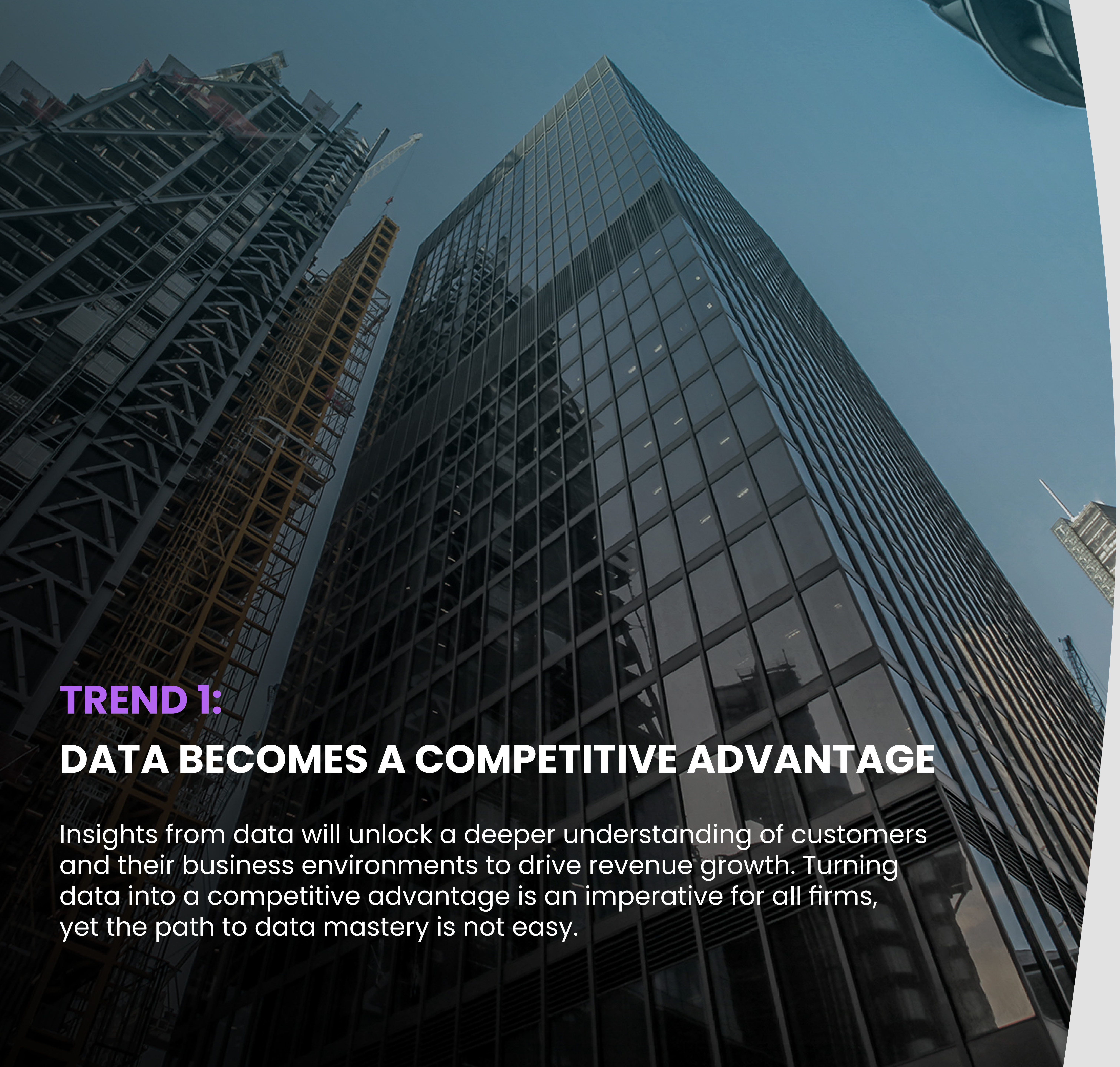
Introduction

The financial services industry faces multiple challenges: the ongoing threat of a recession, the increasing risk of cyber attacks, and growing regulatory pressure. Customers will no longer accept anything less than a convenient and personalised experience. Together these pressures seem daunting for the financial services world.

So, how can financial services firms navigate these choppy waters while growing their revenues? They must put their learnings from 2020-2022 into action and harness technology to create value while managing uncertainty. They need to become data driven to better predict risks and deliver the hyper-personalisation their customers crave. Leading firms will leverage rapidly forming open ecosystems to roll out new business models and source much needed fresh revenues. Ultimately, technology enabled innovation will define future success.



TREND 1:

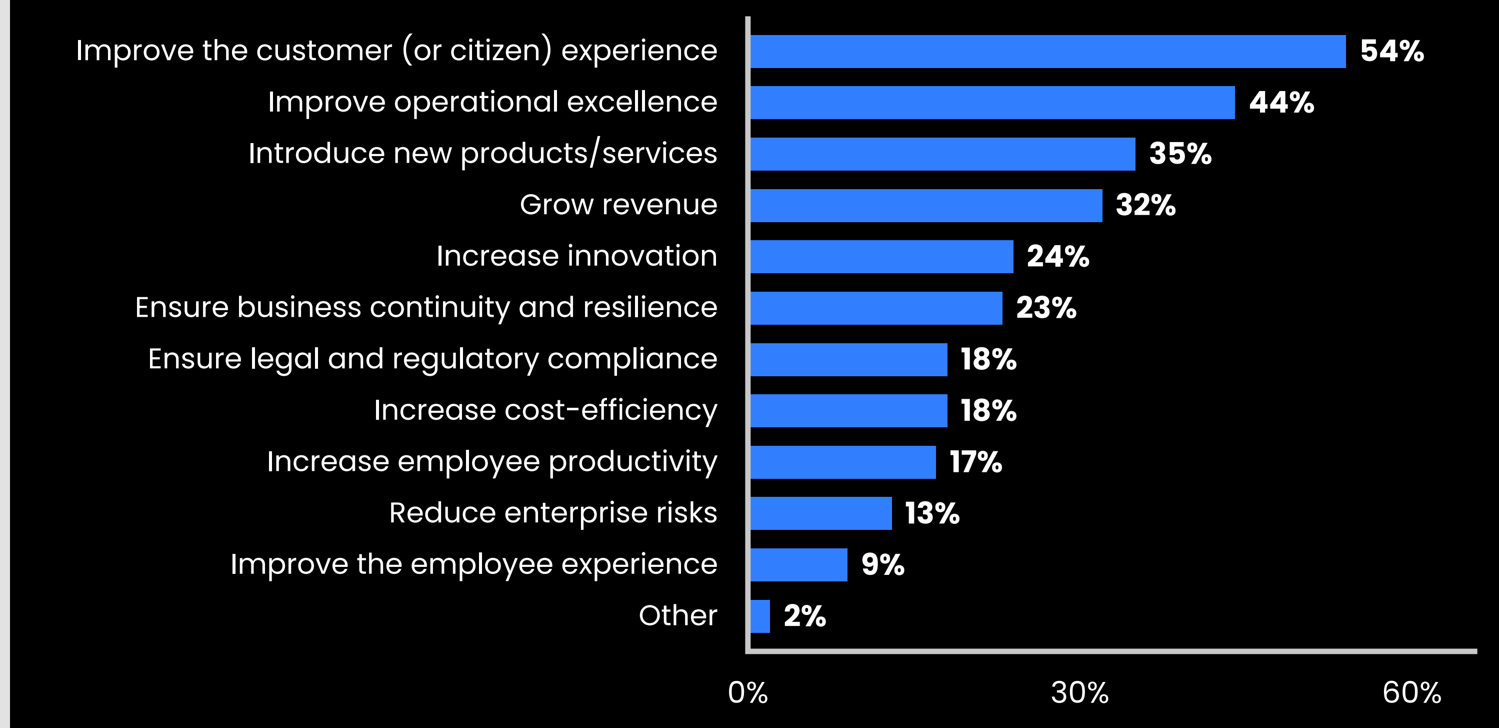
DATA BECOMES A COMPETITIVE ADVANTAGE

Insights from data will unlock a deeper understanding of customers and their business environments to drive revenue growth. Turning data into a competitive advantage is an imperative for all firms, yet the path to data mastery is not easy.

Key Messages

- Across the entire financial services industry, investing in data and analytics is seen as a crucial growth driver.
- Rising customer demands for more personalised products and services has made customer experience a top priority for financial services firms.
- Data-driven insights will enable firms to build closer relationships with their customers by better understanding their needs and tailoring their offering accordingly.
- Richer customer insights will also drive revenue growth through lead generation and more precise cross-and up-selling.
- Asset managers and insurers need fresh insights to better understand more nascent trends and risks to drive growth.

Objectives of Digital Investments Over Last Two Years
Percentage of Banking Respondents



n = 261 banking CIOs and technology executives answering, excluding "not sure"

Q: How would you describe the primary objectives of your enteprise's digital technology investments in the last two years?

Source: 2023 Gartner CIO and Technology Executive Survey

Fig: Gartner

What is Driving the Growing Role of Data in Financial Services?

Financial services winners will prioritise generating insights from data to meet rising customer demands and gain a better understanding of key risks and trends.

The Customer Experience Imperative

Influenced by superior experiences with big tech firms and more innovative fintech competitors, customers are now demanding hyper-personalised experiences from their financial services providers. For example, global banking customers are decisively specifying that a hyper-personalised experience is a table-stakes demand with a staggering **93%** indicating they want tailored products and services.

> **What is hyper-personalisation? It can be defined as leveraging real-time data to generate insights by using data science and analytics to deliver the right information, products, or services to customers at the right time, per 2023 Gartner surveys.**

Moreover, financial services customers are willing to exchange their data for more personalised services. A **clear majority (86%)** of global banking customers state they would swap their data for tailored products and services.

As a result of rising customer demands, global insurers and banks both state that the principal objective of their digital investments over the past two years has been to improve the customer experience, per 2022 Gartner surveys.

In order to tailor their offerings to their customers' demands, financial services firms need to better understand their customers using data-driven insights.

Changing Business Environments

Cyber and climate have emerged as principal business risks for all financial services companies worldwide. According to the Allianz Risk Barometer 2022, financial services firms identified **cyber** as their most significant risk. Fresh insights from alternative data sources will help businesses to better understand these emerging and proliferating risks.

Analytics also helps companies improve risk management while meeting compliance requirements. This includes more machine-learning powered credit risk decisioning that takes a wider set of parameters into consideration when making lending decisions, for example.

Data as an Enabler to Cost Cutting

Persistently high inflation alongside – and partially driven by - rising wage growth in the UK have pushed up the cost of doing business for financial services companies. Consequently, operational excellence and other cost-cutting initiatives have jumped up the priority lists for the full spectrum of financial services companies. Coupled with automation, data analytics can address rising expenses by driving operational efficiencies across key internal operations, such as finance.

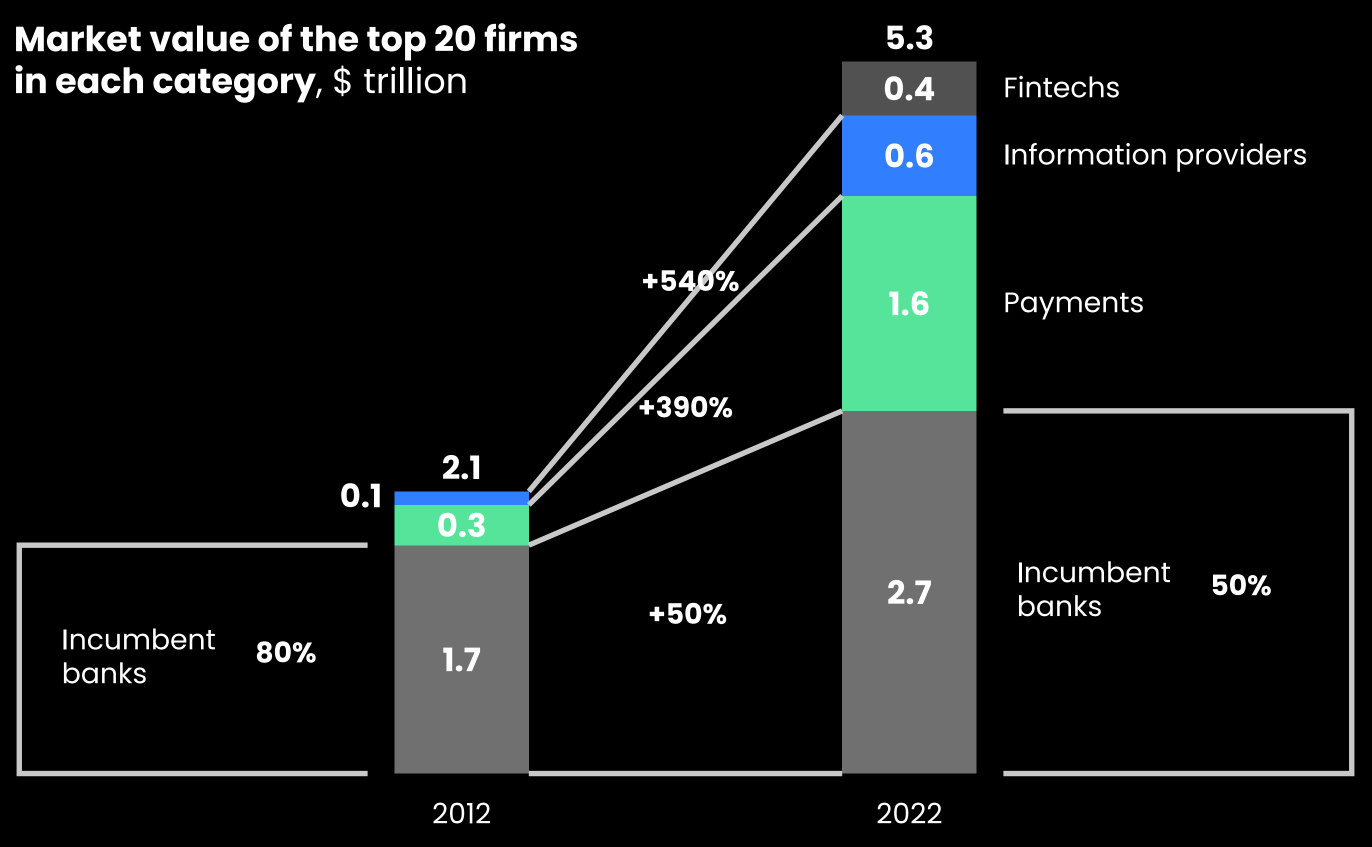
What are the Opportunities for Financial Services Firms?

Financial services companies that can turn their wealth of customer data into insights will gain an edge over their competitors by delivering a hyper-personalised customer experience. They will also use richer data insights to augment decision making and risk management as data becomes a business asset.

Create Market Value

Across the financial services industry, the fastest-growing sectors (by market value) have been payments firms, information providers, and fintechs. Payments firms' market value growth over the past decade has outstripped that of incumbent banks by 240%. Payments firms, information providers, and fintechs all use data as a principal asset to both personalise the customer experience and for data monetisation purposes.

The top value creators have been information and payments providers, thanks to data monetization and improved customer experience.



Valuation of fintechs as of July 4, 2022; valuation of other categories as of September 29, 2022.
Source: Market data; McKinsey Fintech Investment Radar; McKinsey analysis

Fig: McKinsey

Insurers

Data analytics will unlock premium growth from in-demand and data-driven insurance products, boost customer engagement, and augment risk assessment.

The global cyber insurance market is forecast to more than double in size between 2022-2026, per Statista. Yet many incumbent insurers are shying away from the potential premiums on offer due to the more nascent nature of the risk and lack of expertise. Data analytics will be crucial to generate the insights to circumvent more limited historical cyber data and augment the underwriting process.

The insurance industry is plagued by low levels of engagement which leads to low levels of customer loyalty. Insurance customers want more flexible and tailored policies. Insurers can meet these demands with data-driven insurance coverage while also taking the golden opportunity to boost engagement. Gartner predicts that insurers that can personalise engagement with their policyholders will boost retention by 20%.

Two key examples of data-driven and more personalised insurance include usage-based insurance (UBI) and preventative insurance. Motor UBI enables drivers to lower their monthly premiums with safer driving, while wearable devices allow insurers to incentivise healthy behaviours with lower premiums and other rewards. In both these use cases they have the dual benefit of creating engaged customers while preventing risky behaviours. Insurance customers are onboard for this data-driven journey: just under 70% would swap their health, exercise, and driving data for lower prices.

Usage-based Insurance

Usage-based insurance (UBI) is an innovative approach that utilises data on driving behaviour to determine personalised insurance premiums. By collecting information from telematics devices or mobile apps, insurers gain insights into factors such as mileage, speed, and braking patterns. This data allows for fairer pricing based on individual risk profiles and encourages safer driving habits. UBI combines insurance with data-driven insights to provide personalised premiums and promote safer driving.

Banks

Banks that hyper-personalise the customer experience by using insights from data to anticipate customer needs will build deeper relationships with their customers.

Retail banks can convert a greater proportion of their customers into primary customers infusing their frequent customer interactions with tailored messaging on relevant topics or timely product offers. This will have the dual benefit of increasing share of wallet while also creating a more loyal customer base. Primary customers hold a greater number of products, are more loyal, and are more likely to recommend the bank.

More personalised services boost customer satisfaction and reduce churn. This is an imperative for banks given that **61%** of global retail banks say that they currently struggle to reduce churn.

Commercial banks can also gain an edge over their competitors by using data to enhance the client experience and grow their market share. Commercial banks typically have low share of wallet; according to Deloitte, **one third of global corporations** with over $1 billion in annual revenues use 10 or more banks. Equipping relationship managers with timely client insights to infuse conversations with personalised topics and offerings will boost client satisfaction and could grow share of wallet.

While investment banks can source much needed trading revenues from the continued market volatility, AI-powered insights will equip analysts with real-time data to inform research traders to make faster and more accurate decisions.

Investment Managers

Greater personalisation will enable wealth and asset managers to enhance the client experience while also making more informed investment decisions.

Wealth Management

Richer insights will allow wealth managers to treat every client like their best client. Insights will uncover key topics for advisors to engage client with topics tailored to their unique financial profile. And as the great wealth transfer looms large, personalising the client experience will be paramount. Younger generations class personalisation as a table-stakes demand and failure to deliver on this will see wealth managers miss out on their slice of the pie from the money in motion. In the US alone, **$72.6 trillion** will be passed as inheritance to the younger generations.

Asset Management

UK asset managers suffered record outflows of £50 billion in 2022 amid the market downturn, underlining the case for asset managers to put data at the heart of their businesses. In the first place, more quality data will augment investment decisions to better navigate hard-to-predict volatility and more nascent investment themes, such as ESG (Environmental, Social and Governance). But equally, asset managers need to build closer relationships with their clients so that future downturns don't automatically lead to client outflows. Wealth managers' closer client relationships meant that they were able to reassure their client bases more effectively about the value of riding out the storm and hold onto their business.

Exchanges

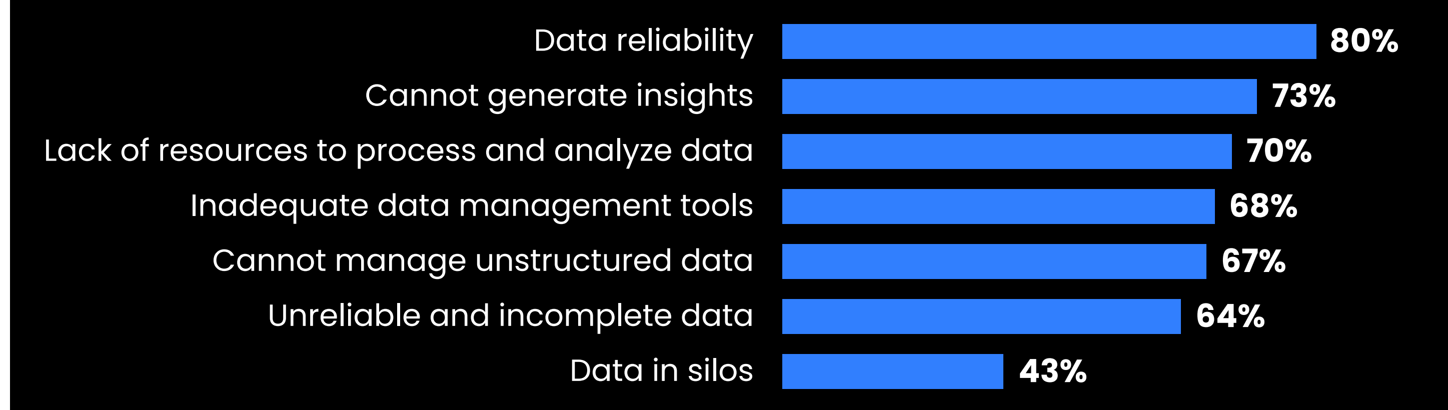
Data has become a key revenue stream for exchanges as they have successfully diversified away from core trading incomes. As of 2020, data and tech account for $6.8 billion in revenues (2020) and 20% of total revenues globally (2020). Exchanges are also able to **generate higher prices** for their market data than their other services. The growth of its data businesses has become crucial for the London Stock Exchange amid its shrinking market share of global listings of the past decade.

What is Stopping Financial Services Firms from Using Data as a Business Asset?

Despite the significant opportunities, few firms can truly claim to be making the most of the data they hold. **Nearly three quarters** of global retail banks say they struggle to turn data into insights, per a 2022 Capgemini global retail banking report. And they're not alone - investment management firms and insurers report similar data challenges.

Why do Financial Services Firms Struggle to Turn Data into Insights?

Banks face a range of data challenges



Sources: Capgemini Research Institute for Financial Services Analysis, 2022; Capgemini marketing executives survey, N=142. Question to executives: What are top data-related concerns for marketing function? (selection of top five in a list of seven factors)

Fig: [Capgemini]

> ***"Financial services firms have been using data and analytics for a long time. However, we still see lots of room for improvement. For example, implementing robust Machine Learning (ML) Ops capabilities at scale, augmenting views of customers with new data sources, and employing new analytic methods that allow better one-to-one personalisation of customers' experiences."***
>
> David Rose, WW Partner Development Lead, Financial Services Data and Analytics, Amazon

Financial services companies struggle to extract the full value from the wealth of data they hold due to a range of related challenges.

Data at large financial services organisations is held across disparate sources including legacy systems that integrate poorly with modern technologies. Data at large financial services organisations is held across disparate sources including legacy systems that integrate poorly with modern technologies. A staggering 95% of global banks said legacy systems and outdated core banking modules inhibit efforts to optimise data- and customer-centric growth strategies. Siloed data inhibits efforts to build a single source of truth that can be used across the organisation. Data quality challenges also stand in the way of extracting insights from unstructured data that tends to be incomplete or unreliable.

Financial services firms have shortages in internal talent in key data capabilities, such as the data scientists that are needed to build and deploy the models to extract insights. Firms also have skills gaps in AI, ML, amongst other crucial areas.

They also struggle to agree on a top-down digital vision necessary to define what "great looks like," create coherent data strategies, provide c-level executive sponsorship, and implement a data-driven culture. The lack of data leadership also creates data governance issues that inhibits the effective management of data across organisations.

Rising data privacy standards and greater scrutiny on the responsible use of AI and customer data creates further headaches for financial services companies looking to make more of the data they hold.

As a result of data challenges, financial services companies struggle to generate quality insights to reliably inform decision making, gain a view of enterprise-level risk, or build a 360-view of their customers necessary to deliver personalised services. Poor quality data as an input will lead to poor quality insights.

Risks

Customers now expect hyper-personalised products – and slow-moving firms will pay the price with customer churn. Organisations will also miss out on revenue and acquisition opportunities dependent on generating more value from data.

Customer Churn

The level of personalisation that financial services firms are offering their customers is out of sync with rising demands. [Only one third] of global banking customers feel their bank delivers on their personalisation expectations, while [just under half] of global high-net worth individuals (HNWIs) are dissatisfied with the personalisation of their wealth manager's offering.

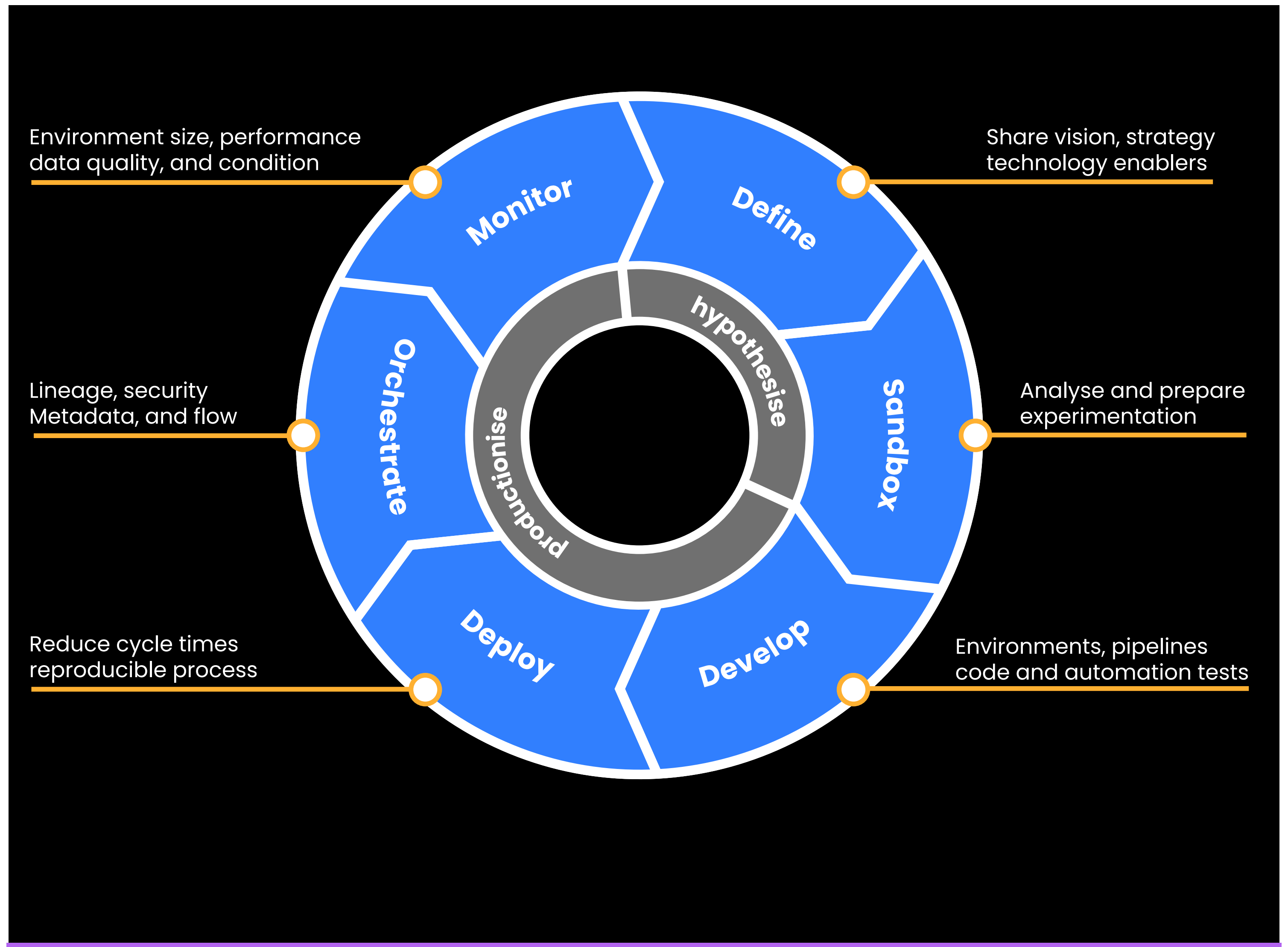
Failing to deliver personalised experiences can result in customer churn, a risk acknowledged by the financial services industry. Global firms identify a lack of personalised services as the [second largest obstacle] to customer retention.

Missed Revenue Opportunities

In addition to the revenue opportunities discussed earlier regarding data-driven products and investment strategies, maximising the value of data will also enhance marketing and sales initiatives.

Survey data from the banking world underlines the whitespace opportunity for the financial services industry to turbocharge marketing and sales with client insights. Only [8% of global banks] are currently able to apply predictive insights to their marketing campaigns which goes some way to explaining why [82% of global retail banks] struggle to identify new customer segments and 55% fail to identify cross- and up-selling opportunities.

How can FS Firms Become Data-Driven Organisations?



"Customer expectations are constantly evolving, and financial services leaders need to be agile and efficient in order to meet them. By combining customer service and transactional data with marketing, channel, CRM, and other first-party data in a secure cloud environment, and using intelligent machine learning (ML) to drive customer insights, financial services companies can gain a deeper understanding of their customers and quickly act on that understanding."

Karen Huish, Director of Financial Services, Google Cloud UKI

To become data-driven, financial services companies need to build modern data platforms to collect, clean, and process large volumes of data. Valuable insights need to be visualised and democratised across the organisation to generate true business value for all stakeholders.

We recommend implementing a DataOps approach to data management to achieve success from big data programmes.

Financial services will need to implement a top-down, data-driven culture to ensure that they are laser-focused on delivering business value. C-level executives must define the vision, strategy, and technology enablers as a starting point. Next, delivery teams must sandbox the hypothesis supported by embedded fail-fast and rapid iteration ways of working to quickly prove or disprove the hypothesis.

Once the hypothesis has been accepted, it can be productionised and support data pipelines. Raw data will be processed from various data sources to a data store for analysis. This involves developing environments, pipelines code, and automation tests for deployment. Data orchestration is critical for unifying siloed data from multiple sources and readying it for analysis. Where raw data will be cleansed, standardised, and enriched. Data lineage tools will ensure data quality by providing a clear understanding of where data came from and how it has changed over time. Data must also be proactively monitored over time to ensure its quality and that it is fit for purpose. Once data has been collected, cleaned, and processed it can provide timely and actionable insights to key stakeholders across the business.

Cloud and analytics will unlock data at an enterprise scale by accelerating the delivery of value. The interoperability of cloud services accelerates building a data platform. Cloud data platforms provide storage that supports both structured and unstructured data, scalable infrastructure, and data processing and analytics services to create pipelines and generate insights. Insights can be easily delivered and visualised to key stakeholders through Power BI.

How BJSS Helps Organisations Become Data-Driven

Lean Data

Lean Data is BJSS' proprietary approach to delivering successful data projects. It fast tracks leading companies' journey towards becoming data-driven organisations by aligning business and IT stakeholders.

Lean Data creates a single version of truth: one golden source of consistent and reliable data that all stakeholders can tap to gain access to relevant and timely insights across the entire organisation. It enables organisations to develop strong data analytics capabilities and develop data maturity across the entire business. Lean Data is focused on gaining momentum through small, quick, scalable successes leading to early gains.

BJSS helps firms to generate innovative ideas through workshops to think big. We guide them in delivering minimum viable products (MVP) in 90 days to demonstrate tangible value to start small, and scale fast. We do this by applying the learnings from the MVP and develop a plan to rapidly scale data analytics capabilities for enterprise-wide adoption.

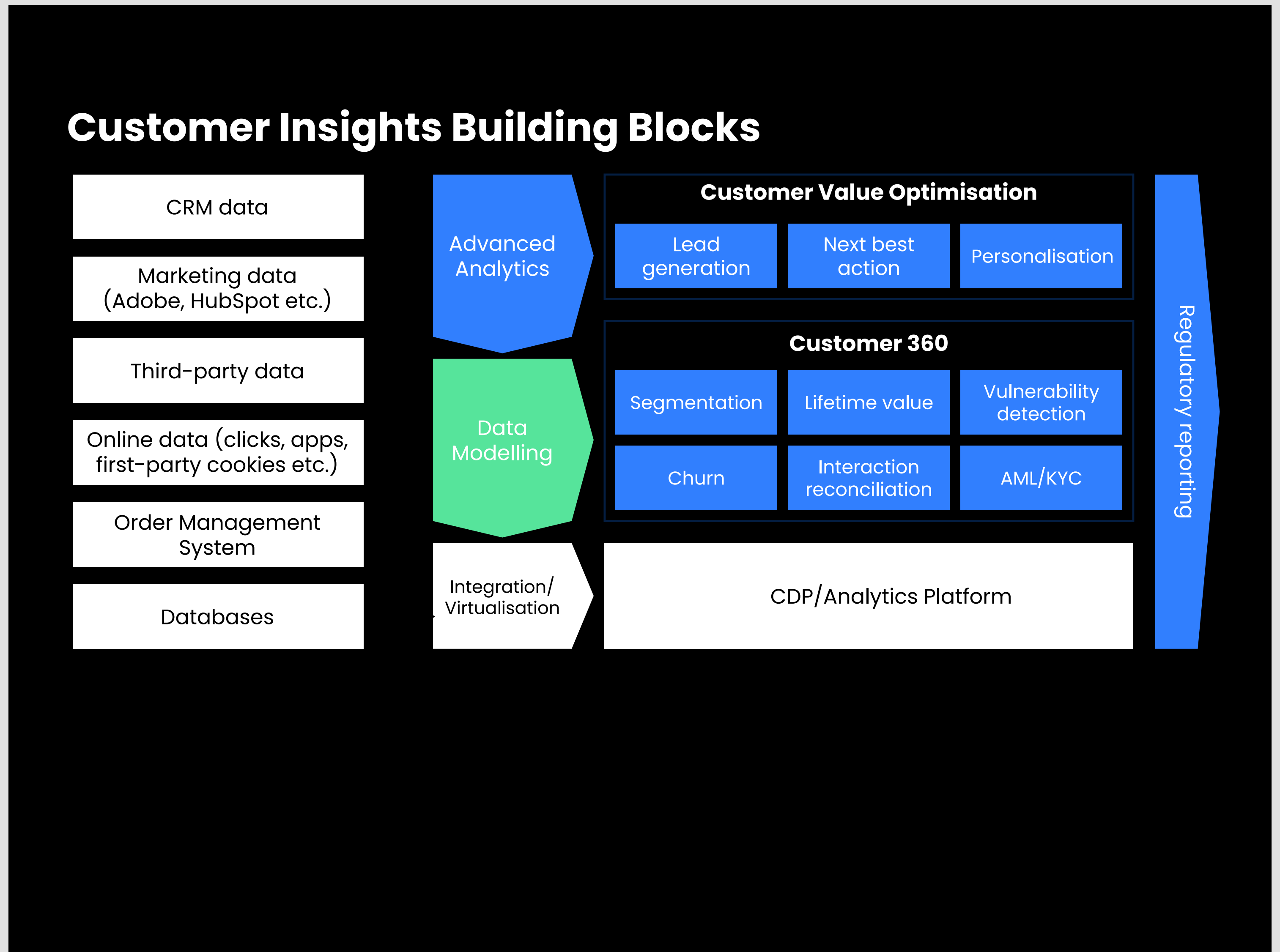
This is aligned to **AWS Data Driven Everything (D2E)**, an engagement framework to jump-start an organisation's data flywheel to create value-based outcomes throughout the entire process of building a data platform.

Customer Insights

BJSS' Customer Insights enables financial services firms to hyper-personalise the customer experience and make decisions based on real-time insights. The key building blocks of Customer Insights are a customer data platform (CDP), a customer 360 model, and customer value optimisation.

We combine customer relationship management data (CRM), finance, orders, and third-party services. From this we can create a unified view of the customer. Accurate, timely, and unified customer insights will transform customer experience, sharpen your business strategy, and increase your resilience in the face of disruption.

Our Customer 360 solution accelerates organisations' journey towards developing a comprehensive, unified view of the customer. By aggregating data from various key sources such as CRM, finance, order, and third-party data, our solution enriches identified customer profiles. We provide actionable insights and essential metrics, enabling businesses to gain a deeper understanding of their customers.



AWS Customer 360

AWS Customer 360 Solutions helps organisations capitalise on both first-party and third-party data. Internal Data sources such as customer interactions can be brought into alignment with customer responses to marketing campaigns. Aligning these data sources help organisations detail the complete customer journey. Once this is known, business decision makers will be able to establish a clearer perspective on customer lifetime value, customer churn, and propensity to spend on different products. Decision makers can use this knowledge to better target marketing campaigns and coordinate messaging across multiple points of contact. When looking at these use cases in an extended and cohesive manner, we refer to it as customer value optimisation.

Even with all the possibilities using solely internal data, it is possible for organisations to derive additional utility by collaborating with their partners in a safe environment such as AWS Clean Rooms. Within a clean room, organisations can join internal and external data to run queries and perform analysis that would not be possible with either set alone. Query results can be exported into an Amazon S3 bucket for downstream analysis and activation. Together, these strategies help organisations generate business value from their data.

Customer value is optimised by uncovering key insights through customer churn prediction, lead generation, vulnerable customer identification, personalised recommendations, and next best action.

Our Experience

[Helping Confused.com Create and Implement Machine Learning Models]

Confused.com is the first and longest-running UK comparison site, making it easy to compare a wide choice of insurance types and financial services from a range of trusted providers.

As an online, data-driven business, Confused.com had invested significantly in its data science capabilities and platform. However, the company needed help implementing the processes and technical infrastructure required to produce machine learning models and derive value.

BJSS delivered a machine learning (ML) platform and next best action using ML (Machine Learning) in Azure within four months. This increased renewals by targeting those most likely to buy.

BJSS also built the capabilities to facilitate the building and productionising of new data models for Confused.com, including rebuilding and putting into production an existing Next Best Action data model for marketing campaigns. This increased click-through rates and decreased unsubscribe requests significantly.

Confused.com now has an automated ability to release data science models into production, a futureproof capability that allows the Data Science team to create and implement new data models for future business questions or problems. The Confused.com team has also made significant strides in maturing their Data Science capabilities.

[Enhancing the Customer Experience at Beauty Bay]

Multinational online beauty retailer Beauty Bay wanted to innovate to improve its customer experience. When it realised the constraints of its IT systems were limiting its ability to please customers and grow at pace, it turned to BJSS.

BJSS developed Beauty Bay's first foundational data platform with automated, end-to-end AWS data pipelines. The platform integrates real-time information from multiple sources and provides a single view of customer and business data. BJSS built the data platform using an everything-as-code approach by leveraging the AWS Code Development Kit.

BJSS supported Beauty Bay's shift towards a data-driven culture. Its business leaders now have easy access to real-time information from its data lake, helping them make better decisions.

TREND 2:
FINANCIAL SERVICES PLAYERS WILL FOCUS ON BECOMING TRUSTED PARTNERS

Customer trust in the financial services industry is under assault in 2023. The increasing threat of cyber attacks has sown the fear that financial data is unsafe, even with established institutions. The cost-of-living crisis has also created a pervasive feeling that firms are not doing enough to support their customers through the downturn. In reaction to this, financial services organisations will prioritise initiatives that build trust among their customers in 2023 through financial support, guidance, and robust cyber security protection.

Key Messages

- Financial services companies will prioritise demonstrating to their customers that they can help guide and support them through the current period of extreme socioeconomic turbulence.
- The increasing frequency of cyber security attacks is a top concern for both financial services companies and their customers.
- And the cost-of-living crisis threatens to shatter consumer trust in financial services companies.
- Financial services companies will bolster their cyber security defences to not only protect their businesses but also hold onto the trust of their customers.
- Firms also need to proactively offer support and guidance to maintain trust and reaffirm their roles as trusted partners.

Which Trends are Forcing the Financial Services Industry to Laser in on Building Trust?

The risk of cyber attacks is growing for financial services companies, and incidents threaten to undermine customer trust. Perceived inaction to support customers through sinking living standards is also damaging confidence in the industry.

Cyber Security

The proliferating risk of cyber attacks is keeping companies and their customers up at night. Financial services organisations rated cyber incidents as their **most significant risk** in the Allianz Risk Barometer 2022. CIOs in **banking** expected cyber security to see the **largest increase in tech spend in 2023**, while insurance CIOs expect cyber security to experience the **second largest increase**, according to Gartner research.

Financial services companies are popular targets for cyber criminals due to the high volumes of money that they move between individuals and institutions. **IBM's** most recent report on cyber attacks found that the financial industry is already spending the second-most of any industry fighting off attacks, with an average cost of $5.72 million per data breach.

Cyber security attacks are also worrying customers with 50% wanting their banks to take additional security measures, for example. Robust cyber security defences will increasingly become a critical factor in consumers placing trust in financial services providers - and failure to sufficiently assure customers their money and financial data is safe will lead to irreversible reputational damage.

The Cost-of-Living Crisis

The cost-of-living crisis is putting an increasing number of UK consumers under financial strain, with **over three million** more people struggling to keep up with bills and payments in 2023 compared to 2022. The Citizens Advice Bureau has also said that it's helped **more people than ever** in the first four months of the year as inflation remains elevated.

Customers will increasingly expect that their financial services providers make concerted efforts to support them through the ongoing crisis, such as money saving tips. Increased attention on retail banks' failure to fully pass on their higher net interest margins to customers, coupled with legal disputes between insurers and policyholders over Covid-19 payouts, has the potential to negatively impact consumers' perception of traditional financial services companies. Consequently, this could lead consumers to shift their trust towards emerging challenger firms.

What Opportunities does Building Trust Create?

Earning trust through financial support, financial guidance, and cyber security protection will help to build a loyal customer base. Economic uncertainty could also create customer acquisition opportunities due to increased appetite for switching.

Build a Loyal Customer Base

Financial services companies will earn trust from their customers by supporting them in their time of need. Tailored guidance in the form of money saving advice on spiralling bills or signposting informative resources on websites will go a long way to building trust. Equally, robust cyber defences and transparent communications on phishing scams and other FAQs will build digital trust among consumers regarding the security of their financial data. These actions will pay off for financial services companies in the long term by building a loyal customer base that will increase retention rates.

Acquisition Opportunities

Increased pessimism among financial services customers increases the likelihood of switching and creates opportunities for fast-moving firms to scoop up new customers with the **highest recorded** total of customers switching bank accounts in the first quarter of 2023. Banks have an opportunity to lure in fresh customers with attractive savings rates, cash incentives, as well as easy to use digital apps.

Financial services companies will also attract increasingly security-conscious consumers by rolling out features that give their customers' peace of mind about the protection of their financial data. Security mobile banking features in fact stand out as **the most important** feature to UK customers.

Challenges

The financial services industry is faced with an array of challenges that increases its cyber security vulnerabilities, such as managing the persistent threat landscape and increasingly sophisticated attacks.

Managing Persistent Threat Landscape

Mitigating the risk of advanced persistent threat (APT) is challenging for financial services due to the direct monetary incentives for cyber criminals, their vulnerabilities to mechanisms for compromise, and conflicting frictionless customer experience demands.

The financial services industry is one of the most targeted industries due to the direct monetary incentive from successful attacks.

Financial services organisations are vulnerable to APT as named accounts and publicly-available email addresses and other personal data creates opportunities for credential stuffing. Once cyber criminals have infiltrated organisations via spear-phishing, they can expand their presence via other connected systems to access sensitive data. Subverting access controls, manipulating zero days, and unreported vulnerabilities can also lead to sensitive data being compromised.

Financial services companies are faced with a trade-off between robust cyber security practices and user experience demands. They are under somewhat competing pressures to provide a frictionless digital user experience while also putting in place best practice cyber security practices. Additional checks that challenge responses – such as reCAPTCHA – create friction in the user journey but help to protect the customer's data.

Increasingly Sophisticated Cyber Attacks

Cyber attacks are becoming increasingly sophisticated as malevolent actors leverage disruptive technologies. The rapid development of smishing attacks (attacks via mobile messaging) during the lockdown periods of 2020-2021 illustrates how quickly cyber criminals adapt to novel situations (increased home deliveries) and take advantage of their victims. Machine learning technology has played a part in the rise of phishing attacks as they enable more convincing emails to be created.

Cyber criminals are increasingly realising financial services companies' Achilles heel is their customers, as approximately **80% of cyber attacks** now target customers. As cyber security attacks evolve from emails to machine learning-powered deep fakes, they may continue to grow in the future.

Complex Infrastructure and Widening Ecosystems Creates Additional Vulnerabilities

You can't protect what you can't see. The increasingly complex infrastructure used by financial services organisations makes it harder to keep on top of assets and keep an eye on an organisation's cloud security posture.

Companies are also increasingly working with more third-party partners due to the development of better integration technologies and the vibrant fintech ecosystems. Cyber criminals are taking advantage of this by targeting companies' more vulnerable partner networks instead of direct attacks. Worryingly, **60% of financial institutions** experienced an increase in island-hopping, a 58% increase from last year, and 94% of financial security leaders experienced attacks on an API associated with fintech, per VMware.

Growing Cyber Security Defence and Insurance Spend

The sheer cost of cyber security investments and insurance is a barrier to smaller firms putting in place the necessary measures to protect their businesses and customers with cyber insurance premiums estimated to range from **£100,000 to over £1.5 million**. This goes some way in explaining why the SMB cyber insurance gap exists with only **56.2% of UK medium-sized and 40% of small-sized businesses** having a cyber insurance policy in 2022, according to GlobalData.

Negative Press Damaging Trust

Negative press coverage of the financial services industry could damage trust in the industry. Ongoing court disputes between insurers and their policyholders regarding claims payouts for business interruption during lockdowns have painted the insurance industry in a negative light. More recently, major UK banks have also been called before MPs to explain why they aren't passing on their bumper profits from interest rate hikes to their customers in the form of more generous savings rates.

Negative press feeds into the long-standing narrative that financial services companies choose profits over their customers' best interests – and this could be a tipping point in the context of falling living standards. Recent surveys suggest that trust is already eroding in banks with **nearly half** of UK banking customers not trusting their bank to help them manage their finances in a recession.

Risks

Financial services firms that are slow to grasp the magnitude of these threats to the trust of their customers will face higher likelihood of customer churn, regulatory scrutiny, and financial costs.

Shattered Trust Inducing Customer Churn

Failure to support their customers in the current turbulent macroeconomic period will lead to higher churn rates. There is already growing belief among customers that providers could do more to help with most UK customers thinking that financial institutions aren't doing enough to help their customers during difficult economic times.

Growing consumer awareness of cyber security also makes it a reputational protection imperative for financial services firms. Digital trust is increasingly rooted in the belief that financial services providers are effectively protecting their financial assets. A loss of faith in the ability of a company to effectively prevent, mitigate, and respond to cyber threats will lead to a loss of trust in that provider.

Given that integration technologies, supportive legislations, and services – like the current account switching service - have made switching between financial services providers easier than ever, customers will ultimately talk with their feet.

Regulatory Scrutiny and Punitive Action

As the financial services industry becomes increasingly reliant on technology and digital platforms, cyber security is increasingly in the crosshairs of regulators. The Digital Operational Resilience Act (DORA) is now in force and establishes guidelines for IT risk management, digital operational resilience testing programmes, and third-party risk management strategies.

Consumer Duty rules arriving in July could stipulate how financial services firms should respond to attacks, and Payment Card Industry Digital Security Standards (PCI-DSS) also create further security standards for financial services that process and store credit card information.

Financial services firms that fall foul of new requirements will be hit with non-compliance fines to the tune of 1% of the average daily global turnover of the organisation in the preceding business year, in the case of DORA.

How can Financial Services Companies Build Trust?

Financial services companies that prioritise offering financial support, financial guidance, and robust cyber security, will earn the trust of customers.

Securely and Compassionately Identifying Vulnerable Customers to Provide Support

Financial services firms need to identify, understand, and support their most vulnerable customers to maintain trust. The combination of data science and machine learning can play a critical role in identifying vulnerable customers by spotting the early warning signs that a customer's financial situation is worsening, enabling companies to take pro-active steps to support their customers.

Once available data sets have been mined, cleaned, and anonymised, machine learning models can define the drivers of vulnerable customers and thresholds of vulnerability using historical data. Models can then help to determine if a customer is vulnerable or not, with propensity models (to determine the likelihood of an event taking place) and recommend different treatments via value models (the impact of that particular event).

This will help financial services organisations get answers to key questions in advance, such as if a customer is likely to miss a future monthly insurance premium or mortgage repayment.

With vulnerable customers identified, financial services firms can take pre-emptive actions and reach out to customers and provide support before their situations deteriorate. This can take the form of tailored budgeting tips or guidance on financial support options, such as debt management solutions.

It is important to flag that financial services companies must also make the entire vulnerability assessment process transparent and explainable. Customers should be informed about the steps being taken to support them, explain the basis for identifying vulnerability, and provide clear information about the available options for assistance. Financial services organisations should be able to justify subsequent decisions and also spot mistakes.

Features and Tools to Support Customers

Low-code solutions will accelerate feature development, enabling firms to quickly respond to disruption. Subscription management and spending trackers would resonate well with customers feeling under increased financial strain. Replicating 'get paid a day early' features made popular by digital challenger banks will be a quick win for incumbent banks.

Security features will also help build confidence with financial services customers. UK mobile banking customers score security related features – such as alerts for unusual account activity and debit card holds - as among the most highly valued, for example.

Mitigating Cyber Security Risk

It's very difficult to prevent incidents from occurring entirely, but firmscan make it as difficult as possible to get in to access critical data. The right behaviours and processes must be embedded top-down in an organisation, working in tandem with monitoring, detection, and other cyber security tools.

Here is a non-exhaustive list of best practices:

- **Firms should focus on prevention by regularly training all staff to raise awareness for cyber security and help them to identify attacks.**
- **Cyber security risk management will ensure that critical threats are handled in a timely and correct manner.**
- **Multi-factor authentication, zero-trust principles, and clear incident processes will also help to mitigate risks.**
- **Monitoring firewalls, endpoints, networks, and in-house cyber security expertise are key to identifying attacks.**
- **Bot detection is a tool for organisations to have in their armoury that will help flag when requests are most likely.**
- **Financial services firms also need to improve observability to understand why there are issues identified by monitoring in systems.**
- **Cloud security posture management and modern vulnerability management strategies will help to manage increasing vulnerabilities, including cloud security management.**

Mandiant (now part of Google Cloud)

Mandiant helps financial institutions of all sizes protect themselves and their customers from continuous and targeted attacks. Its team of threat intelligence experts, consultants, technology, and incident response professionals can help organisations enhance, support, or extend their security posture and operationalise their resilience to threats.

AWS Identity and Access Management

AWS Identity and Access Management enables companies to securely manage identities and access to AWS services and resources. Companies can set and manage guardrails, manage identities across single AWS accounts or centrally connect identities to multiple AWS accounts, grant temporary security credentials for workloads that access their AWS resources, and continually analyse access to right-size permissions on the journey to least privilege.

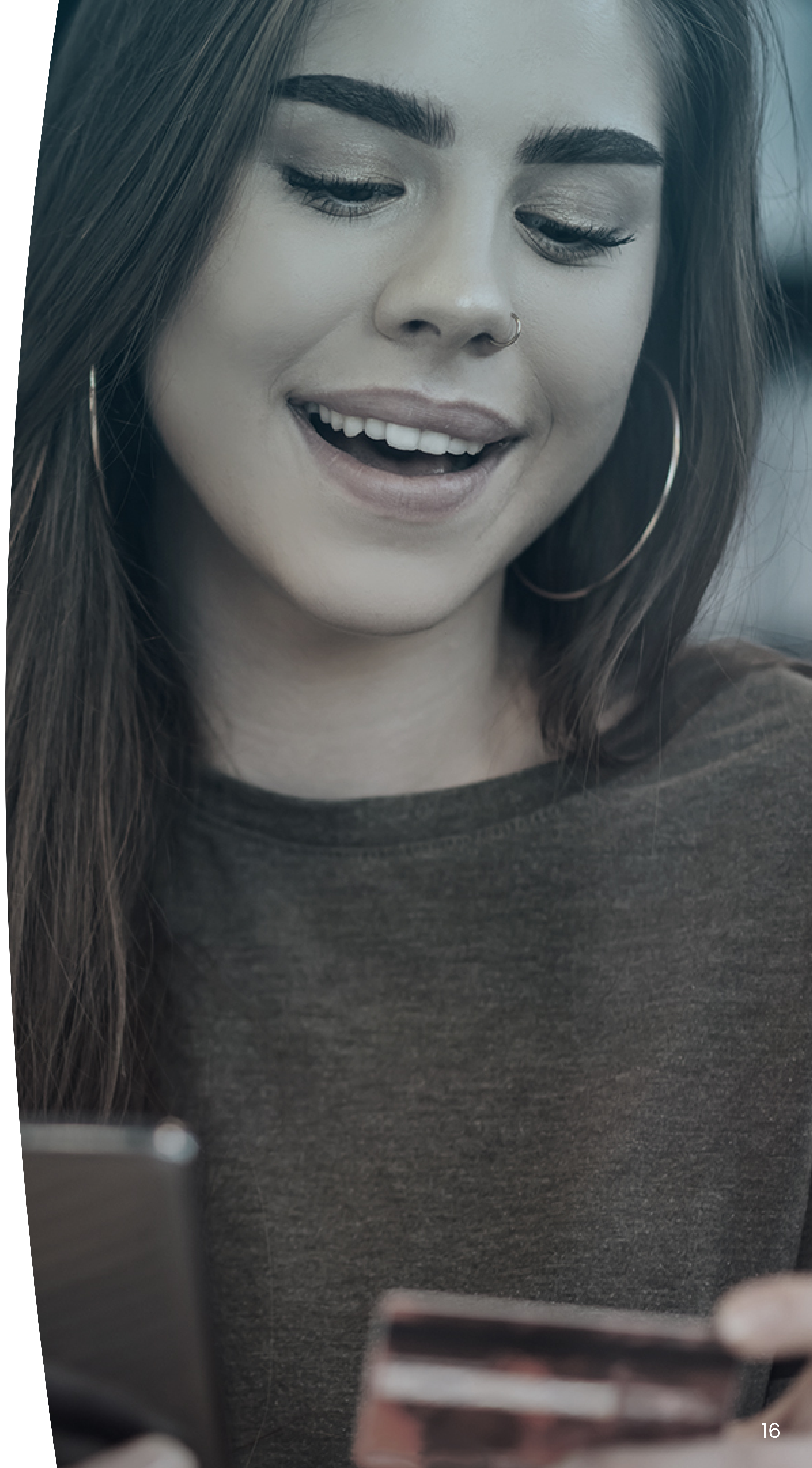
AWS Nitro System

AWS Nitro System provides a combination of dedicated hardware and lightweight hypervisor enabling faster innovation and enhanced security. The Nitro System is the underlying platform for AWS' next generation of Elastic Compute Cloud (EC2) instances that enables AWS to innovate faster, further reduce cost for customers, and deliver added benefits like increased security.

It provides enhanced security that continuously monitors, protects, and verifies the instance hardware and firmware. Virtualization resources are offloaded to dedicated hardware and software minimizing the attack surface. Finally, Nitro System's security model is locked down and prohibits administrative access, eliminating the possibility of human error and tampering.

While AWS Nitro Enclaves enables customers to create isolated compute environments to further protect and securely process highly sensitive data such as personally identifiable information (PII), financial, and intellectual property data within their Amazon EC2 instances. Nitro Enclaves uses the same Nitro Hypervisor technology that provides CPU and memory isolation for EC2 instances.

> ***"As a highly-regulated industry, financial services must focus on security and compliance, risk and regulations, and fraud detection and prevention. Google Cloud offers unique capabilities to help financial services organisations meet these challenges and earn customers' trust, reducing risk and data loss because it is built on a comprehensive zero-trust architecture. We also offer a shared-fate model built on best practices in risk management via automation, guidance, and insurance."***
>
> Karen Huish, Director of Financial Services, Google Cloud UKI



How can BJSS Help Organisations Build Trust?

Vulnerability Assessments

By leveraging BJSS' leading Data & AI capability, we are utilising business, customer, and external data to proactively and reactively identify those who may require additional support through the current cost-of-living crisis. Recent examples of our work include helping a major UK energy company and NHS Digital to identify and support vulnerable people.

Helping a UK Retail Bank Identify Vulnerable Customers

We worked with a UK retail bank to identify vulnerable customers in severe financial difficulty using machine learning algorithms.

To identify the bank's vulnerable customers:

- We created natural language processing (NLP) models that processed call transcripts and flagged keywords that indicated vulnerability.
- We curated 'gold standard' call transcripts with business users and conducted an independent audit to agree on transcription accuracy and metrics.
- We developed binary classification models to detect customers entering collections with at least 90 days' notice, allowing banks to act responsibly.
- The model development was supported by a responsible AI framework created by the team and pass/fail controls assessing all aspects of ML pipelines.

DevSecOps

At BJSS, we know that for security to perform at its optimal level, it must be automated through the development lifecycle. This recognition powers our people-centric DevSecOps approach, with security seamlessly weaved into the delivery process.

DevSecOps principles will also help firms embed and automate security through the development lifecycle. This is increasingly important as financial services companies strive to churn out products and features more quickly.

Whereas traditional DevOps integrates and automates software development (Dev) and IT operations (Ops) to improve and speed up development processes, DevSecOps adds security into the mix. The process is accomplished using a methodology called 'Security as Code' (SaC), a way of writing code to ensure security is kept up-to-date and any issues are detected earlier and faster. Rather than a siloed security team bearing total responsibility for an organisation's cyber defences, each delivery team is accountable for ensuring their software is secure. DevSecOps also requires that security be introduced and tested much earlier in the project lifecycle.

Well-Architected Review

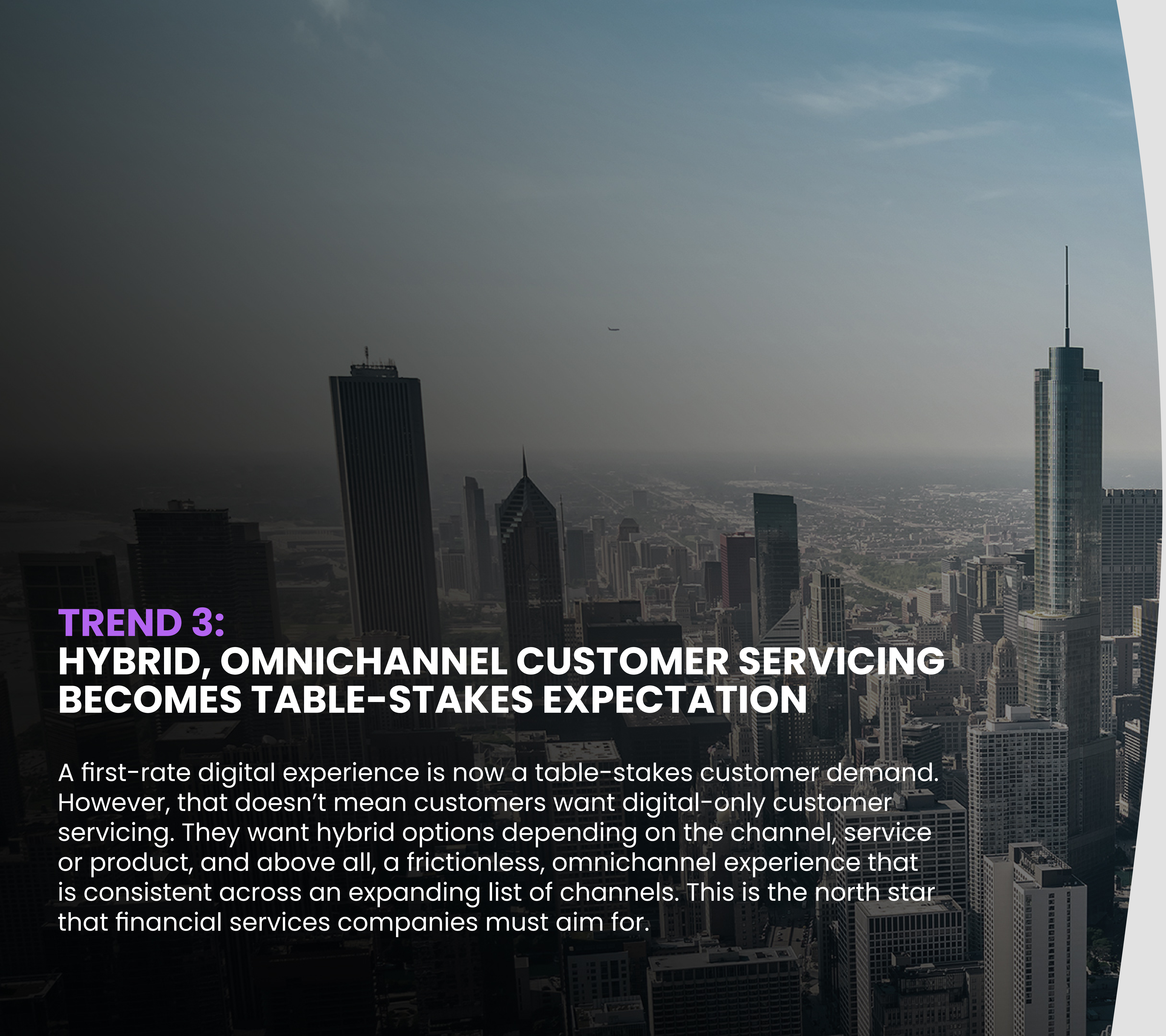
BJSS also conducts well-architected reviews in which we assess organisations' endpoints, monitoring, and general cyber security environments. We conduct these reviews against industry standards such as NISS and ISO 2701.

Case Study

Driver & Vehicle Standards Agency

Driving DVSA to the Cloud

BJSS is an advanced AWS services partner with seven competencies including government. We have helped the DVSA (Driving Vehicle Standards Agency) to drive down costs and increase efficiencies by integrating Agile and DevOps ways of working, and pioneering the use of cloud technology within the department. These engagements gave the DVSA the confidence that BJSS was able to perform the migration within the tight timescales.



TREND 3: HYBRID, OMNICHANNEL CUSTOMER SERVICING BECOMES TABLE-STAKES EXPECTATION

A first-rate digital experience is now a table-stakes customer demand. However, that doesn't mean customers want digital-only customer servicing. They want hybrid options depending on the channel, service or product, and above all, a frictionless, omnichannel experience that is consistent across an expanding list of channels. This is the north star that financial services companies must aim for.

Key Messages

- Financial services customers will no longer settle for anything less than a seamless, omnichannel experience.
- Financial services companies need a blend of physical and digital services tailored to their clients' preferences to meet demands for a hybrid experience.
- This will allow companies to save money through the automation of digital customer services while meeting customer demands for personalised value-add interactions.
- Poorly integrated systems across an expanding list of channels stand in the way of offering a consistent customer experience.

What is the trend?

A legacy of the pandemic was the accelerated adoption of digital financial services by customers across all demographics. However, the appetite for human interactions for support and value-add activities remains high and will not disappear. Customers now expect to move seamlessly between physical and digital channels.

Surge in digital adoption in financial services

Customers across all demographics have displayed a remarkable willingness to trade, bank, and buy insurance policies online over the past few years. Between 2020-2023 the percentage of UK customers purchasing banking products online jumped from 48% to 69%. Insurers and investment managers also recorded a surge in adoption of their digital channels.

Organisations that lack a first-rate digital experience will ultimately be left behind, with 81% of UK adults saying that the quality of online experience determines who they bank with.

Hybrid servicing stands out as preferred option

However, despite the high appetite for digital financial services, most customers still want access to human contact for a specific set of circumstances. For example, a combination of human and digital advice stands out as the preferred option for global wealth management clients, especially ultra-high net-worth individuals. Clients are happy to self-serve for more basic activities – such as checking the balances of their accounts – but want access to financial advisors for tailored market updates and product recommendations. Likewise, nearly one third of European banking customers' purchasing journey blends human and digital touchpoints.

A Seamless, Omnichannel Experience

Most of all, financial services customers want to move seamlessly between multiple physical and digital channels without experiencing any friction. Customers have become accustomed to convenient digital interactions with more mature tech firms and expect the same with their financial services provider. Not only are they demanding personalised experiences, but they also want to choose where and how they interact with financial services providers.

What are the Opportunities for Financial Services Firms?

Putting in place hybrid customer servicing options that are frictionless will help firms meet rising customer demands while also driving cost savings. Non-complex tasks can be automated, freeing up human employees to focus on value-add interactions and services.

Cost Optimisation

Financial services organisations have a golden opportunity to lower their cost bases by putting in place self-service for activities their customers are happy to consume digitally. AI-powered chatbots can answer customer queries on-demand, reducing the number of customer services representatives needed.

Further use cases include the potential for insurers to make significant cost savings by digitising claims management, or banks optimising labour intensive processes such as KYC checks during customer onboarding.

The end of the bull run last year will bring greater urgency to asset and wealth managers addressing long-neglected structural cost issues. In wealth management, human advisor-client interactions are critical to the client experience, yet some services can be digitised, with **64% of global wealth management** clients preferring to view investment results using digital platforms, for example.

Build Deeper Client Relationships

Once low-value add activities have been digitised, human financial advisors and other customer-facing employees can focus on more complex and value-add tasks. This will boost customer satisfaction by aligning servicing to each user's unique preference.

In the wealth management space, financial advisors can devote more time to infusing client conversations with themes personalised to their personal interests, such as specific ESG topics. This will drive greater engagement as McKinsey research shows that increasing interactions with US wealth management clients from a few times a year to every month boosts satisfaction by **52%**.

Lower Cost to Serve Wider Segments

More so, blending human and digital customer servicing will allow financial services firms to cater to a wider set of customers. For example, wealth managers can start to make inroads with the mass affluent by offering lower cost financial advice, with **55% of UK adults** believing that paying for financial advice is only for the rich. Wealth managers can dispel this notion with cheaper, digital-led financial advice. The cost of digital financial advice is up to 90% cheaper – and wealth manager can pass those cost savings onto clients with cheaper fees.

Challenges

Laying on consistent experiences across a growing list of channels is hugely complicated by legacy system constraints and integration roadblocks.

Expanding List of Channels

Global customers now expect to engage with financial services providers across a growing number of channels. Already in 2017, **95%** of global consumers were using at least three channels in a single customer service interaction - and this number has expanded significantly since then. This list now includes the metaverse, smart speakers, and wearables to name a few. It will become increasingly challenging to deliver a consistent experience across this expanding list of channels.

Lack of Integration and Fragmented View of Customers

Financial services firms need to enable the real-time exchange of data between different channels for the customer journey to be truly seamless. However, this requires a high degree of integration between systems and the growing list of applications and products. Reliance on legacy systems inhibits this as they are difficult to integrate with cloud and web-based services.

Poorly integrated systems and data scattered across disparate sources contributes to a fragmented view of the customer. A fragmented view of the customer across channels means messaging will be inconsistent and interactions will lack relevance.

Risks

Fragmented customer profiles, non-convenient experiences, and weak hybrid offerings will lead to low customer satisfaction levels and churn to more digitally mature competitors and challengers.

Missing the Mark with Customer Satisfaction

Incumbent financial services organisations often fail to recognise customers across different touchpoints and lines of business. This creates friction and leads to low customer satisfaction, with over two thirds of global consumers saying it is frustrating when they have an inconsistent experience across channels.

Friction during the buying process will lead to dropouts, while failing to recognise customers across different channels will also lead to churn. Unencumbered by legacy systems and with more agile product delivery models, challengers are better placed to meet demands for omnichannel servicing, and this poses a further attrition risk for incumbents.

How can Financial Services Firms Put in Place Hybrid, Omnichannel Servicing?

In order to deliver the frictionless hybrid and omnichannel experience that their customers have come to expect, firms will need to modernise legacy applications, put in place open APIs, and take a human-centred design approach to building products.

In a seamless, omnichannel experience, companies have a contextual and consistent understanding of their customers at each step and different channel.

Human-Centred Service Design

Organisations need to place the customer at the centre of their products and services and take a human-centred service design approach to understand the current pain points and unmet needs of customers along the service journey. Creating a service blueprint enables you to see how the underlying people, process, and technology need to be orchestrated to deliver the desired customer experience, cross-products, and cross-services.

Legacy App Modernisation

Legacy applications will need to modernise to ensure different application, products, and services are tightly integrated. Critical applications should be modernised and redeveloped using agile delivery techniques and open-source software.

Integration Tech/Open APIs

Secure and open APIs are needed to ensure that organisations' applications and systems enable frictionless data sharing, so that different products and business lines have the same view of the customer to deliver a consistent experience.

Amazon API Gateway

Amazon API Gateway allows users to create, maintain, and secure APIs at any scale. Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. Using API Gateway, users can create RESTful APIs and WebSocket APIs that enable real-time two-way communication applications. API Gateway supports containerised and serverless workloads, as well as web applications.

API Gateway handles all the tasks involved in accepting and processing up to hundreds of thousands of concurrent API calls, including traffic management, CORS support, authorisation and access control, throttling, monitoring, and API version management.

Automation

Automation solutions will allow financial services firms to digitise processes, freeing up human financial advisors to focus on value-add activities. Back-office processes, regulatory compliance, and customer onboarding are all ripe for end-to-end automation.

How can BJSS Help Firms to Deliver a Hybrid, Omnichannel Experience?

Digital Design

We excel at building digital products and services, that are human-centred, inclusive, and accessible. Our deep expertise across the design spectrum means we can stand up mixed capability teams that deliver products and services that truly fit user needs.

Legacy App Modernisation

We redevelop your critical applications native to the cloud, and also decouple monolithic legacy technology and build for evergreen operations. We also deliver microservices architecture using agile ways of working.

Secure and Open APIs

We deliver integration solutions that underpin your enterprise integration strategy, and web services and APIs to deliver discrete functionality.

Automation

Businesses achieve value through processes, but these need to grow and adapt in line with changes to strategy. Organisations should be looking at how technology can deliver agility, remove inefficiency, and reinvent processes ready for the digital age.

Case Studies

Rapid Service Design of a Wealth Robo-Advisor for an investment manager

BJSS' design arm SPARCK designed and developed a new digital wealth management service for the next generation of customers.

Traditionally focused on the needs of more sophisticated investors, the client had identified an untapped opportunity in the delegated investor market and engaged SPARCK to help understand how the new service would work, define a compelling user experience and create a roadmap to deliver a live product.

SPARCK's Design Thinking methodology was used to turn a high-level objective into an initial Service Blueprint and working prototype in only ten weeks. In parallel, a user-focused technical Discovery underpinned the approach, ensuring a balance between creative solutions and technical feasibility.

Replatforming a global retail bank's mortgage application

We overhauled a legacy online mortgage application following a mobile-first digital design approach as part of a wider retail banking transformation programme to a micro-service architecture, aligned with DevOps principles, with a heavy focus on test automation, to support a more agile delivery.

Helping a leading UK retail bank lead the way in Open Banking

Our partnership with the bank involved a successful modernisation of its open-banking services, securely migrating the APIs to the cloud. By applying our agile methodologies and expertise in cloud migration, we expedited the transition of the bank's open-banking services. The result was a cost-effective, flexible, and high-performing platform that processed over 1 billion API hits in 2020. The bank now offers a greater range of open-banking services to its customers than ever before.

Driver & Vehicle
Standards
Agency

Helping the DVSA to Improve Decision Making

During the pandemic the DVSA had to sort through a huge number of driving license applications, including prioritising ambulance driving tests. Using UiPath and AWS, we delivered an RPA solution to process bookings, while still covering key processes such as error handling and duplicate processing. This cleared a backlog of 48,000 requests in only 10 days.

TREND 4:

OPEN ECOSYSTEMS WILL BECOME INGRAINED IN FINANCIAL SERVICES

Open ecosystems are rapidly forming and are forcing more collaboration, disrupting value chains, and creating new business models. They offer financial services firms the opportunity to bring in fresh revenues, boost customer engagement, and plug capability gaps – but beware, more data sharing will also strengthen challengers.

Key Messages

- Open ecosystems will change the face of financial services. They will force more collaboration, chip away at value chains, and create new business models.
- Fast-moving incumbents will seize the opportunity to form an ecosystem of partners to harness innovative solutions to plug capability gaps.
- Incumbents can also boost engagement and grow their share of wallet by complementing their core offering with additional financial and non-financial products and services.
- Digital challengers' offerings will also be strengthened by access to more customer data needed to hyper-personalise their products.
- Slower-moving players that lack a coherent strategy and integration capabilities to take their place in open ecosystems will miss out on fresh revenue opportunities and fall behind on incoming regulations.

What's Driving this Trend?

Data sharing regulation, the necessity to meet rising customer experience demands, and a rich ecosystem of fintech solutions are all driving the formation of open ecosystems.

Regulation

Open-banking regulation mandated large UK banks to build and maintain secure APIs to facilitate the sharing of customer data with third parties. This kickstarted other financial services firms to also put in the place the integration capabilities to share data. Incoming open-finance regulation will force remaining financial services firms to build or acquire the necessary secure APIs to enable data sharing.

Rising Customer Experience Demands

Rising customer experience demands are pushing incumbents to up their game to make sure their experience stands up to digital challengers. While build initiatives are underway in tandem, incumbents will also turn to the rich fintech and tech vendor ecosystem to harness their innovative solutions and meet shifting customer expectations.

Advantages of ecosystem model over traditional business approach

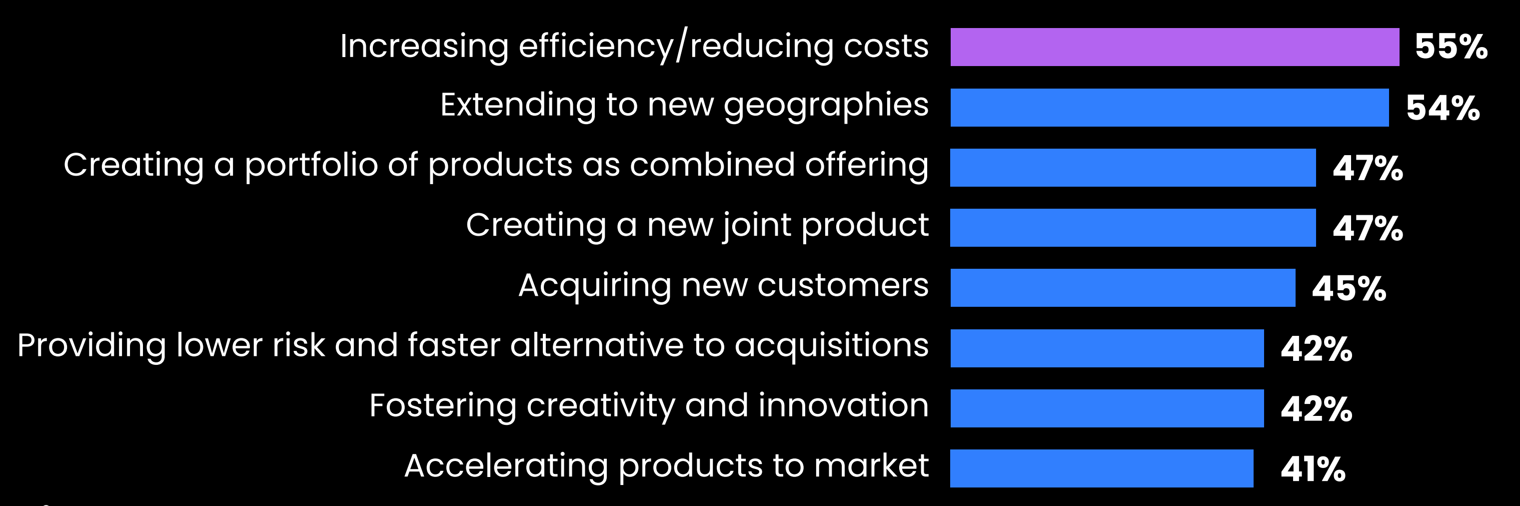


Fig: ey.com

Opportunities

Open ecosystems create revenue opportunities for organisations through increased share of wallets via platform-based models and more distribution through embedded finance. They also provide access to innovative products and solutions from partners. **Two thirds** of global financial services companies said ecosystems are very important to their future success.

Platform-Based Business Models

Incumbent financial services companies can boost customer engagement by integrating third-party products into their own platforms. Taking care of a greater range of their customers' needs will keep them on their platforms for longer and create a more engaged customer base and opportunities to grow their share of wallet. **Almost half** of global financial services firms believe open ecosystems will enable them to build out more of a one-stop-shop product offering.

Financial services companies can further fortify their offerings with non-financial products and services. For example, Spain-based CaixaBank's lifestyle platform 'imagin' has entertainment elements - like games and educational content - that complements its financial products. Future-looking banking platforms could handle **entire end-to-end processes – like purchasing a property – from mortgage brokerage, to viewings, and legal services with an ecosystem of partners**.

Embedded Finance

Financial services companies can also generate additional revenues through distributing their products at the point of sale through non-financial services partner platforms. Global firms recognise how embedded finance can help them reach new geographies and customers. Embedded finance is forecast to climb to a market value of **$7.2 trillion** in 2030.

Embedded insurance is becoming an increasingly popular way for incumbents to widen their distribution. Incumbents are collaborating with non-insurers partners, such as John Lewis and Tesla, to distribute home and motor insurance, respectively.

Access to innovative partners and solutions

Incumbent financial services firms can also plug capability gaps via an ecosystem of tech partners. The UK is one of the leading global fintech hubs, and partners can help incumbents circumvent skills gaps in key technologies - such as machine learning or cloud - to overcome a common internal build effort roadblock.

This can help incumbents accelerate their digital transformations at a lower cost - and acquire the disruptive solutions that they need today. In fact, global financial services firms believe greater efficiencies and reducing costs to be the greatest benefit of open ecosystems. Insurers can partner with cyber specialist tech vendors that offer machine learning-power risk assessment solutions, for example.

Challenges

Legacy system constraints and integration challenges stand in the way of incumbents capitalising on open ecosystems. Equally the nascent nature of open ecosystems has created hesitancy among incumbents about how they should seize the related opportunities.

Integration Challenges

Legacy technology infrastructure is not up to the task of seamless data sharing via open architectures, and legacy systems lack the required interoperability with more modern applications. Incumbents' reliance on legacy systems may create organisational and data siloes that will inhibit their efforts to participate in open ecosystems.

Uncertainty and Hesitancy

Financial services companies are also unsure about what role they can take in the newly forming ecosystems. This uncertainty over how to participate in new ecosystems is holding incumbents back from embracing them fully.

Despite their massive potential, research by Boston Consulting Group's Henderson Institute found that **less than one third** of the world's largest banks are investing in ecosystems in a meaningful way. And nearly one quarter aren't investing in them at all, beyond the occasional pilot.

A lack of understanding also creates negative perceptions regarding open ecosystems, such as cyber security and complexity concerns, that are also holding firms from devoting resources to fully leveraging open ecosystems.

Risks

Getting open ecosystem strategies wrong and failing to put in place the necessary technical capabilities create customer attrition and compliance risks as challengers become fiercer and new regulatory requirements come in.

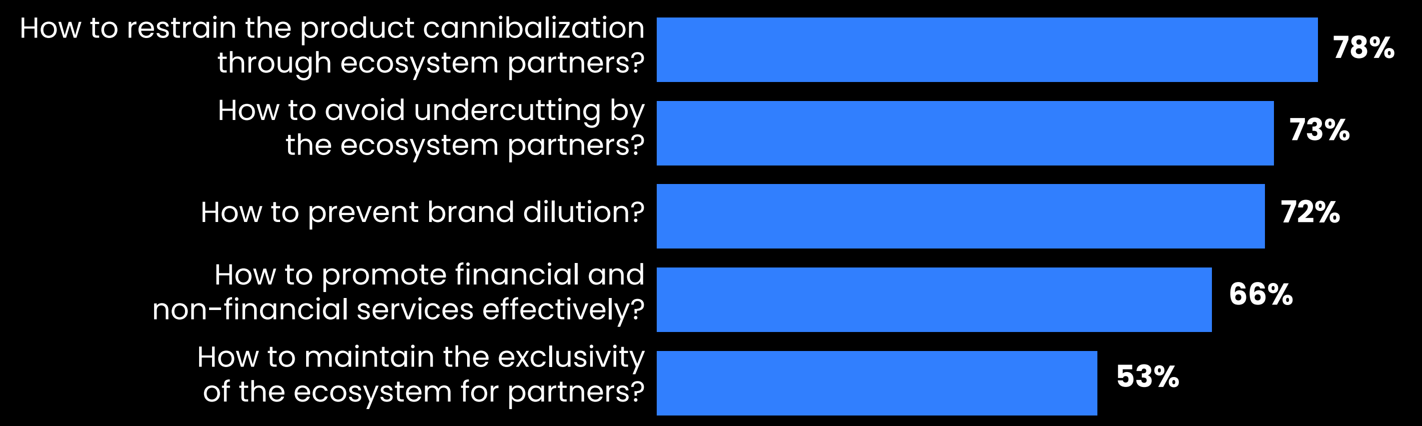
More Competitive Challengers

Open ecosystems will help digital challengers to create a stickier offering with a wider set of products and services that are highly personalised. Fintechs have disrupted the financial services landscapes with digital experiences that are convenient. Already a comprehensive 85% of global consumers would recommend a fintech to a family member or friend.

Gaining access to more customer data will lower incumbents' historical data advantage over digital challengers. This will enable them to leverage their Lean tech stacks and hyper-personalise products according to their customers' unique preferences.

Tapping open ecosystems to add partner products and services will also help challengers to broaden their appeal to a wider set of customers. For example, Starling Bank has supplemented its core banking product suite with third-party insurance, investments, and credit score services. Open ecosystems could also fuel "super-app" ambitions. Super apps in China and India offer an example of how Western fintechs could integrate partner solutions to create a stickier customer value proposition.

To thrive in the platform economy, face hurdles with innovation



Sources: Capgemini Research Institute for Financial Services Analysis, 2022; Capgemini Executives Survey, N=142.

Question: What are the major issues/threats or barriers to ecosystem banking (marketplace model operation)? (executives rating 5 and above where 1 = the slightest threat, and 7 = the highest threat)

Fig: Capgemini

Falling Behind Regulatory Requirements

Open finance regulation is at the forefront of the new Data Protection and Digital Innovation Bill that could land at the end of this year or next. It will iterate on open banking by bringing the full spectrum of financial services providers – including insurers, investment managers, and lenders - into the scope of data sharing requirements.

Financial services firms will also need to balance revenue opportunities with product cannibalisation and disintermediated customer relationships risks.

Product Cannibalisation and Brand Dilution

Introducing third-party products into financial services companies' own platforms creates twin risks of product cannibalisation and brand dilution. Adding new partner products that are in direct competition with a firm's own products could divert attention and business away from their own products for just a slice of the profits. Almost 80% of global banks are concerned by product cannibalisation, while organisations that have built their brands over decades (or centuries) will want to avoid partnering with firms that have brands that do not align with their own values. 72% of banks worry about brand dilution, per Capgemini.

Disintermediated Customer Relationships

Leveraging embedded finance to widen distribution runs a risk of incumbents giving up valuable customer interactions. Firms can look to the example of asset managers who rarely – if ever – interact directly with their retail clients. Retail client outflows suffered by UK asset managers during the market downturn in 2022 underlines the perils of disintermediated customer relationships. Customer loyalty becomes critical in leaner times, and this is difficult to build if the partner controls the customer relationship.

How Can Firms Take Advantage of Open Ecosystems Opportunities?

Financial services organisations must devise an open ecosystem strategy that is matched to their technical capabilities and commercial ambitions. Legacy app modernisation and open API build work will also be necessary for incumbents to participate in open ecosystems.

Open Ecosystem Strategy

Financial services companies will need to align internally on their ambitions and intended outcomes to devise an open ecosystem strategy. Companies will need to map out desirable opportunities and potential risks, pain points, and potential technical and cultural limitations. They will also need to assess their own technical capabilities, as not all firms are able to form their own ecosystems due to legacy constraints or a lack of integration capabilities. Firms can then start to ideate, test, and iterate on hypotheses through workshops before building the roadmap.

> ***"Financial services institutions are creating new business opportunities by developing secure APIs for embedded finance and making them available to non-financial services developers at little-to-no cost. This has led to an ever-expanding tapestry of API-connected partnerships. For example, many digital insurance companies now connect directly with mortgage lenders to provide homeowners insurance to home buyers."***
>
> Karen Huish, Director of Financial Services, Google Cloud UKI

Legacy App Modernisation

Legacy applications will need to be overhauled and modernised to enable seamless data sharing and integration. Financial services firms will need to conduct assessments of current state solutions before creating a target state solution and a roadmap. It is crucial to deliver incremental value while minimising the risk of disruption to the existing business.

Open APIs

Secure and open APIs are needed to ensure that organisations' applications and systems enable frictionless data sharing to participate in open ecosystems. Financial services companies need to build open APIs to create a higher level of interoperability.

Apigee API Management

Apigee API Management is Google Cloud's native API management tool that allows customers to build, manage, and secure APIs — for any use case, environment, or scale. Apigee's API management platform makes it easy for any bank, lender, wealth management company, or insurer to create new ways to serve partners and customers.

How BJSS can Help Firms?

BJSS combines extensive tech and engineering experience with our future-of-service solutions that will help firms select the appropriate open ecosystem strategy.

Open Finance Strategy

We assist financial services firms in comprehending emerging trends – such as open finance - and their implications for their organisation. We help firms choose the most suitable tools based on their challenges, context, and desired outcomes.

Legacy App Modernisation

Our approach involves redeveloping your critical applications natively for the cloud, untangling monolithic legacy technology, and building for sustainable and efficient operations. Additionally, we specialise in delivering microservices architecture through agile methodologies to enhance productivity and responsiveness.

Integration

We deliver integration solutions that underpin your enterprise integration strategy, and web services and APIs to deliver discrete functionality.

Case Studies

Rapid Design-Driven Exploration of Open Finance in a Global Wealth Management Firm

Objective: To collaboratively investigate the complex and dynamic subject of open finance and its implications for a global wealth management firm.

Our approach comprised of:

1. **Multi-faceted exploration:** Analysing open finance from various angles, gathering input from both internal and external stakeholders, and continuously adapting, synthesising, and planning in partnership with the client as new insights emerge.
2. **Driving change through engagement:** Actively positioning the client team as open-finance leaders by collaboratively sharing and processing evolving thoughts and insights. Utilising interviews, informal interactions, and workshops to secure support from business stakeholders and crafting compelling narratives.
3. **Navigating open-finance consequences:** Guiding the client team through uncertainty to understand the implications of open finance within their unique business context. Identifying potential opportunities and establishing a framework for organisational transformation.

Outcome: This case study showcases how a rapid, design-led approach to exploring open finance helped a global wealth management firm navigate the complexities of these emerging trends. Through collaboration, engagement, and strategic guidance, the firm was able to assess the potential impact on their business, formulate a strategic response, and create a framework for transformative change.

We helped a global retail bank to modernise their legacy mortgage platform

BJSS conducted the initial engagement and recommended a cloud-hosted, responsive mobile-first platform and a new agile, DevOps and BDD based delivery model.

We partnered in collaborative delivery with the client teams to realise the vision and deliver a minimum viable product (MVP) to market. BJSS also provided the client with an agile delivery ethos and new DevOps tooling that provided a lasting capability uplift.

Rapid Design-Driven Exploration of Open Finance in a Global Wealth Management Firm

RBS successfully achieved its desire to offer Apple Pay at its UK launch. As the only “big four” bank able to register its customers to the service, RBS enjoyed a first-mover advantage.

The project was delivered by an agile ‘Lean Team’ of four BJSS testing and QA professionals, which by their collaborative and multi-functional expertise, were able to adapt and take on different roles throughout the project to cover all testing areas.

Despite an aggressive delivery deadline and the secrecy attached to the project, the team successfully delivered a wide ranging, complex solution which involved close collaboration, five separate organisations and several technology platforms. This was delivered on-time and on-budget. The success of the project saw the BJSS team continuing to support RBS with other mobile testing services. Currently the team continues to work on other innovative payment frameworks within the RBS Group in the UK.

TREND 5:
HARSHER (FINTECH) FUNDING CLIMATE FORCES DIGITAL CHALLENGER BANKS/FINTECHS TO CHANGE COURSE

The bear market of 2022 slammed shut the boom years of swelling fintech investment. As lower funding volumes spill over, the fintech sector will change course. Stronger balance sheets and operational resilience will come in vogue and attract funding, while ambitious growth plans with distant profit targets will go out of fashion. Fintechs that survive the tougher funding climate will emerge stronger and play a key role in shaping the future of financial services.

Key Messages

- Fintechs need to focus on sustainable growth to weather the worsening market conditions.
- Funding volumes declined in 2022 as soaring inflation and rising interest rates led to investors taking a more cautious stance on the riskier fintech sector.
- Investors will not retreat from the fintech sector as it remains a hub of innovation, but they will gravitate towards different types of fintechs.
- We expect funding will still flow to B2B fintechs offering vital solutions in areas such as cyber security, well-run businesses, and fintechs offering exciting tech solutions linked to concrete use cases, like generative AI.
- Smaller funding rounds will also usurp the mega-rounds that defined the heady years of 2020 and 2021.
- To emerge from the downturn, agile fintechs will rethink their business models and prioritise sustainable growth strategies and cost optimisation to deliver profits sooner.
- Successful fintechs that survive the investment winter will prosper: Annual fintech revenues will grow six times over to $1.5 trillion by 2030, per BCG.

What is the Trend?

Global fintech funding volumes declined in 2022 as a direct result of worsening macroeconomic conditions. The record year of funding in 2021 was largely driven by investors seeking higher returns from an inflated tech market in a low interest rate environment. However, soaring inflation and rising interest rates made riskier bets on younger and unprofitable companies less appealing. Total global fintech funding fell by 46% to $75.2 billion in 2022 year-over-year.

The abrupt reversal in macroeconomic conditions last year led to venture capitalists and other key fintech investors holding fire. Venture capitalists (VCs) "dry powder" jumped by over $50 billion and stood at **$300 billion** in the US alone in 2022. VCs are under pressure to stem poor returning investments from their own main sources of capital, Limited Partners (LPs). LPs are adopting a more prudent approach with their capital deployment amid the downturn, with inflows to VC funds falling to its **lowest level** since 2015 for the last three months of 2022.

Global fintech funding falls 46%, deals fall 8% YoY

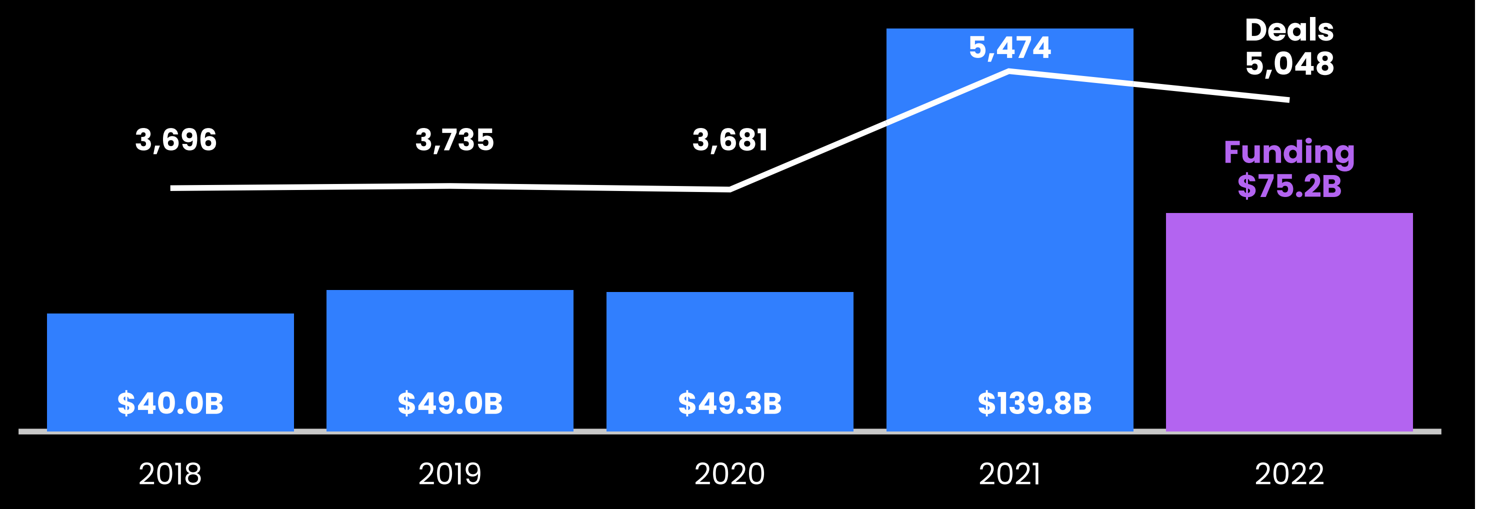


Fig: CB Insights

Falling valuations also makes raising funding less appealing as fintechs are forced to give away more of their business for less capital. It's likely larger fintechs delayed raising capital and a dreaded "down round" last year to avoid giving away more for less, which also depressed funding volumes.

This year fintech-funding volumes are expected to take a similar shape to the harsher funding climate of 2022 – evidenced by Q1 figures - rather than the record-breaking year of 2021. It's worth pointing out that fintech-funding volumes were higher in 2022 than the three years preceding 2021 – and 2021 represents somewhat of an outlier as funding peaked due to the extreme market liquidity.

Yet the sharp decline in fintech funding last year signals that the era of cheap money is over. It also portends a shift in focus among fintechs from a "growth at all costs" mentality towards sustainable growth strategies. Fintechs need to adjust to the new investment climate in which expansion can no longer be fuelled by war chests alone and business models must be underpinned by profits.

How did This Impact Different Fintech Sub-Sectors?

While fintech funding fell across the board, certain sectors were more exposed to smaller overall volumes:

- Global payments funding dipped by $20.8 billion in 2022 but remains the largest fintech subsector.
- Digital lending declined by 53% to $11.5 billion last year.
- Digital challenger bank funding nosedived by 63% year over year to $9.4 billion in 2022
- Wealthtech funding fell by 41% by $8.8 billion in 2022.
- Insurtech funding fell by 53% to $8.4 billion last year.

Deep Dive: Why Did Digital Challenger Bank Funding Fall Off a Cliff?

Digital Challenger Banks

Investors pulled back from digital challenger bank funding more than any other fintech funding category in 2022, with global funding plummeting by 63% year over year to $9.4 billion in 2022, returning to pre-2020 levels. And banking funding hit its **lowest level** in Q1 2023 since Q2 2017. Alongside the insurtech sub-sector, digital challenger bank funding was the only subsector to dip below 2020 levels.

Investors have turned away from fintechs and digital challenger banks appear to have suffered against this new yardstick. Most digital challenger banks have failed to effectively monetise their large customer bases by expanding into higher-margin products - like lending - and are heavily reliant low-margin debit card interchange fees. **Less than 5%** of global digital challenger banks were estimated to be breaking even in 2021.

What do we expect?

Venture capitalists and other key fintech investors will remain more cautious as high inflation proves stubborn and central banks tease further interest rate hikes. Q1 2023 figures jumped 55% quarter over quarter (QoQ), per CB Insights, yet this partial rebound should be taken with a pinch of salt as it was inflated largely by Stripe's huge $6.5 billion raise. Funding fell 12% QoQ without Stripe's mega-round and was still lower than Q1 and Q2 of 2022. However, investors won't retreat from fintech sector and we predict that funding will still flow to the following areas:

B2B Fintechs

We expect B2B fintechs will rise to the fore as their solutions will play a crucial role in helping incumbent companies accelerate their digitisations. Revenue streams from businesses should prove more stable and predictable than more fragile consumer spending that B2C players rely on. [CB Insight's Fintech 250]() (annual list of most promising private startups) was comprised of over nearly two-thirds of B2B players reflecting the wider shift in market sentiment away from B2C fintechs.

B2B payments stand out as one area that will command investor attention as financial services companies demand solutions that help them to modernise their payments infrastructure and enable real-time payments. B2B fintechs offering solutions to augment the CFO's ability to understand financial data will also fare well.

We also expect cyber and regtech-specialists to attract capital. Third-party cyber security solutions are considered "must-have" as financial services companies increasingly score cyber security as their number one risk, while 'regtechs' offering digital-identity verification and transaction-monitoring solutions will be in demand among financial services firms and investors alike.

Transformative Technologies Aligned Use Cases

Investors have been piling into generative AI startups amid the ChatGPT frenzy, illustrating that buzzy technologies that can demonstrate potential business value can prosper. AI technologies are nothing new, yet excitement has reached fever pitch as generative AI shows its capability to create human-like content, augment decision making, and greatly boost productivity. Global insurers are experimenting with the role of generative AI in augmenting the underwriting process with historical claims data, for example.

We also expect that fintechs with stronger balance sheets and earlier-stage fintechs will also prove more popular destinations for investor dollars as they shy away from riskier bets and mega-rounds.

Fintechs with Strong Balance Sheets

The days of fintechs achieving lofty valuations based on ambitious growth targets far out of sync with their existing revenues and margins are over (for now). Investors will increasingly place much greater emphasis on fintech businesses that are well-run and aren't haemorrhaging cash.

Younger Startups and Smaller Bets

Investors have pumped the brakes on the mega-rounds that dominated the 2020-2021 period. Investors will favour smaller bets after being burnt by cascading tech firm valuations last year. Market volatility also creates uncertainty regarding the value of more mature firms with more near-term exits in their sights - and it might seem a safer bet for investors to back younger fintechs with more distant exits when markets have stabilised. Mega-rounds dipped by 60% in 2022 and early-stage deal share jumped to its highest ever share in 2022. And early-stage rounds hit their record high again in Q1 2023, per CB Insights.

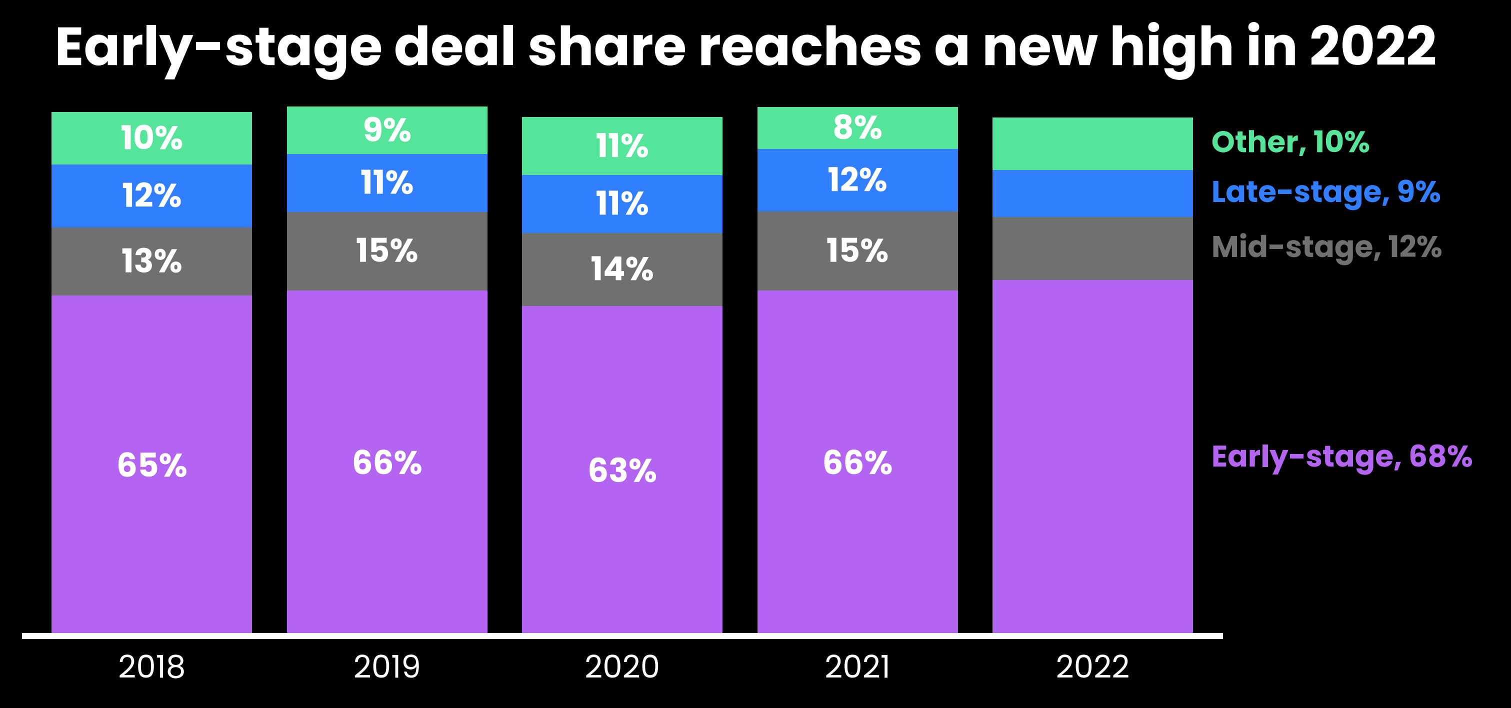


Fig: [CB Insights]()

What Should Fintechs do to Survive the Investment Winter?

We expect the fintech space to change course and leading players to adjust their business models. Nimble fintechs will pivot away from prioritising rapid customer growth towards more sustainable growth strategies and demonstrate their long-term resilience by cutting their losses and putting in place more robust governance.

Fintechs will play a crucial role in the future of financial services, delivering innovative solutions to both customers and incumbents. The prize on offer for navigating the difficult funding climate is vast, as annual fintech revenues will surge sixfold to **$1.5trillion by 2030**.

AWS Operational Analytics

AWS supports businesses by offering **operational analytics**, a powerful solution that provides a comprehensive overview of system health through the analysis of diverse data logs. By leveraging real-time analytics, this solution enables businesses to safeguard revenue, mitigate risks, minimise downtime, optimise capacity utilisation, and scale their operations effectively. Achieving these benefits necessitates the ingestion of numerous logs in varying formats at a rapid pace, while monitoring an extensive range of system components and microservices.

Sustainable Growth Strategies

In 2019, following a significant funding round, German digital challenger bank N26 made it clear that profitability was not among its "core metrics." This statement shed light on a rapidly expanding sector that prioritised "customer growth at all costs." However, fintech companies aiming to secure capital and satisfy current investors must now shift their focus towards sustainable growth strategies.

Offering a wider range of products and services will capture a greater share of their wallet and boost profits. Western fintechs will look to successful examples of 'super apps' in Southeast Asia, where the likes of Grab allow customers to order food deliveries, taxis, and buy insurance. Revolut is one fintech that has set its sights on achieving a Western-tinged version of "super-app" status and launched instant messaging last year.

Building out offerings targeted at businesses will also bring in more money per customer. Companies are more willing and accustomed to paying for financial services, such as banking. Already profitable Starling Bank has benefited from its strategy of targeting SMEs and says it will quadruple its profits this year thanks to the growth of its small business accounts. ClearBank is another success story and provides the underlying tech for real-time clearance on payment transactions for banks and turned a profit for the first time last year in October.

Demonstrate Resilience

As runways shorten with the rising cost of doing business, lower consumer spending, and higher-borrowing costs, investors will be looking for well-run businesses. Stronger balance sheets and robust governance are two ways to demonstrate the ability of a business to ride out the storm.

While in previous years investors were happy to accept large annual losses and bought into the fintech sector's "growth at all costs" mentality, they will now demand that fintechs map their paths to profitability in the near-term. It will be crucial for fintechs to cut costs and improve their margins.

Another way that fintechs can assure investors about their durability will be to put in place robust governance processes and risk management. Investors will conduct more due diligence before making investments in line with a more cautious investment approach. Governance failures were largely to blame for FTX's and SVB's dramatic collapse. Fintechs need to double down on regtech and other governance controls to alleviate fears that they lack the resilience of more established firms.

"The cloud is now a fundamental ingredient for building financial resilience. The cloud provides organisations with a scalable, secure, and cost-effective platform to run their applications and data. This can help organisations to improve their agility, flexibility, and responsiveness to market changes. By investing in these three pillars, organisations can build a foundation for financial resilience that will help them to survive, even thrive, through whatever challenges lie ahead."

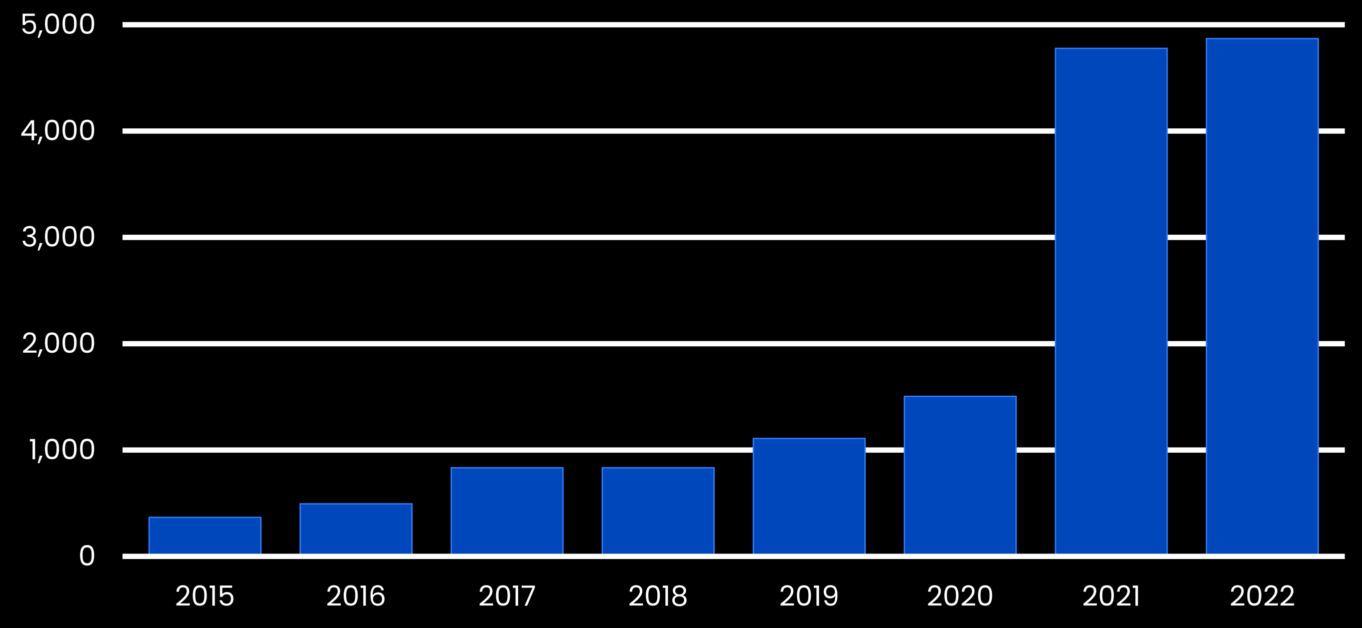
Karen Huish, Director of Financial Services, Google Cloud UKI

Earn Customer Trust by Addressing Growing Pains

Fintechs need to iron out common customer gripes regarding their businesses - such as a lack of human customer service - to avoid losing trust. Fintechs have scaled their businesses based on Lean, digital-only business models to a great degree of success. However, they must now put in place accessible human customer support as their businesses mature. Complaints relating to UK e-money products have jumped significantly in recent years as fintechs gain users and common customer pain points come under the microscope. The most common complaint is poor customer service.

The number of complaints relating to e-money products has surged in recent years

Complaints relating to e-money products in the UK



Source: UK Financial Ombudsman Service

Fig: Financial Times

How Could BJSS Help?

Process Excellence and Automation

We help organisations understand and enhance their operational processes, from detailed analysis to realisation of improvement opportunities. Our clients are enabled to maximise value for their customers, optimise costs, and both set and reach their strategic goals.

- Operations Assessment: Focus on identifying and documenting broken operations, with subsequent analysis driving both strategic and tactical recommendations in value creation, risk mitigation, and improving customer outcomes.
- Process Improvement: Transform operational performance and deliver optimal value from end-to-end by identifying, delivering, and embedding tangible improvements to processes, in a continual and methodological fashion.
- Automation: Reduce manual intervention and costs, enable sustainable business growth, elevate security, and risk mitigation, through the definition and delivery of automation strategy, pipelines, and deployments.

Organisation Transformation & Change

BJSS partners with organisations to engage and equip their people to deliver lasting and meaningful change. We have a range of capabilities which can deliver this including:

- Traditional and Agile Change Management: Supporting organisations to adopt complex transformations by designing the frameworks and tools to ensure that teams and individuals are ready, able, and willing to adopt the change.
- Leadership and Culture: Mobilising c-suite leaders to drive create a culture where employee behaviours are aligned to existing or new organisational strategies. We deliver this through the facilitation of a compelling vision, case for change, and a clear roadmap to deliver meaningful change.
- Operating Model: Our rapid assessment approach enables our clients to re-think their operating model, capabilities, and geographies to support the evolution of strategy and purpose, ensuring your organisation is fit for the future.

Case Studies

Improving Operational Performance through Process Excellence

BJSS was approached by a client to assist with a struggling operation. The team faced service level agreement failures, a backlog of manual work, and slow processing due to paper-based records. Regulatory breaches and low team morale added to the challenges.

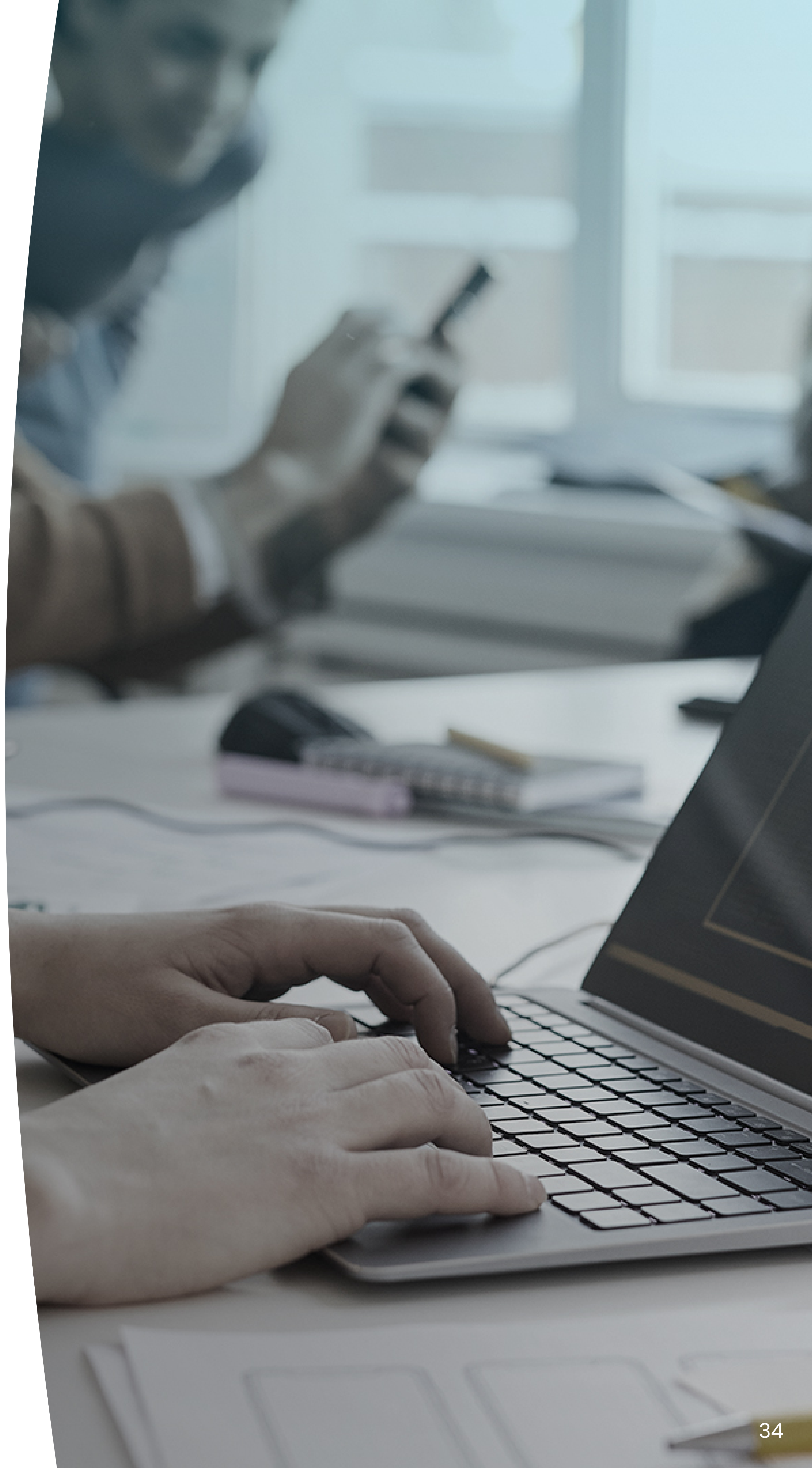
The BJSS Process Excellence and Automation team worked closely with the client to understand their processes. Through deep dive sessions and process mapping, pain points were identified for targeted improvement. Quick wins were implemented to address the backlog and reporting issues. BJSS proposed a two-pronged solution: front-line process support for immediate improvements and a long-term modernisation journey. This included low-code automation deployment, system integration, and clear measures for enhancing customer journeys and reducing costs.

Case Study: Agile Transformation for an Investment Bank

A Japanese investment bank engaged BJSS when its Internal Audit team identified a problem with measuring the value and throughput of the internal IT teams. The bank could not be confident of meeting deadlines for regulatory changes. It also wanted to achieve transformational changes across the entire operating model, rather than continuing to make tactical quick fixes.

BJSS used its Technology Assessment Framework to assess the current operating model, including identifying the key value streams and constraints. We then designed a new operating model detailing roles and responsibilities for both business and technology colleagues across the bank. The new operating model also defined key processes such as requirements management and governance. We also calculated a multi-year ROI for an agile transformation to show the potential benefits in the immediate and longer term.

BJSS took responsibility for management of the resulting agile transformation programme. The programme resulted in increased productivity, reduced error rates, and improved consistency through automation, faster delivery, and better predictability. We created a dashboard of key metrics to track progress through the transformation and to drive a culture of continuous improvement. The availability of clear, objective, and up-to-date measures improved visibility and increased trust between the business and IT.



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