



Financial services technology



Fintech has been and will continue to be disruptive. It is a risk to be managed. The digital age is changing all aspects of financing. Internal auditors need to be tech savvy to provide the level of assurance that audit committees are, or should be, asking for. Are you ready?

Take a little time with us to think about the risks relevant to your organisation, questions for internal audit and where the trends are taking this new sub-sector. All organisations are either customers of or part of the financial services sector so this should be of interest to all audit leaders.

The importance of fintech

Fintech or financial technology is the generic term for computer programs and other technology used to support or enable banking and financial services. We focus on third-party fintech within this article, recognising that in-house developments will be within the control and governance of the organisation.

It has changed the way the money game is played. People and organisations have welcomed disruption of the traditional approach, particularly wanting access 24/7 on a variety of devices. It is as much an opportunity as it is a threat to existing business models.

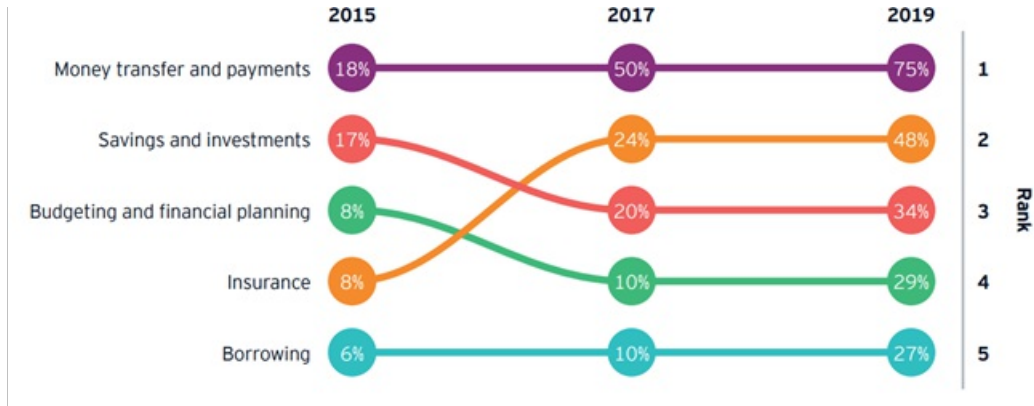
Prior to 2008, the financial sector was, for many, like a respected member's only club. The financial crisis eroded that respect and trust. In the years that followed, technology hit an exponential trajectory and a new generation of digital natives (people growing up with smartphones and tablets) entered the marketplace.

This combination of factors led to new companies challenging the establishment with new technologies like blockchain and artificial intelligence changing the way people and organisations interact financially; key areas being payments, insurance, planning, trading and investments, lending/crowdfunding, data analytics,

and security.

Like all technology, the innovation is fast paced.

Research by EY shows the adoption rate in the UK has grown from 14% in 2015 to 71% in 2019. Separate analysis details the growth of the main categories.



Source: Ernst & Young: Global Fintech Adoption Index

It is a young but maturing sector influencing the future economy. In 2018 investment in the sector slowed down according to a KPMG **report** although total investment of £18bn was almost quadruple the previous year due to the acquisition of Worldpay by Vantiv at just over £10bn. Globally the sector hit \$111bn double the value of 2017.

Risk landscape

Fintech used to be considered a **disrupter**. It still is but it is also a credible competitor to traditional ways of operating. We look at three key risk areas.

Velocity

Fintech is fast to market. Conception to capability can be a short journey.

Development of technology is unregulated and capitalises on the advancement of digital capabilities, particularly artificial intelligence.

New technologies may not be fully tested. Controls may not be robust. Technology start-up companies may be newly formed with limited governance. Technology may become obsolete very quickly. Partnerships may be unstable or short-lived.

Complexity

Fintech has to integrate with or replace legacy systems. All auditors know the challenges that any system interdependencies can create. Software as a Service, known as SaaS, is a common way to leverage cloud technology and limit the disruption.

Organisations need to ask themselves what problem they are solving before creating new ones.

Fintech is heavily reliant on **algorithms** and artificial intelligence. While the world waits for technology

regulations to play catch up, internal auditors have a duty to provide assurance and protect their organisations. In relation to algorithmic trading the Prudential Regulation Authority has addressed requirements in Supervisory Statement 5/18.

There will undoubtedly be data sharing with a fintech so auditors should ensure all regulatory and operational risks are identified and addressed including GDPR. Reputations are easily damaged.

Regulatory

Fintech companies are very much part of the financial services sector but not regulated by it. Their products however must be capable of compliance within their field of use.

A regulated firm must ensure any product provided by a third-party is compliant with all regulations including those specific to financial service products such as investment, payments services or money regulations.

Compliance with anti-money laundering regulations is a particular concern with unregulated monetary transactions.

There is much speculation by experts in the industry as to the sustainability of this and the inequality it creates between banks developing their own programmes and the entrepreneurial sector.

London has been the Fintech capital of the world (pre-Brexit at least). The Financial Conduct Authority has supported this by opening a sandbox to work on new innovations adding a degree of legitimacy for customers. The FCA is also supporting the development of a Global Financial Innovation Network.

Internal audit activities

Fintech is complex for internal auditors as it is much more than a technology audit. It combines many challenging areas where assurance is required such as rapidly deployed innovations, third party partnerships and technology dependency.

Audit approach

Internal audit must be adaptable. As with any change management, it is essential that internal audit is part of the journey. An agile audit approach is designed to enable assurance to be provided in fluid environments.

As part of this, auditors should adopt a learning mindset, evaluating controls while in the design phase, understanding that the organisation may make mistakes and focusing on solutions. Engaging with new technologies and change will ensure that there is robust assurance in relation to regulatory compliance alongside areas of innovation where more risk can be taken.

Audit leaders should consider their own strategy as it can influence how readily its assurance is accepted in an emerging area. It is important to ensure that internal audit exploits technology itself, particularly for data analytics as well as staying up to date with new developments. Auditors themselves must have sufficient skills to not only provide assurance but have gravitas when engaging with fintech stakeholders.

Assurance mapping

Internal auditors know the value an assurance map gives to the audit committee. In addition to a table that shows the assurance provided by various functions, it may be useful to create an assurance framework that

focuses on fintech and other critical technologies.

As value chains evolve or where responsibilities are shared with third-parties audit leaders may find it useful to keep track of the assurance and governance over critical systems.

Due diligence

Fintech is a compelling proposition, driving down costs and offering new opportunities. It is also a highly competitive environment and selecting the right suppliers/partners is critical for an organisation.

Internal audit may find it useful to engage with the due diligence aspect of fintech in an advisory capacity. Questions to prompt discussion are included in the thought box. In particular, audit leaders should consider how its use fits with the organisations risk appetite.

Using fintech

The use of fintech heightens all the traditional **third-party risks** that internal audit provides assurance against such as governance arrangements, data security, fraud, vendor management, continuity and knowledge dependency.

Audit leaders may need to increase focus on basic risk management awareness at all levels of the organisation in the impacted areas to maintain effective safeguards.

Future trends

There are potentially big changes on the horizon for fintech and society.

Cybersecurity will only increase in importance as the digital age develops. Organisations must invest and maintain robust controls to protect data and operational capabilities.

Fintech thrives in a culture of openness and collaboration, not traditional qualities within the highly regulated and competitive finance sector. Organisations will need to embrace this, a cultural shift, to capitalise on disruptive technologies or risk being observers and potentially obsolete.

A combination of developments in artificial intelligence (AI) and quantum computing will see a seismic shift in system capabilities. This may introduce real-time interventions in the regulatory sector through identification and predictive programmes relating to fraud and compliance. Regulation and potentially law will also need to recognise the role of AI.

The entry of big tech firms into fintech may lead to decentralised finance (cryptocurrency) becoming mainstream. In July 2019, the United States House of Representatives Committee on Financial Services requested Facebook and its partners to stop the development of their stablecoin stating *“this raises serious privacy, trading, national security, and monetary policy concerns for not only Facebook’s over 2 billion users, but also for investors, consumers, and the broader global economy”*.

Commentators acknowledge that the current payment system is outdated. It would appear the battle between the established financial infrastructure and the tech firms has begun.

Audit leaders thought box

Use the questions in the box to start thinking outside of it...

Organisational questions	Due diligence questions
<ul style="list-style-type: none"> • Does your organisation have a strategy for fintech and other emerging technologies? • How extensive is the use of fintech in your organisation? • Why is fintech used/not used by different departments? • Which operations are dependent on fintech? • What fintech developments are being planned? • Could your organisation be doing more? • Does your organisation understand fintech governance? What is its risk appetite? • Is it discussed at the audit/risk committee? • Do decision makers understand the risks that come with cutting edge technologies and working with start-ups? • How robust is fintech risk management in your organisation? • What role should internal audit take? Is it at a strategic level, design and implementation or pure assurance? 	<ul style="list-style-type: none"> • Is there a cultural fit with the third party? If not, what challenges should we be alert to? Fintech companies are often dynamic and informal compared to the large organisations. • How will the tech company keep us at the fore of new developments? Fintech can be quickly obsolete. Will the third party be able to take advantage of market opportunities and new breakthroughs? • How will the fintech provider identify, diagnose and fix incidents before they impact our organisation? Large organisations may need to support continuity efforts to capitalise on niche technology lacking robust infrastructure. • Is our cybersecurity programme robust enough to cope with fintech risks? • Do we have a shared view of the most important metrics? Start-up companies may be focused on sales and new business rather than system availability and data management. • Can we tolerate this level of risk to take advantage of the opportunity; are there greater risks if we don't do this?

Closing thoughts

This is the digital age. Fintech is a game changer and the UK is a leading player. It has created a new risk landscape for financial service firms and their customers which all audit leaders must be alert to.

The game has changed – have you?

"Disruptive innovation can hurt, if you're not the one doing the disrupting"

Clay Christensen, consultant and academic

Further reading

Financial services technology 2020 and beyond, PwC

The future of fintech, EY

Fintech predictions, KPMG