

# Crossing the lines:

How fintech is propelling FS and TMT firms  
out of their lanes

Global Fintech Report 2019



## **This is our third survey charting the rapid evolution of fintech.**

Our 2016 Global Fintech Survey, [Blurred lines: How fintech is shaping financial services](#), revealed established financial services (FS) organisations' concerns about the threat to their market position as fintech set new benchmarks for agility, customer insight and cost.

Our follow-up in 2017, [Redrawing the lines: Fintech's growing influence on financial services](#), highlighted the shift towards collaboration as startups realised they didn't have the scale or customer trust to compete with long-established FS organisations head-on, while FS looked to fintech partnerships to help strengthen operational efficiency and boost innovation.

# Contents

- 3 Introduction**
- 4 Key findings and insights**
- 5 The current landscape**
- 10 What will determine winners and losers**
- 15 How to position your firm for success**
- 23 Conclusion**
- 24 Methodology**
- 27 PwC technology tools**
- 28 Contacts**



# Introduction

It used to be that financial services (FS) companies and technology, media and telecommunications (TMT) companies travelled side by side, sometimes on the same roads but not usually in each other's lanes. But now, the lines between FS and TMT firms have blurred to the point that the roads are a free-for-all and previously distinct sectors are colliding. Many TMT companies are applying for FS licences, and FS organisations have begun calling themselves technology companies.

Fintech, or financial technology, is at the epicentre of this transformation. The FS and TMT industries are both using it to sharpen operational efficiency, lower costs, improve customer experience and heighten the appeal of their products and services. They're also carving out new commercial possibilities. Digital-only banks are offering redesigned client propositions and cost profiles. Investment managers are deploying fully customised robo-advice. Insurers are using sensors to monitor people's health and help prevent illness. And according to a recent [PwC survey](#), consumers are ready for the digital shake-up. The question is no longer whether fintech will transform FS, but which firms will apply it best and emerge as leaders.

In this year's Global Fintech Survey, we polled more than 500 FS and TMT executives worldwide and analysed their responses. We think the winning companies will be those that not only embrace fintech-driven business models but figure out how to navigate wider and more crowded lanes with approaches that make the most of FS and TMT's combined strengths.

This report explores the current fintech landscape, the factors that will determine the likely winners and losers in coming years, and the steps that organisations can take to put themselves in the best position to lead.

## What is fintech?

Fintech is a combination of technology and financial services that's transforming the way financial businesses operate, collaborate, and transact with their customers, their regulators, and others in the industry. All types of companies, from startups to tech companies to established firms, are using fintech.

In recent years, many variations of fintech have emerged that draw on cutting-edge technologies specifically tailored for certain sectors or functions within the FS ecosystem, such as regtech and insurtech.



# Key findings and insights



## Adopting a fintech-centred strategy is paramount

PwC's survey found that 47% of TMT and 48% of FS organisations have embedded fintech fully into their strategic operating model. Also, 44% of TMT and 37% of FS organisations have incorporated emerging technologies into the products and services they sell.

Executives who've already fully engaged with fintech are more likely than those who haven't to be very confident about their future revenue growth and ability to outstrip the competition. Many firms, though, are still stuck in the development and pilot stages, and therefore haven't seen a return on investment. In our view, those firms are at risk of being one step — or more — behind the market.



## FS should look to TMT for ideas about how best to use fintech

The FS executives we surveyed think that using fintech to improve the ease and speed of their service will be key to retaining customers. But we think people expect ease and speed, so firms that focus their fintech efforts on these attributes might only meet customers' expectations and not differentiate themselves, especially when competing with digitally intuitive TMT businesses.

TMT leaders see personalisation as the key to keeping customers. In a marketplace that's moving rapidly towards mass customisation, we expect that using fintech in this way is more likely to create differentiation, so it would be good for FS firms to adopt a TMT approach in this case. In fact, FS companies that don't will get left behind.



## FS and TMT should look to each other and retrain to fill skills gaps

Our survey showed that 80% of TMT and 75% of FS organisations are creating jobs related to fintech. Yet 42% of both TMT and FS organisations are struggling to fill these roles. While 73% of FS organisations are hiring from the technology sector, only 52% of TMT firms are looking to recruit from FS. It's our position that [finding ways to attract people](#) from TMT to FS, and vice versa, will be important to future success because each sector needs the other's expertise. Upskilling will also be important, as will the right mergers, acquisitions and joint ventures.



## Firms should push cross-sector fusion further

Among organisations that are planning to pursue an acquisition, strategic alliance or joint venture to drive growth via fintech, 78% of TMT and 76% of FS firms are targeting businesses within their own sectors. Fewer than half (44% of TMT and 47% of FS organisations) are targeting a company specialising in fintech.

At a time when FS firms are striving to sharpen their technology capabilities and TMT needs product and regulatory expertise to compete in the FS market, we think firms will miss opportunities if they don't pursue more cross-sector fusion.



# The current landscape

Emerging technologies have given companies a low-cost way to create convenient, personalised, data-intuitive products and services. Fintech has also lowered the barriers to entry for firms — from established FS groups to startups to TMT entrants — and has therefore created a complex web of cooperative competition, or ‘coopetition,’ and collision.

## The technologies executives think will drive change

PwC’s survey shows that FS and TMT executives have different ideas about what type of fintech will drive change, but they have similar struggles in executing their digital transformation strategies. More than half of FS leaders believe artificial intelligence (AI) will create the biggest change in how financial services are delivered over the next two years. A prominent example of this technology is robo-advice. TMT executives think the Internet of Things (IoT) will be the game changer. An example would be sensors used in pay-as-you-drive insurance (see Exhibit 1).

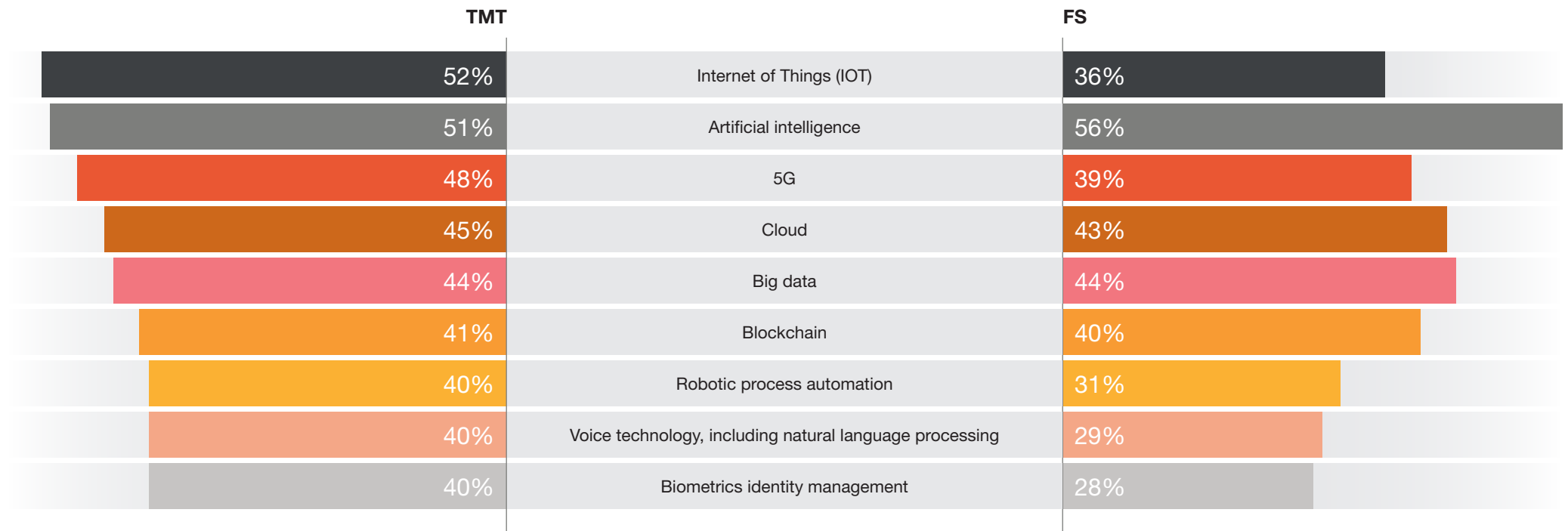
In an era of increased focus on data, hyper-personalisation and ‘always-on’ connectivity, it’s unsurprising that AI and IoT top the list. But our survey highlights recurring challenges and concerns in implementing these technologies, including long delays in developing market-ready products and services, and difficulties managing regulation, safeguarding data and earning customers’ trust. In asset and wealth management (AWM), for instance, robo-advice and automated exchange-traded funds pose a significant challenge to traditional delivery models.

Only 30% of insurers in our survey think IoT will be transformational, which is surprising given the potential for insurers to use it to make risk management more proactive and develop new business models in areas such as equipment and health monitoring and maintenance.



**Exhibit 1: Technologies leaders think will drive change**

In your opinion, which technologies are set to transform the way financial services are delivered within the next two years?



Base: All TMT respondents (260), Don't know (1%); all FS respondents (248), Don't know (0%)

Source: PwC Global Fintech Survey 2019





Customers need quick, convenient and personalised service. Fintech can help to offer such service.”

**Julien Courbe**

Global Financial Services Advisory Leader  
PwC US

### Who's ahead in leveraging fintech

Almost half of all firms in both FS and TMT have embedded fintech fully into their strategic operating model, and many have fintech-based products and services. In certain sectors, the numbers are even bigger. More than half of banking and capital markets (BCM) organisations have incorporated emerging technologies into commercial banking and personal loans, and an additional 20% plan to do so in the next two years. In AWM, asset managers are ahead of wealth managers on incorporating emerging technology (57% to 48%). But all of these percentages leave a significant proportion of companies that have no current plans (see Exhibit 2).

Chinese companies are among those out in front on embedding emerging tech. More than three-quarters of those surveyed have insurtech-supported products and services, and almost two-thirds offer robo-advice. In part, this is because Chinese [regulators are keen](#) to promote fintech-enabled innovation in order to improve competition and bring services to unbanked consumers. Businesses there also have been able to act quickly on emerging tech — such as facial recognition, which can facilitate customer identification and virtual banking — because they're not held back by legacy infrastructure.

#### Exhibit 2: Almost half of both TMT and FS firms have fully embedded fintech

To what extent is fintech part of your organisation's strategy?

##### TMT



##### FS



- No formal strategy
- We have an informal strategy that we have discussed internally but not documented
- We have a formal, documented fintech strategy, but it is not fully embedded across our strategic operating model
- Fintech is fully embedded across our strategic operating model

Organisations in **China** and **Brazil** are more likely to have fully embedded fintech across their strategic operating model (58% and 55%, respectively), compared with organisations in the **US** and **Germany** (37% and 36%, respectively)\*

**Multinational and large corporations** are more likely to have fully embedded fintech across their strategic operating model (53%), compared with middle-market or micro, small and medium-sized enterprises (39% and 34%, respectively)

Base: TMT (260), Don't know (0%); FS (248), Don't know (0%)

\*Caution: low number of responses

Source: PwC Global Fintech Survey 2019

## Where collision and fusion are happening

After years of tracking the competition and collaboration between FS and TMT firms, we are now seeing pockets of convergence. As far back as 2014, [Citigroup Chief Executive](#) Michael Corbat said, “In many ways, we see ourselves as a technology company with a banking licence.” Similarly, in 2017, Lloyd Blankfein, then chairman and CEO of Goldman Sachs, [declared](#), “We are a technology firm.” And insurance company Lemonade is replacing brokers and bureaucracy with bots and machine learning, promising as a result zero paperwork and instant everything.

Hugely successful TMT payment platforms such as Alipay and PayPal offer striking examples of collision and crossover. So does the dominance of businesses such as Alibaba and Tencent in consumer lending and retail investment, and the ability of telecom businesses in Africa to create a leading mobile-delivered financial infrastructure.

The [introduction of virtual banking licences](#) for digital businesses in Hong Kong could take convergence to a new level there, too. TMT companies are [cooperating with established FS groups](#) and other companies in applying for the licences and are set to roll out these operations soon. This could severely disrupt the traditional banking industry in Hong Kong, because digital banking is more efficient and less expensive. Australia offers similar restricted licences for its ‘neobanks,’ which also conduct all operations online. And other markets, including Singapore, have recently announced similar moves.

Europe, too, is seeing disruption as a result of challenger banks unencumbered by the legacy, complexity and cost structures of their longer-established counterparts. These challengers are harnessing fintech to sharpen customer service with offerings such as budgeting apps and no-fee currency exchange. They have yet to challenge the established groups in terms of market share, but they’re raising the bar for customer expectations and are operating at a fraction of the cost of their competitors.

US startups and TMT giants now have a firm foothold in less regulated segments, such as payments, but they’re in no rush to set up their own banks and other FS businesses, owing to concerns about licensing requirements, costs and compliance. Instead, they’ve keen to sell their services and innovation capabilities to established FS organisations.

Collision and fusion are complicated, though. It’s our position that in the near future, although we envision growing overlap between TMT and FS in certain areas, such as payments and regulation, TMT and FS firms will remain distinct in other areas.

## Where there isn’t fusion, there’s cooptation

Where fusion isn’t happening, we see cooptation, which is the collaboration that occurs when the interests of FS and TMT businesses diverge. [Open banking](#), which creates a digital shop window for the best products and services available in the marketplace, is perhaps the most significant manifestation of this trend. We also

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**In China, convergence is gathering pace. At the top of the market, we’ve even seen regulators seeking to match up the big four TMT firms with the big four banks and get them to work together — you could call it an arranged marriage. The TMT firm provides the tech enablement and the FS firm delivers the end product.”**

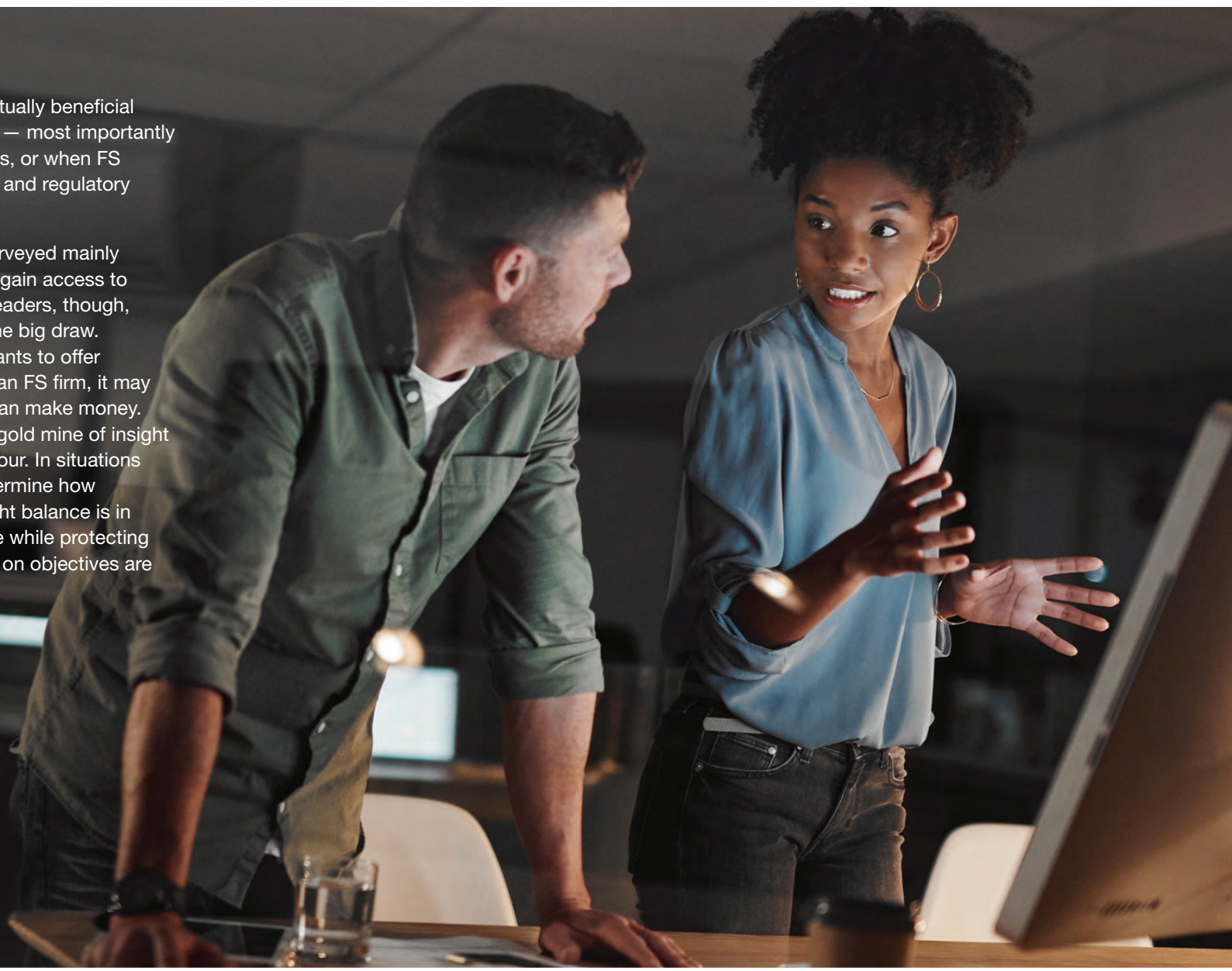
**Wilson Chow**

Global Technology, Media and Telecommunications Leader  
PwC China



see it when TMT companies share mutually beneficial technology, supporting employee and — most importantly — customer relationships with FS firms, or when FS organisations bring products, markets and regulatory expertise to the party for TMT.

For instance, the FS executives we surveyed mainly view fintech collaboration as a way to gain access to technology and innovation. For TMT leaders, though, access to customers' data could be the big draw. For example, if a telecom company wants to offer payment services using support from an FS firm, it may just want to add functionality rather than make money. The payments data could also offer a gold mine of insight into customer preferences and behaviour. In situations like this, FS organisations have to determine how open they want to be and what the right balance is in providing convenience and experience while protecting customer data. Clarity and agreement on objectives are therefore essential.



# What will determine winners and losers

Companies that have embraced fintech are reshaping the marketplace, and those that haven't are being left behind. In fact, three-quarters of the FS and TMT executives we surveyed said they're stepping up their fintech investment in the next two years. More than 90% are very or somewhat confident that fintech will deliver revenue growth over the next two years (see Exhibit 3).

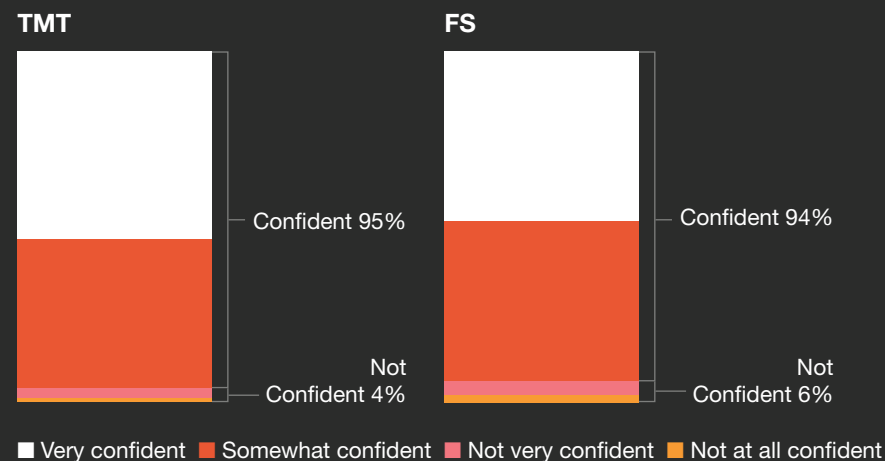
## Where companies can win

Customer relationships are one of the big prizes firms are chasing, so the ability to deliver a premium experience will probably help determine the winners and losers. But while FS organisations focus on applying fintech to improve ease and speed of service, which we view as table stakes, TMT firms are differentiating themselves with personalisation and a superior experience by embedding FS activity directly into the service they provide (see Exhibit 4). AWM organisations, too, are focussing more on personalisation than BCM companies and insurers.

Tellingly, more than 90% of both FS and TMT executives believe TMT has led the way in setting new standards for customer expectations by offering more convenient products and services through the customer life cycle. However, many only 'somewhat' rather than 'strongly' agree with this statement, and some FS organisations are harnessing fintech to catch up fast.

### Exhibit 3: Consensus that fintech will drive growth

How confident are you that fintech will support your organisation to deliver revenue growth over the next two years?



Organisations in **Brazil** are more likely to be very confident (73%) that fintech will deliver revenue growth over the next two years, compared with organisations in the **US** and **UK** (47% and 41%, respectively)

**Organisations with an embedded fintech strategy** are more likely to be very confident that fintech will deliver revenue growth over the next two years, compared with those that have a formal strategy that isn't fully embedded (60% vs. 43%)

**Multinational and large corporations** are more likely to be very confident that fintech will deliver revenue growth (60%), compared with middle-market or micro, small and medium-sized enterprises (38% and 20%, respectively)

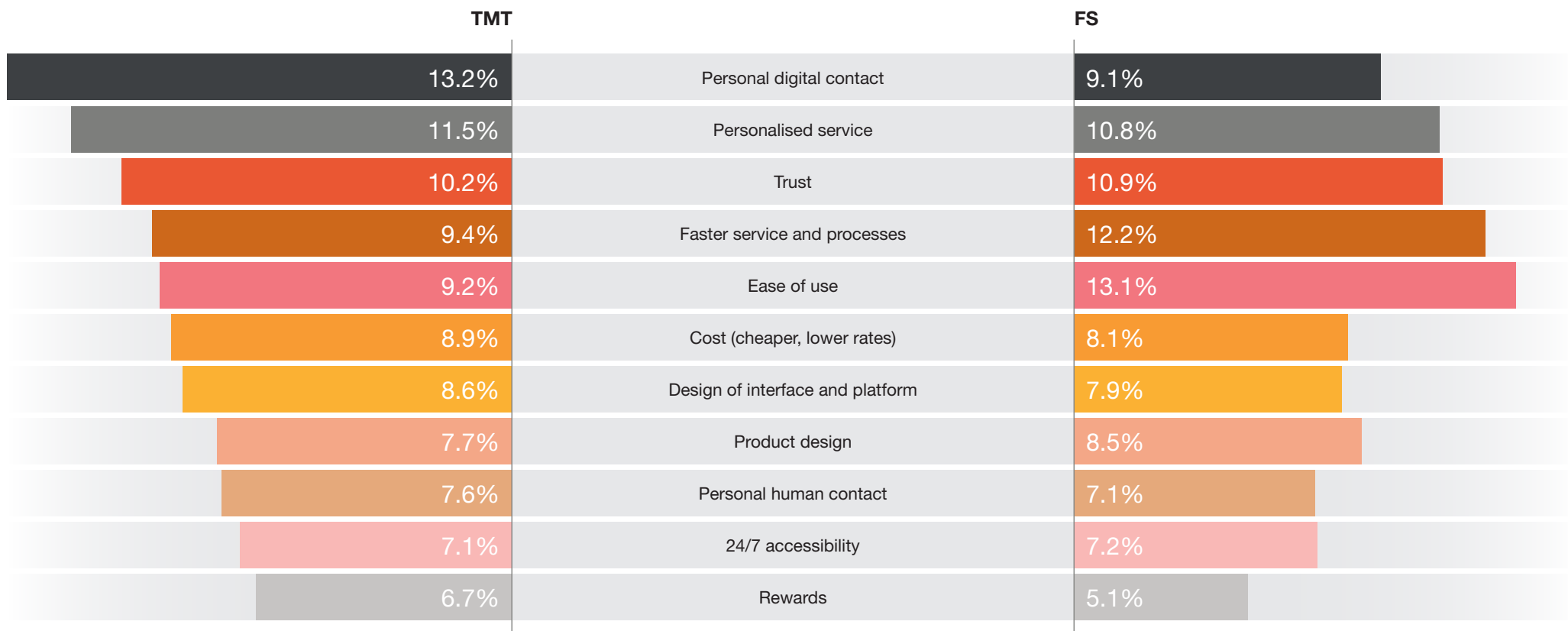
Base: TMT (260), Don't know (1%); FS (248), Don't know (1%)

Source: PwC Global Fintech Survey 2019



**Exhibit 4: TMT and FS firms differ on how best to use fintech to retain customers**

What do you think are the most important areas for customer retention in the context of emerging technology (e.g., artificial intelligence, robotics, Internet of Things)?



Base: All TMT respondents (260); all FS respondents (248). Ranked based on index analysis; excludes “don’t know” and “other” responses

Source: PwC Global Fintech Survey 2019

Trust will be another battleground in customer retention. Both the TMT and FS executives surveyed cited trust as important for customer retention. This is where FS has a clear edge. Despite some erosion of faith in FS over recent years, people still trust banks with their savings, AWM businesses with their investments and insurers with protection against loss. And building up that trust takes time, which is one of the reasons we're seeing TMT become interested in acquiring and partnering with established FS businesses. However, FS organisations shouldn't be complacent, because young people don't have the same level of trust as previous generations and their loyalty can't be taken for granted.

TMT has an advantage in its lead in deploying digital and mobile technologies and the improved connectivity that comes with them. Areas where these technologies could boost operational capabilities, especially when deployed in conjunction with AI, include facial recognition, real-time data capture and high-definition video conferencing. FS also could use these technologies to broaden the quality and reach of virtual services and pave the way for an increasing range of smart contracts that could be exchanged and executed on smartphones. There also are opportunities to speed up and improve the security of know your customer (KYC) verification.

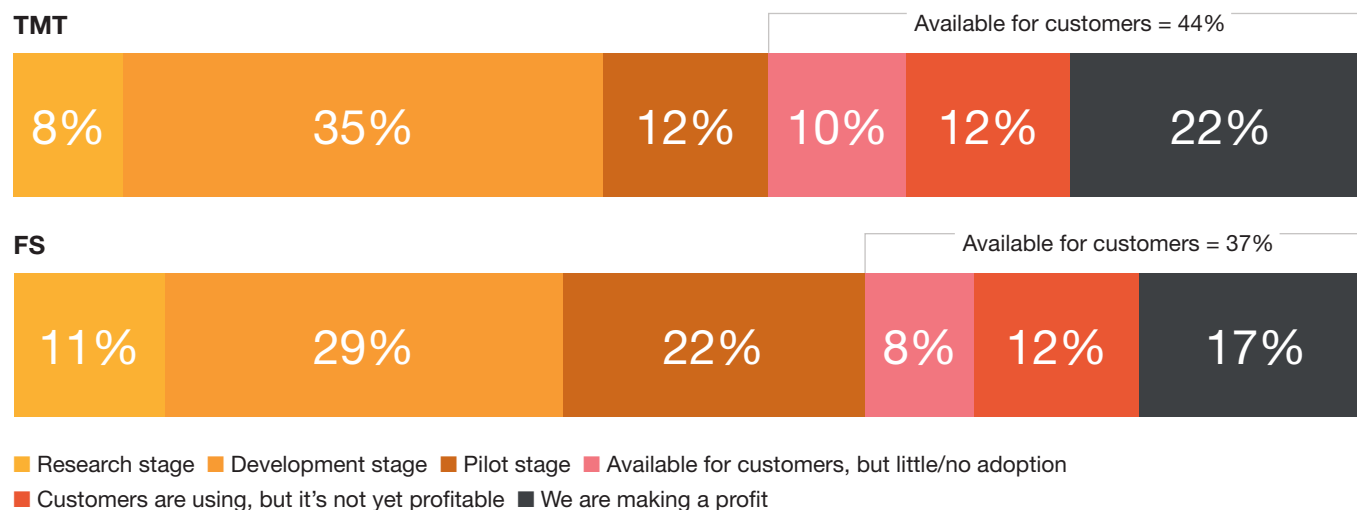
Given the enormous flow and volume of data in the cloud, tech companies that currently provide these platforms to process and store this data efficiently could also have an advantage and provide value-added services to other firms, such as data analytics and AI applications.

When we asked executives about the extent to which their companies have incorporated emerging technologies into their products and services, further gaps between leaders and laggards became evident (see Exhibit 5).

**Exhibit 5: FS organisations are slightly behind TMT firms in moving products to market**

**TMT respondents:** Thinking about your fintech products/services that are at the most mature stage, where would you place your organisation on the scale below in relation to the implementation of fintech products/services?

**FS respondents:** Thinking about how you are incorporating emerging technology (e.g., AI, blockchain, robotics, fourth industrial revolution) into your existing products or developing new fintech products/services, where would you place your organisation on the scale below in relation to the implementation of these products/services? Please focus on the products/services that are at the most mature stage.



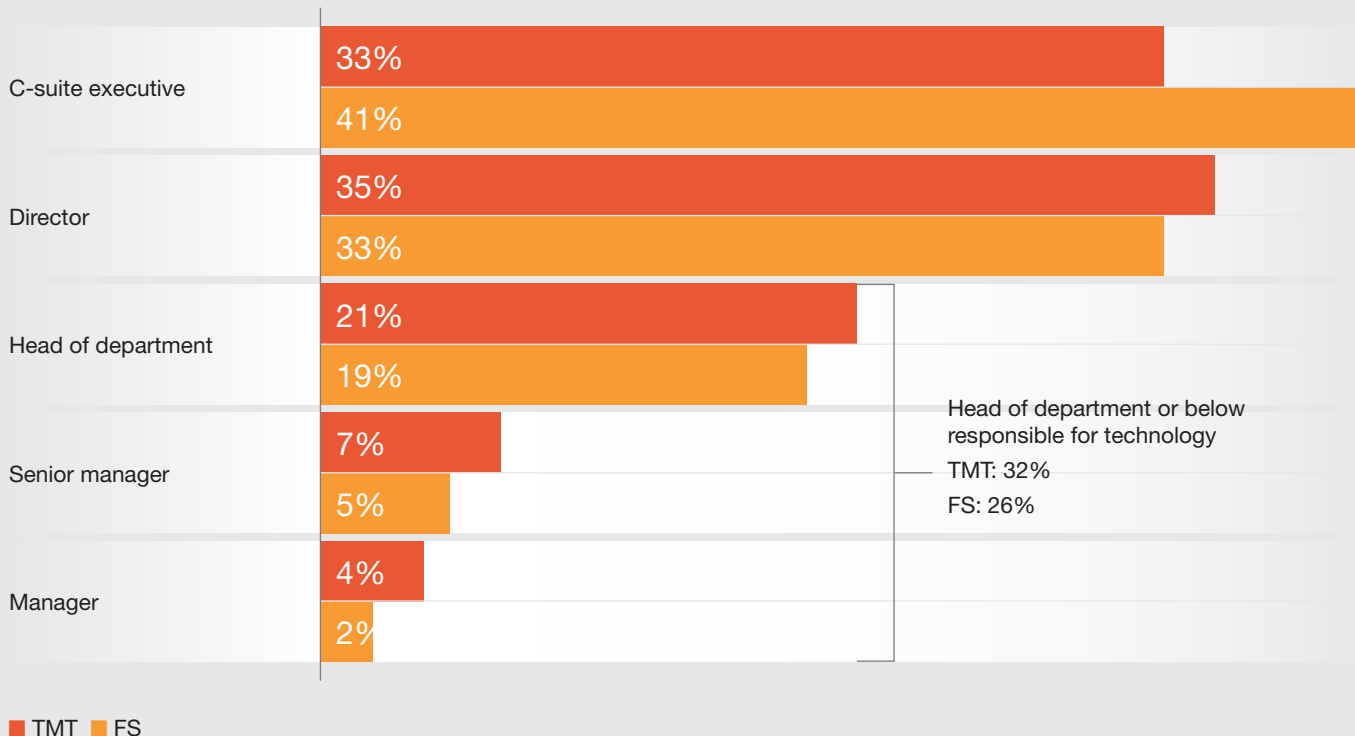
44% of TMT organisations have fintech-based products or services available to their customers, compared to 37% of FS organisations. However, more than a fifth (22%) of FS organisations have products or services in the pilot stage.

Base: TMT (260), Don't know (0%); FS (248), Don't know (1%)  
 Source: PwC Global Fintech Survey 2019



**Exhibit 6: C-suite executives not leading fintech efforts at many firms**

Which of the following best describes the most senior person in your organisation who is responsible for digital/innovation/technology?



Organisations in **China** are more likely to have a C-suite executive responsible (50%), compared with organisations in the **UK** (32%) and **Brazil** (25%)

**Multinational and large corporations** are more likely to have a C-suite executive responsible (42%), compared with middle-market companies (29%)

Companies with revenues of **US\$5bn-plus** are significantly more likely to have a C-suite executive responsible (44%), compared with companies with revenues of less than **US\$1bn** (31%)

Base: TMT (260); FS (248)  
Source: PwC Global Fintech Survey 2019

Perhaps another indicator of which firms are poised to lead the pack is whether or not they have C-suite executives championing their digital innovation efforts. Our survey revealed that only 33% of TMT and 41% of FS organisations do. In China, the proportion of C-suite-directed operations is significantly higher (53% for TMT and 46% for FS), and organisations there are more likely to be ‘very confident’ about their prospects for revenue growth (83% for TMT and 92% for FS) than the survey population as a whole (see Exhibit 6).

Given most firms’ slow speed-to-market, along with the fact that C-suite leaders aren’t directly responsible for driving the innovation agenda at many firms, it’s hard to see how more than 90% of our survey respondents can be confident about their prospects for revenue growth. But this could be why more than 40% are only ‘somewhat confident.’



**“The really big changes have to be top-down. They have to be strategic. They have to be something that leadership, the board, and the executives are closely involved in and have decided the organisation needs to pursue.”**

**John Garvey**  
Global Financial Services Leader  
PwC US

## Where companies could lose

Where do survey respondents see the biggest threats? TMT executives think tech, social media and startup companies will be most disruptive in fintech over the next two years, primarily because of their innovative culture and tech capabilities. Big Tech’s move into cryptocurrency is an example of this. The potential threat

from established financial institutions isn’t on most TMT executives’ radar, despite the market reach, regulatory expertise and foundation of trust that they have.

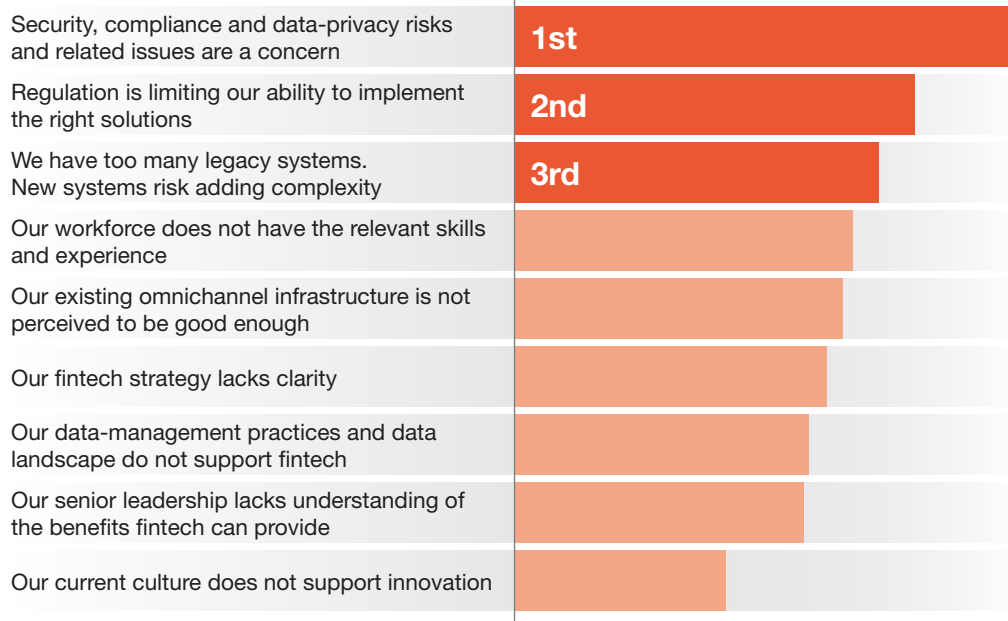
FS executives also are worried about the threat from tech and startup companies, and they are concerned about whether or not their senior leadership really understand fintech.

TMT and FS executives share concerns about data, regulation and legacy systems. There is worry, in particular, that regulation creates a barrier for emergent fintech (see Exhibit 7). These concerns highlight that execution is the key to strategy. Cybersecurity, for instance, has to be ingrained into the way people think about new business opportunities and capabilities. It can’t just be something that systems teams are going to fix.

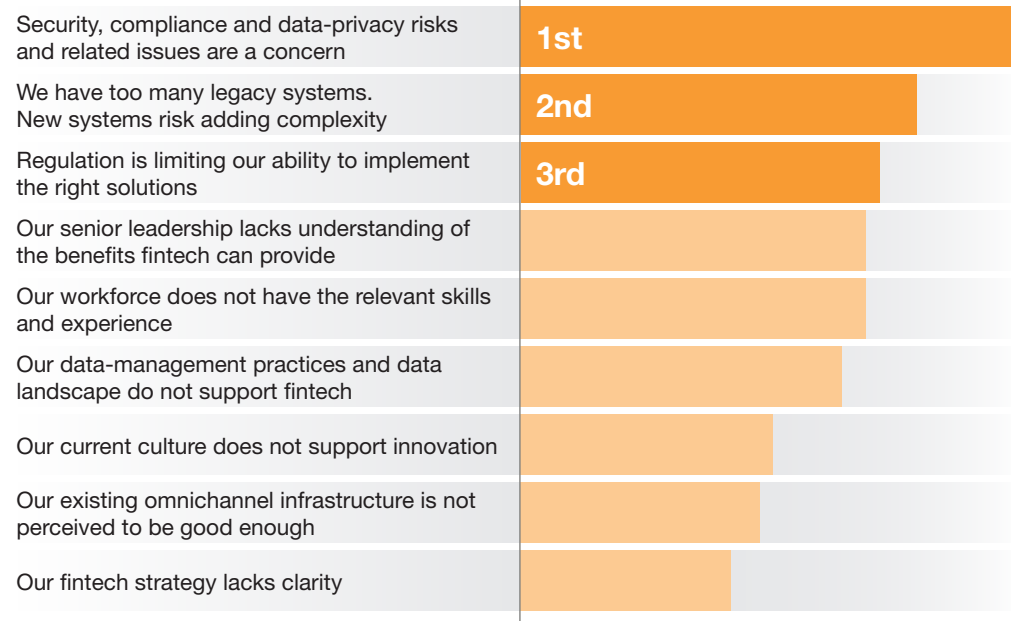
### Exhibit 7: Top challenges to fintech growth

What do you perceive as your organisation’s greatest challenges to implementing a fintech strategy? Please rank the top five, where one is the biggest challenge.

#### TMT



#### FS



Base: All respondents: TMT (260); FS (248). Ranked based on index analysis; excludes “don’t know” and “other” responses  
 Source: PwC Global Fintech Survey 2019



# How to position your firm for success

As gaps between leaders and laggards grow, FS and TMT businesses need to move quickly if they're going to capitalise on fintech's potential and avoid being marginalised.

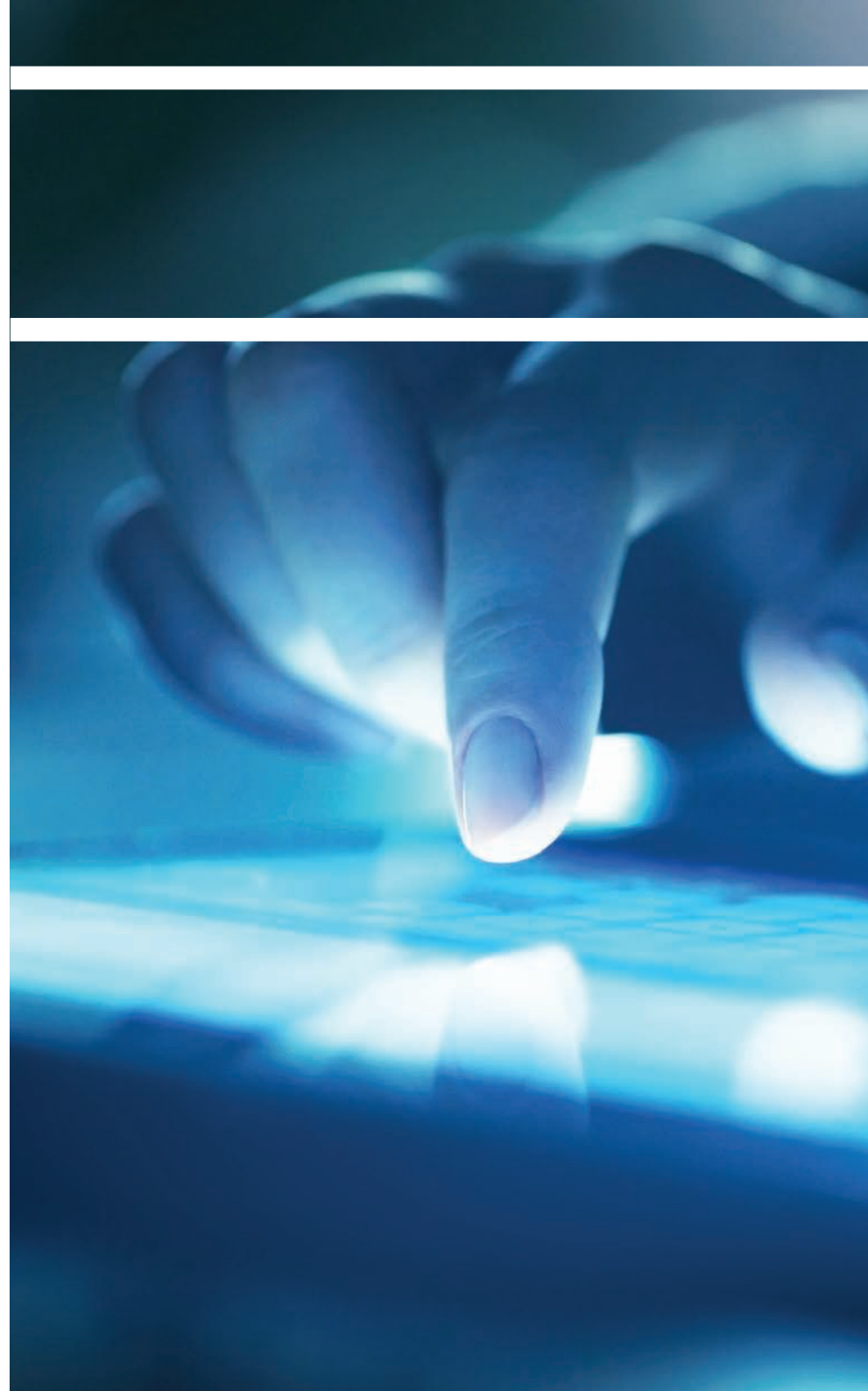
Recognising the different starting points and what is likely to be a triangular play among TMT, fintech and established FS companies, here's how firms can get up to speed across four key growth areas: digital, workforce transformation, deals and risk and regulation.

## Digital

**Priorities:** Digital advances have the potential to revolutionise capabilities and open up new markets. Robo-advice, for instance, highlights the evolving customer offer because it paves the way for customised investment solutions for mass-market consumers that used to be available only to high-net-worth clients.

Capitalising on these and other fintech-enabled commercial openings requires the ability to leverage technology in new, personalised and real-time offers. Success also demands a clear understanding of customer expectations. Customers need to trust the technology, think that it offers better value for their money than current products and services, and believe that the institution will use their data responsibly.

**Challenges:** Translating opportunity into successful execution is difficult. Most tech developments are still stuck in the lab. For example, despite executives citing AI as the technology that's most or second most likely to transform financial services (in FS and TMT, respectively), fewer than 40% of executives surveyed have moved AI projects beyond the pilot stage into implementation.

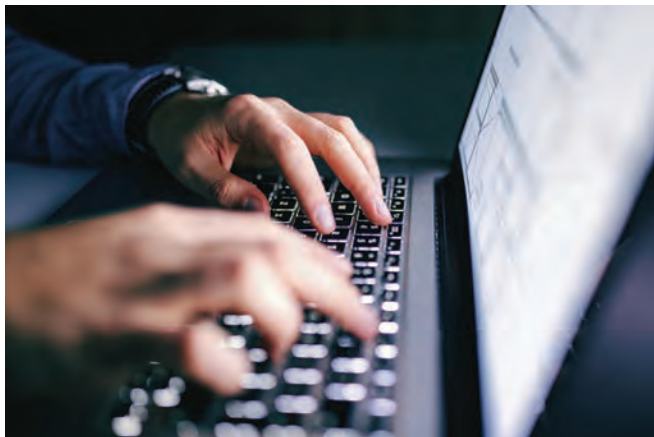


### Steps to take

**1. Personalise and customise:** Our survey suggests that FS businesses are at risk of losing out to TMT competitors that are better able to match experience and solutions to customers' individual needs and preferences. Sharp use of AI, IoT and big data is critical in creating the necessary customer insight and agility to meet demands. It's also a matter of culture; firms need to embrace data-driven decision making and move from product push to customer pull.

**2. Balance tech and a human touch:** Most consumers want the reassurance of some human oversight. They also want access to a human adviser for key decisions. If we look at robo-advice as an example once again, high-net-worth investors still get this human touch, but it's actually less affluent consumers who most need it and are firmly in regulators' sights. We're therefore seeing a growing shift towards hybrid human and robo-advice strategies, with even some of the pure-play robo-advisers now hiring human advisers.

Are FS and TMT businesses getting this all-important balance between human and machine right? As our survey confirms, this tends to be an area where TMT is strong, and that could give it an edge when moving into FS markets — 45% of TMT respondents strongly agree that they're getting the balance right. Within FS, 43% of AWM respondents strongly agree, compared with 36% in BCM and 31% in insurance. But the fact that personal human contact is near the bottom of the list of ways in which executives think fintech should be used to retain customers raises questions about the balance (see Exhibit 4 on page 11).



**Customers have widely different digital preferences. They can also be particular about wanting automation one day and requiring human assistance, or even doing it themselves (e.g., investing in a particular share), another day. That's why digital platforms need to be versatile and agile enough to cater to the largest population of users in a customised way."**

**Olwyn Alexander**

Global Asset and Wealth Management Leader  
PwC Ireland

**3. Make cybersecurity a business priority:** The fact that both TMT and FS organisations see security, compliance and data privacy risks as their greatest challenge in implementing a fintech strategy highlights the extent to which work needs to be done to bring cyber into the forefront of business planning, product innovation and go-to-market strategies, rather than just leaving it to IT. This is a trust rather than just a systems issue.

Fintech doesn't necessarily change the nature of the risks, but TMT organisations will come under greater scrutiny as they handle more of people's money and hold sensitive data in areas such as health insurance. Fintech also brings smaller and possibly less protected businesses into the operating ecosystem.

To be effective, a cybersecurity strategy needs full involvement and support from the C-suite and board. Senior leaders don't always fully understand cyber risks, whether explicit or implicit, but they should.

Constructing a tech firewall is just the first line of defence. The second is weaving strong cybersecurity controls into the entire risk management structure. It's important to prioritise data based on its sensitivity, quickly identifying and eliminating any vulnerabilities. Start by assuming that your users are already compromised. This will force you to build systems with privacy and protection in mind from the start.

Good cybersecurity hygiene includes a new organisation mind-set, the right incentives and consequences, a blend of experiential and digital training, and regular reviews of authentication and security controls. Regular cyber-intrusion drills can also improve resilience.





Fintech will have the biggest impact on people. Financial-services professionals are going to have a very different background, mind-set and skill sets.”

**Bhushan Sethi**  
Joint Global Leader  
People and Organisation  
PwC US



**4. Open up the black box:** The business leaders we surveyed said trust is critical to capitalising on the opportunities that emerging technology opens up. Building trust requires you to be transparent with customers about how technology is being used, the decisions it makes and the opportunities it brings — for example, how machine learning is used in credit scoring, how the systems were trained and how the process is controlled.

### Workforce transformation

**Priorities:** The workforce is as important as technology in staying relevant. People, not systems, drive innovation. As industry boundaries disappear, it's important to reach beyond traditional sources of recruitment when filling roles. For FS, this includes gaining access to agile, digital-ready employees within TMT and fintech organisations. Almost three-quarters of FS executives in our survey said they are looking to the technology industry to access engineering, data analytics and other key skills they need to develop and implement fintech.

Just as important as finding the right external employees is upskilling within your business. Organisations that pull ahead of the competition will be those that foster a fintech mind-set within their business, for instance by pushing for data-driven decision making.

Incorporation of fintech also presents an opportunity to take down siloes and facilitate the flow of data throughout the organisation. This is critical in today's data-enabled world.

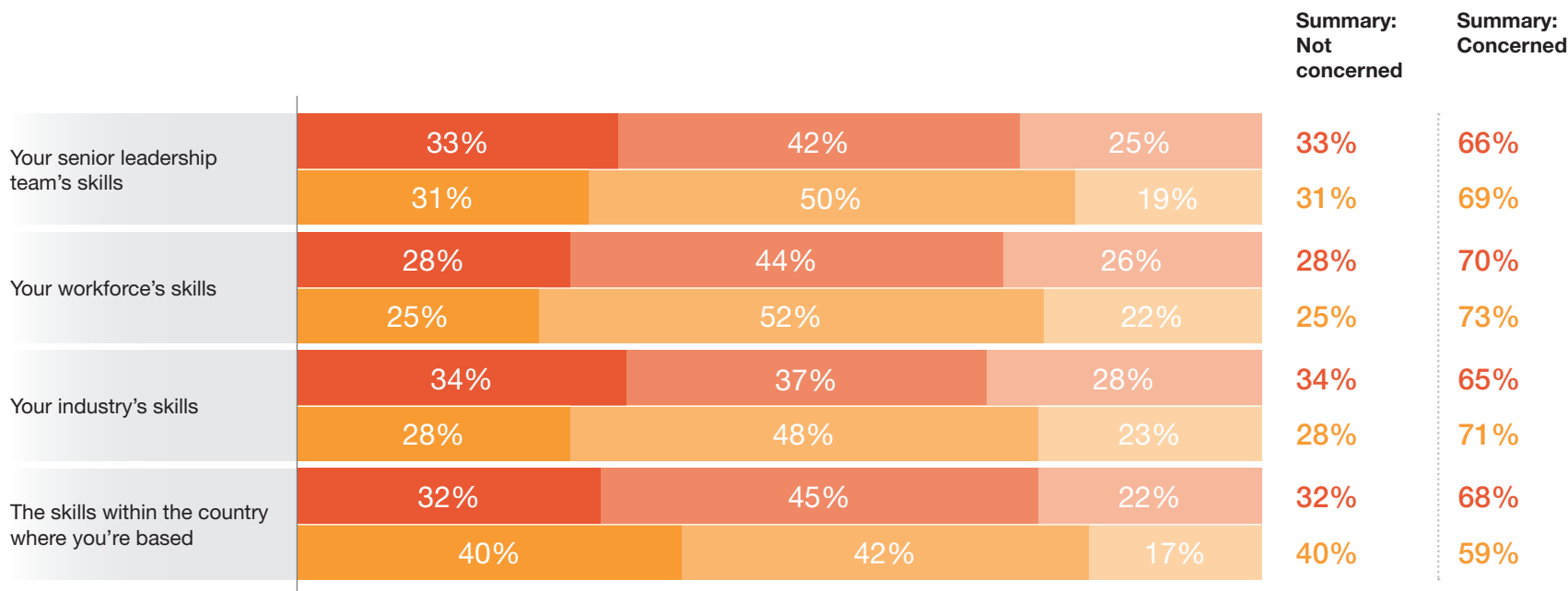
**Challenges:** Both FS and TMT organisations are concerned about skills shortages (see Exhibit 8). BCM executives are the most worried, though AWM and insurance executives are also anxious. This echoes the findings from PwC’s 22nd Annual [Global CEO Survey](#).

Ten years ago, only about 50% of FS leaders saw skills shortages as a threat to their growth prospects. Now, it’s nearly 80%. These shortages are not only creating mounting cost pressure by spurring more job switching and raising salaries for hard-to-fill roles. They also are

impairing FS organisations’ ability to innovate and meet customer expectations. And as industry disruption accelerates, the shortages could get even worse.

**Exhibit 8: TMT and FS share skills concerns**

Thinking specifically about the skills needed to develop/implement fintech, to what extent are you concerned about the availability of the appropriate skills among the following?



About two-thirds of **TMT** and **FS** organisations are concerned about the availability of fintech skills among their senior leadership team and also across their industry, with more than a quarter of **TMT** executives stating they’re “extremely concerned.”

**Brazil** (75%), **Japan** (85%), the **UK** (73%) and the **US** (79%) are more likely to be concerned about their workforce, compared with **China** (49%).

**TMT** ■ Not at all concerned ■ Somewhat concerned ■ Extremely concerned  
**FS** ■ Not at all concerned ■ Somewhat concerned ■ Extremely concerned

Base: TMT (260), Don’t know (0-1%); FS (248), Don’t know (0-2%)  
 Source: PwC Global Fintech Survey 2019



## Steps to take

**1. Manage the real impact of technology:** The impact of technology on the workforce is often misunderstood. Rather than whole divisions being automated out of existence, we're seeing parts of jobs being replaced and augmented. Think about which skills your workers really need, given the new shape of their day-to-day jobs.

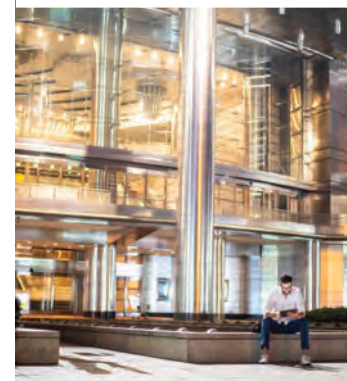
Technology could commoditise many aspects of FS delivery, so a rethinking of operating models is necessary, too, as organisations seek to identify and focus on areas that offer real differentiation and outsource or automate others. Remember when considering new operational models that many of the most important skills you'll need people to have are ones that can't be replicated by machines, such as creativity, engagement and emotional intelligence.

Also, anticipate and address inevitable resistance to, fear of and anxiety about technology and upskilling inside and outside your organisation — among your employees, service providers, counterparties, communities, etc. Consider their different needs and resist the 'one size fits all' approach to stakeholder engagement. Consider segmenting your various stakeholders and customers into different personas to understand and address differing needs and wants.

**2. Shift your workforce from analogue to digital:** As you modernise your workplace, it will be important for workers to learn how to use digital tools and make the most of the time technology frees up for them. The executives we surveyed expressed that fintech-enabled product development and growth can't happen without digital expertise and understanding. And a recent PwC report, [\*The productivity agenda: Moving beyond cost-cutting in financial services\*](#), finds that the biggest barrier to digitisation in FS organisations isn't technology, process or data, but people.

This is why it's critical that you find new, effective ways to boost the digital IQ of your workforce. You need to get your people comfortable with new and emerging technology and instil in them the skills, mind-set and behaviour of innovation. A digital workforce will be better able to boost productivity, realise returns on fintech investments, drive change and enhance customer experience.

**3. Focus on creating an attractive culture and people experience:** Reimagining your company culture, decision-making models, employee management practices and working environment are vital to attracting the workers you need (who are probably used to the pace and freedom of startups). You might have to make changes to existing programmes and policies related to recruitment, learning, performance management, rewards and employee well-being.



## Deals

**Priorities:** For FS, access to fintech talent, tech and innovative potential through collaboration or full acquisition could be especially important in improving the stickiness of customer relationships, especially when coming into direct competition with the digitally intuitive capabilities of TMT.

For fintech firms, joint venture or sale is an opportunity to apply their innovations on a much bigger scale and gain access to the openings created by an established brand.

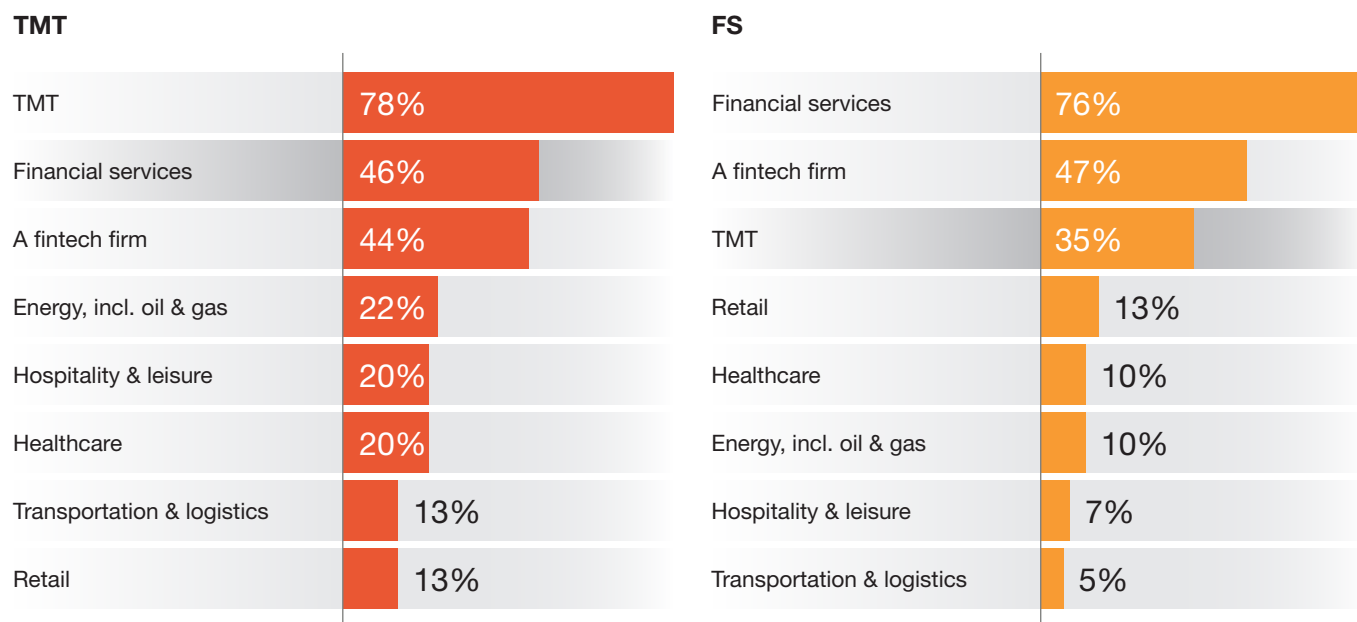
For TMT, the benefits of converging include access to customers, infrastructure, markets, operating licences and regulatory expertise.

The most significant development could be a megadeal initiated by a big tech group looking to compete with potentially slower and less innovative traditional businesses in FS markets that it sees as ripe for disruption. The opportunities include the ability to leverage customer relationships and digital touch points in areas such as ads and e-retail (see Exhibit 9).

**Challenges:** Many deals fall short of expectations or come up against competing priorities. When asked what the main challenges are in making these tie-ups work, FS executives put data security and data exchange at the top of the list. This reflects the sensitivity of the data that the industry works with, the tough regulation surrounding it, and concerns about looser controls in sectors that FS executives might buy into or partner with. TMT leaders are also worried about regulatory uncertainties.

### Exhibit 9: Most organisations are looking to collaborate with firms in their own sector

You mentioned on another question that you plan on creating a new strategic alliance or joint venture, or merging/ collaborating to drive growth in fintech. In what sector are the organisations that you plan on working with?



Only 35% of FS firms plan to collaborate with a TMT organisation, whereas 46% of TMT firms plan to collaborate with an FS organisation. TMT organisations that collaborate with FS firms tend to be multinationals and in China and Brazil  
**FS** organisations are instead more likely to collaborate with a fintech (47%), rather than a TMT company (35%)  
**TMT** firms are likely to collaborate with a wider range of sectors than FS firms (TMT average three sector vs FS average collaboration with two sectors)  
 Around 20% of **TMT** firms would consider collaborating with the energy, hospitality and healthcare industries, compared with around only 10% of FS organisations

Base: TMT (166), Don't know (0%), Other (1%); FS (135), Don't know (1%), Other (0%)  
 Source: PwC Global Fintech Survey 2019





### Steps to take

**1. Embrace a collaborative operating model:** FS organisations have traditionally tried to control value chains and own the customer interface. The business models and associated capabilities emerging from the fintech-driven model are completely challenging that notion. It's important to develop the relationship skills and strategic blueprint to succeed in increasingly convergent, or at least cooperative, commercial ecosystems.

**2. Plan and test a detailed operating model of the combined entity:** Companies need to be clear about what defines value in the deal — for example, profit maximisation or technological modernisation. It's also important to judge the potential benefits against what could be high acquisition multiples for fintech deals.

Cultural compatibility is a critical element of the deal assessment. Tech is a largely unregulated world where risks are taken (and not measured) and failure is accepted. In FS, firms exist to assess risk safely, and failure can have severe consequences. This potential culture clash can be a deal breaker; differences in management and culture are high on TMT and FS executives' list of challenges in making deals work. But this coming together of different cultures can also be the catalyst for the creation of a more dynamic enterprise in areas including fuelling innovation and attracting a broader selection of employees. Focussing more closely on this challenge in the early stages of the deal process can help bring people and cultures together. This includes acknowledging that differences can be a strength, rather than FS trying to change TMT or vice versa.

### Risk and regulation

**Priorities:** When asked about the impact of regulation, TMT executives said their biggest concern was how it would affect their ability to develop and capitalise on new business models. The clear priority, therefore, is meeting regulatory expectations while sustaining innovation, personalisation and customer appeal.

**Challenges:** For some TMT businesses, the highly regulated nature of FS means that converging will remain in the 'too difficult' pile. But TMT firms, too, are moving into regulators' sights because of tighter oversight of data. Even in the less regulated areas of the market that TMT firms have prioritised, such as payment, insurance aggregation and peer-to-peer lending, the survey highlights executives' growing wariness of regulatory pressure.

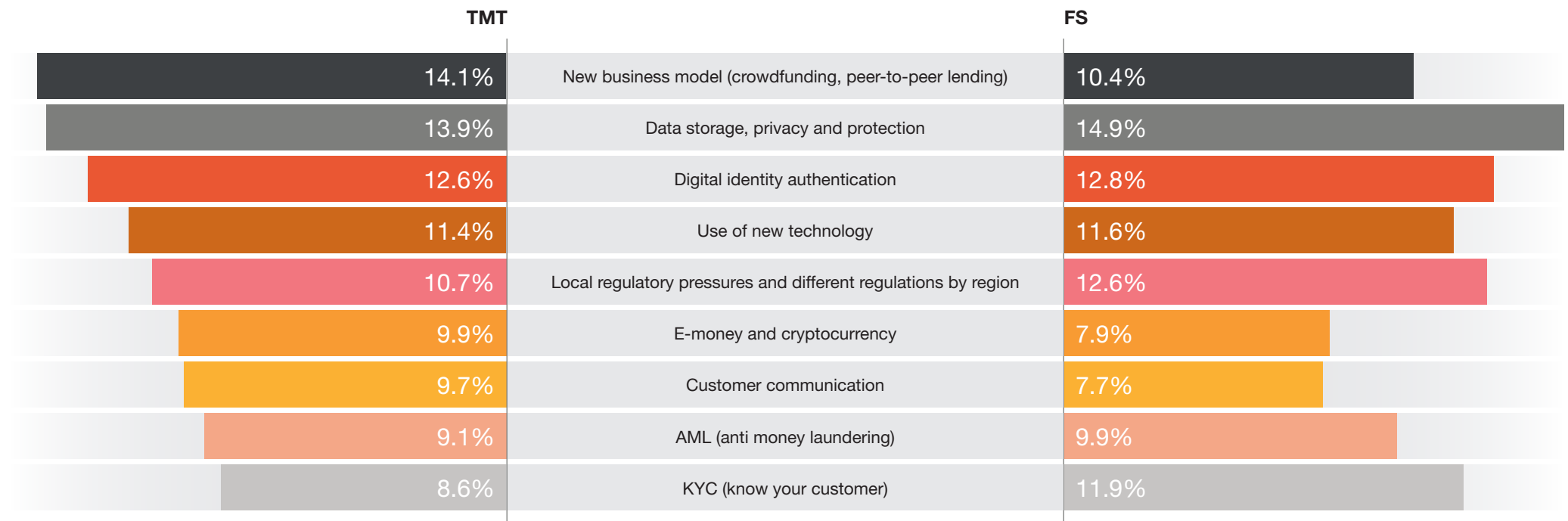
Four out of five TMT organisation leaders believe that high-profile fines are influencing their strategy and activities in fintech. Almost three-quarters of FS organisation leaders agree. More than three-quarters of both don't believe that regulators can keep up with developments in fintech (see Exhibit 10).

### Step to take

**1. Share expertise:** FS firms are well-versed in regulation and can provide valuable support for their less experienced partners. TMT firms have the resources to not only acquire the necessary FS regulatory expertise, but also move to a new era of fast and efficient regtech-enabled compliance.

**Exhibit 10: TMT and FS executives are worried about regulation**

Below is a list of areas that could potentially be impacted by regulation. Thinking about the impact on your organisation's growth prospects in fintech, which, if any, of the following areas is your organisation concerned about?

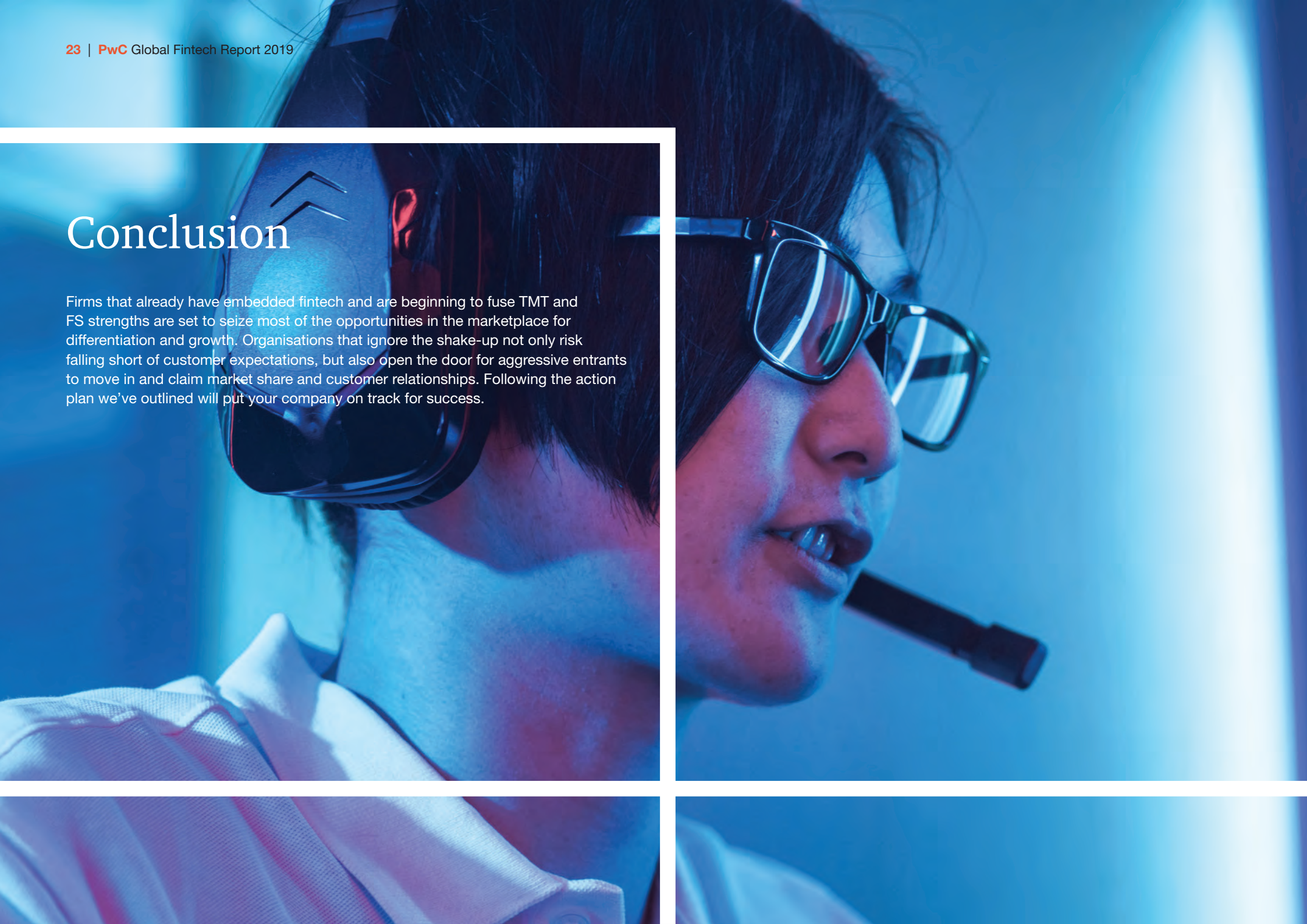


Base: TMT (260); FS (248)

Source: PwC Global Fintech Survey 2019

## Conclusion

Firms that already have embedded fintech and are beginning to fuse TMT and FS strengths are set to seize most of the opportunities in the marketplace for differentiation and growth. Organisations that ignore the shake-up not only risk falling short of customer expectations, but also open the door for aggressive entrants to move in and claim market share and customer relationships. Following the action plan we've outlined will put your company on track for success.





# Methodology

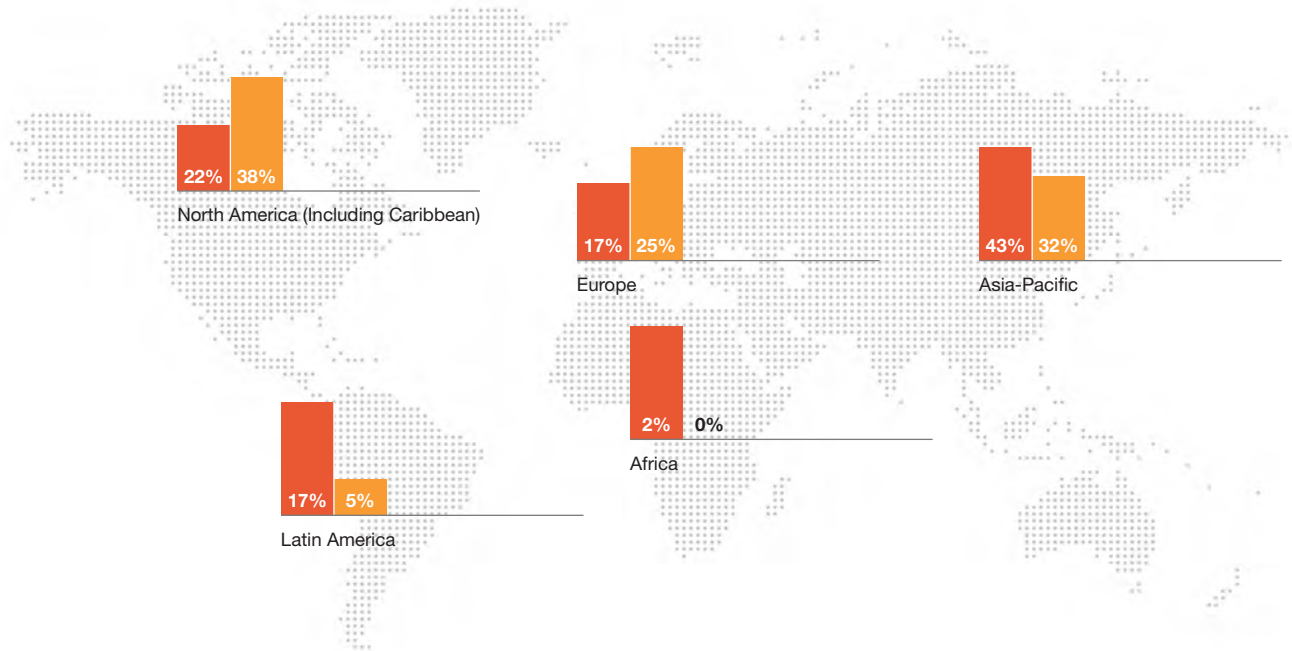
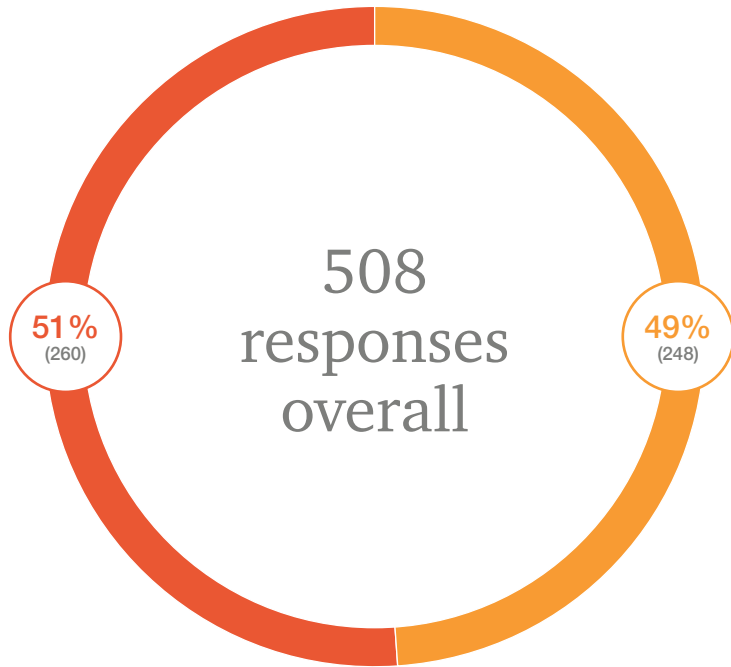


Exhibit 11: About the respondents

Even split across TMT and FS

Responses from 14 countries

■ TMT ■ FS



TMT – 260 responses (51%)

Technology 81%

Telecommunications 16%

Entertainment and Media 3%

FS – 248 responses (49%)

Banking & Capital Markets 53%

Insurance 22%

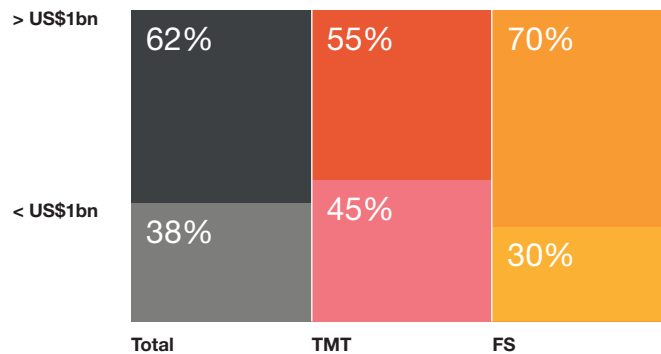
Asset Management 18%

Fintech 5%

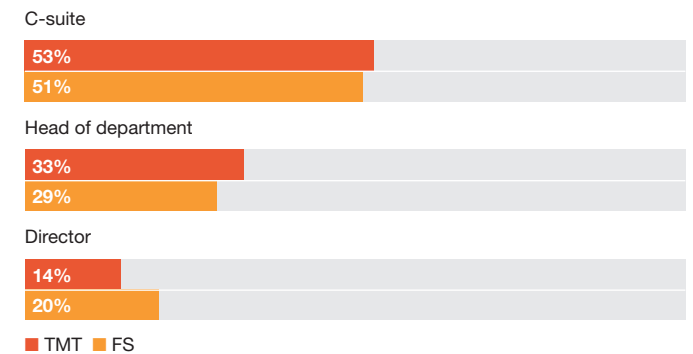
Payments 2%

Other 1%

More than 60% of responses from organisations with US\$1bn or more in revenues



More than half of responses from C-suite executives



**Exhibit 12: How we conducted our survey**





# PwC technology tools

Tool	Function
<b>Customer Insights Platform</b>	Acquiring and retaining customers requires 'in the moment' insights about whom to target, at what time and with what actions. PwC's Customer Insights platform can help you get the information you need, right away. Our suite of interconnected analytic modules operates over PwC's proprietary big data analytics infrastructure to deliver insights in real time using the latest data science techniques. Our innovative, user-centred designs make it easy to find the insights that matter most to you.
<b>Productivity Hub</b>	The Productivity Hub gives you a global-to-granular view of your entire project management environment. The tool provides comprehensive information on milestones, financials, risk, resource utilisation and quality of deliverables, using your own data from your existing systems. The information is available for desktop and mobile. And output from the tool is designed to be used in reports for you and your stakeholders. The tool is applicable for financial services, assurance and tax.
<b>Digital Fitness Assessment</b>	The Digital Fitness Assessment tool helps identify employees' digital strengths and weaknesses and transforms the way they learn, think, interact and solve problems.

# Contacts

## Financial Services

### John Garvey

Global Financial Services Leader  
Principal, PwC US  
+1-646-471-2422  
john.garvey@pwc.com

### Peter Burns

Global Banking and Capital Markets Leader  
Partner, PwC Australia  
+61-2-8266-4726  
peter.burns@pwc.com

### Olwyn Alexander

Global Asset and Wealth Management Leader  
Partner, PwC Ireland  
+353-0-1-792-8719  
olwyn.m.alexander@pwc.com

### Stephen O'Hearn

Global Insurance Leader  
Partner, PwC Germany  
+49-89-38-00-69-688  
stephen.t.ohearn@pwc.com

### Julien Courbe

Global Financial Services Advisory Leader  
Principal, PwC US  
+1-646-471-4771  
julien.courbe@pwc.com

### Isabelle Jenkins

UK Banking and Capital Markets Leader  
Partner, PwC UK  
+44-0-7711-773030  
isabelle.jenkins@pwc.com

### Rav Hayer

Partner, PwC UK  
+44-7841-468-296  
rav.hayer@pwc.com

### Harjeet Baura

Asia-Pacific Digital Banking Leader  
Partner, PwC Hong Kong  
+852-2289-2715  
harjeet.baura@hk.pwc.com

### Manoj Kashyap

US Fintech Assurance Leader  
Partner, PwC US  
+1-415-498-7460  
manoj.k.kashyap@us.pwc.com

### Aaron Schwartz

Director, PwC US  
+1-212-656-0850  
aaron.m.schwartz@pwc.com

### Henri Arslanian

Fintech and Crypto Leader, Asia  
Partner, PwC Hong Kong  
+852-2289-2490  
henri.arslanian@hk.pwc.com

### James Chang

Consulting Leader, Mainland China and Hong Kong  
Partner, PwC China  
+86-755-8261-8882  
james.chang@cn.pwc.com

## Technology, Media and Telecommunications

### Wilson Chow

Global Technology, Media and Telecommunications Leader  
Partner, PwC China  
+86-755-8261-8886  
wilson.wy.chow@cn.pwc.com

### Roger Wery

Global Advisory Technology, Media and Telecommunications Leader  
Principal, PwC US  
+1-415-498-6401  
roger.wery@pwc.com

### Romain Godard

Partner, PwC France  
+33-0156578640  
romain.godard@pwc.com

## [pwc.com/financialservices](https://www.pwc.com/financialservices)

PwC Research, PwC's global Centre of Excellence for market research and insight, conducted this global survey of business executives. For further information on the research, please contact Cliona O'Beirne ([cliona.a.obeirne@pwc.com](mailto:cliona.a.obeirne@pwc.com)), PwC Research.

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