

Financial Institutions Group

Banking Newsletter
Q3 2017



Welcome to the Q3 2017 edition of the Willis Towers Watson Financial Institutions Group* (FIG) Banking Quarterly newsletter.

In this issue, we feature the lead article from our 2017 report on the Future of Financial Services; it discusses the complex and changing interactions between people and technology. We also discuss the opportunities for banks from PSDII, the compensation trends in Fintech and consider what a good risk culture looks like.

Thank you for your continued feedback on our newsletters. Please contact me or your usual Willis Towers Watson representative if you'd like further information about how FIG can help you.

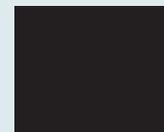


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*FIG is composed of ex-bankers, former regulators and insurance professionals. We connect experience across the Willis Towers Watson Group to support our clients with the resources they need to respond to changing regulatory pressures and uncertain economic and market conditions.

The future of work in financial institutions

Ravin Jesuthasan

Financial services disrupted

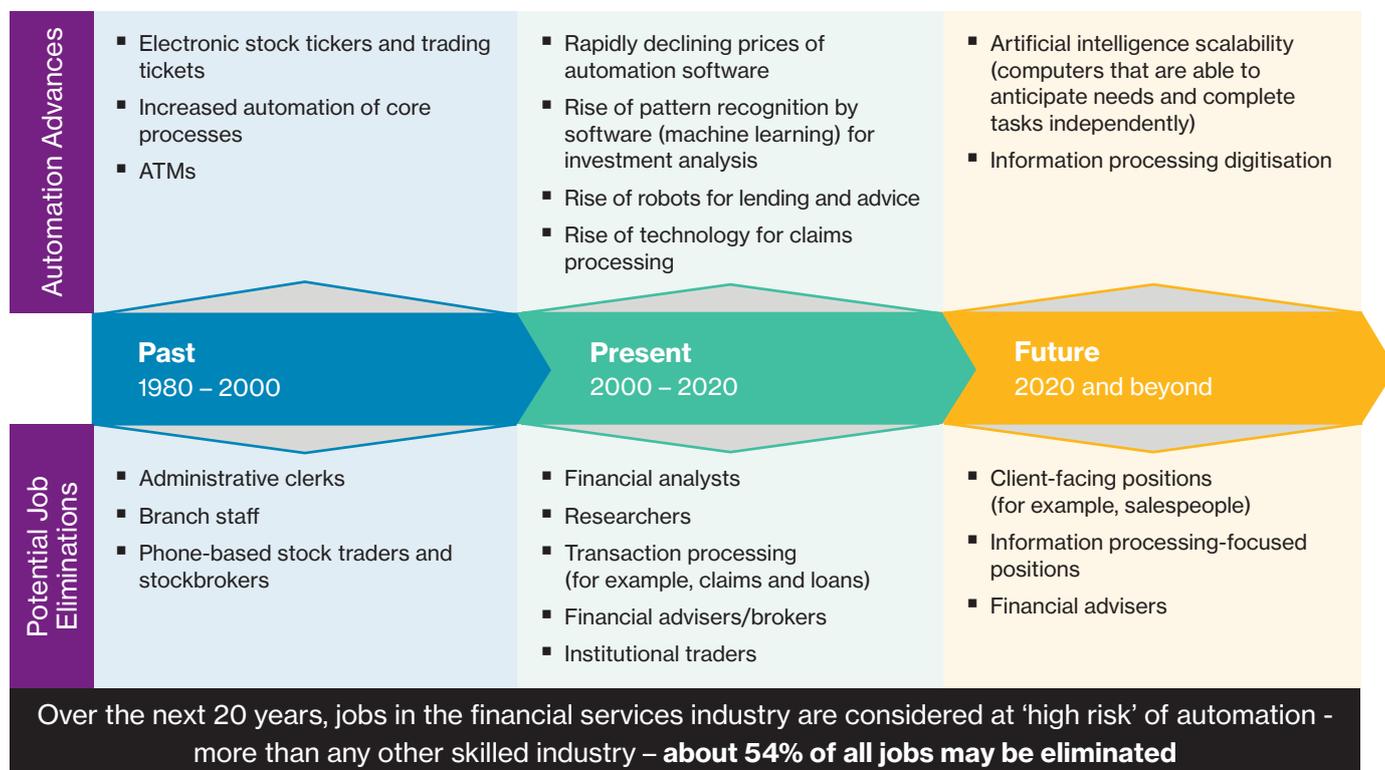
We're at the beginning of a fourth industrial revolution characterised by the fusion of technologies and the convergence of the physical, digital and biological spheres. Its effects are already being felt in financial services with the advent of robo-advisors in wealth management, online-only banks and peer-to-peer funding.

This technological disruption is also blurring lines across sectors and industries, a development that is especially relevant to financial services. The use of common technologies and platforms is bringing global industries closer together and changing the competitive landscape. The new players include fintech and insurtech companies as well as disruptors in other industries.

In Asia, for example, Tesla has partnered with established insurers to offer a vehicle package featuring customised auto insurance that accounts for its vehicles' autopilot safety features as well as maintenance costs. As it moves toward fully autonomous vehicles, Tesla is in a unique position to compete with P&C insurers in cases where traditional insurers are not willing to lower the risk premium.

At the same time, technological breakthroughs in areas ranging from artificial intelligence and robotics to blockchain technology and telematics are upending not only how financial institutions interact with customers and the products they offer but how work gets done. Because so much of the work in financial services involves information processing, it is especially susceptible to automation. Over the next 20 years, more jobs in the financial services industry are considered at 'high risk' of automation than in any other skilled industry (Figure 1).

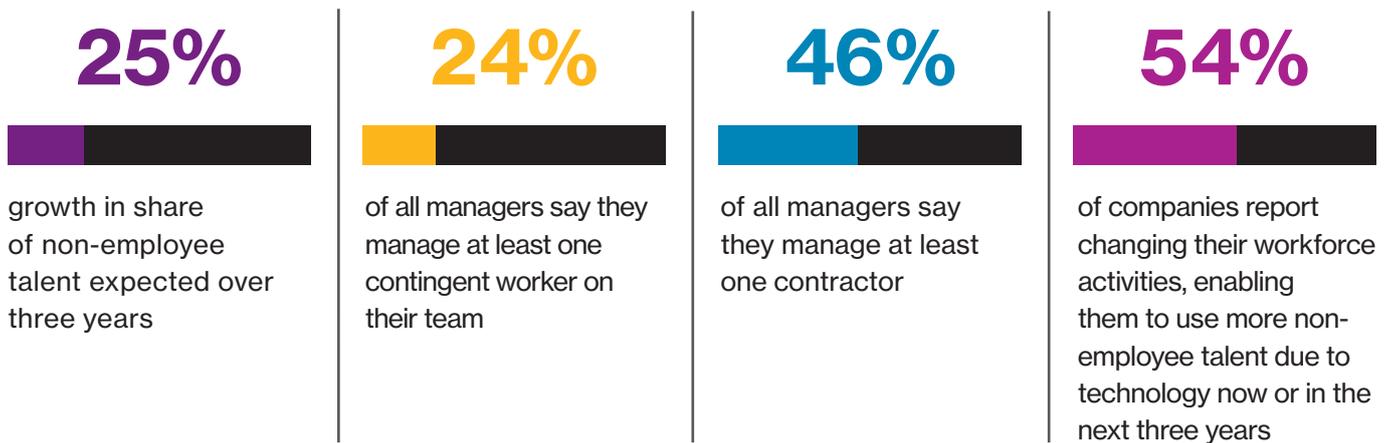
Figure 1: Automation and digitalisation are affecting financial services



Source: Willis Towers Watson Analysis. And "The Robots are Coming for Wall Street", *The New York Times Magazine*, Nathaniel Popper

In addition, the on-demand, gig economy offers options for getting work done using non-employee talent: contingent workers, talent on a platform, alliance partners etc. And companies expect to increase their use of non-employee talent over the next three years (Figure 2).

Figure 2: Non-employee talent is growing



Source: Willis Towers Watson, 2016 Talent Management and Rewards Study

To manage the risks and capture the opportunities of this new work ecosystem, leaders in financial institutions need a robust decision-making framework allowing them to evaluate the many emerging options for getting work done and how to make the best use of human talent.

Rethinking how work gets done

Since the second industrial revolution, organisations have been focused on jobs and employment as the primary means of getting work done. Yet today's business leaders must navigate a world beyond employment where work can be accomplished using non-employee talent as well as automation.

This transformation of work requires that an organisation 'deconstruct' jobs into tasks or projects. Once an organisation disaggregates a job, it is able to tap a range of sources for getting work done – from robotics and AI to employees on talent platforms, contractors and alliance partners.

To help with this process, organisations, regardless of industry, should consider grouping tasks into three buckets and then determine how to best accomplish the work in each bucket.

1. Routine cognitive or routine manual work that needs to get done on a regular basis. Motor insurance claims processing is a good example of this type of routine work. Until recently, this was a human-intensive, time-consuming and often error-prone process. Today, motor insurance companies can disaggregate claims handling

tasks – for example, identifying damaged parts, assessing the extent of the damage, estimating repair costs and recommending a payout – and use a combination of AI, big data and cognitive analysis to perform these tasks. It's now possible to process motor insurance claims in minutes in an efficient and accurate manner. As a result, the need to negotiate a settlement is minimised and the customer experience improved.

2. Non-routine tasks that require some level of insight and intelligence. Organisations can employ AI or a pool of specialist talent for these tasks. For example, a bank may opt to hire a user interface specialist via a talent platform to design the look and feel of a mobile app while internal talent focuses on app development and testing.

3. Tasks that require a human touch, empathy, creativity and innovation. For instance, it's especially critical for financial advisors to empathise with clients following major life events (such as death or divorce) in order to better assess the impact of a given event on a client's long term financial plan. Many wealth management firms employ automated workflows to minimise manual tasks, thereby freeing up advisors to spend more time understanding the needs of their clients and delivering creative investment strategies.

Finally, it's important not to confuse this deconstruction and dissemination of activities with outsourcing, which involves having intact jobs performed by a third party at a lower cost.

The following metrics can help organisations evaluate each option for accomplishing different tasks:

- **Speed to capability** – how do we develop new capabilities as quickly as possible, recognising how rapidly competitive advantage can be dissipated.
- **Cost** – how do we acquire new capabilities as efficiently as possible – i.e., with an optimal mix of fixed and variable costs?

- **Risk** – how do we develop new capabilities by taking on as little risk as possible? This involves two key aspects. As work moves outside the organisation, it is critical to mitigate the risks associated with the potential 'lack of control' of the workforce (for example, liability or loss of IP). In addition, as the half-life of skills continues to shrink, it is essential that an organisation insulate itself from the rapidly rising risk of obsolescence.

Our analysis reveals that financial services companies that deconstruct jobs in this manner can typically realise savings in the 60-80% range.

Sample Analysis: Technology Enablement/Replacement

Compliance analyst vs regtech

Human? 		AI? 
Compliance analyst		AI-based compliance agent
<ul style="list-style-type: none"> ▪ Analyses regulatory requirements ▪ Identifies necessary data sets ▪ Collects and analyses data ▪ Reports data to regulator and business ▪ Keeps up and adjusts with regulatory change 	Activities	<ul style="list-style-type: none"> ▪ Analyses regulatory requirements ▪ Identifies necessary data sets ▪ Collects and analyses data ▪ Reports data to regulator and business ▪ Keeps up and adjusts with regulatory change
<ul style="list-style-type: none"> ▪ Specific sourcing channels ▪ Multiple organisation stakeholders for requisition, screening, interview management, offer management, new hire setup ▪ Average time and cost to hire 60 days/ US\$12,000 	Source	<ul style="list-style-type: none"> ▪ A software provider of the service; probably as SaaS
<ul style="list-style-type: none"> ▪ Organisation development across technical and professional disciplines ▪ Average learning cost per employee US\$2,000 	Develop	<ul style="list-style-type: none"> ▪ AI-based regtech enhances its performance exponentially through machine learning
<ul style="list-style-type: none"> ▪ Direct manager coaching, development ▪ HR workforce administration including data management and processing 	Manage	<ul style="list-style-type: none"> ▪ Natural language (voice/text) interface makes the use of the AI-based compliance agent resemble the experience of working with a human contractor
<ul style="list-style-type: none"> ▪ Foundational, career and environment, performance-based rewards for average total loaded cost US\$120,000 annually 	Reward	<ul style="list-style-type: none"> ▪ Estimated on current prices for compliance automation SaaS application US\$120,000 annually (includes implementation of solution)

General Benchmark sources: Google search, interviews with RegTech providers on typical pricing, American Staffing Association, Glassdoor

Among the areas where financial services firms are deconstructing jobs and exploring new options for getting work done is regulatory compliance. Stricter regulations are prompting financial institutions to find ways of improving the compliance process, which can be costly, labour-intensive and error prone.

Many institutions are turning to regtech, a subclass of fintech, to address their compliance challenges. Combining big data analysis, robotic process automation (RPA) and machine learning, regtech automates the compliance process. We recently helped a retail banking client as well as a life insurance company that were facing compliance pressures deconstruct their compliance jobs and implement a regtech solution. In both organisations, there was a heavy reliance on manual processes that increased the risk of inaccuracies. And as regulations increased, more employees were needed to handle compliance tasks. As a result of their regtech implementation, these organisations transformed their compliance process making it faster and cheaper, and reducing the risk of errors that can result in fines.

An AI-based regtech solution can deliver many advantages including ongoing performance enhancements through machine learning, improved data quality and analysis, and significant cost savings.

A new value proposition

This transformation of work spawns new employment relationships that require business leaders to rethink their value proposition and accompanying rewards.

It's not possible to be the employer of choice for everyone. Therefore, financial institutions need to identify their key talent segments and develop relevant and personalised work experiences for these segments. It's important to identify areas where great talent really makes a difference and where good enough suffices, and to plan the value proposition accordingly.

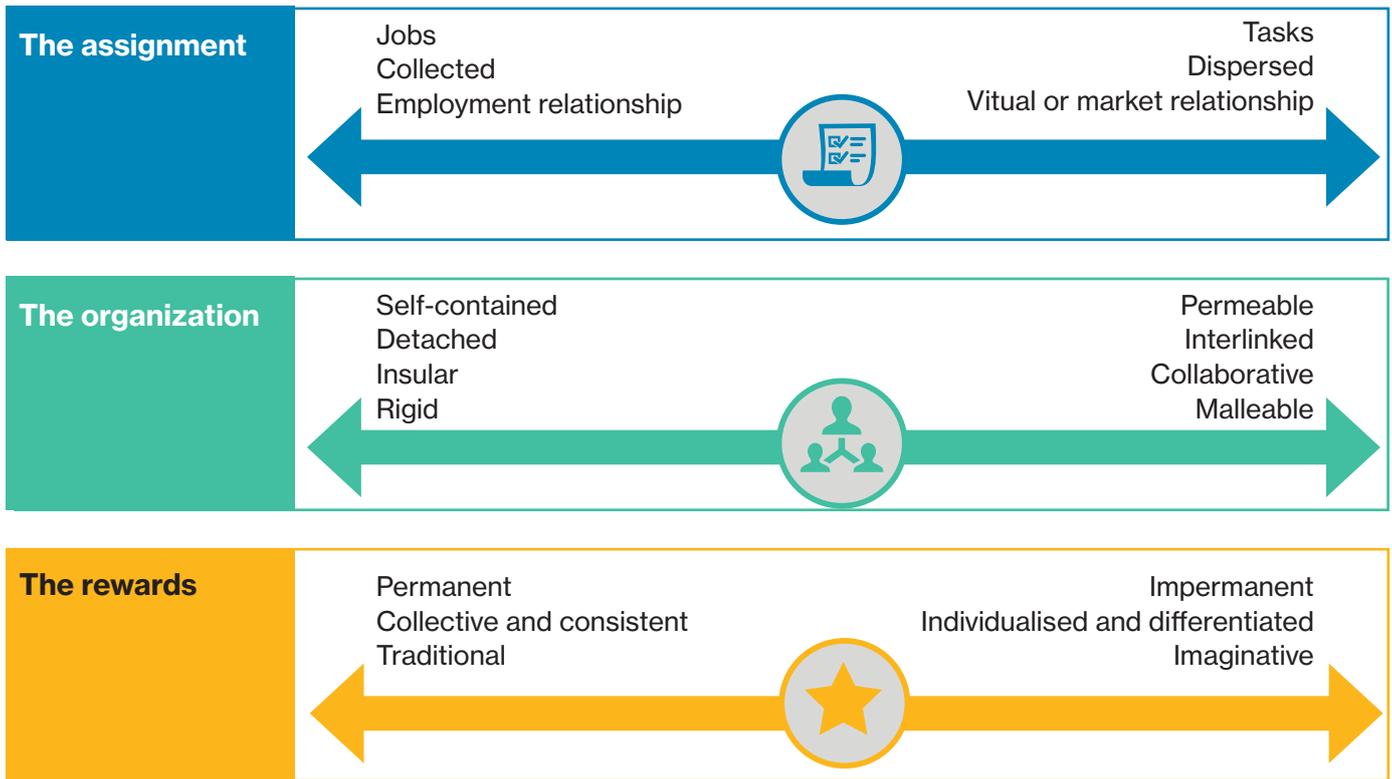
Traditionally, many organisations have regarded non-employee talent or contingent workers purely as a cost play, not requiring a formal value proposition. But in a world beyond traditional employment, it's crucial to identify all the workers and stakeholders whose engagement is critical to the organisation's business success. As organisations begin to focus on

the work and available talent (internal and external) as opposed to jobs and full-time employees (FTEs), they can find themselves competing for pivotal capabilities that often they can only access through external sources. In this situation, it's essential for organisations to develop a relevant value proposition for these workers.

The drivers of attraction and retention for non-employee talent or contingent workers may not be the same as those for FTEs. For instance, contingent workers may place a higher premium on work arrangements that offer greater flexibility as well as opportunities for networking and development. In addition, when an organisation is not an employer, it may not be possible to offer certain elements of the traditional employment deal such as health and retirement benefits. Consequently, rewards for contingent workers need to be individualised, short-term and imaginative. While money is always important, non-monetary rewards can play a critical role in attracting, retaining and engaging external talent. What other voluntary benefits can an organisation provide to contingent talent to transcend the typical transactional nature of such relationships?

- Working for a prestigious company or on a high-profile project that will enhance a worker's reputation and ability to secure future work is often regarded as a significant reward.
- The ability to work remotely can be a valuable reward element for workers that prefer and need this type of flexibility and value the potential for improved work/life balance.
- Opportunities for learning can also provide a powerful reward, as new knowledge can enhance workers' resume and increase their earning potential. The new world of work will require all workers not only to improve existing skills but to undergo radical retooling at various intervals— for example, a sales rep acquiring skills in the area of AI. In developing learning and development programs, organisations can't go it alone. They should consider partnering with a third party such as a university or online training company to deliver programs that meet the needs of their key talent.

The opportunity: lead the work



Source: John Boudreau, Ravin Jesuthasan and David Creelman

In a world beyond employment, the focus is on work and available talent (internal and external) as opposed to jobs and FTEs. Organisational boundaries are malleable. Being able to decide which work is to be completed inside the organisation vs. externally becomes a strategic issue as the right decisions can deliver significant business value to an organisation. To learn more, see John W. Boudreau, Ravin Jesuthasan and David Creelman, *Lead the Work: Navigating a World Beyond Employment* (New York: Wiley, 2015).

Once you have a sense of the work options you'd like to pursue, experiment – for example by hiring an AI vendor for one task or an individual on a talent platform for another. Communicate your plans to all the stakeholders – leaders, manager and employees – who will need to understand this new way of getting work done. And identify leadership skills gaps – leadership in the new work ecosystem will be more about orchestrating different work options and less about leading people. Lastly, share your lessons learned as you go along and stay up to date with how other organisations are approaching the future of work.

Start by experimenting

What steps can financial institutions take now to get started on this journey? Organisations should consider experimenting with this new plurality of means for getting work done.

Identify jobs in areas where your organisation is having difficulties attracting talent. Alternatively, identify areas where work has been done in the same way for a long time and where you suspect that the work could be done better, faster and cheaper. Pick a few jobs and examine how these might be deconstructed into the three buckets discussed above and evaluate the cost, risk and speed to capability implications of different work options.



Guide to Payment Services Directive II (PSDII) for financial institutions

What is PSDII?

The updated directive seeks to:

- Enhance consumer protection when payments are made online
- Promote the use of innovative online and mobile payments
- Ensure cross-border European payment services are safer
- Under PSDII, traditional financial institutions are classified as 'Account Servicing Payment Service Providers' (ASPSP) whereas those without a banking license are 'Third Party Payment Service Providers' (TPPs)
- The TPP category, the most significant amendment introduced by PSDII, encompasses two types of services, designed to cover the flurry of new actors joining the value payments chain:
 - Payment Initiation Service Providers (PISPs): Obtain funding decisions for payments direct from consumer payment accounts. Typically operating between the merchant and consumers bank enabling cheaper electronic payments without the use of a credit card
 - Account Information Service Providers (AISPs): Provide users with a consolidated view of all their products and accounts held across multiple providers
- To this end, both AISP and PISP are required to hold a professional indemnity insurance that covers all territories where they effect account information and payment initiation services

What necessitated PSDII?

Significant technical innovations in electronic and mobile payments, including the introduction of new payment services, increased technological innovation, and the entry of non-traditional service providers which combined, necessitated a revisit to the original PSD.

What is the major change?

PSDII envisions opening up the payments industry through the 'account information service' rule that will make it mandatory for banks and financial institutions to provide third party service providers access to customer account information through a robust Application Program Interface (API) framework.

How can Banks use PSDII for competitive advantage?

1. Banks have the opportunity to position themselves as third party providers (TPPs) and (with appropriate controls) to access the information of their customers' accounts with other financial institutions.
 - This will enable banks to act as data aggregators to deliver a range of services to their customers, promoting cross-selling opportunities based on analysing customers' payment habits.
2. Larger banks could position themselves as service providers to smaller banks. A variety of services could be outsourced to smaller banks and in doing so create a new revenue stream.
3. PSDII opens opportunities for banks and financial institutions to partner with technology service providers:
 - Banks can venture into developing and maintaining Application Programming Interfaces (APIs – a set of routines, protocols, and tools for building software applications) in order to enhance security for digital distribution channels and product offerings.
4. By moving early and becoming a preferred provider, banks could exploit their first-mover advantage against competition.
 - Banks have broad and deep proven data handling and holding capabilities, brand profile and trust in addition to pre-existing infrastructures
 - Banks can use their data and experience to their advantage to become leaders as the wider banking and tech 'ecosystem' opens up due to PSDII

5. Customer behaviour analysis:
- Banks can analyse account behaviour combining their existing access to customer account-derived data to develop a whole range of innovative services and channels for their customers.

Challenges for banks

1. For banks, PSDII poses substantial economic challenges. Banks will need to reorganise their IT infrastructure and, most likely, will need to refocus at least part of their business model.
 - IT costs are expected to increase due to new security requirements and the opening of APIs. According to Accenture, 9% of retail payments revenues are predicted to be lost to Payment Initiation Service Providers (PISP) services by 2020¹
 - A reduction in customer deposits could occur due to greater price transparency and the increased ease of transferring funds overnight to alternative higher-yielding providers. Any such decrease in customer deposits will increase the need and cost of alternative funding sources to meet liquidity and capital requirements.
2. By opening up access and introducing new players (such as TPPs) into the payments ecosystem, allocating and managing liabilities will be a key challenge. PSDII puts the onus on the bank that maintains the customer account to implement adequate customer protection:
 - The provisions state that payer customers should always be entitled to make a claim for compensation from the bank maintaining the customer account in the case of an unauthorised payment, despite the involvement of a payment initiation service provider.

Therefore, although PSDII acknowledges that the TPP could be held liable to compensate the bank that holds the account, liability allocation under the new regime will prove to be a major concern for banks and payment firms.

3. Although PSDII has not moved the liability for 'authorised push payment scams'² away from the customer, banks and TPPs may still want to reimburse the victims of such scams, on a case by case basis.
 - Many consumers are unaware that if they use a TPP to 'overlay' their credit card, they may not have protection under Section 75 the Consumer Credit Act 1974 for authorised push payment fraud³. In these circumstances, customers must rely on the protections provided by the TPP, which can vary.
 - The higher number of firms in the payments ecosystem may increase the complexity of co-ordinating an appropriate response between banks and TPPs to address such fraud, to a further escalation of authorised push payment fraud. Therefore, both banks and TPPs may want to consider contingent credit cover or similar instruments.
 - The existence of this fraud, and recent regulatory initiatives⁴, may require further investment in IT and data analytics.



¹ Accenture (May, 2016): [Seizing the Opportunities Unlocked by the EU's Revised Payment Services Directive](#).

² An example of an authorised push payment fraud could be where a consumer purchasing a new property or asset is tricked into transferring money to what they believe to be their solicitor's account, but the account is actually controlled by a fraudster.

³ www.moneysavingexpert.com/news/cards/2017/04/revealed-section-75-credit-card-protection-may-fail-due-to-payment-processing-loop-hole---shoppers-beware.

⁴ See the joint response www.psr.org.uk/psr-publications/news-announcements/which-super-complaint-our-response-Dec-2016 to the September 2016 super-complaint www.psr.org.uk/psr-publications/news-announcements/Which-super-complaint by UK consumer group Which?, where the UK regulators (the Financial Conduct Authority and the Payment Systems Regulator) confirmed that there would be no change in liability for such scams, but that the regulators agreed that some banks could do more to identify potentially fraudulent incoming payments and prevent accounts coming under the influence of scammers.

How could insurance help de-risk PSDII?

There are three aspects to how insurance can help manage risks emanating from PSDII:

1. By ensuring your crime coverage is extended to provide for fraudulent losses arising from social engineering and phishing type events where the bank has been found to be a direct party to the loss.
2. By undertaking a contractual/due diligence review with TPP and ASPSP's who access the banks API infrastructure and ensuring a) that liability risk is clearly held by them and b) by ensuring they hold adequate insurance coverage to support breath and quantum of the risk being carried.
3. It may also be possible to seek protection for customers' losses where the bank has not been directly a party to the loss but wishes to make payments as a gesture of goodwill to customers, for example retail customer phishing coverage is available in Switzerland due to the strict loss reporting procedures for such retail losses. Obtaining this coverage would depend on a range of circumstances and would need to be reviewed on a case by case basis.



Compensation trends in Fintech – David and Goliath, for now

Disruption of industry has multiplied over the years with technology turning business models on their heads and using new avenues to achieve business goals, generate revenue, and serve customers. Uber, Deliveroo, and Netflix are all examples of these. Of course it does not always go smoothly – recent employee tribunals and court cases testify to this. However, the theme remains, innovation (disruption seems too negative a word) is here to stay.

Fintech investment grew by 11% to \$17.4 billion in 2016 in Europe, the Middle East and Africa, demonstrating the wealth of investors that are looking to back the next big company. One example often used as reasoning is Nokia who once held a Goliath 38% of the market share for mobile phones. By contrast, its market share is now down to a couple of percentage points, as companies like Samsung, Apple and Huawei innovate and now dominate this space. Innovative companies continue to pull at the heartstrings and purse strings of investors while also generating much desired returns.

For Fintech, “tech” has been the key differentiator changing the way day-to-day activities are undertaken – no segment of the Financial Services industry has been left untouched. Technological innovation has changed the way financial products are delivered, the structure of deals themselves, as well as the way capital and risk are managed bringing, in some instances, new business propositions to the marketplace such as crowdfunding and peer-to-peer lending.

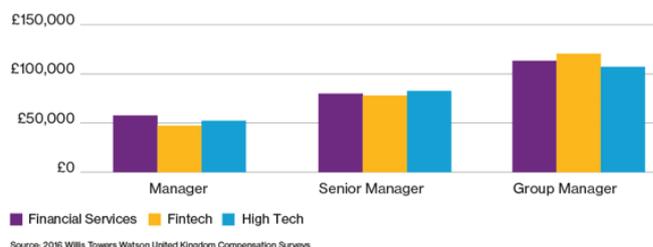
In a world that crosses two industries, a trend emerges that companies look to both the traditional Financial Services and High Tech industries when it comes to assessing market value for pay. Organisations across Fintech, Financial Services and High Tech are now fighting for the same pool of talent, but can go to either sector for it, or need both the specialist roles offered to succeed.

Although we have recently launched our Fintech Compensation Survey to serve this emerging industry and allow companies to compare to relevant peers, trends still come from our existing data.

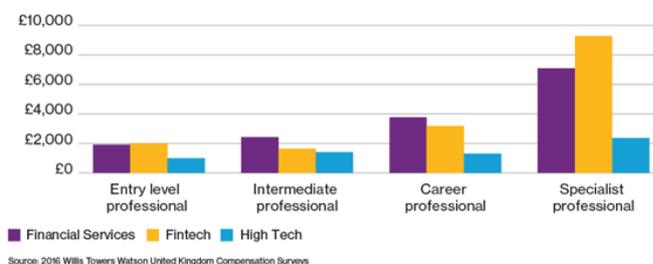
In the United Kingdom a manager role in Fintech is notably higher than in either Financial Services or High Tech industries, the same is true for technology development where a premium is paid when compared to high tech.

For junior levels it would seem on the outset that traditional Financial Services organisations have the edge on base salary, but the potential for variable pay tips the balance in favour of Fintech.

Levels of base salary for manager roles across the United Kingdom Financial Services, High Tech and Fintech industries



Levels of variable pay for non-manager roles across the United Kingdom Financial Services, High Tech and Fintech industries



Knowing where you stand compared to the competition can be important in a fast moving industry that is taking on Goliaths, one where you need to attract and retain key talent that makes your business what it is. Whatever the size, innovation is an expected norm. People risk will be an important consideration, both the risk in attracting, but also in them moving on. You need to understand the roles, how they compare to the market, and then how you mitigate these risks from coming to pass.

Whilst the future may not be certain, you can be sure that the pay decisions you have to make today will influence your ability to attract and retain critical talent. Is it time you used the right data to underpin these crucial pay decisions? We offer a large amount of experience across these sectors to help guide you through situations where David may meet Goliath.

Our High Tech industry coverage consists of:

At a glance:

- 93+** Countries globally
- 5,200+** Participants
- 4million+** Incumbents

What does a good risk culture look like?

Alasdair Wood

In 2012, a major international bank disclosed a multi-billion-dollar trading loss on its synthetic trading portfolio. By its own admission, the events that led to the company's losses included inadequate understanding by the traders of the risks they were taking; ineffective challenge of traders' judgment by risk control functions; weak risk governance and inadequate scrutiny.

The bank's trading loss demonstrates a truth that is often lost in the regulatory clamour for banks to hold ever more capital; the driver of bank failure is rarely insufficient capital, but rather bad risk culture.

What elements does an effective risk culture include?

An effective risk culture is one that enables and rewards individuals and groups for taking the right risks in an informed manner.

A successful risk culture would include:

1. A distinct and consistent tone from the top – the board and senior management – in respect of risk taking, making clear which risks are positive and potentially beneficial and which are negative and should be avoided or controlled.
2. A holistic approach, ensuring governance and control systems and risk parameters are aligned with HR programmes, bonuses and other non-monetary incentives.
3. Consideration of wider stakeholder positions in decision making.
4. A common acceptance throughout the organisation of the importance of continuous management of risk, including clear accountability for and ownership of specific risks.
5. Transparent and timely risk information flowing up and down the organisation with bad news rapidly communicated without fear of blame.
6. Encouragement of risk event reporting and whistle blowing, actively seeking to learn from mistakes and near misses.
7. No process or activity too large, too complex or too obscure for the risks to be readily understood.
8. Appropriate risk taking behaviours rewarded and encouraged, and inappropriate behaviours challenged and sanctioned.
9. Risk management skills and knowledge valued, encouraged and developed, with a properly resourced risk management function and widespread membership of and support for professional bodies. Professional qualifications supported as well as technical training.
10. Sufficient diversity of perspectives, values and beliefs to ensure that the status quo is consistently and rigorously challenged.
11. A commitment to ethical principles.
12. Alignment of culture management with employee engagement.

Risk culture series

- What is risk culture?
- Managing and improving an organisation's risk culture
- How to measure risk culture

About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 40,000 employees serving more than 140 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas – the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

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