

The future of financial services: how work is impacted by the connection and convergence of people and technology

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Foreword

The relevance of people and technology in 2017



People and technology were the two key themes that emerged from our interviews with 150 senior executives across the financial services industry for our 2015 Risk Index.

Even now these themes remain just, if not even more, relevant. We are now at the beginning of a fourth industrial revolution driven by technology that will transform the way we work and live. We believe in the coming years more jobs in financial institutions are at high risk of automation than any other skilled industry. Financial institutions are and will continue to be top targets of cyber attacks and fintech continues its powerful disruption of the industry; now supplemented by insurtech and regtech.

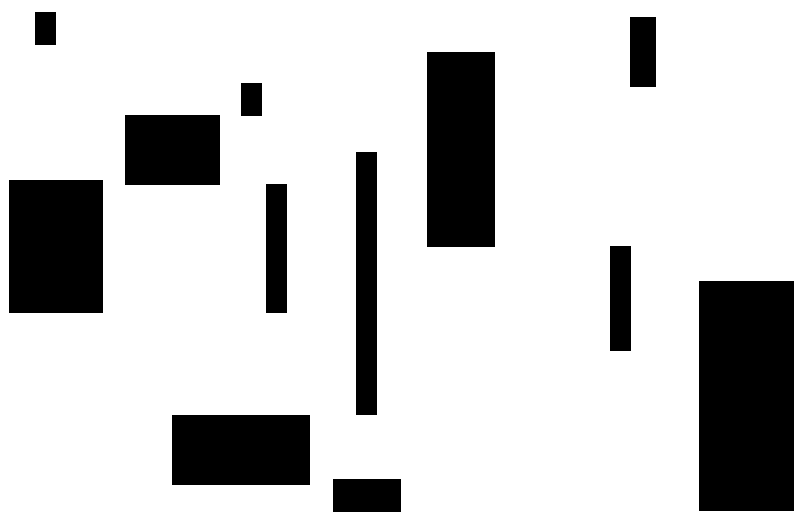
All of these developments meet at the intersection of people and technology.

In this rapidly changing environment, financial institutions will have to adapt to a new future where lines will be blurred across sectors and industries and work will be deconstructed. In our lead article Ravin Jesuthasan, a global thought leader on the future of work and human capital, further explores these issues and how financial institutions can respond.

The themes of people, technology and the future of work run throughout this future of financial services report: from algorithmic regulation to usage-based insurance. All three themes come together in our final article, which explores how our daily lives might look in 2040. We trust that the following articles will generate thought-provoking debate and discussion on the future of our industry and we warmly welcome your feedback.

Mary O'Connor

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1

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-advisers in wealth management, online-only banks and peer-to-peer funding.

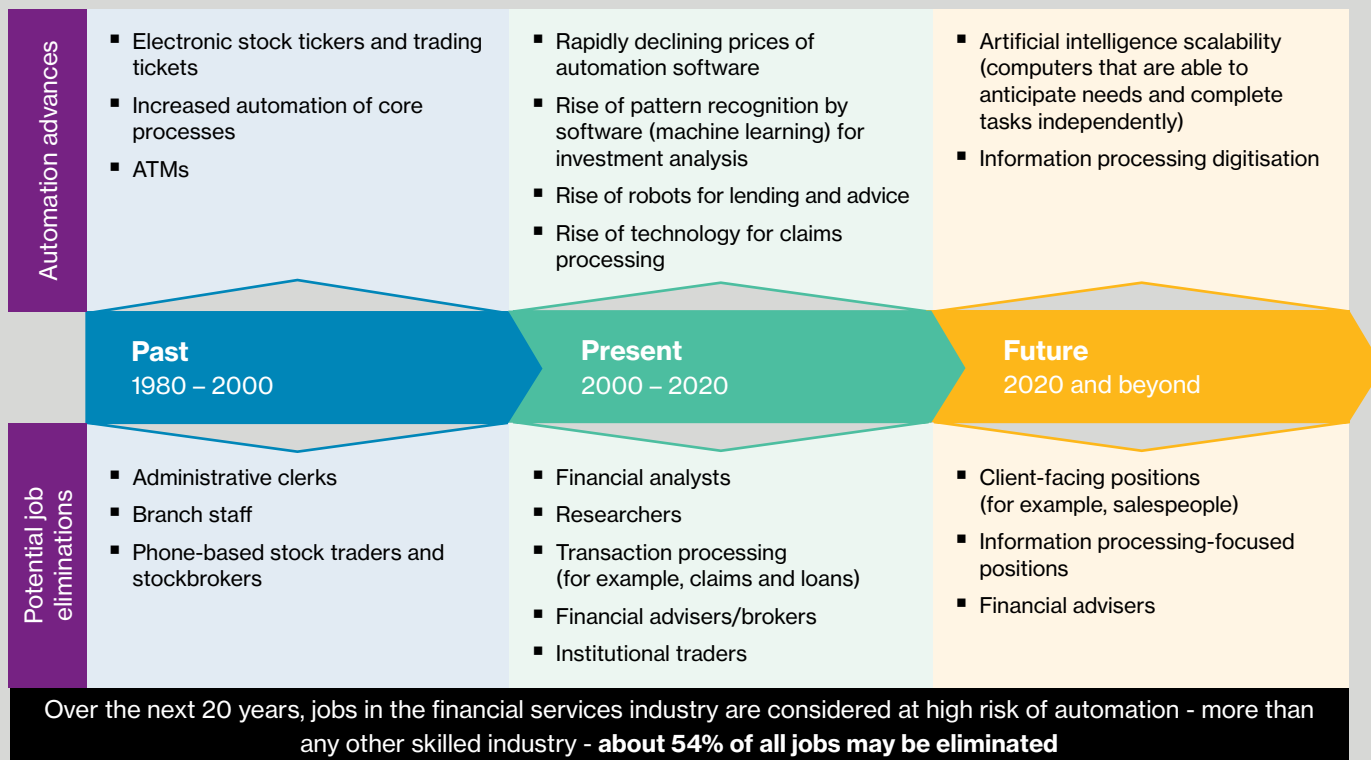
This technological disruption is also blurring lines across sectors and industries, a development that is especially relevant to financial services. The use of common technologies and platforms is bringing global industries closer together and changing the competitive landscape.

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 motor 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 property and casualty insurers in cases where traditional insurers are not willing to lower the risk premium¹.

At the same time, technological breakthroughs in areas ranging from artificial intelligence and robotics to blockchain technology and telematics, are upending not only the way in which 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

¹Electrek, 'Tesla expands on its new car insurance program as self-driving technology improves', February 2017



In addition, the on-demand, gig economy offers options for getting work done using non-employee talent: for instance, contingent workers, talent on a platform and alliance partners. 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.



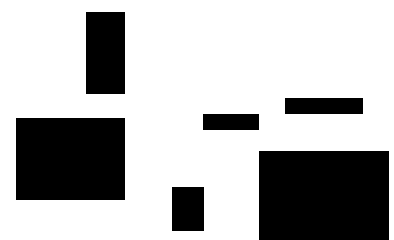
Rethinking how work gets done

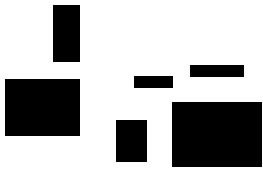
Since the second industrial revolution, organisations have been focused on jobs and employment as the primary means of getting work done. Yet today’s business leaders must navigate a world beyond employment where work can be accomplished using non-employee talent as well as automation.

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.

“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.”





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 advisers 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 advisers 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 – that is, 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% to 80% range.



Select Article

Case in point: automating compliance

Figure 3: A 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 fully loaded cost of US\$125,000 annually 	Reward	<ul style="list-style-type: none"> Estimated on current prices for compliance automation SaaS application US\$20,000 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 sub-class 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 and 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.

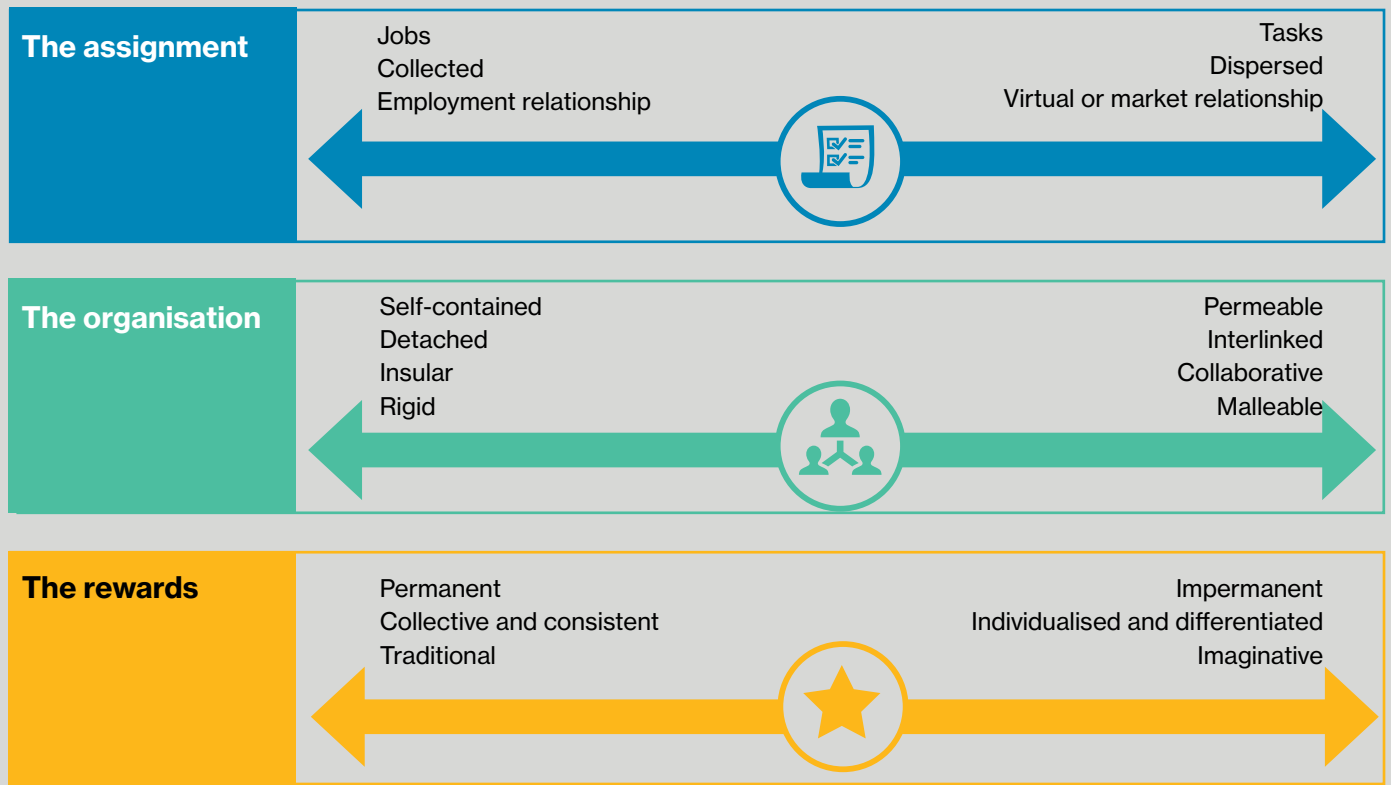
The drivers of attraction and retention for non-employee talent or contingent workers may not be the same as those for FTEs. For instance, contingent workers may place a higher premium on work arrangements that offer greater flexibility as well as opportunities for networking and development. In addition, 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 who 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' résumés 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 programmes, organisations can't go it alone. They should consider partnering with a third party such as a university or online training company to deliver programmes that meet the needs of their key talent.

“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.”

Figure 4: The opportunity: lead the work



In a world beyond employment, the focus is on work and available talent (internal and external) as opposed to jobs and FTEs.

Source: John Boudreau, Ravin Jesuthasan and David Creelman

Organisational boundaries are malleable. Being able to decide which work is to be completed inside the organisation as opposed to 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).

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.

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.



2

The algorithmic future of regulation

Professor Philip Treleaven

Algorithms have fundamentally changed how financial markets operate and soon they will change the face of regulation, says Philip Treleaven, Professor and Director of the UK Financial Computing Centre at University College London. Every aspect of our regulatory system will be impacted – people, processes and technology.

The issues with our current regulatory system for financial services are many and well known: there is a large and ever-growing body of regulation; it is difficult to interpret and understand, time consuming to navigate and costly to comply with. For example, the *Financial Times* stated that “Big banks, such as HSBC, Deutsche Bank and JPMorgan, spend well over \$1bn a year each on regulatory compliance and controls. The Spanish bank BBVA recently estimated that on average financial institutions have 10 to 15% of their staff dedicated to this area”.

*An **algorithm** is a self-contained sequence of actions to be performed. It specifies the inputs needed and the exact calculations to be performed to calculate an output.*

Algorithms are most often associated with mathematics and computers. Indeed, they are essential to the way computers process data. But they are also an essential part of our daily lives – think about the process of baking a cake, it’s just an algorithm with tastier outputs.

Although we can read consultation documents on our tablets, watch live-streamed political and legislative debates on our smart phones and submit regulatory data directly to

the regulator by XML via APIs, we still follow essentially the same time-consuming, paper-based processes to make, implement and monitor regulation from the last century (if not the one before).

Indeed, in a US presidential debate around nine years ago, the then-candidate Barack Obama suggested that: “The problem is we still have an archaic, twentieth-century regulatory system for twenty-first century financial markets”².

“ ..we still follow essentially the same time-consuming, paper-based processes to make, implement and monitor regulation from the last century. ”

But no complex system is static. Even a system as seemingly immovable as financial services regulation is subject to the force of change. And change is coming. I have no doubt that the frustrations so eloquently expressed above by the then-candidate Barack Obama have been part of the driver for change. But I have also observed a *willingness* to embrace change in the wider aspects of our regulatory systems. In part, this has been helped by increasing the span of people who are impacted by regulation. In the past it was mainly lawyers, compliance experts and regulators; now it includes fintech professionals who see an exciting business opportunity, existing financial institutions wanting to drive down operating costs and technology-focused academics, like myself, who see an exciting new application of technologies that have reached commercial maturity.

¹ *Financial Times*, ‘Market grows for ‘regtech’, or AI for regulation’, October 2016

² *New York Times*, ‘The Second Presidential Debate’, October 2008

Which technologies are important for financial services regulation?

Change has often been driven by technology. Think about how the combinations of technologies in our smartphones have fundamentally changed our communications – beyond the pervasiveness of the emoji, it has also changed when, where and how we communicate.

For financial services, there are several important technologies that could help, many of which have reached commercial maturity. Any one of these technologies could have a material impact on the work that we do in financial services regulation and on the mix of skills we would need going forward to do that work.



Artificial intelligence (AI)

A branch of computer science dealing with the simulation of intelligent behaviour in computers. 'Intelligence' is taken to mean an ability to perceive its environment and take actions that maximise its chance of success at some goal.



Automated fraud detection

Techniques used to identify suspicious patterns in credit card transactions, identity theft, insurance claims, money laundering or insider dealing.



Blockchain

A form of distributed ledger or database that stores a permanent and tamper-proof record of transaction data. Unlike traditional databases, blockchain does not have a central point of data storage.



Data scraping

The technique in which a computer program extracts data from human-readable output coming from the Internet or another program. This involves searching and retrieving information (scraping) from social networking sites such as Twitter and Facebook, but also web pages, forums, blogs, RSS feeds, online newspapers and product/service reviews or feedback.



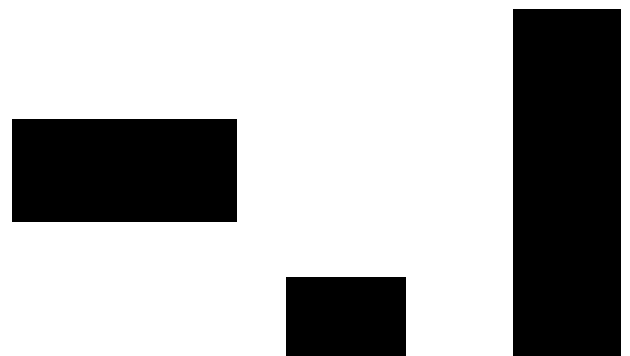
Natural language processing

Content interpretation of natural language by means of algorithms mainly based on machine learning.



Sentiment analysis (or opinion mining)

The process of computationally identifying and categorising opinions expressed in a piece of text. It is used to determine whether the writer's attitude towards a particular topic or product is positive, negative or neutral.





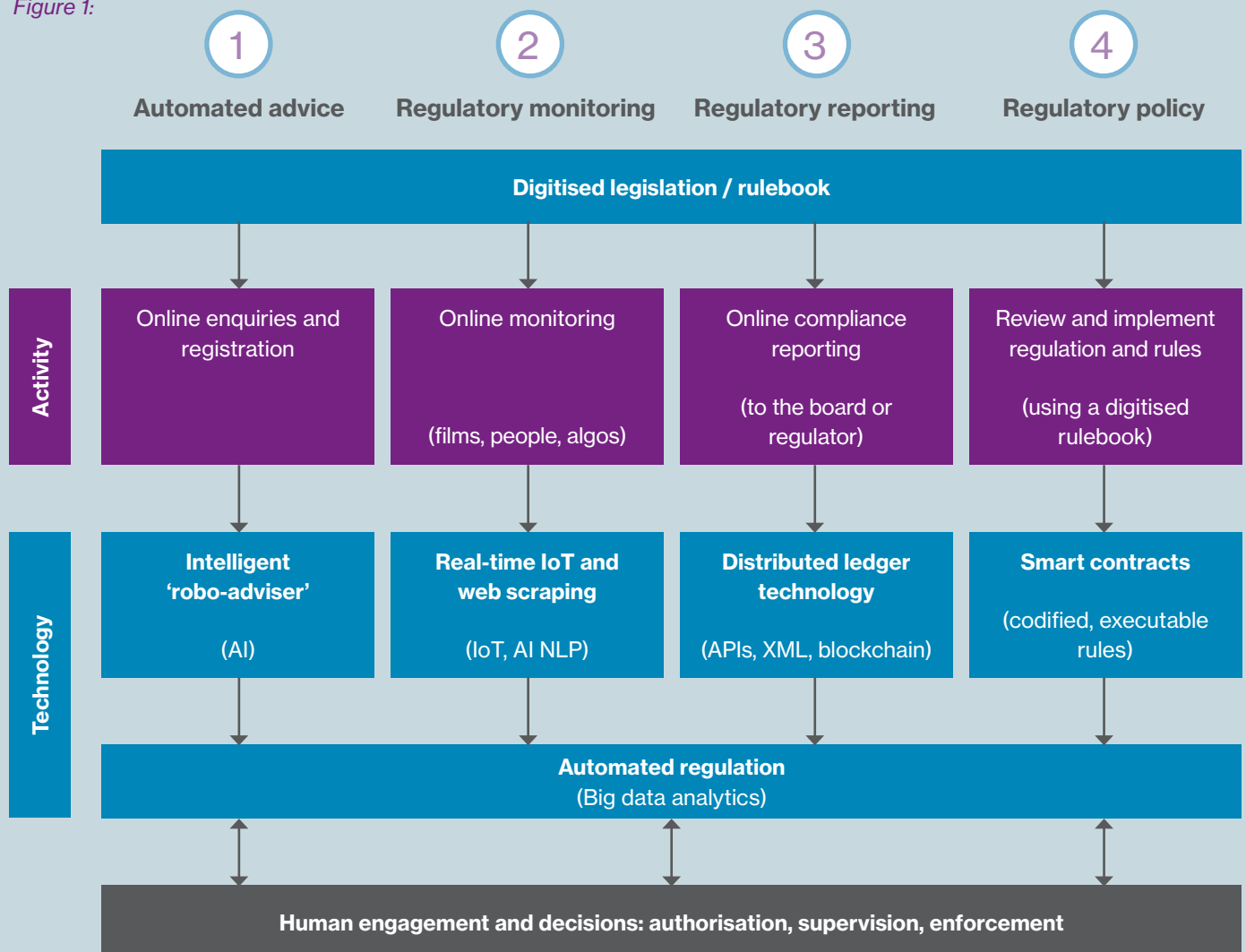
Using technology to rethink regulation: *Algorithmic Regulation*

I believe that a regulatory system fit for this century (and the next) will need to use all of the above technologies. I have created a theoretical framework that achieves this, called *Algorithmic Regulation*.

This *Algorithmic Regulation* framework comprises four main limbs that feed into a spine of 'automated regulation' (figure 1). The framework uses a blockchain solution to

record compliance reports and smart contract technology to codify, computerise and automate financial regulation and compliance.

Figure 1:



“ This Algorithmic Regulation framework comprises four main limbs which feed into a spine of ‘automated regulation’. ”

1

Advice and registration: it is hard for new and existing financial services firms to navigate the maze of legislation and regulatory rulebooks in order to complete (or update) the authorisation process with a national regulator. Firms often require expensive external regulatory advice from specialist legal or compliance firms to complete the authorisation process.

- **Solution:** provide an AI front end to the regulation that helps a new firm/user locate relevant information and guides them through authorisation. If successful, a robo-adviser could significantly reduce (but not eliminate) what firms pay lawyers and compliance specialists for authorisation advice. There could be several robo-advisers in the market provided by private sector firms – in addition to any that a regulator might choose to provide.

2

Monitoring: regulators monitor and supervise regulated firms on an ongoing basis, generally in a risk-based way so that the firms that pose the greatest risk to the financial system receive the greatest attention with specific teams allocated to them and a form of thematic or portfolio approach to the remainder.

But regulators often have thousands of firms to monitor. The monitoring challenges faced by regulators can be illustrated by looking at the UK Financial Conduct Authority (FCA) – with essentially the same resources as when it was created, the FCA now has to supervise an additional 21,000 small firms – 56,000 firms in total.

- **Solution:** monitor online and social media by using natural language processing and sentiment analysis. The intention would be to monitor consumer opinions, concerns and level of trust and to identify market abuses. Developed for brand management and customer profiling, there are several sophisticated data scraping and sentiment analysis tools that could equally be deployed by regulators for automated monitoring. Examples include Adobe Social, Brandwatch, Google Alerts, and Mention.

3

Reporting: firms provide data to regulators, on a monthly/quarterly/ad-hoc basis. It is an expensive and complex activity for regulated firms. New regulation may require significant changes to underlying processes and regulatory reporting requirements. For example, research from the American Action Forum has suggested US banks have so far paid US\$24bn and allocated 61 million employee hours to comply with Dodd-Frank Wall Street Reform and Consumer Protection Act³.

- **Solution:** use the fintech paradigms of APIs, online communication, big data analytics and distributed ledger technology (DLT) to automate compliance and regulatory reporting to an equivalent form of ‘straight through processing’³.

4

Policy: regulated firms, advisory firms and regulators engage in a range of written and personal interactions, sometimes spanning years, to draft new or amended rules. Sometimes, it is not until after the new policy is implemented that the full impact of the proposals is fully understood. For example, it is now appreciated that a number of the regulatory proposals considered after the 2010 Flash Crash (for example, lodging algorithms with regulators, best price quotes, trading pauses and tick sizes), if implemented, might have actually increased systemic risk.

- **Solution:** use smart contract technology to digitise and codify regulations. Then use computational modelling (such as agent-based systems) to assess the potential market impact of a regulatory proposal before deployment (for example, Basel IV, MiFID III, Solvency III).

³ www.americanactionforum.org



Moving from 'thinking' to 'doing' – it's already happening

But this is not an abstract theory. Several aspects of the *Algorithmic Regulation* framework are already being tested and implemented.

For example, the Blockchain technology for Algorithmic Regulation And Compliance (BARAC⁴) initiative that I am involved in has already started to develop and test this framework as a whole. The group is testing the feasibility of using blockchain technology for automating regulation and compliance by producing a proof-of-concept platform. It comprises industry participants, regulators and academics across a range of disciplines in order to investigate the technological, legal and managerial aspects related to the use of blockchain across the regulation of financial services industry. The BARAC platform will be constructed around the requirements articulated by our industry and regulatory partners including BT, R3⁵ and the FCA.

Other practical initiatives abound. For example, on **automated advice** regulated firms are developing and using advice bots for a range of activities. Reuters reported in May that Credit Suisse has deployed 20 robots within the bank, some of which are helping employees answer basic compliance questions⁶. The bank said that the technology may help reduce the number of calls coming into the bank's compliance call centre by as much as 50%. In addition, my team at UCL is already working with the UK law firm Clyde & Co on a proof of concept for a robo-adviser for registration and authorisation advice in the UK.

Progress in **regulatory monitoring** is coming from regulators and the private sector. According to the London School of Economics, national regulators have already begun to codify conduct offences and group them under conceptual headings, such as market abuse, oversight failure, customer care failure or careless reporting or recordkeeping⁷. Firms such as Corlytics are using this

global taxonomy to generate *predictive* power by taking enforcement and other regulatory data to pick out emerging risks and trends months before they crystallise in the market.

A range of **regulatory reporting** solutions were presented at the FCA's 2016 TechSprint on 'Unlocking Regulatory Reporting'⁸. Some proposed that firms changed from 'pushing' reports into the regulator, with the regulator storing all this data, to a possible scenario of the regulator 'pulling' the agreed data instantaneously from firms as required. Indeed, the Austrian Central Bank (Oesterreichische Nationalbank, OeNB) already has a version of such 'pull' regulatory reporting in place which, according to the provider BearingPoint, is "achieving saving across the country upward of 30%"⁹. In Asia, the Monetary Authority of Singapore (MAS) has funded a blockchain-based record keeping system as part of its five-year US\$225 million investment plan aimed at financial technology¹⁰.

Finally, in **policy** we have seen that some regulators are using technology to help make the regulations themselves more navigable – for humans and ultimately for machines. In the 2017 Our Mission feedback statement, the FCA announced that "we are seeking ways to make the FCA Handbook easier to navigate, and have already progressed work in in this area"¹¹. The FCA has already introduced some practical improvements, including topic-based navigation and searching¹².

The profound people impact

So far, I have focused on the technology aspects of the changes that algorithmic regulation could bring. But technology does not operate in isolation. I believe that the people impact (for individuals and organisations as a whole) from algorithmic regulation will be equally profound – not least in terms of the type of work that we humans will perform and the skills we will need to do it. With the pace of technological change ever accelerating, it may be time to start thinking about how best to enhance your own skills to this new regulatory framework.

⁴ <http://blockchain.cs.ucl.ac.uk/barac-project/>

⁵ R3 is a distributed database technology company. It leads a consortium of more than 70 of the world's largest financial institutions in research and development of blockchain database usage in the financial system.

⁶ Reuters, 'Credit Suisse has deployed 20 robots within bank, markets CEO says', May 2017

⁷ <http://eprints.lse.ac.uk/66934/>

⁸ www.fca.org.uk/firms/innovate-innovation-hub/regtech

⁹ BearingPoint press release, March 22 2017

¹⁰ CoinDesk, Singapore Central Bank Funds Blockchain Recordkeeping Project, July 2015

¹¹ FCA, 'Our Mission 2017: feedback statement' April 2017

¹² www.handbook.fca.org.uk/news/54



Professor Philip Treleven

About the author

Philip Treleven is Director of the UK Centre for Financial Computing & Analytics and Professor of Computing at UCL in London. Twenty years ago his research group developed much of the early fraud detection technology and built the first insider dealing detection system for the London Stock Exchange.

For the past 12 years Prof. Treleven's research group has developed algorithmic trading systems with many of the leading investment banks and funds and for the past four years they have worked on HFT trading risk and systemic risk with the Bank of England and FCA. Current research includes the application of blockchain technology to financial 'Algorithmic Regulation'; and working with BUPA/Boots on mHealthcare.

3

Using technology to help rebuild trustworthiness in the insurance industry

Jagdev Kenth and Grace Watts



Insurance

1. Business that involves selling people promises to pay later that are never fulfilled
2. A way to get free money

Source: the crowdsourced Urban Dictionary

Insurance company

1. An affiliation of pirate-gamblers who accept bets called premiums. The dollar amounts of the premiums are non-negotiable but the amounts of the claim settlements, should the company lose the bet, are rarely delivered without argument.
2. Evil multi-billion dollar corporations that earn a profit from your premiums, and then find any loophole they can so they can refuse to live up to their responsibility in order to save money.

Source: the crowdsourced Urban Dictionary

The two most popular definitions of 'insurance'¹ and 'insurance company'² on the crowdsourced Urban Dictionary are symptomatic of the pervasive lack of trust within the modern insurance sector.

Perhaps unsurprisingly, the Urban Dictionary definition of 'insurance fraud' is:

"A person in need of cash. They will deliberately chuck themselves in front of vehicles just to get compensation. They will use some of their money from the insurance company to pay the health bills to recover and then the rest is pure profit³".

There is no reference to insurance fraud being improper or illegal. It seems we are justified in exaggerating or falsifying claims to get some of this money back – it was taken from us unfairly, after all.

The distrust cycle

So, have the actions of insurance companies eroded trust and pushed consumers towards the notion that defrauding insurance companies is socially and morally acceptable? Or have dishonest consumers who believe fraud is harmless caused insurance companies to question or challenge claims?

According to the FBI, insurance fraud actually costs the average US family between US\$400 and US\$700 per year in the form of increased premiums⁴. So for most this 'free money' remains elusive. It's not just individuals and families bearing the brunt of these actions, but societies too.

In Europe fraud is estimated to account for 10% of all claims⁵, in Australia it costs the industry US\$2 billion per year and in South Africa, US\$390 million⁶. Fraudulent and unfair health insurance claims alone cost the South Korean government US\$500 million in 2016⁷.

However, the insurance sector is not above criticism. After Hurricane Katrina, the industry faced a raft of negative publicity for denying claims to policyholders at a time of great human suffering. Elsewhere, a report found that UK car insurance companies were making £1 billion per year by hiding price rises from customers at renewal⁸. Earlier this year insurers received more negative attention when some rejected claims following a London terrorist attack that killed seven and shut down local businesses for 11 days. One restaurant was faced with £50,000 in losses despite having business interruption cover; it excluded terrorism and the claim was not paid ex gratia⁹.

And so distrust breeds misbehaviour, which fuels more distrust. Indeed according to one behavioural economist, "If you tried to create a system to bring out the worst in humans, it would look a lot like the insurance of today¹⁰".

¹ www.urbandictionary.com/define.php?term=insurance

² www.urbandictionary.com/define.php?term=insurance+company

³ www.urbandictionary.com/define.php?term=insurance%20fraud

⁴ www.fbi.gov/stats-services/publications/insurance-fraud

⁵ www.insuranceeurope.eu/fraud

⁶ www.ssp-worldwide.com/fraud

⁷ *Insurance Business*, 'Insurance fraud to cost South Korean government over US\$500m', December 2016



Why do we even need trust?

Trust – our belief in the reliability, truth or ability of something or someone – is integral to daily life. We trust drivers of public transport to get us to work safely, we trust our favourite lunch spot to serve us edible food and we are trusted by our employer to carry out our duties in a responsible and legal manner. These simple, everyday activities become laborious in low trust environments.

“ The inability of societies to develop effective, low-cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the Third World ”

Douglass North, *Institutions, Institutional Change and Economic Performance*

According to the economist Stephen Knack, “If you take a broad enough definition of trust, then it would explain basically all the difference between the per capita income of the United States and Somalia”¹¹. For Knack trust has wide-ranging economic and social impacts: from reducing transaction costs to strengthening democratic governance. When trust is present, we can enforce contracts quickly and cheaply¹².

In the insurance industry the abundance of protocols to tackle distrust can add layers of complication and cost, both for the insurer and the insured. Arguably, like certain societies around the world, the industry is being hampered by such complicated processes.

⁸ *The Telegraph*, 'Car insurance companies making £1 billion a year by keeping customers in the dark', June 2015

⁹ *Insurance Business*, 'Restaurant claim fails after London Bridge terrorist attack', June 2017

¹⁰ www.lemonade.com/blog/the-cost-of-our-dishonesty/

¹¹ *Forbes*, 'The Economics of Trust', July 2010

¹² www.oecd.org/innovation/research/1825662.pdf





A trust revolution?

The sharing economy has generated much thought on trust. In its entirety, the industry will be worth US\$335 billion in 2025, up from US\$14 billion in 2014¹³. In today's world people open their homes to strangers (Airbnb), order a ride with an unseen driver (Uber) and entrust their pets to someone they met online (BorrowMyDoggy).

All of this relies, in some part, on trust. Indeed Amsterdam-based Peerby relies entirely on trust; users put household items on loan and borrow the things they need from people in their neighbourhood without any financial transaction.

This business model is not restricted to tangible assets: it's also being used in insurance. German start-up Friendsurance uses the sharing economy approach to unite groups of similar policyholders who can gain cashback on their premiums if no one in the group makes a claim. Guevara encourages friends and family to join mutual pools. Members trust each other to mitigate risk and not make fraudulent claims, which would decrease the potential group rewards. Any money left at the end of the policy year is used to discount their renewal.

Lemonade is a start-up carrier that also functions as a public benefit corporation. Its mission is to "use the power of technology to transform insurance from a necessary evil to a social good" and its Chief Behavioural Officer Dan Ariely was appointed to "make Lemonade trusting and trustworthy"¹⁴.

Lemonade has disrupted the traditional insurer model in two fundamental ways in a bid to gain its customers' trust. Firstly, it has declared it will only ever take 20% of premiums as a flat fee; it does not make money from denying claims.

Secondly, when policyholders sign up to Lemonade they are asked to nominate a charity to benefit from its

Giveback programme. Each year the company donates any underwriting profit to these nominated causes. According to Ariely this is not just about philanthropy but good business as it "neutralizes the conflict of interest at the heart of the insurance industry, lowering fraud, costs and hassle all around"¹⁵. It functions as a mechanism to foster trust between Lemonade and its customers, because if they try to claim 'free money' it will be at the expense of a charity they care about, not Lemonade's bottom line.

Or is it?

However this idea that trust is integral to business is not a 21st century concept introduced by the sharing economy or technology disruptors. And fundamentally, the concept of an insurance company *wanting* to pay claims is not a new one.

The motto of Lloyd's of London, the world's largest and oldest insurance marketplace, is *fidencia*, meaning 'confidence'. The underlying legal principle of London insurance is 'utmost good faith', namely all insurance contracts rely on full and complete honesty.

In 1906, a major earthquake hit the American city of San Francisco. The quake and its ensuing fires ravaged the city, killed thousands of people and left half of the population homeless.

As the government was not responsible for financing relief, the insurance industry bore the cost of these losses: US\$50 million in total, over US\$1 billion in today's money. Famously, one of Lloyd's leading underwriters, Cuthbert Heath, instructed his agent to "pay all of our policyholders in full, irrespective of the terms of their policies"¹⁶.

Heath's actions were revolutionary at the time and solidified Lloyd's reputation for the fair and honest payment of claims. It is this same reputation that today's technology disruptors are hoping to rebuild. Rather than trying to keep up with these new entrants, insurance companies may want to take a step back into their past to find the way forward.

¹³ Niam Yaraghi and Shamika Ravi, 'The Current and Future State of the Sharing Economy', March 2017

¹⁴ <https://blog.lemonade.com>

¹⁵ www.lemonade.com/blog/lemonades-social-impact-report-20-nonprofits-100-days/

¹⁶ www.lloyds.com/lloyds/about-us/history/catastrophes-and-claims/san-francisco-1906-earthquake

Rebuilding trust versus becoming trustworthy

Insurance companies are not the only organisations caught in cycles of distrust. Even new business models centred on trust have had their trustworthiness questioned in recent times.

In 2016, a study on racial discrimination in the sharing economy found that guests with distinctively African-American names were 16% less likely to be accepted for an Airbnb stay compared to identical guests with typically white names¹⁷.

Algorithms, which are heavily relied on by low-cost insurtech companies, have also come under scrutiny. Scientists recently found that word embedding algorithms exhibit gender and race biases, such as associating white names with pleasant words and African-American names with unpleasant ones¹⁸. “A lot of people are saying this

is showing that AI is prejudiced,” said one of the study’s authors, “No, this is showing we’re prejudiced and that AI is learning it¹⁹”. Algorithms, unlike humans, cannot consciously detect their own biases and redress their behaviour.

New technologies and disruptive business models are not therefore a quick fix for distrust or a proxy for trustworthiness. Indeed, insurtech start-ups face many of the same problems as traditional insurers; Lemonade has publicly acknowledged how refusing claims to underinsured customers can create distrust.

Trust cannot be taken, it must be earned. Much of the current thinking is around how the insurance and broader financial sector can rebuild trust; the approach has involved increased regulation, more compliance officers and further processes. A better approach would be to rebuild trustworthiness.

Ways to build trustworthiness:

1. **LISTEN** – to your customers and act on their feedback
2. **CULTURE** – embed inclusivity and fairness: from IT development to customer services, demand the same of partners
3. **EDUCATE** – employees through effective training and clients through ‘plain English’ contracts
4. **TECHNOLOGY** – to detect, develop and demonstrate trustworthiness for example, through swift claims payments

By appropriately adapting to a future of work where trustworthiness is at the core of the business model, for example, insurers can instil trustworthy behaviours in their business, employees and customers. Using technology to take the pain and friction out of the claims process allows insurers not only to engender good feeling, but also to redeploy human capital for customer-facing interactions, which in turn can demonstrate trustworthiness and develop mutual trust.

The question is not how can we convince our customers to trust us, but what actions do we take to make ourselves worthy of their trust and vice versa.



¹⁷ Edelman, Luca, and Svirsky, 'Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment', 2016

¹⁸ Caliskan, Bryson, and Narayanan, 'Semantics derived automatically from language corpora contain human-like biases', *Science*, April 2017

¹⁹ *The Guardian*, 'AI programs exhibit racial and gender biases, research reveals', April 2017

Trust

in conversation with Mark Evans, Marketing Director, Direct Line Group

“**Insurance is unique in that it is a business where you don't know the cost of something at the point in time that you sell it.** For example, the average motor insurance premium last year in the UK was a few hundred pounds – and yet our largest motor claim in 2015 was well over £10m due to the devastating injuries incurred by multiple crash victims.

This makes the sector constitutionally risk averse.

Simultaneously, with the growth of price comparison websites the market has become increasingly commoditised leading to an over-focus on price at the expense of value-for-money. As a result, surveys from the likes of NVision and Edelman suggest that it is one of the lowest trust sectors in the economy. As a die-hard consumer marketer, I found this a sorry state of affairs for our industry when I joined but I can also see the huge opportunity that it presents – going back to the basics of marketing and meeting consumers' unmet needs.

At Direct Line we are confident that we've found a way through this distrust cycle – by listening to our customers to understand their unmet needs and sorting out our processes to deliver that. For example, when customers take their

damaged car to a garage to be repaired, they don't know when they'll get it back and if they get a replacement car during the process. We found that customers want certainty – so we gave it to them: a guarantee of a seven-day repair turnaround (approximately half the industry average) or we pay them a daily rebate of £10 and a guarantee of an equal standard replacement car in the meantime. There are many examples like this where we have challenged the norms of the industry.

Focusing on meeting customer needs is not always easy – in the past three years it has required a huge amount of effort across the organisation to change our propositions and processes and also the culture to support this. We've had to shift our mindset to become 'fixers' all the way from the front line staff to the executives – and to trust each other that we will each play our part in this journey. Hence, we were particularly proud when in a 2015 **Harvard Business Review study** Direct Line was voted the most empathetic company on Twitter, reflecting our genuine customer orientation.

But implementing **a strategy in support of trust has also made great business sense** – our numbers reflect that, which is why it's a strategy that we will continue to focus on.”

Trust

in conversation with David Williams, Technical Director AXA Insurance

“Trust is so important throughout the whole insurance purchase process – as we're selling a promise that should things go wrong, we will look after you.

But trust requires a relationship. In insurance, it's difficult to connect with customers in the right ways to create that trust. After all, even in a bad year less than 15% of us as retail consumers will make a claim, so most people will only interact with their insurance providers once a year at renewal time. Also, renewals can be somewhat 'reluctant' – as some types of insurance are driven principally by what the law requires us to do.

Engendering trust is important to counter the potential for substitution from technology. Just think about it for a moment – the fully connected home is almost a reality where we'll be able to remotely check our home for intruders via 'canary cameras' or be alerted to fire or moisture threats by other monitors before disaster falls. In this scenario, where technology could facilitate a deep and trusting relationship with consumers, they could start to question 'what do I need insurance for?' To counter this, insurers will need to have established a trusting relationship with our customers in order

for our advice to be heard – otherwise our promises to protect people when things go wrong will just sound like more 'fake news'.

At AXA we want to **create the right types of interactions with customers** beyond the annual renewal. Avoiding the persistent and impersonal mass mailshot that says 'buy this random thing now', we want to suggest topics and services that are relevant to specific customers using the communication forms they like – say social media or email. That way, people will get to know us and trust us more.

90% of AXA's business is intermediated. So if we want to build trust with our end-customers, **we will need the help of intermediaries to do this.** This means reinforcing another kind of trust – between intermediaries and underwriters. Intermediaries need to trust us that we can have a direct client relationship without disconnecting them from the client – basically that we can build trust with the end client in a way that will be a good outcome for all of us. That's part of the overall trust dialogue that we want to start building.”

Trust

in conversation with Richard Norris, Director Consumer UK Insurance, Bupa

“ We want to be loved as a true customer champion in health and care. Customers are at the heart of everything we do. **For us, trust is simple: our customers trust us to do what we say we are going to do and we do it.**

For us this means listening to our customers, acting on their feedback and responding to their needs quickly and with respect. We trust our customers to give us the right information, whether that's their date of birth or employment status, but we also have our own checks in place. This builds mutual trust.

We see it as a balance sheet; every interaction a customer makes with us should be a positive asset on their balance sheet. There should be no 'trust liabilities'.

Core to our business is health insurance and we recognise our responsibility to care for our customers when they need us the most. When customers make a claim on their policy, they expect us to make sure that they receive appropriate treatment from the most appropriate clinical provider. We also focus on the points where customers buy and renew their policies. As four out of five customers may

not use their insurance in a given year, we focus on giving them trust in the value of their purchase despite not using it regularly. Again, this means trusting us to do what we say we are going to do.

We recognise that trust is not a right or a given, but it needs to be earned. Health insurance is not compulsory in the UK as it is in some other markets and our customers in the UK have a free alternative under the National Health Service (NHS). As a result we must work even harder to get customers to trust that health insurance products are a valuable and viable alternative.

We also want to build partnerships with our intermediary partners to put our shared customers at the centre of what we do. Importantly, everyone must trust each other to have the end customer's best interests at heart – nothing can be withheld in the middle.

Ultimately trust should form part of an organisation's very ethos; **as an industry we must take actions that are trustworthy because we want to, not just because the regulator has enforced it.”**

“ Trust is so important throughout the whole insurance purchase process – as we're selling a promise that should things go wrong, we will look after you. ”

4

Redefining negotiation: a social process in which we can all excel

Ali Gill

We all negotiate every day – for the last space in the lift, for whose turn it is to cook dinner or simply for a lie-in. Yet despite how successfully we negotiate in the minutiae of our everyday lives, few people would claim to be good ‘negotiators’ as this is seen as a specialist, often high-octane skill set. Some of us even structure our lives so as to avoid explicit negotiations.

I am interested in the social, emotional and cognitive reasons that lead to the behaviour of *not* negotiating. From my research, I believe that it is possible to redefine negotiation to be a social process – one in which with a little forethought we can excel.

I am writing as a person who believes that in order for me to achieve the things that I want, I have to set myself up in such a way that I can be my best. Because my needs and wants are not always the same as others’, this has meant both in my work and sporting careers that I have had to learn to negotiate.

My starting point is that anyone (and particularly those who enjoy relating to others) can learn to be great negotiators. This is because negotiation is a social process, usually involving dialogue, through which wants and needs can be met.

Negotiation:
the process of discussing something with another person (or people) in order to reach an agreement.



Negotiating pay

When we think of and speak of negotiation at work, we often think about negotiating pay. In her book *Women Don't Ask* (2001), Linda Babcock found that while 57% of men typically negotiate their salary before accepting a role, only 7% of women do. When she looked in to this she identified three reasons:

1 Women experienced what she called a relationship capital cost when they tried to negotiate. That is, they experienced being penalised by those they tried to negotiate with, which made them reticent to try.

2 They also typically underestimated their value – so they felt that negotiating for small gains was not worth it. They underestimated the compound impact of a year on year salary at lower levels over their entire career.

3 Although they often prepared fully to ensure they got the job, they did not prepare in terms of what it was worth to them and what they wanted to be successful, so they struggled to generate alternative options to any offers they received.

Linda Babcock’s research offers some profound insights that bring meaning to our negotiation experiences; the differences between how men and women typically experience negotiation and the core capabilities required to be good at it – regardless of gender.

Lessons from negotiating with children

Anyone who thinks that they might not enjoy or be good at negotiation might want to think about their experiences as a child (or perhaps more easily with children generally): you have an eye to their needs and wants (more sweets, staying up later, more of your time) and your own needs and wants (happy children, an easy life, or getting somewhere on time and within budget).

Generally everyone knows with children flexibility is key – but also you have a bottom line; a perspective you won't go beyond. I recently was reminded of my non-negotiable bottom line with my goddaughters – two ice creams were enough, no more. At that point I was non-negotiable (it's not good for them, they don't need it and their parents won't thank me if they have any more).

This simple example illustrates three important aspects of negotiation:

- **It happens all the time**
- **We constantly make subtle adjustments**
- **But, we have an absolute limit based on what we think is reasonable.**

What negotiation with children shows us is that authority, power, respect and dominance are key levers of social interaction and the way that we interact with each other at home and at work. These social and emotional processes are particularly important to becoming successful at negotiation.

Negotiation is a social and therefore an emotional process

Let me take you back to Linda Badcock's research on relational capital. She identified that many women often feel that they can't negotiate because it has a negative effect on their relational capital. She found this experience was directly related to how dominant the person they were negotiating with was. Dominant bosses, in pay negotiation, used dominance as a means to assert negotiation authority.

A word about dominance

Dominance is a mechanism used primarily when animals (and humans) compete for limited resources (food, sexual partners, status and in the case of humans, money). The stronger animals benefit at the expense of the weak. By submitting to a stronger peer one avoids an aggressive act from the dominant animal. In chimpanzees and gorillas (and the same is observed in human gangs) the dominance hierarchy reduces violence in the group. Choosing to challenge the dominant male (and sometimes the dominant female) is potentially life threatening. It is 'evolutionarily' expensive.

So, what has this to do with human negotiation? In organisations in which a dominance hierarchy is alive and well and, used as a primary means of controlling subordinates, negotiation will be experienced by the leader as competition for vital resources, that is status and power.



However, dominance is difficult within species in which cooperation is important (such as humans). Weaker animals can form coalitions to attack stronger animals, something we see happening for example in chimpanzees. In human evolution, cooperation has led to a reversal of the balance of power. Someone is not a leader because he or she is able to dominate, but because their abilities benefit the group. Studies of hunter gatherers show that in these civilisations there is little or no formal power relationship and attempts to dominate the group are punished. The leader leads by consent of the group. The position of leader has obvious evolutionary advantages: the respect and prestige may translate into greater privileges and more mating opportunities for that leader.

“ Someone is not a leader because he or she is able to dominate, but because their abilities benefit the group. ”

How a dominance hierarchy can impact negotiations

My own research tells me that the existence of a dominance hierarchy is most likely to be found in organisations where large bonuses are the currency of status and reward and also in male-dominated environments where group behaviour is driven more by male-to-male interaction.

In such an environment, attempts to negotiate can often be met with un-cooperative behaviour. This behaviour comes in five types:

- **Criticism:** attacking your motivation to negotiate; perhaps describing you as greedy, not worth it relative to others who are 'serious competitors' for the role
- **Contempt and mocking:** statements that come from a relative position of superiority. Example, 'You must be joking' or 'I don't think you have done your research on the value of this role'
- **Defensiveness:** self-protection in the form of righteous indignation or innocent victim-hood. Defensiveness wards off a perceived attack. Example: 'It's got nothing to do with you'

- **Stonewalling:** emotional withdrawal from interaction. Example: the listener does not give the speaker the usual nonverbal signals that the listener has 'heard the request'. In a business environment this might include simply not replying to (email or other) requests for information or a discussion, for example
- **Overuse of charm and difficult-to-support claims:** examples include '...of course you are worth that amount but we don't have that budget just now' or 'we'd be looking to get your salary up to that level once you are in'

Most of us are biologically attuned to these types of behaviour; we recognise them as uncooperative behaviour and they act as warning signals and threat. These behaviours typically raise our cortisol levels (the stress hormone) and lead to feelings of wanting to 'fight-back' or avoid the discussion (figuratively 'run away'). You don't need to be a silverback gorilla to know that fight is always a costly strategy in a dominance hierarchy.

Preparing to excel at negotiation

I find that to excel at negotiation it is helpful to understand evolutionary leadership. Having a good understanding of power and leadership dynamics and different styles of and approaches to conflict resolution, helps us to recognise and appropriately react to these unhelpful behaviours. Finally, it is essential to learn to be attuned to the needs of others. Attuning to the needs of others and being able to help others see the need for change is a vital skill if you want to influence others. The ability to attune requires that you listen with 'the third ear'. A concept introduced by psychoanalyst Theodor Reik (1948), this refers to the practice of listening for the deeper layers of meaning in order to glean what has not been said outright. It means perceiving the emotional underpinnings conveyed when someone is speaking to you.

These attributes may feel too big to be immediately manageable, so below I set out some more digestible steps to help you for your next negotiation – be it with a small child or the CEO of a large corporation.

“ I find that to excel at negotiation it is helpful to understand evolutionary leadership. Having a good understanding of power and leadership dynamics and different styles of and approaches to conflict resolution, helps us to recognise and appropriately react to these unhelpful behaviours ”

1

LISTEN – and attune to the situation, the best negotiators use their ears first. They use their ‘third ear’ listening to what is being said (as well as to what is not being said) and test whether their interpretation is correct.

2

ASK – does the person you are talking to have the authority to negotiate? If not, ask to meet the person who has this authority. This is a vital early step as a very common negotiation technique is to defer to someone in higher authority and then to blame the lack of ability to budge on an inaccessible third party.

3

PREPARE WELL – use all information you can and prepare well; remember the whole outcome that you are trying to negotiate. If you are trying to negotiate a whole remuneration package (and not just a salary), you might want to start with how you work, rather than what rewards you get.

4

KNOW YOUR LIMITS – be confident about your needs and wants and know the difference between those two things. Compromising on needs lowers your status.

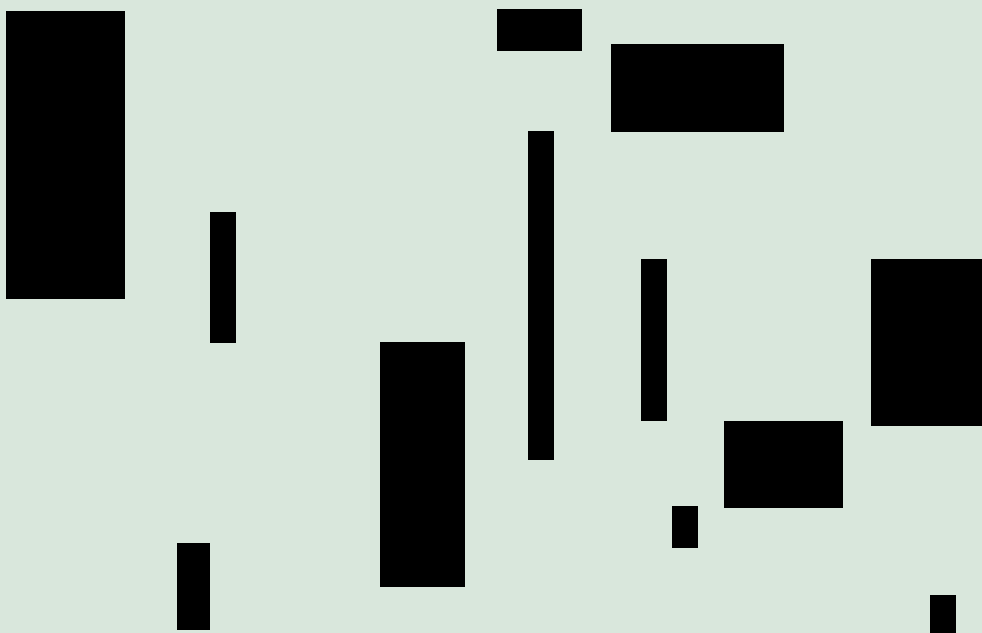
5

USE POWER PAUSES WELL – if you are offered a lower than acceptable offer – one you know is too low and the person offering knows is too low – use the painful ‘power pause’. Say nothing and look them straight in the eye.

6

PRACTICE – practice negotiating things that are low risk to you and do it often. Humans suffer from loss aversion, so practising when you have a lot to lose will feel emotionally draining. Make your practice safe until you have a sense of the basics.

And remember, if you never hear NO when you negotiate it is likely you haven't negotiated enough.



Select Article

My experience of negotiation: Rosemary Hilary, Portfolio Non-Executive Director and Chair of Audit Committee at Willis Limited

Ali Gill's article about negotiation as a social process really resonated with me across the various types of negotiation I have had to do so far in my work. In the course of my career I worked as a regulator for a number of years. That meant I had positional power over the firms I supervised. However even then I realised that this sort of power needs to be used sparingly if you are to gain the real respect of those you are supervising.

I have also been in a position of 'semi-positional' power when running the risk function at the UK Financial Services Authority (FSA) and as a chief internal auditor. In these cases I was dealing with my peers, which can be more difficult. The key here was always to put myself in the shoes of the person I was 'negotiating' with.

I think what gets in the way of successful negotiation all too often is not what is going on in the here and now, but what is popping up in one's subconscious. This can be very complicated: sibling rivalry from childhood; playground squabbles; perceptions that the other party 'gets away with things' all too often; worry about what 'losing' will do to your reputation etc. It's helpful to know what your personal triggers are.

I've also found the following helpful when going into a business negotiation:

- **Preparation:** think about the other party and what drivers they have; what motivates them (is it an intellectual debate? How much time do they have? Do they work better with statistics or written material?); and what is at stake for them in the negotiation
- **Business focus:** try hard in advance and throughout the process to remove emotion from your own mind
- **Compromise:** remember that it is not generally a case of winning or losing but each party will often have to give a bit and feel they can walk away with their head held high
- **Prioritise:** work out in advance what is really key. This can help avoid digging your heels in for the wrong reasons; for example, simply because the other person is getting on your nerves
- **Flexibility:** be flexible and intellectually nimble as the conversation(s) may take twists and turns that you had not thought of. The other party will also be subject to all of the above pressures and emotional triggers, so be prepared to respond to these
- **End positive:** think how you will end the conversation even if you don't get your chosen outcome
- **Follow up:** think what actions you might take. For example, in successful pay negotiations it is wise to send an email to confirm what you think you gained. If you have been unsuccessful you might nevertheless want to send an email to thank the person for their time and flag that you might want to try again in x months' time.

My experience of negotiation: Nigel Basham, Special Contingency Risks Ltd. Formerly a special operations detective and hostage negotiator for the UK's Metropolitan Police and a member of the British Government's elite Hostage and Crisis Negotiation Unit (HCNU).

“ I think it's important to realise that hostage and crisis negotiation does not in reality tend to bear much resemblance to the images we see in Hollywood movies. Yes, it can be extremely stressful and dangerous at times, but key to successfully resolving many situations is to work towards bringing calm and rational thinking into the mix – not guns and egos. ”

Whether the person we are dealing with has suffered personal tragedy, or is mentally ill or possibly a violent criminal now surrounded by police officers, the common theme is that most of the individuals we faced were likely to be in a state of crisis. It is therefore vital to think very carefully before making even an initial contact because, as the saying goes, you don't get a second chance to make a first impression. And so, as Ali points out in her article, preparation is key.

If we look at negotiation as being a series of carefully considered conversations with a purpose, we can start to see how the same approach can also be applied before entering into other types of negotiation in everyday life. Negotiation is not a chat, it is designed to move the person we are dealing with into a state where we begin to have rapport and empathy with them, with the ultimate goal being to have earned the right to work with them towards a solution. This takes care, skill, patience and high levels of emotional intelligence. So it is unsurprising that many of the finest negotiators I have worked with over the years have been women, although this fact seems to be largely ignored by Hollywood.



Ali Gill

About the author

A consulting psychologist and a triple Olympian in rowing, Ali works with boards of directors to strengthen relationships, enhance decision making and improve board effectiveness. She works extensively with FTSE100 boards on non-executive and executive effectiveness and as an advisor on matters of culture and behaviour.

She was an independent adviser to British Rowing for their internal review of culture (2016); adviser on culture to the Salz Review of Barclays Bank (2013) and co-authored Annex 4 of The Walker Review of Banks and Other Financial Service Institutions (2009): Psychological and behavioural elements in board performance. She is currently co-lead tutor and Advisory Board Member of the *Financial Times* Non-Executive Director Diploma and an advisory board member for *Governance & Leadership* magazine.

5

Game on: the potential for gamification in asset management

David Bird

Millennials do not have a great reputation. This group of people, born sometime between 1980 and 2000 are apparently lazy, entitled, narcissistic and more interested in their smartphones than human interaction. In China they are the only-child generation and considered 'little emperors and empresses' given their privilege and lack of hardship. In the West, they've been accused of 'killing' cereal, chain restaurants and even the napkin industry.¹

At the same time the world over they are described as socially conscious, entrepreneurial and highly educated. In South Africa and Latin America they have been called upon to ensure democracy and act as the force of change.

Millennial money – interested in saving, not investing?

Mixed perceptions of this 'Me Me Me Generation' continue when it comes to their finances. In the same month this year one news outlet ran the headlines 'Why Millennials Aren't Saving Enough Money to Retire' and 'Hey, Millennials, You May Not Be as Bad at Saving as You Think You Are'.

According to a recent report by Merrill Edge, millennials are saving but for different reasons than their parents; they save to live their desired lifestyle rather than to leave the workforce. They are less interested in getting married and becoming parents than older generations, but more desirous of working their dream job and travelling the world².

Millennial money is therefore more concerned with short term goals, which may explain why they are good at saving but not so interested in investing. By 2020 millennials could have a net worth of US\$24 trillion³ yet only one third invest in the stock market⁴. Many grew up during the financial crisis of 2007-2008 and saw their parents suffer as a result; this has engendered distrust in investments and a risk-averse attitude. In China where millennials are relatively more prosperous (70% are homeowners), their preferred investments are property and cash over stocks or funds.

Relatability is another issue; the average age of a financial adviser is 50 years old and there are more financial advisers over 70 than there are under 30⁵. 60% of millennial women equate a typical investor to an old, white man⁶. This wariness of investing is compounded by high student debt, house price rises and the fact that young adults today earn 20% less than their counterparts did in 1989⁷.

Not just a millennial problem

While millennial saving for short-term goals may be damaging to their long-term financial health, it is also bad news for asset managers. The average investor is currently in their late 50s but 81% of asset managers say they want to become more attractive to the younger generation⁸.

Asset managers who fail to adapt business and operating models to attract this next generation of wealth may risk losing a substantial pool of future investments. Asset management is not immune to the fintech boom and millennials are particularly open when it comes to technology; 85% of UK millennials are comfortable with using robots for financial advice⁹. Arguably this will only grow when Generation Z (born 1995-2012) reach investment age; they are the only generation to have never known a world without internet.

¹ *MarketWatch*, 'Here are all the things millennials have been accused of killing – from wine corks to golf', June 2017

² Merrill Edge Report: Spring 2017, 'Millennial mindset: It's all about freedom and flexibility'

³ UBS, 'Millennials – the global guardians of capital', June 2017

⁴ Bankrate survey, 2016

⁵ *CNBC*, 'Here's why millennials aren't investing', April 2016

⁶ *Business Wire*, 'Stock Market Investing is for Old, White Men, According to More Than Half of Millennial Women', March 2016

⁷ *Fortune*, 'Millennials Are Worth Half as Much as Their Parents Were at the Same Age', January 2017

It's game time

Gamification, defined by Merriam Webster as “the process of adding games or gamelike elements to something (such as a task) so as to encourage participation”¹⁰ may be one way for asset managers to engage and educate future investors.

The principles of gamification have been used successfully in a range of scenarios. Although many of us would not consider ourselves gamers, we have probably encountered gamification techniques in our daily lives; from walking that bit further to reach our Fitbit reward to moving up levels on retail or airline loyalty programmes.

Languages are an area where gamification has really taken hold. Some readers may remember a time when learning a language meant attending a crowded evening class, or self-learning using a cassette tape or CD. Then the language startup Duolingo launched its free app about five years ago. It has applied the principles of gamification to help 120 million users learn up to 22 languages, including French, Japanese and Swahili¹¹. They, and other language apps, use gamification elements such as level unlocking and rewards to educate and motivate users but also, crucially, to encourage them to continue to use their service over the competition.

“ The principles of gamification have been used successfully in a range of scenarios. Although many of us would not consider ourselves ‘gamers,’ we have probably encountered gamification techniques in our daily lives: from walking that bit further to reach our Fitbit reward to moving up levels on retail or airline loyalty programmes. ”

Gamification principles are not restricted to recreational activities; tangible business problems have been tackled using this approach including improving security awareness (by improving employees’ filtering of phishing emails) to enhancing stakeholder engagement (by facilitating ‘tailored story-telling’ by external stakeholders and employees as they explore the firm’s vision and culture platform).

Applications in asset management

According to fintech thought leader Paolo Sironi, gamification can “achieve sustained innovation in financial services because it can provide a way for individuals to rewire their brains and bodies and achieve better investment behaviour against the imprints generated by financial events and the experience of their formative years”¹². This is particularly relevant for millennials, 82% of whom say their investment decisions are motivated by the financial crisis¹³. For asset managers, gamification can also create ‘stickiness’ among clients and enhance profitability.

⁸ *Financial Times*, ‘Millennials force wealth managers to up their game’, June 2016

⁹ *Financial Times*, ‘fintech lures millennial investors away from asset managers’, January 2017

¹⁰ www.merriam-webster.com/dictionary/gamification

¹¹ www.duolingo.com/press

¹² Paolo Sironi, *FinTech Innovation: From Robo-Advisors to Goal Based Investing and Gamification*, Wiley 2016

¹³ Legg Mason, ‘Global Investment Survey’, June 2017

Encourage investment

According to Legg Mason's recent Global Investment Survey, 85% of millennials describe themselves as conservative investors, compared to just 29% of baby boomers. For asset managers to attract these future customers they must be able to demonstrate to millennials not only the risks of investing, but also the potential rewards.

One startup, Copper Street, is drawing on the concept of popular game fantasy football to "gamify the stock market". The app serves as an educational tool for potential investors to learn about trading through "fun competitions and rewards" without feeling overwhelmed. Users create teams of stocks and compete in interactive challenges. Once they feel confident, they can transition to trading real stocks via the same gamified structure.

By providing first-time investors with no-risk educational tools prior to making real investment decisions, asset managers could encourage participation among this generation of cautious investors. Better education could also improve investment strategies and outcomes, all of which improves asset manager profitability.

Assess risk and reinforce positive behaviour

Although many millennials are conservative, they are not immune to risk. However, in an age where lives can be managed on smartphones few younger investors appreciate filling in lengthy risk appetite questionnaires. This is one area where gamification could not only improve engagement but also the accuracy of outcomes.

Neuroprofiler is a risk profiler that uses gamification techniques to assess an individual's investor profile. The potential investor plays a five-minute interactive game whereby they must make choices when presented with different scenarios. Questionnaires can be flawed; they can be complicated and ultimately rely on individuals understanding their own inherent biases and motivations. Games, however, can be instinctive, simple and better at simulating real-life experiences. Furthermore they can be repeated with higher frequency and ease than questionnaires.

By using such techniques to understand an investor's risk appetite, asset managers can identify early warning signs of negative behaviour not just at the initial point of investment, but throughout the investment lifecycle. In a gamified setting, this could allow for the reinforcement of positive behaviour through rewards and appropriate penalties for negative behaviour, improving outcomes for both the investor and manager in the long term.

Improve customer retention

Investment start-ups using gamification techniques such as Nutmeg or Meetinvest don't just aim to improve trust and education in the investment process, they also want to make it *fun* – an adjective perhaps not always associated with investment processes of old.

Investing real money is of course not a game in itself and sensible risk taking should always be prioritised above simply having fun. However the two need not be mutually exclusive. By continuously engaging with customers in a manner that is both fun but also demonstrates an understanding of their goals and concerns, asset managers can increase loyalty among a generation known for its lack of brand allegiance.

Game on – the wider impact on asset managers

Adapting business models to meet the requirements of future investors is not simply a technology bolt-on; to be successful it will also require asset managers to adjust traditional work and talent structures in their organisations.

Asset managers will need to understand both the role technology will play in their core business strategy and which cultural attributes and organisational capabilities will create competitive advantage in this new landscape. Talent will need to be realigned with these priorities, which may require asset managers to look for skills outside of their traditional employee base – from software developers to artificial intelligence.



LifeSight – Gamification and personalisation in action

When we started to build Willis Towers Watson's master trust offering we were very keen to make a break with the failed past approaches to communication and engagement in pensions. It is a commonplace view that the pensions industry is poor at engaging with members and yet it has been lamentable at addressing this failing in a meaningful way.

We started from the premise that a consumer-grade experience was a requirement and that the more we personalised our communications the better the outcome.

Many pension members, particularly millennials, struggle to understand the relevance to them of pensions: it all seems so far away and for other people to worry about. However everyone gets old and knows people who are old. So while they might not 'get' the idea of saving an amount for some remote future, they do understand that they will want to stop work at some point and are interested in when that might happen. We created the 'ageOmeter' to address this need.

The ageOmeter is a simple, personalised tool that gives members results with a human metric – the age when you can afford to retire – that everyone can understand. The metric can be made more accurate and personal by inputting more data about past savings and reflects changes in investment strategy and contributions. Our video¹⁴ shows that as members consider updating their choices they see how their decision could affect the age at which they can afford to retire. This educational element to the tool is refreshed every time the member visits their pension savings site.

Another element that encourages members to return to monitor and keep up to date with their retirement planning is a progress tracker that tells users what they've done on the site and points out areas and activities that they've not yet visited. We use analytics from the progress tracker and site usage to prompt members with occasional eCards to come back and visit the site to engage with their retirement planning.

We know that helping millennials build a good retirement income is going to be a long and tough road. We need to learn how best to help them on their journey as much as they need to learn about how best to save for retirement. Understanding what they do on the site and getting feedback from members about what they like and don't like about what we've built is integral to our plans so that we can keep meeting the needs of our members and ensure they have great pension outcomes.



¹⁴ <https://vimeo.com/user25465055/review/221288908/05c13ba7c8>

6

The future of leadership

Stephanie Rudbeck and Hannah Mullaney



Where are we now?

Before discussing the future of leadership, we should take a moment to reflect on where we are now. So, let us consider that, in our most recent Global Workforce Study, only 55% of all financial services employees have trust and confidence in the job being done by the senior leadership of their organisation.

38%

of financial services employees don't think senior leaders are doing a good job of growing the business

Only 44%

of financial services employees think their leaders are doing a good or very good job of developing future leaders

43%

of financial services employees say that senior leaders don't do a good job of managing costs

Only 56%

of financial services employees believe the information they receive from senior leadership

Only 49%

of financial services employees believe their organisation has a sincere interest in employee well-being

Source: Willis Towers Watson 2016 Global Workforce Study

Although many of these results compare favourably to other industries, financial services employees are demanding better leadership.

Leaders, however, have a tough job – and one that is only set to get tougher. The world is changing, work is changing and we are at the beginning of a fourth industrial revolution. Technological advances such as AI and robotics are already disrupting almost every industry and to master this new digital world, leaders must be agile amid disruption. Indeed, those occupations and specialties most in demand today did not exist 10 years ago. In fact, 65% of children entering primary school today will end up working in jobs that don't yet exist¹. We are living in a VUCA world. Leaders are leading in a VUCA world. For those of you unfamiliar with the acronym, VUCA stands for volatile, uncertain, complex and ambiguous. Starting to sound familiar?

Additionally, the demographics of organisations are changing and younger generations are starting to emerge as the dominant force in most organisations, introducing another set of challenges. Our clients recently discussed this topic at a roundtable event and described how “a large chunk of the workforce feels they have a more relevant understanding of their markets and clients than their leaders” and are “full of fresh ideas” that reflect this. They are, consequentially, often “dissatisfied with decisions that current leaders are taking”. This can be particularly pertinent amongst cultures where an approach of ‘this is how we've always done it’ is ingrained. The outcome is often a disengaged workforce that eventually leaves and this is not good for business.

¹ World Economic Forum, 'The future of jobs', January 2016

Looking forward, what do we need to do differently to identify and develop leaders who will not simply survive in this new world, but thrive? We believe that assessment models focusing on impact will help drive innovation in future talent management practice.

Solving the problem of potential with impact

How to best identify high potential individuals has been the subject of debate among HR and leadership teams for years. These debates often rightly start with the question 'What is potential?' Where teams fail to define this, they will also fail to measure it. In an effort to support organisations with this problem, a number of generic models of potential have been put forward over recent years. While such models can be incredibly useful, their major drawback is their inability to cope with diversity in future leadership or change within the organisational environment of which, we've established, there is a lot.

Generic measures of potential may help organisations identify future leaders, but they fail to provide an understanding of the sort of leadership roles to which those identified would be best suited. This is problematic for the individual and the organisation as both parties start to map out the future.

The impact model of leadership provides a solution to this problem. Rather than seeking to establish what potential looks like in a generic sense, by asking 'Where must our future leaders have impact?', organisations are able to

define what their future leadership should look like in a way that links directly and tangibly to organisational outcomes. Assessing individuals against this framework not only identifies potential future leaders, but enables the development of specific career pathways and development plans tailored to these.

Using impact in succession planning

Succession planning is an exercise that brings its own challenges. It is fundamentally a question of what talent is needed and what talent is available? The practice, however, can encounter any number of problems along the way to answering these relatively simple questions. Firstly, much activity in this space is positioned in a way that associates it with a current leader's organisational mortality and so, therefore, becomes inherently sensitive. It can then be much more difficult to engage with and appropriately advise leadership teams in the exercise. Secondly, there is the issue of defining critical roles and scoping out what these might look like in the future. While we might have a good go at predicting the future, it is still an uncertain place and where many succession plans fall down is in their lack of flexibility here. Effective succession plans are as dynamic as the world around us. Finally, there's the problem of successor identification itself. Leaders often fall victim to mistaking success at one level for success at higher levels (the classic example is promoting a successful sales person out of the role in which they excel and into management). And of course, we must not forget the bias that creeps in; leaders often demand to be able to see themselves in their successors.



By using impact to frame conversations about succession and what talent is needed in the future, it is possible to create plans that are fluid and adaptable, but also objective and possibly even less sensitive and, therefore, more widely accepted by the organisation. And, of course, by using impact to assess for potential, you have the winning combination.

Leadership development for the future

So we've seen that a focus on leadership impact will drive innovation in how we identify individuals for leadership roles and how we think about future succession plans but how is this being translated into leadership development practices? In truth, it's not. So far.

Our research shows that 71% of financial services organisations agree or strongly agree that they develop leaders who will be able to meet changing business needs. However there is a responsibility-respect mismatch as less than half of all financial services employees think the role of manager in their organisation is respected. Furthermore only 46% believe their line manager has the necessary skills to perform their job. Leadership development needs to change gear.

We still hear of some organisations who invest heavily in an emerging or senior leadership development programme in partnership with a leading business school; however these are increasingly rare as their ROI is seen to be difficult, if not impossible, to measure. This is typically a sizeable investment for a relatively small group of individuals with no guarantee that they will stay for the organisation to realise that value. This speaks somewhat to the issue of a general preference for home-grown leaders over external hires, which probably comes from there being less risk associated with the former than the latter. This preference, however, does appear to be at odds with the fact that younger generations actively avoid staying in one organisation for more than a few years, instead opting to broaden experience and even build portfolio careers. For leadership development teams, it begs the question, whose leaders are you developing? If you are particularly

progressive, you could take the view that you are developing future leaders not for your own organisations but for all organisations – but how on earth do you measure ROI on that?

It is becoming increasingly clear to us that future development needs to focus on flexible, bite-size learning that an individual can dip in and out of, depending on their preference, need and time available. It also needs to take advantage of advanced technology. Elements should include access to online modules, psychometrics, apps and podcasts with opportunities for a cohort to meet virtually for a discussion on the topic.

Practical development activities currently popular include action learning groups where a group of individuals from different parts of the business work on a real-life business problem and present their solution to the executives. Being able to work flexibly and in an agile manner, with others, across organisational boundaries and time zones is only going to become increasingly important as the way of getting work done evolves and the face of the workforce changes. We see real opportunities here for developing skills required for 'flexible teaming': essential for the blended workforces of the future.

We also think that rotation programmes and job shadowing will become increasingly popular, along with the relatively new concept of reverse mentoring, where younger employees are paired up with more experienced leaders to provide fresh perspectives and an insight into the reality of the millennial generation. Where already in place, it is seen to have had a positive impact in bringing different employee generations closer together, facilitating better working relationships, closing the knowledge gap for both parties and empowering both emerging and established leaders.

So, while we're not seeing a significant shift in some of the leadership development activities themselves, we do believe in a trend towards packaging them together using a more flexible, self-selected and self-directed approach. The learning 'event' is no longer.

“ We also think that rotation programmes and job shadowing will become increasingly popular, along with the relatively new concept of reverse mentoring, where younger employees are paired up with more experienced leaders to provide fresh perspectives and an insight into the reality of the millennial generation. ”



51%

of job activities can be automated, less than 5% of jobs are entirely replaceable by machines

McKinsey, *Harnessing Automation*, 2017



22%

of the global workforce is contingent – and this proportion will increase in the next three years

Willis Towers Watson



The days of employment being the only important means for getting work done are passing



Boudreau, Jusuthasan and Creelman, *Lead the Work, Navigating a World Beyond Employment*, 2015

51%

of UK companies are changing their workforce activities to enable the use of more non-employee talent

Willis Towers Watson

Industrial robots could be 16% less costly than humans by 2025



Boston Consulting Group, *Industries and Economies Leading the Robotics Revolution*, 2015



Of the children entering primary school today, 65% will end up working in job categories that do not yet exist



World Economic Forum, *The Future of Jobs*, 2016



2.6

jobs created by the internet for every one lost

McKinsey, *Internet Matters*, 2011

77%



of organisations list missing skills as the single biggest impediment to digital transformation

Willis Towers Watson



A career today...can mean two years or less



Fast Company



7

The future of wellness programmes

Rebekah Haymes and Gaby Joyner

Where are we now?

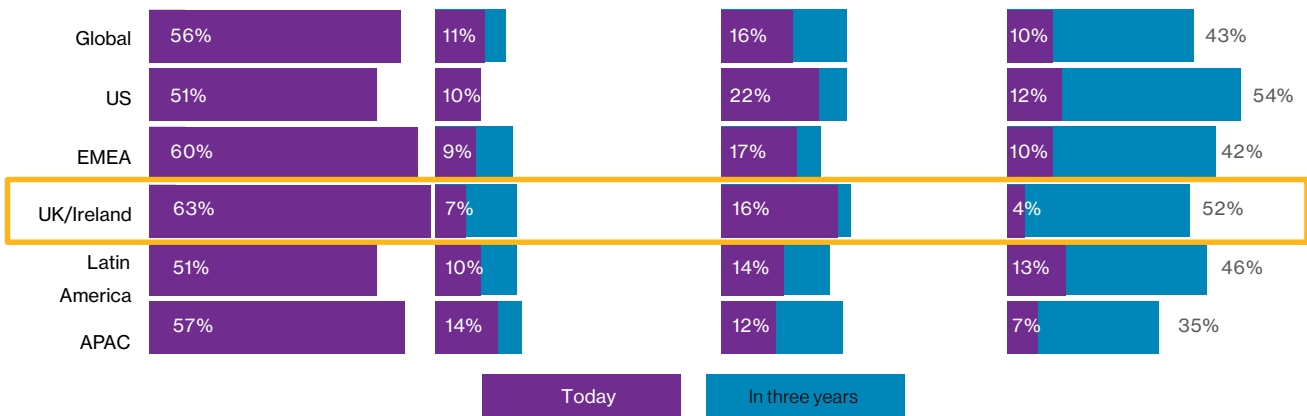
It is widely accepted that positive wellbeing and productivity are intrinsically linked.

And on the whole, employers understand that programmes that look to reduce their employees' health risks and improve overall health and wellbeing will lead to better business outcomes and heightened levels of financial performance. But it takes more than recognition of a correlation to implement an effective and robust health and wellbeing strategy.

Willis Towers Watson's Staying@Work Survey found that over 60% of UK employers have no health and wellbeing strategy and instead simply offer various standalone health and wellbeing programmes.

Employers are taking the next step in health & productivity (H&P) strategy as a key competitive advantage

No strategy	Adopt strategy	Communicate and deliver	Differentiate H&P strategy
Offered various programmes but have not articulated and H&P strategy	Articulated an H&P strategy with stated objectives and goals for each programme	Effectively communicated the value proposition behind the H&P programme and delivered on its promises	Customised for critical workforce segments and used organisational analytics to test programme effectiveness

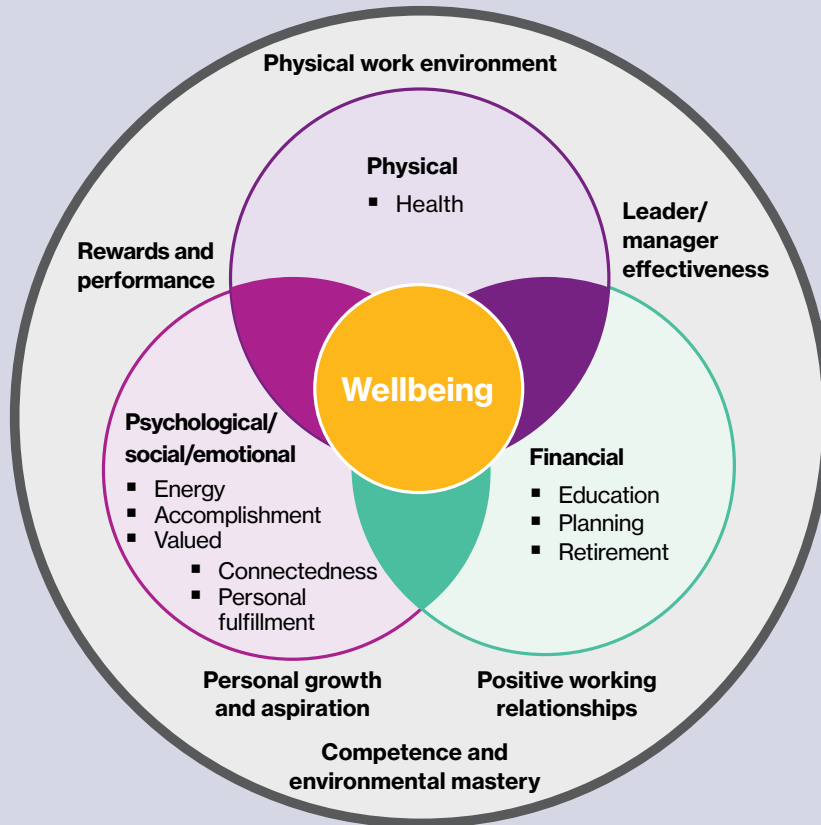


Source: 2015/2016 Global Staying@Work Survey

But with employee health risks among the foremost workplace issues faced by employers today, businesses can ill afford to take a fragmented, disconnected approach to health and wellbeing.

Wellness programmes need to move away from being rigid and meaningless tick-box exercises (standalone programmes) towards being holistic, tailored, adaptable and most importantly, measurable (a coherent strategy). After all, the value of wellness initiatives can only be appreciated – and direction decided – if results are available.

The ultimate goal for businesses is to build a culture of health and wellbeing within the workplace, which will, in the long-term, help them to retain key talent, boost productivity and cement their reputation as a leading employer in their field. A recognition should be made that wellbeing, in its broadest sense, addresses physical, psychological, social and financial wellbeing and also considers the impact of the working environment and relationships on employees.



A new chapter

We are at a crucial crossroads when it comes to wellness initiatives – what would have been deemed appropriate a few years ago is no longer sufficient. The workplace is fast evolving, accelerated by advances in technology.

We are witnessing a shift towards flexible and remote working, a rise in contract workers and outsourced resources and a move towards assigning ‘tasks’ as opposed to job roles.

To keep up with such changes, companies will be looking at their business strategy, talent landscape and organisational culture. And as wellness programmes underpin a business’s total reward offering, it is imperative that these are adapted to suit the new workplace environment and changing demographic.

After all, two-thirds of UK workers claim benefit provision is important in their decision to work for a company, with 28 per cent of them claiming it is very important¹. Only 4% say it is not at all important.

Now is the perfect opportunity for companies to review and reinvigorate the wellness conversation and consider if they are taking a holistic approach to wellbeing, in line with the changing profile of the organisation, employee needs and expectations.

Time to listen

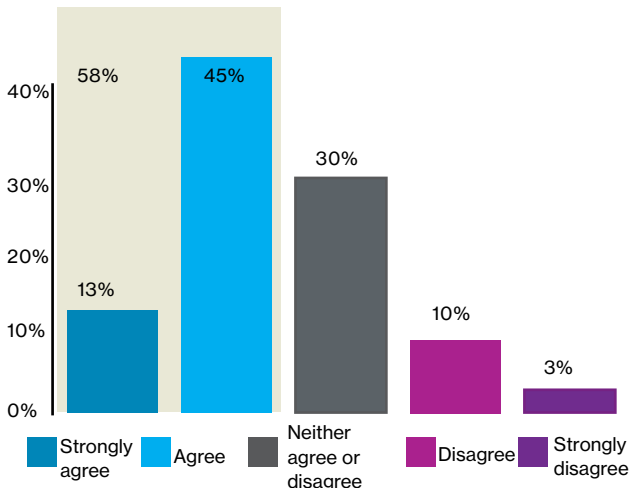
Workers’ expectations of wellbeing initiatives are changing too, due in part to the greater normalisation of mental health considerations in the workplace, employees becoming more receptive to psychological interventions and improved understanding of non-communicable diseases.

Willis Towers Watson’s Global Benefits Attitude survey found that the majority (56%) of UK employees believe their employer now has a role to play in helping them live healthier lifestyles and three in five employees view managing their health as a top priority in their life.

Couple this with the fact that 97% of UK employers are committed to health and productivity in the years ahead² and you have a strong springboard for positive interaction and engagement. The intent is there.

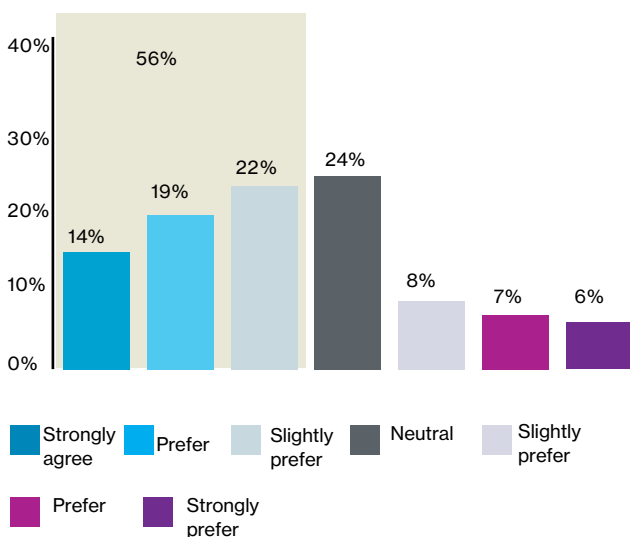
Yet, health is a clear employee priority in the UK

Employees: health as a priority



Employers should take an active role in encouraging their employees to live healthy lifestyles

It is not the role of an employer to encourage their employees to live healthy lifestyles



Leading the way

Less than half (44%) of UK employees are satisfied with the range of benefits they receive from their employer¹ and two-fifths claim that initiatives offered by their employer do not meet their needs², there is an evident disconnect between what employers think employees need and what they really value.

In order for employees to be convinced that employers have their health and wellbeing at heart, businesses need to build trust. Senior leadership is key in building this trust and shaping a general culture of health and wellbeing in the workplace – so early leadership buy-in should be encouraged.

¹&² Willis Towers Watson GB Health and Benefits Barometer 2017

Employee engagement and senior leadership co-operation should be the building blocks of any effective health and wellbeing strategy and businesses can help achieve this goal by being transparent with the workforce and listening to their feedback.

It is tempting to take a top-down approach to health and wellbeing strategies but in the long run, this will only serve to fail the very people the strategies are meant to be benefitting. Businesses should look to strike the balance and promote interconnectivity.

Return on investment (ROI) vs value of investment (VOI)

Just as the workplace and employee expectations are rapidly changing, so too is the definition of a successful wellness strategy.

More and more companies are using VOI to evaluate their employee wellness programmes. This is because it encompasses the invaluable benefits of employee health, as opposed to strictly the financial return. With VOI, values such as employee satisfaction, sickness absence and change in health risks are taken into account, alongside the financial savings on healthcare and disability costs.

It is becoming an increasingly popular measure and reinforces the ideal that employers take a co-ordinated approach to wellness instead of focusing solely on cost and ROI.

Changing profile of workers

We are familiar with the concept of the aging workforce. Over the next decade in the UK there will be 3.7 million more workers aged between 50 and state pension age, according to the Office for National Statistics (ONS).

In addition, the scrapping of the default retirement age, combined with other factors, including shortfalls in pensions and savings provision, is expected to significantly compound this trend.

So, wellness programmes will increasingly have to cater for a multi-generational workforce. But there is a danger that subsets will feel isolated if benefits are not seen to be inclusive.

In Willis Towers Watson's GB Health and Benefits Barometer 2017, a disconnect was identified among older workers. Close to half (49%) of those surveyed said their employers make provision for their health and wellbeing but this figure drops to 39 per cent among 45 to 54-year-olds and 31% among 55 to 64-year-olds.

And then there is the issue of the crisis-hit NHS. Almost half (48%) of respondents agreed that businesses are increasingly expected to provide for employee health in order to mask cuts to the NHS.

Considering this climate, companies should look to preventative wellness benefits and maintaining a healthy and productive workforce as a whole – taking a proactive, rather than a reactive, approach to wellbeing.

Companies should take a lead from the modern concept of Willis Towers Watson-coined human-centric health. Human-centric health leverages the precepts of behavioural economics to drive prevention and better treatment of non-communicable diseases (NCDs), such as cardiovascular disease, mental illness, cancer, respiratory disease and obesity and diabetes.

NCDs represent one of the 21st century's most significant burdens on productivity and could be responsible for an estimated cumulative output loss of US\$47 trillion globally over the next two decades.

With the concept, the onus is on the individual to take control of their own well-being rather than being passive recipients of care defined and delivered by healthcare providers. It promotes a move towards individualised treatment, based on genomics and personal preference and away from homogenous therapies.

This reinforces the need for benefits to be increasingly differentiated and individualised for them to be meaningful for employees and encourage engagement.

The research also highlights the need for behavioural changes. It found that, by default, people discount future benefits radically, displaying an irrational preference for payoffs that come today. They are optimistic about the future, so they don't always take precautions to forestall future hazards. And this trend is expected to continue.

Companies should look to address this by ensuring rewards support desired behaviour, opportunities to 'win' are embedded in programmes and communications, emphasis is placed on short-term rewards and campaigns are not just built around the risk of a future disease³. Short-term rewards will help to drive engagement in wellbeing programmes and support behavioural change although there is little evidence to suggest financial incentives are effective in driving longer-term sustainable change.

³ World Economic Forum/Willis Towers Watson report: Human-Centric Health



Embrace technology

Technology plays an integral part of human-centric health, in line with the virtual diagnostic care concept and it is set to feature more frequently in future wellness programmes.

The good news is that employees are eager to embrace new technologies to help manage their health and wellbeing. Forward-thinking employers have an opportunity to capitalise on this trend by adopting, offering and utilising the latest digital-health tools, such as wearables and apps.

By doing so they can encourage employees to make smarter health-related decisions, promote workforce engagement and take a more strategic approach to health and wellbeing programmes with employee-generated data insights.

There is a growing trend towards online coaching around health and wellbeing, which offers employees the opportunity to access guidance and training at their convenience – and in private.

Virtual access for UK employees to GPs is also becoming an increasingly common offering as a stand-alone service but also available from medical insurers and cash-plan providers. The provision enables consultations to take place via webcam or video link from a computer, tablet or smartphone. These can help overcome some of the hurdles associated with the traditional, face-to-face, family doctor appointments, including protracted waiting times and leave from work.

'Artificial Intelligence' doctors are now being developed, capable of making diagnoses using data algorithms and these also have the potential to find their way into the future workplace.

Interim workers

Another question companies must ask themselves is if and where interim workers fit into the wellness equation. And this feeds into the debate on whether benefits should differ dependent on worker type.

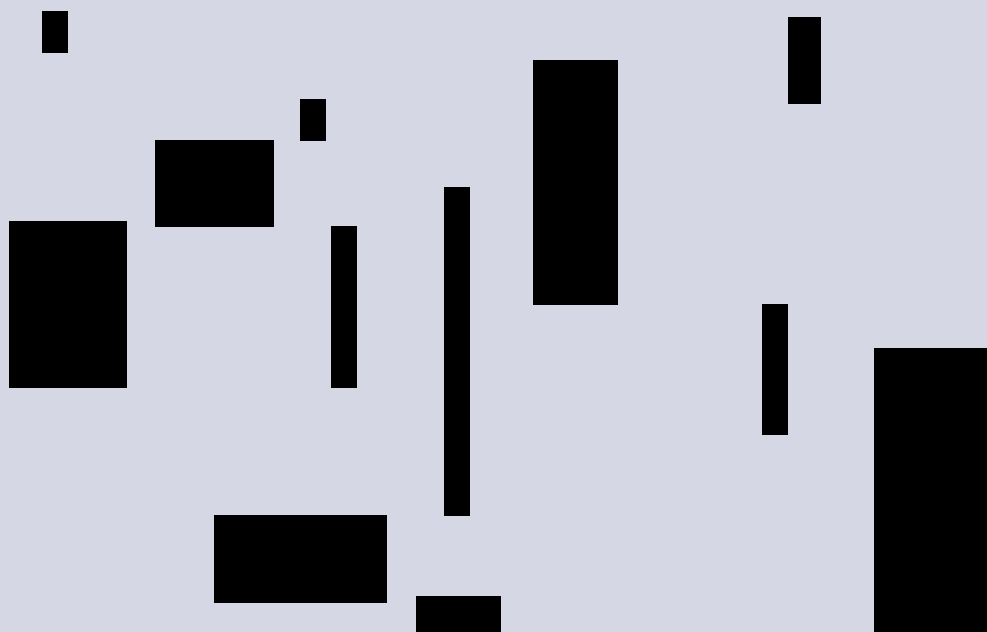
With transient staff becoming a more common occurrence in the workplace, this will become more of a prevalent issue for employers. When considering this, employers should take a number of factors into account, the first of which is productivity.

It cannot be denied that contractors are an important cog in the corporate machine and are not immune to wellbeing issues. They will be equally impacted as a permanent worker.

There is also the question of moral obligation. The Willis Towers Watson GB Health and Benefits Barometer 2017 revealed that three-quarters of workers believe their employers have a moral obligation to offer the same healthcare provision to all staff.

Protecting the brand and upholding reputation may encourage companies to look at their healthcare and wellbeing strategy and see if there is an opportunity to establish a baseline of benefits for these types of workers.

Another consideration is administration. The more inclusive the wellness programme, the more streamlined the administration process can be. Companies must weigh up the benefit of a sliding scale benefits system and the costs associated with governance.





Looking to the future

It is understandable if companies are somewhat apprehensive when it comes to developing health and wellbeing strategies in a rapidly evolving workplace – after all they are crossing uncharted waters. But they should remember that positive wellness is correlated with heightened levels of financial performance and therefore needs to be an integral part of business strategy. Treating it as so – with clear objectives and careful planning – will help companies keep focus and strive for success.

Companies already committed to a wellbeing strategy should get the best out of their current projects but look for opportunities to improve outcomes and redirect resources into new wellness benefits where possible.

Conversely, companies that have tended to take a fragmented approach to wellness in the past should look to establish a strong foundation on which to build an effective and measurable strategy suitable for a modern workplace. But no matter where a company is on their strategy 'journey', they should embrace change and keep abreast of new opportunities, such as technology developments.

And above all, they should take the time to review communications and engagement approaches so that employees can see the breadth of what wellness means for both them and their organisation.

8

Cyber risk: it's a people problem, too

Adeola Adele and Michael O'Connell

The trillion-dollar problem

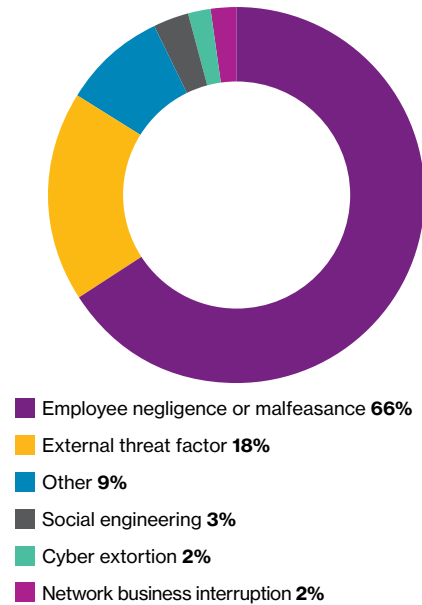
It is estimated that the global cost of cybercrime will reach US\$6 trillion annually by 2021¹. Financial institutions incur a higher annual cost of cybercrime than any other industry: US\$16.5 million on average². Cyber attacks against online financial services and lending companies increased 122% in 2016, causing £8 billion in loss value worldwide³. The industry also tops the charts for incidents of cyber extortion⁴. Around one in every five financial institutions uses an email service provider with severe security vulnerabilities⁵.

Add to this the new EU General Data Protection Regulation (GDPR) that will come into force in 2018 and could see financial institutions penalised up to 4% of their annual turnover for failing to protect personal data and the picture is rather bleak.

The industry is of course responding to this threat. In the US alone, the financial institutions cyber security market will be worth US\$68 billion by 2020⁶. Although companies are aware there is more work to do on technological responses to cyber threats, our research shows most feel they are broadly on track and making progress in addressing potential weaknesses in their IT infrastructure.

What is less certain, however, is how financial institutions are addressing similar weaknesses in their *cyber culture*, or putting it another way, the *people* aspect of cyber threats. According to our research, employee negligence or malicious acts account for two-thirds of cyber breaches (*figure 1*); in contrast only 18% are directly driven by an external threat⁷.

Causes of cyber breaches



Source: Willis Towers Watson claim data

Cyber risk therefore, is much more than a pure technology issue. For example, the recent high profile WannaCry attack served as a stark reminder that employees are both the weakest link in an organisation's cybersecurity strategy and the strongest defence. The attack affected more than 230,000 computers and compromised the systems of some banks. Ultimately, it was enabled by employees clicking infected phishing emails.

¹ Cybersecurity Ventures, 2016 Cybercrime Report

² Ponemon, 'Cost of Cyber Crime Study & the Risk of Business Innovation', 2016

³ ThreatMetrix, 'Organised Fraud Rings Turn Their Attention to Online Lenders and Emerging Financial Services', February 2017

⁴ Consultancy UK, 'Costs of cybercrime have soared to \$280 billion this year', December 2016

⁵ Security Scorecard, 2016 Financial Industry Cybersecurity Report

⁶ Homeland Security Research, US Financial Services: Cybersecurity Systems & Services Market – 2016-2020

⁷ Willis Towers Watson, 'When it comes to cyber risk, businesses are missing the human touch', March 2017



The new frontier: a cyber-savvy workforce

In June 2017 we surveyed a combined 163 US and UK employers and over 4,000 employees on their present and future cybersecurity strategies. This Cyber Risk Survey found that attention is now increasingly turning to the people-related risks that, claims experience shows, leave companies exposed to cyber risk even with state-of-the-art IT approaches.

The survey found that the top cyber risk across both regions is 'insufficient employee understanding of cyber risks'. However, in the UK only 14% of respondents have embedded cyber risk management within their company culture; in the US this falls to just 8%. Yet the tide is turning; in both regions over 80% say they will develop a cohesive culture of cybersecurity in the next three years⁸.

Embedded cyber risk management within company culture?

93% of US companies versus **95% of UK companies**

Completed today or plan to complete in next three years



Challenges to driving a strong cyber culture

Our survey found that most employees feel they know how to manage data privacy and information security in their jobs. However, there remain challenges that will need to be addressed in order for financial institutions to build the strong cyber behaviours among employees necessary to develop a cyber-savvy workforce and culture.

1 Budgets

Only 43% of US and 50% of UK organisations believe they have adequate budgets to meet all cyber risk management needs. Although many large financial institutions have significant cybersecurity budgets, they should ensure that appropriate capital is allocated to managing the people risks. Small and middle-market institutions tend to be less concerned about cyber risks than their larger counterparts and many do not have the same capital available for mitigation. However, these organisations need to be just as proactive as their larger counterparts: hackers are specifically targeting financial institutions with revenues below US\$35 million for their valuable client data⁹.

2 Lack of risk management-HR collaboration

Only a third of respondents believe that their company's risk management and HR functions work closely together on cyber risk management. This disconnect can result in ineffective structures and processes, which adds cost and leaves holes in cybersecurity.

3 Overreliance on IT

A large number of employees are overly reliant on company IT to provide cybersecurity and assume they will be protected at all costs.

Alarming, nearly half of all employees believe that opening any email on their work computer is safe. While email and online systems are vital for financial institutions to function, employees

Influencing risk culture

In an increasingly complex corporate world, managing risks related to an organisation's human capital is critical. The management of these risks is often perceived as challenging because it's thought that people-related risks can't be quantified.

The right, balanced risk culture can help financial institutions identify and take advantage of the right opportunities, gaining competitive advantage and reducing the total cost of risk.

Focusing your efforts

To influence and improve risk culture, financial institutions must understand both a top-down and bottom-up perspective. This understanding highlights risky behaviours, which, if reduced, can lead to fewer incidents, accidents, fines and claims, lowering the total cost of risk.

An organisation can improve risk culture holistically and/or by focusing on specific businesses or functions via an operationally focused approach, for example, the trading arms within banks.

Measuring risk culture – the importance of quantification

Measuring risk culture is important for internal risk culture assessment and management. Much of an organisation's risk culture lies 'beneath the surface'. Important cultural characteristics may not be immediately apparent but they can be identified, measured and understood using two key assessments.

Setting the right risk culture

Taking an overly cautious approach to behavioural risk can lead an organisation to achieve below-potential growth, while an organisational culture that is high on the risk spectrum (without suitable frameworks in place) can lead to extreme losses. Additionally, pressure from shareholders to achieve quarterly performance results often forces long-term risk management to take a back seat to short-term targets.

⁹ Beazley Insights, 'Hackers target smaller financial institutions' July 2016

must be aware of the risks they also present. In addition, they must understand that they, not just IT, are a key component in their organisation's cyber defence.

4 Failure to report

Over a third of all employees have witnessed co-workers behaving in ways inconsistent with data privacy and information security policies. However of these, only 47% and 53% in the UK and US respectively reported the incident to a manager or IT department.

Financial institutions have had their cultures closely examined by the media, consumers and regulators in the last 10 years. The effects of a cyberattack can be devastating to both finances and reputation; so empowering employees to raise concerns and challenge poor behaviours is one way to mitigate this risk.

5 Employee unawareness of emerging threats

Only 40% of employees believe that a disgruntled employee or contractor could deliberately compromise company systems or steal customer data.

Two-thirds only change their password on their work computer when prompted and one-third is happy to share personal information on social media sites.

These attitudes may leave financial institutions more vulnerable to emerging risks, particularly social engineering, where cyber criminals use impersonation techniques to trick employees into divulging confidential information or data.

6 Disconnect between employer and employees

The majority of employers believe that they are doing enough to protect the integrity of customer data.

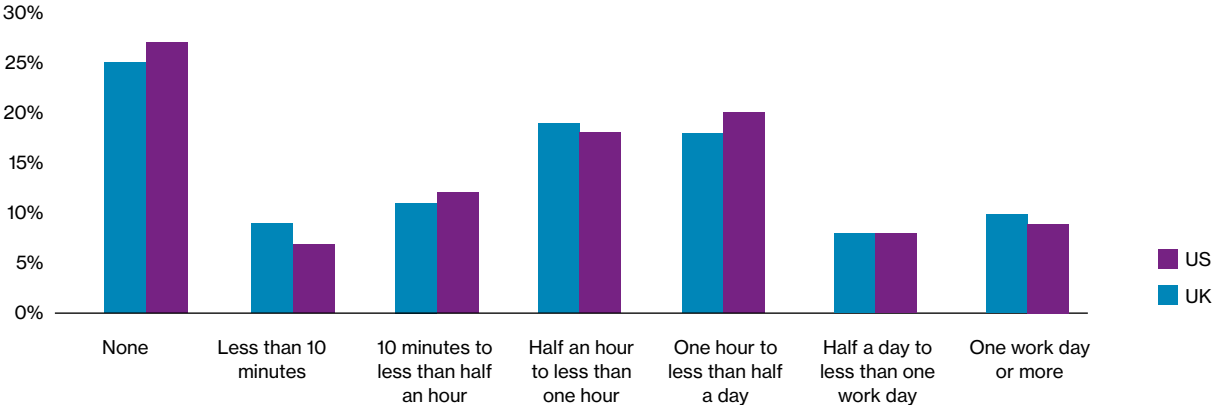
However, around 40% of employees use a work computer or cellular device to access confidential company information and discuss work-related topics in public places. About 30% admit to logging in to a work device on an unsecured public network or using a work computer in public settings. Roughly a quarter take confidential paper files home and use unapproved devices to do work at home. As such, there is a disconnect between company policy and employee behaviours.

Financial institutions are continually looking at ways to make their services more personalised, a strategy that requires the collection of vast amounts of consumer data. Each time employee behaviour exposes this data to hackers, the financial institution is exposed to significant financial and reputational damage.

7 Training

Nearly half of employees surveyed spent less than 30 minutes in training specific to data protection and information security in the last year. Yet the benefits of comprehensive training are clear: 77% believe it increased their sense of personal responsibility for data security at work.

Time spent on cyber training in the last year



So how can financial institutions achieve a culture of cybersecurity?

Given these findings, there is certainly a need to more closely assess the reasons why employees continue to engage in risk-producing behaviours.

Effectively managing people risk: key considerations for financial institutions

- 1 Increase the level and regularity of employee awareness training in your organisation.** It is important that employees are trained to understand and respond to cyber threats, such as reviewing emails closely to ensure they are from trusted and known senders before clicking on links. A cyber-savvy workforce holds the key to your enterprise resiliency.
- 2 Consider innovative ways to deliver employee awareness training.** Financial services employees have a large and increasing training load covering topics from diversity to regulation. Given our survey finding of the low level of understanding of cyber risks, firms may want to use 'learn by doing' training approaches that will help to embed understanding over a longer term. There are several ways to achieve this – without risking the firm's IT infrastructure – including novel approaches such as gamification and 'cyber ambassadors' – employees who champion cybersecurity.
- 3 Assess whether your organisation's IT department has the right or sufficient talent and skills** needed in today's environment to effectively handle these emerging threats.
- 4 Evaluate whether your organisation's culture is supportive of cyber awareness and action-oriented behaviours.** For example, do leaders model positive behaviours that encourage employees to do the same and do employees truly know how to report a cyber incident?

Conclusions

Increasingly organisations share the view that effective cyber resilience has its roots in corporate culture and people. Solutions are likely to be complex and multidimensional, as is always the case for any kind of cultural change.

Certainly, financial institutions may have to adapt their operations to the constantly changing nature of cyber threats. They should also pay attention to the expanding risk mitigation options available through the insurance market. But employers will increasingly foster a more cyber-savvy workforce, using innovative employee engagement, talent management and reward strategies to fortify their cybersecurity posture.



Banking: in the spotlight

February 2016: hackers transferred US\$81 million from the US Federal Reserve accounts of Bangladesh Central Bank – they originally aimed to take US\$951 million. The same hackers are reported to have targeted banks in 18 countries worldwide¹⁰.

November 2016: hackers stole money from 9,000 customers of one UK bank, costing the organisation £2.5 million in refunds to affected account holders.

June 2017: a ransomware attack known as NotPetya hit banks in the Ukraine before spreading globally, also affecting the property arm of one of Europe's largest banks.

Opportunity and risk

By 2020 it is predicted that over two billion people will use mobile banking¹¹. In Europe, one in five card payments will be contactless by 2021¹². 'Challenger banks' and digital-only start-ups are pushing traditional banks to upgrade legacy systems and quickly adapt to new methods of distribution, transaction and customer interaction. For every new technology implemented to deliver customer satisfaction and gain competitive advantage, banks increase their exposure to a range of digital threats such as social engineering, theft of data and cyberterrorism.

Developing threats

The cyber threat landscape is constantly evolving. Social engineering attacks have developed in complexity: from the original 'advance-fee' scams targeting individuals to the more sophisticated 'fake president' frauds that seek to gain access to an entire organisation.

As these attacks develop so too must risk management strategies. However hackers often have the first mover advantage. For example, banks may find there are gaps in their protection when it comes to social engineering as often neither cyber insurance policies nor traditional fidelity policies singularly cover the scope of losses associated with social engineering claims.

Given the acceleration in number and complexity of attacks for banks in particular, it is imperative to fully understand the potential impact of a cyber event and ensure the right business continuity plans and insurance protection are in place.

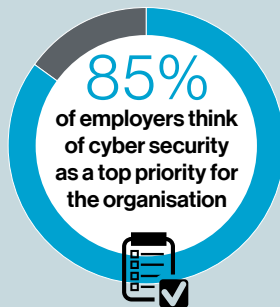


¹⁰ Asia Finance, 'Cyber attack threat intensifies for Asia Pacific banks', May 2017

¹¹ Juniper Research, 'Mobile banking users to reach 2 billion by 2020', October 2016

¹² Pymnts, 'Contactless card usage in Europe exploding', November 2016

Cyber risk security



Reporting cyber breaches

Employers

93%

of organisations believe that they have provided an environment in which employees are comfortable reporting about data privacy and data security

43% of employees

received a suspicious email at work meant to trick them into opening a harmful link or attachment



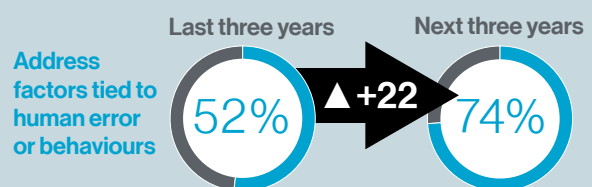
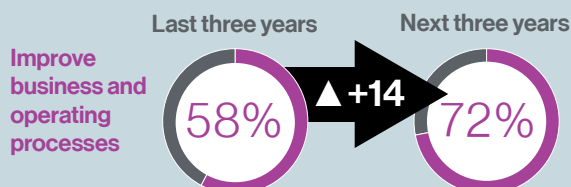
34% of employees

witnessed co-workers behaving in ways inconsistent with data privacy and information security policies

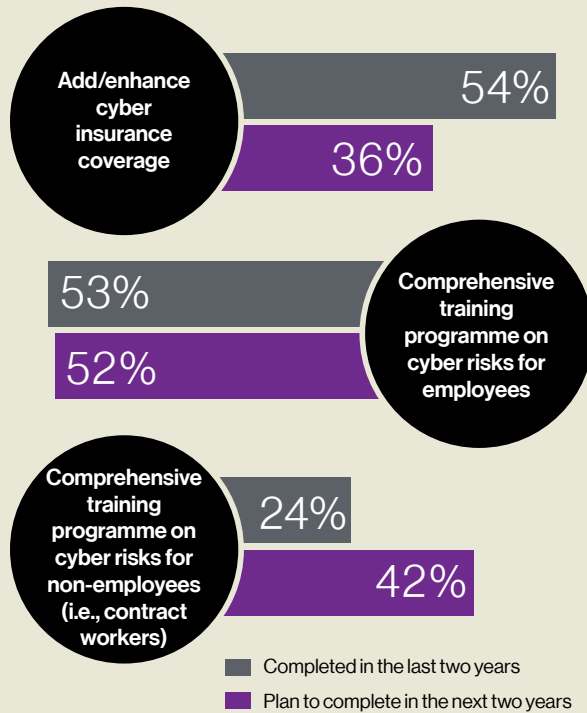


15% took no action

Human factors and business processes will receive the most attention over the next three years



Top actions in the next two years are adding or enhancing cyber insurance coverage and training for employees and contractors and cyber insurance gap



Employees benefit from the training

78%

It improved my understanding of the steps I need to take to better protect confidential information

77%

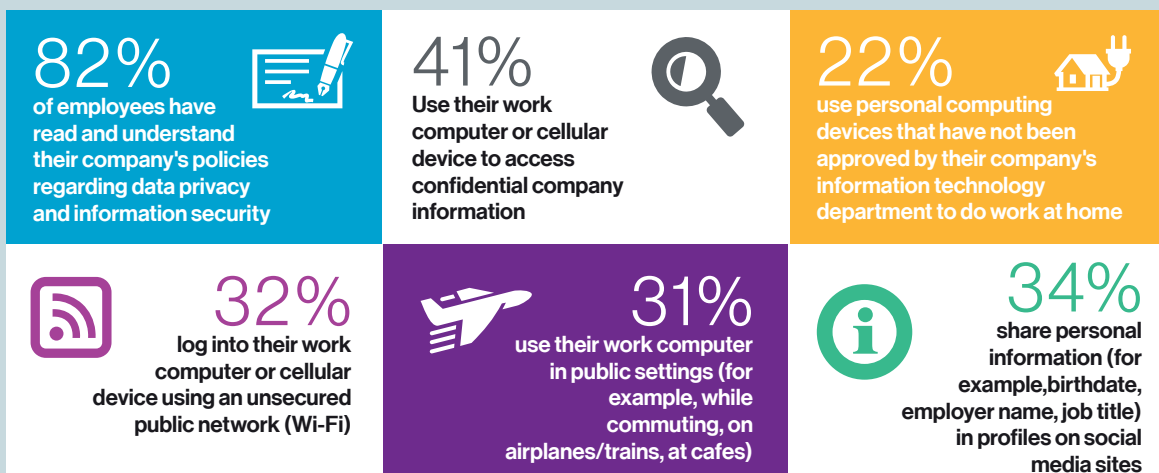
It increased my sense of personal responsibility for data security at work

63%

It motivated me to change how I manage my personal computing devices



The vulnerabilities around employee behaviours of using technology



Source: 2017 Willis Towers Watson Cyber Risk Survey, employer survey, US. Survey respondents include 2,073 U.S. employees and 92 U.S. employers.

9

How insurtech could alter the foundations of risk: capital matching

Andrew Newman and Andrew Johnston

Insurtech is the portmanteau of 'insurance' and 'technology'. It refers to no specific technology, or usage of technology, rather a general leveraging of innovative, contemporary technology. Sound bites echo throughout the industry; promoters portend uber-like or skype-like disruption, spelling the imminent end to the insurance industry as we know it, meanwhile naysayers expound the barriers to entry surrounding the industry and, less than a decade after regulation was broadly considered to be ruining the insurance industry, it is viewed by some as a formidable strategic protector of the status quo.

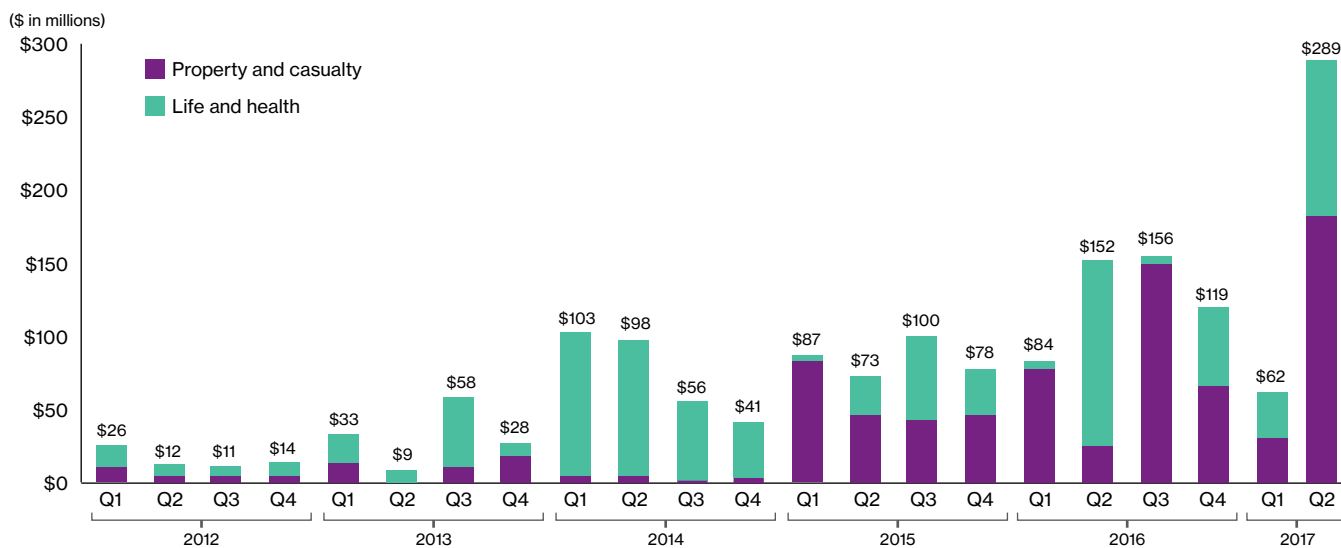
The view we express to clients is ignore insurtech at your peril, however focus on substance and not noise. Rather like the world of phone apps, there is lot of so-called clever kit that ultimately delivers an irrelevant outcome. Many readers might recognise the knee-jerk decision to

“ The last decade has seen technology fundamentally alter the value chain: Alibaba, the world's most valuable retailer holds no inventory, Facebook, the most popular media owner creates no content and Google the largest software vendor doesn't write apps. Might the largest insurer of the future have no owned capital? ”

download an app, only to realise that benefit was both irrelevant and illusionary.

Globally, there are approximately 1,500 recognised insurtechs. Of them, over 40% are focused on distribution and 30% are focused on new product innovation. As the data below indicates, growth in investments and transactional volumes in the insurtech space are not slowing down; in fact, Q2 2017 represents the single highest insurtech funding volume of any quarter. Furthermore, a great number of non-US based insurtechs are coming to the fore, in Europe and Asia specifically.

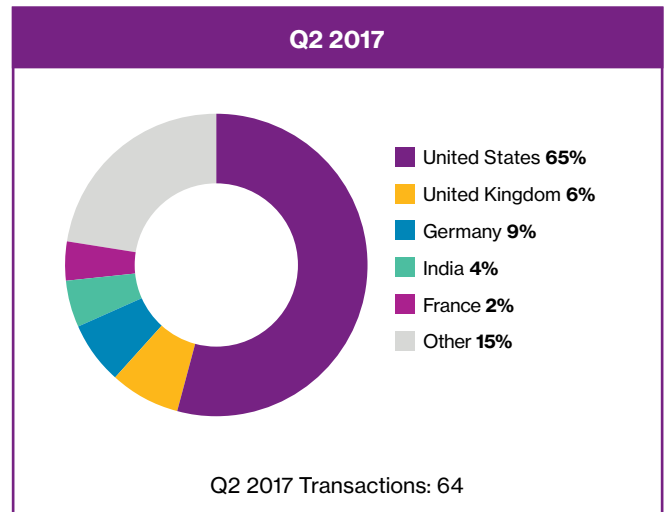
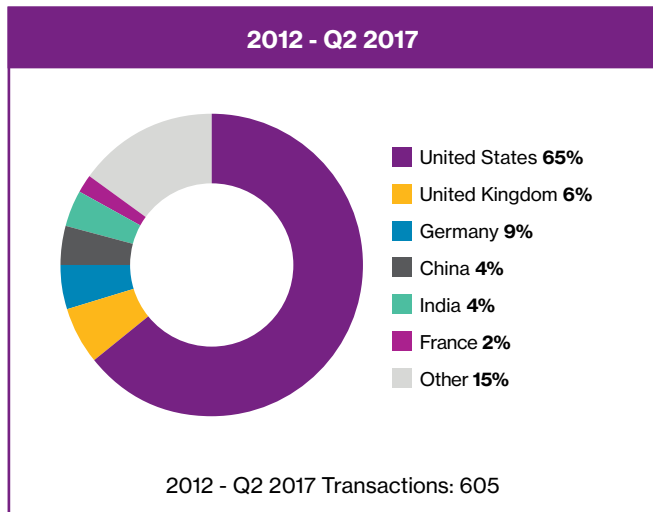
Quarterly insurtech funding volume - early stage



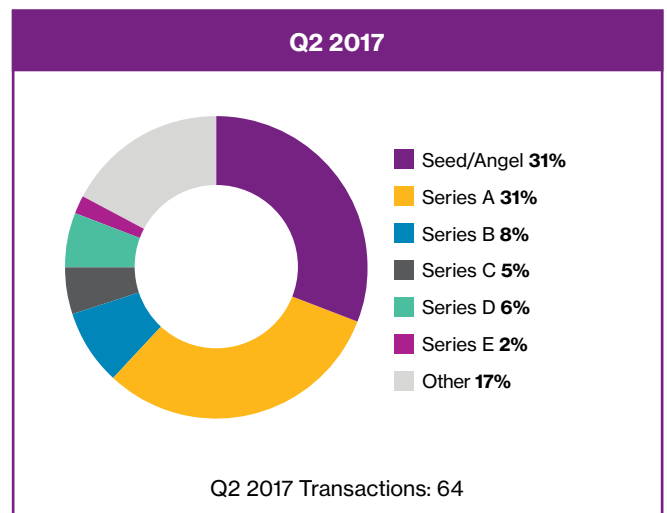
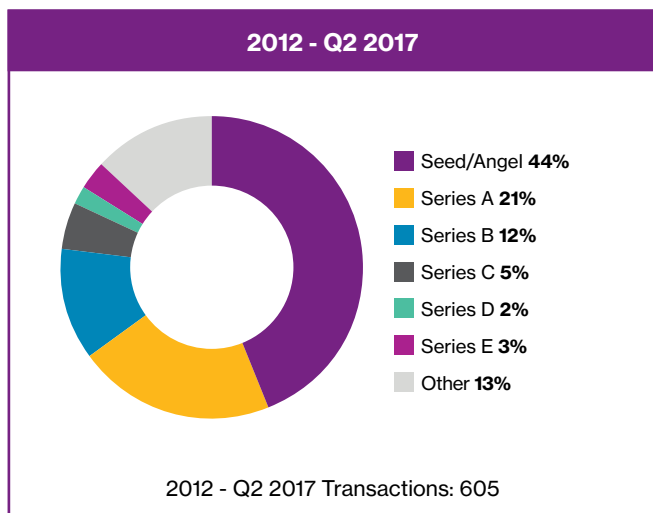
Deal count

P&C:	4	1	4	3	4	2	5	5	4	2	5	6	8	8	8	13	33	9	23	20	15	21
L&H:	6	3	6	7	8	4	6	4	7	9	16	8	7	8	10	18	8	9	4	11	10	19

Insurtech transactions by target country



Insurtech transactions by investment stage



Sifting through Willis Towers Watson data on insurtech, it's clear that the capacity to deliver tangible or strategic outcomes for insurers' day-to-day dealings is, unsurprisingly, causally connected to the three fundamental drivers of cross-cycle operating performance within the industry.

Distribution



The delivery of products and the accessing of risk by the broadly distributive networks; made possible by widely adopted, highly innovative technology

Distribution

Does it (more) directly connect the customer universe and/or otherwise improve the customer experience in a compelling and distinctive way thereby fuelling growth and/or reducing distribution costs and/or real stickiness in the customer relationship?

- *Old-world example:*
DirectLine – leveraged wire technology and the cultural norm of buying over the telephone
- *New-world example:*
PolicyGenius – independent online insurance marketplace

Underwriting



The use of big data, real-time analytics and telematics devices to better price risk for the purposes of more effective, appropriate and ultimately, accurate underwriting. Made possible by the leveraging of innovative technology

Underwriting (risk pricing and/or risk selection)

Does it provide access to information that allows for materially improved precision in the pricing or selection of risk, delivering a measurable advantage relative to competitors?

- *Old-world example:*
AIR/RMS – catastrophe modellers, using historical data to price risk
- *New-world example:*
30mHz – sensor-driven, real-time data drivers, presenting real time risk profiles in the commercial space.

Operational efficiency



The use of technology to automate systems, improve processes in order to lower expense ratios. The expedition of incumbent modes of practice at lower cost and higher speeds

Operational efficiency

Does it reduce the non-loss cost of the business, improving performance through enhanced efficiency thereby widening gross margins that translates directly to improved returns to owners, improved pricing to customers or both?

- *Old-world example:*
IBM Watson – analysis with automated data visualisation, capable to automating high volume low complexity tasks
- *New-world example:*
InsureScan – using photographic imagery and scan technology to generate motor policies





Most large insurance groups have implemented digital or insurtech strategies for some time, variously incubating, investing or forging other forms of partnership with insurtechs that they believe will support their chosen strategy.

What becomes crystal clear is that those insurers who use the new technologies available to improve the insurance industry model most effectively will achieve an advantage; those that don't will suffer as others secure proximity to the client, improve efficiency, underwriting the three main pillars of the insurance model.

What is less clear is the longer-term impact of technology generally and insurtech specifically especially when combined with the changes in both type and source of capital available to finance insurance risk. Clearly insurtech has the potential to attack established distribution channels and in select lines to collapse large swathes of the value chain; personal lines auto insurance is an obvious example. Insurance companies are, at their simplest (largely) fixed pools of capital seeking portfolios of insurance risk from which to earn a return. Today's business model is rooted in the 19th-century concept that the key stakeholder is the capital provider and risk taker in the system. The implicit assumption is that the risk taker is entitled to the majority of the reward, which made sense when capital was scarce and opportunity plentiful. We can see that in technology-intensive sectors the balance of power between the owners of capital and the owners of ideas has swung dramatically in favour of the entrepreneurs, essentially because of the shift in emphasis from physical to human capital.

In an insurance world where technology has the potential to eliminate barriers to entry, weaponise data and create new forms of information from which to more precisely gauge risk thereby lubricating the appetite of alternative capital, frankly, who needs a conventional insurer other than to provide a piece of regulated paper?

Conversely insurtechs themselves are invariably not fully fledged full-stacked end-to-end insurance companies, complete with balance sheet and regulated paper. More often than not, they specialise in one part, perhaps even the critical defining part but one that only works as part of a myriad of processes. The vast majority of insurtech start-ups will not survive infancy – not because they are not innovative or creative, but because they are not solving pertinent insurance pain points; both internally and externally. Much of what is observed in the marketplace is either tech for tech's sake, or projects that are so specific and nuanced that issues of scale will pervade them until their demise. Navigating our industry can take such a long time that firms simply exhaust their operating capital. Furthermore, despite what they may have you believe, a user-friendly website, tech jargon and buzz wordery alone is not enough for an insurtech to make it, even in an industry that is so clearly ripe for some form of change.

Our role at Willis Re is to match risk with capital. Our insurtech strategy leverages those skills to the broader source of risk that insurtech might unlock with the broader sources and forms of capital that are looking to get as close to the source of risk as possible and align with those who a sustainable competitive advantage.

The last decade has seen technology fundamentally alter the value chain: Alibaba, the world's most valuable retailer holds no inventory and Facebook, the most popular media owner creates no content. Might the largest insurer of the future have no owned capital?

If that's too grand, fast forward to a more moderate prediction: the combination of effective, readily available technology, a consumer market with different buying expectations and an ever-increasing influx of non-traditional capital must surely be ripe for the more dislocation than at any other time in living memory.

Technology

Strategic partnerships

Risk origination

Product design

Partners



Multiple and varied distribution channels



Investors and other capital



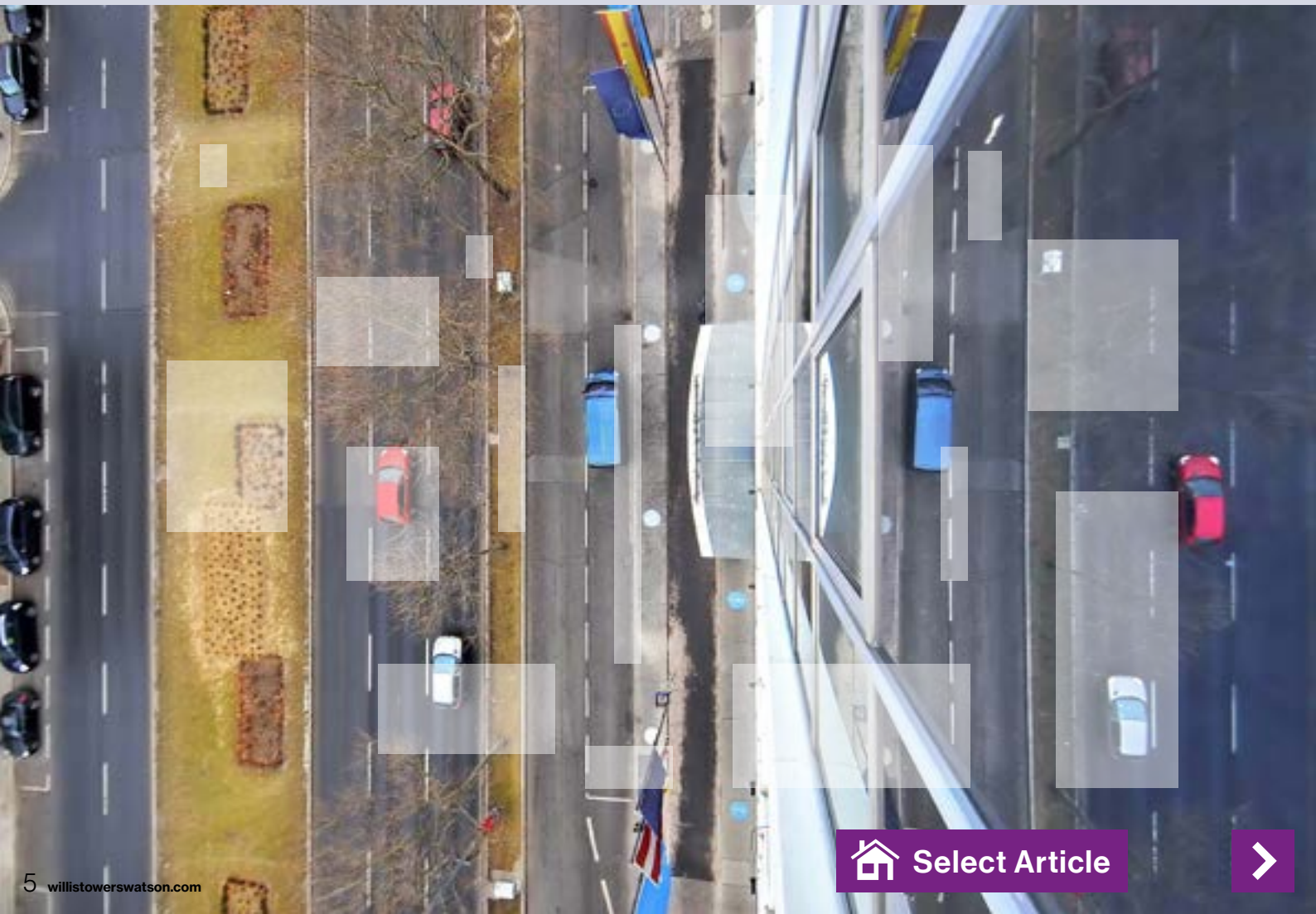
Incubators/accelerators



Reinsurers

Given the potential dislocation the insurance industry is facing, it may well be that companies of the future will be structured around a model like the one the graphic here depicts. This is where technology and risk origination are synonymous with one another, delivered through a number of devices and platforms. Financing and capital come from a variety of traditional and non-traditional sources predicated on a variety of strategic alignments between incumbent and nascent. All of these are centred on the centrifuge of product design.

Whatever the future holds, at Willis Re we focus a great deal of time and energy on monitoring the market, analysing trends and engaging with both start-ups in the insurtech ecosystem and our clients. We continue to fortify our position as thought leaders in the space by predicting such potential outcomes and consulting and advising around how best we can all take advantage of and benefit from the changes the industry is undergoing.



Select Article



10

Technology risk in insurance: why UBI carriers can't stay stationary for long

Geoff Werner

The growth of the usage-based motor insurance (UBI) market has typified the technological opportunities and threats experienced by insurers in recent years. Yet even those that have stolen an apparent march over competitors won't be able to sit on their laurels as the market continues to evolve.

Few, if any, sectors of the insurance industry have been more broadly exposed to technological risks and opportunities in recent years than the motor insurance market. The rise of internet price comparison sites that have irreversibly changed distribution models in certain geographic markets, assisted driving technologies that impact claims, the growth in data analytics capability, the rise of on-demand, short-term policies and the promise of driverless vehicles that raise questions about the very nature of liability and motor

insurance – all are examples of developments that have had or are having a transformative effect.

Indeed, technology has even helped spawn a whole new branch of motor insurance – the use of telematics technology to monitor driving behaviour for usage-based insurance (UBI) products.

In the space of around 15 years, around 10% of American drivers have agreed to provide actual driving data in return for a potentially cheaper motor insurance policy. According to a recent Willis Towers Watson survey of over 1,000 US consumers, 81% of respondents (93% of millennials) said they would be willing or open to sharing recent driving data, with broad acceptance of various data transfer technologies (*figure 1*). A similarly high number (84%) would be interested in or open to having a short trial to determine the discount they could get before buying a policy. Other markets where telematics-based products have also begun to win significant numbers of customers include the UK, South Africa and Italy.

Figure 1: Willingness of different age groups to share recent driving data for personalised insurance quotes

Four out of five drivers are open to sharing their recent driving data for personalised insurance quotes

Most drivers, regardless of age, are open to sharing driving data* for better insurance options

Millennials			Baby boomers		
Definitely/ probably 78%	Not sure 15%	Total 93%	Definitely/ probably 51%	Not sure 28%	Total 79%
Generation X			Older generations		
Definitely/ probably 61%	Not sure 26%	Total 87%	Definitely/ probably 26%	Not sure 27%	Total 53%

*Recent driving data such as the past month's data from navigational apps or in-car system

Source: Willis Towers Watson US consumer UBI (telematics) survey, February 2017



Select Article

Market growth to date has mainly relied on UBI pioneers persuading consumers to have an in-car device fitted in their car or to install an app to gather details such as speed, braking and location. It would seem to follow that those that have made a success of it would be well positioned for the future.

That may well be the case, but emerging technological developments also illustrate how even those that have been at the forefront of UBI expansion may not be immune to technology risk factors in insurance.

Data, data and more data

The core reason is that the mass of new telematics data sources coming on stream for UBI providers is taking the analytics required in new directions.

Critically, connected cars, the Internet of Things (IoT) and other new point-of-sale data sources make information about a consumer's driving and other behaviour available prior to policy issuance. This opens the door to ground breaking opportunities in marketing, underwriting and

pricing for all insurance carriers. And demonstrating the extent of the impact this could have, a recent Willis Towers Watson US consumer survey found that 55% of all drivers surveyed (79% of millennials) said they were likely to buy a new or pre-owned vehicle equipped with new technology features within two years (*figure 2*).

“...emerging technological developments illustrate how even those at the forefront of UBI expansion may not be immune to technology risk factors...”

Figure 2: Consumer interest in buying a car with new technology*

Millennials and Gen X are most interested in new driving technology

	Millennials (1981 – 1992)	Generation X (1965 – 1980)	Baby boomers (1946 – 1964)	Older generations (1920 – 1945)
Likely	79%	66%	42%	36%
Neutral	12%	17%	19%	19%
Unlikely	9%	17%	39%	45%

*Wi-Fi, vehicle maintenance alert system, vehicle theft tracking, built-in entertainment system, automated emergency roadside assistance, driver coaching tools such as speed alerts, Apple/Android compatibility, assisted driving features or self-driving capabilities

Source: Willis Towers Watson (February 2017)

From a policyholder perspective, it will mean that they can determine through a try-before-you-buy promotion or at the quote stage if a telematics policy will benefit them before they buy one. Carriers, for their part, will benefit from being able to get earlier access to actual driving data in order to understand and price risk more precisely and also to offer the kind of digital customer experience to which consumers are becoming accustomed – without the cost and hassle of installing a dedicated telematics tracking device.

Equally, this will rely on consumers being willing to share recent driving data (say from the last 60-90 days) to receive a personalised quote. 81% of respondents (and 93% of millennials) in our survey said they would be willing or open to doing that. So the market opportunities could be substantial.

Nonetheless, new analytics techniques will be required to unlock those opportunities. **Three** critical examples that we believe insurers will need to address are:

1. How to manage multi-source, open-format data and organise technology resources

The range of data sources that the industry may be able to tap in to is sizeable, but will involve considerable data variability. The keys to getting the most value out of this diverse and growing pool of data will be a flexible platform to manage it, combined with sophisticated analytics to turn data into knowledge.

Although many insurers in the US and around the world are either updating or have recently modernised their systems, most have initially focused on reorganising existing data and information. Many may need to widen their scope to include the capability to leverage new data sources for current or future UBI programmes.

But even when such data are accessible, only sophisticated analytics will turn them into useful information. The most granular datasets typically reveal truly risky driving characteristics that can then be applied to less detailed data, although more data doesn't always correlate to better insights without the right analytics. For example, harsh braking is a common metric used in basic UBI scores. While there is a correlation between the number of harsh brakes and the chances of having an accident, harsh brakes don't cause accidents (but rather help drivers avoid them). We have determined from our own analysis that some UBI driving scores in use today actually create less value than simply analysing mileage.

2. How to synthesise driving and location data into meaningful content for consumers

Information about how, when, where and how much a vehicle is driven is not just useful for an insurer but also for capturing the attention of the insureds. For ambitious

UBI providers, the expanded data universe should give the opportunity to move the customer relationship to a different footing. This will require an insurance carrier to be able to turn the detailed granular data into timely, meaningful and intuitive insight for the driver. Consumers, in turn, could benefit from a combination of incentives and rewards complemented by effective communication to encourage safer driving. For example, over 80% of US drivers in our survey who already have a UBI policy said that feedback received had changed the way they drive.

3. How to integrate policy pre-qualification data from telematics sources with traditional rating and underwriting methods.

Rating plans are already changing due to the proliferation of UBI data. Several companies have started to vary the weighting of traditional pricing factors based on what they have learned about actual driving behaviour.

Those with more in-depth experience of handling driving behaviour data should have an advantage in creating market-disrupting rating from new data sources. This doesn't preclude others, but they will typically need to begin by learning more about the driving behaviours that are actually causing claims and the industry resources that can help deliver risk segmentation 'quick wins'.

While gaining scale, there are some significant incremental changes that companies can begin making to ensure rating stays aligned with occurring and anticipated changes. For example, with just a little experience, a company could start by validating current rating assumptions (such as mileage and garaging postcode). An insurer could then adjust traditional factors that are proxies for true driving exposure (such as age, gender, marital status and insurance score) and use data available from new data sources prior to making a quote.

MetLife: putting principles into practice

MetLife Auto & Home® has expanded its usage-based motor insurance programme, My Journey®, this year with a new smartphone app to monitor and improve its customers' driving. The app automatically tracks key driving behaviours, including total miles driven, time of day, road type and conditions, hard braking and harsh acceleration and phone-based distracted driving, in order to arrive at a score for each trip. Through the app, drivers can get a good idea of how they drive, as well as when and by what they are being distracted, so they can alter their behaviour and become safer drivers.





Are IT systems up to the job?

All of the above takes IT power and capability. An associated technology risk therefore is whether property and casualty (P&C) insurers' IT systems can keep pace at a time when they are already under greater stress than ever before from big data, pricing and policy administration demands.

The good news for insurers' IT departments is that in-car technologies (bring-your-own-device) should effectively eliminate the need to manage technology fulfilment.

The harder part will be handling, analysing and sharing the exponentially larger volumes of data. The complexity of creating appropriately flexible systems will rise as will the potential for the analysis paralysis that gripped many early UBI programmes. There will be no one-size-fits-all approach or fixed timescale. The key will be to balance what the company wants to achieve with its IT and resource capabilities – and then find the right partners to fill in any holes.

Keeping on the move

The need for adaptability is certainly not unique to UBI and has become part and parcel of competing effectively in a wider motor insurance market that continues to operate in a technological hotspot. Even those at the head of the pack today have to stay alert to the changing nature of associated business risks and opportunities.

11

Regulators are getting ‘up close and personal’ – with everyone

Francis Kean

Across the globe, there is unprecedented focus on personal accountability in financial services firms. It is no longer the case that regulators are content simply to react when things go wrong or to limit their focus to the board. Following criticism of their ineffectiveness during the financial crisis, regulators have switched their attention to establishing the personal accountability of individuals – at all levels. In this article we explore what such ‘up close and personal’ tactics actually mean for senior personnel and what you can do about it.

A regulatory focus on individual accountability

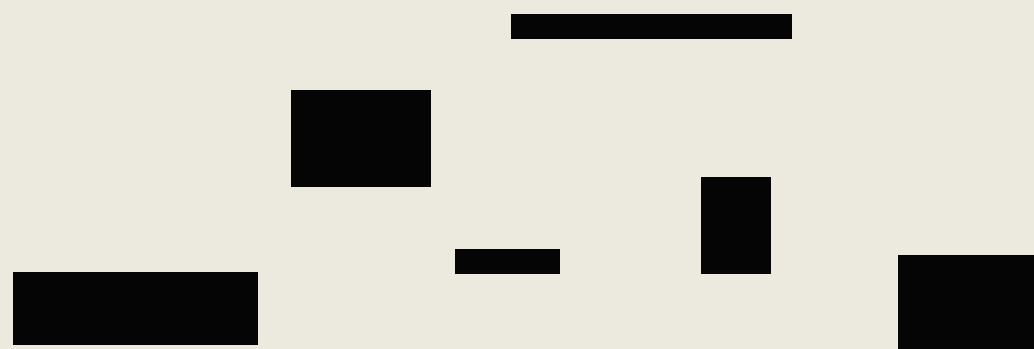
Since the 2008 financial crisis, regulators have called for (and started to deliver on) an increased focus on the actions of individuals within regulated firms. In May 2015 Christine Lagarde, Managing Director of the International Monetary Fund, said: “Ultimately, we need more individual accountability. Good corporate governance is forged by the ethics of its individuals. That involves moving beyond corporate ‘rules-based’ behaviour to ‘values-based’ behaviour. We need a greater focus on promoting individual integrity”.

Perhaps the clearest such statement of personal accountability came from the US Department of Justice in April of this year:

“ The Department of Justice **will continue to emphasise the importance of holding individuals accountable for corporate misconduct**. It is not merely companies, but specific individuals, who break the law. We will work closely with our law enforcement partners, **both here and abroad**, to bring these persons to justice¹. ”

Worldwide, regulatory initiatives focusing on the accountability of senior individuals are being developed or implemented, including the Manager-in-Charge Regime by the Hong Kong Securities and Futures Commission and the Senior Manager and Certification Regime (SMCR) in the UK.

Regulators are not restricting their focus solely to individuals who work at the top of large globally significant banks. As the 2017 announcement by the UK’s Financial Conduct Authority (FCA) to extend the SMCR to all regulated firms demonstrates, the individual accountability and liability is an issue that will have an impact on everyone.



¹ The United States Department of Justice, ‘Attorney General Jeff Sessions Delivers Remarks at Ethics and Compliance Initiative Annual Conference’, April 2017

Increased regulatory focus on individuals in asset management: SMCR

In October 2015, the UK government announced its intention to extend the SMCR to all sectors of the financial services industry, including asset management². In July 2017, the FCA published its proposals for this extension³.

The key features of the extended SMCR are in line with the original regime applied to banks, namely:

- An approval regime focused on senior management, with requirements on firms to submit documentation on the scope of these individuals' responsibilities and for firms to make sure that a senior manager is suitable to do their job
- Some new responsibilities ('Prescribed Responsibilities') that some firms will need to allocate to their senior managers
- A statutory requirement for senior managers to take reasonable steps to prevent regulatory breaches in their areas of responsibility
- A requirement on firms to certify as fit and proper any individual who performs a function that could cause significant harm to the firm or its customers, both on recruitment and annually thereafter
- A power for the regulators to apply enforceable rules of conduct to any individual who can impact their respective statutory objectives. The conduct rules apply to both regulated and un-regulated financial services activities

According to the FCA, the largest and most complex firms (less than 1% of firms regulated by the FCA) will be subject to an 'enhanced regime'. Such firms, like the banks, will also need to produce responsibilities maps and handover procedures and will need to make sure that there is a senior manager responsible for every area of their firm (overall responsibility).

Implementation of the extended regime is now forecast for summer 2018⁴. Regardless, individuals working in asset management companies will want to move quickly to understand their individual responsibilities under the new regime and what support their firms can give them. As Mark Steward, Director of Enforcement and Market Oversight at the FCA, described the SMCR: "The regime embraces a very simple proposition – a senior manager ought to be responsible for what happens on his or her watch"⁵.

What we assume

Most of us will lead productive and (hopefully) well-remunerated professional lives and will never be unfortunate enough to find ourselves caught up in a major regulatory investigation. From my dealings in this area I know that the natural assumption among this majority is that, provided they have not done anything dishonest or recklessly stupid, the organisations that employ them will stand by them in the event of trouble and their personal liability is threatened. In such circumstances, the protection typically relied upon by employees is the indemnity policy and/or directors and officers liability insurance (D&O) provided by the employer.

But how safe is this assumption? Before reviewing what protection indemnities and D&O actually provide, it makes sense to look at how the nature of regulatory investigations has impacted the dynamics of the employer/employee relationship in recent years.

The reality of regulatory investigations: divide and conquer

In times of stress, such as when faced with a regulatory or criminal investigation, cracks can quickly appear between the interests of individuals and the organisations that employ them. This is because the priority for the organisation under investigation will be to establish how bad things are, remedy the problem and move on as quickly as is feasible so as to protect the organisation's brand and reputation. In contrast, for the individuals involved the priority will be arguing the reasonableness of actions taken (or not taken) so as to defend their personal position and escape liability. It is not surprising that in such situations, a regulatory investigation can pursue an approach of divide and conquer.

² The FCA's consultation also impacts incoming branches of non-UK firms that have permission to carry out regulated activities in the UK. Therefore, this consultation may be of interest to non-UK firms and to other regulators.

³ <https://www.fca.org.uk/publications/consultation-papers/cp17-25-individual-accountability-extending-smcr>

⁴ www.fca.org.uk/publications/consultation-papers/cp17-25-individual-accountability-extending-smcr

⁵ www.fca.org.uk/news/speeches/practical-implications-us-law-eu-practice

The UK case of *FCA v Macris* illustrates this divergence in priorities. The case stemmed from the infamous London Whale case in which JP Morgan Chase was fined £137 million. Mr. Achilles Macris was the bank's International Chief Investment Officer at the relevant time. While not named personally in the FCA's Notice, he complained that it did in effect 'identify' him through the phrase 'CIO London management' and that he had been denied an opportunity to make representations in his defence. Although the Supreme Court ultimately ruled in favour of the FCA, its judgment highlighted the potential for the divergence of interests between the employer and its executives:

“ The interests of the addressee of a notice who is accused of failings, and those of a third party such as an employee of the addressee... are by no means necessarily aligned. Thus, it may well be that an employer would want to try and curtail any publicity about the alleged failings by quickly negotiating and paying a penalty, even if there may be grounds for challenging the allegation in whole or in part. But this may often not suit the employee, who might well feel that, in the absence of the Tribunal exonerating him, his reputation, and therefore his future employment prospects, could be severely harmed or even ruined⁶. ”

It is not only case law that shows the divergence of interests between employer and employee. Regulatory enforcement guidelines, such as the current edition of the US Attorney's Manual, tell a similar story that board members, senior executives or indeed any employee cannot simply assume that they will be looked after by the organisations they serve.

“ Government attorneys handling corporate investigations should maintain a focus on potentially liable individuals and maximise the accountability of individuals responsible for wrongdoing by following the principles listed below.

(1) Civil corporate investigations should focus on individuals from the inception of the corporate investigation...

(4) To be eligible for cooperation credit, a corporation must provide all relevant facts about the individuals involved in the corporate misconduct.

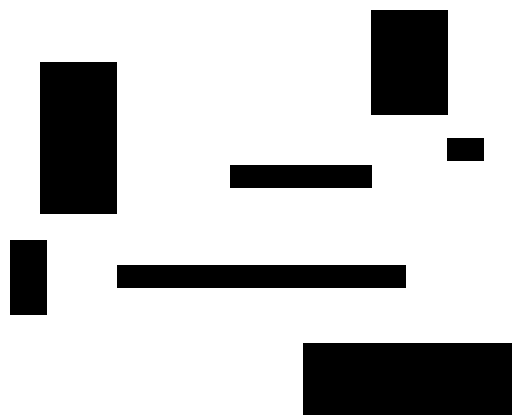
(5) Absent extraordinary circumstances, there will not be a corporate resolution that provides immunity to potentially culpable individuals⁷. ”

With such enforcement guidelines, if firms need to surrender the needs of an individual as the price for reaching a corporate resolution with a regulator and closing an investigation, the needs of the many may well outweigh the needs of the few, or indeed the one.

Seen in this context, it is even more important for individuals to understand what protection the traditional forms of indemnity and D&O provide and the gaps that may exist in that protection.

⁶ www.supremecourt.uk/cases/docs/uksc-2015-0143-judgment.pdf

⁷ www.justice.gov/usam/usam-4-3000-compromising-and-closing



Indemnification and insurance products: mind the gap

Although the exact details will vary by underwriter, the most common trigger for a covered insurance claim in this area is an allegation made against an individual to the effect that he or she has committed a wrongful act in a management or executive capacity. The two key protection products for senior managers and directors are D&O and indemnity policies. My research shows the following key gaps in protection from D&O and indemnity policies.

Gaps in D&O	Gaps in indemnity policies
Applies to directors and officers only.	Applies to all employees and officers of a company who are not also directors (or statutory auditors).
D&O is designed to respond to liability for claims (including defence costs) made and investigations commenced against directors in a particular period of insurance. As such it provides limited, if any, protection in the absence of a claim or investigation directly involving the individual concerned. Cover is often complex and comes with built-in restrictions and exclusions.	An individual has no automatic right to indemnity. Such rights to indemnity as he or she may have, may be further limited by: (a) statutory restrictions (b) the terms of any relevant contract (or deed poll) (c) the company's willingness and appetite to indemnify based on: (i) its perception of the facts on the ground in each case, and (ii) whether the senior manager is still in post when the indemnity is called upon.
The insurance limits themselves are usually shared between a large group of individuals that is not restricted to senior executives (and often includes the company itself). Hence the limits are prone to rapid depletion and even exhaustion.	The company indemnity will be worthless in the event of company insolvency. The indemnity may not continue after the individual has ceased to be employed. Even if it does, the terms may not be as generous.

Many good D&O policies will provide protection to directors who are either the target of a regulatory investigation or who are required to attend an interview in the context of such an investigation. Unfortunately, once senior employees are already caught up in an investigation it may be of little comfort to them to know they can access legal advice. The real win is to avoid being caught up in the investigation in the first place. In addition, those who have left the organisation at the time of the investigation may not be covered; if the individual does secure some cover from their former employer, it may be less generous than when they were an employee even though the regulator's investigation will be no less exacting. For example, the UK regulator (the FCA) has powers to commence enforcement actions six years (and sometimes longer) after the relevant regulatory breaches are alleged to have occurred.

“ The real win is to avoid being caught up in the investigation in the first place. In addition, those who have left the organisation at the time of the investigation may not be covered; if the individual does secure some cover from their former employer, it may be less generous than when they were an employee even though the regulator's investigation will be no less exacting. ”



What can you do?

Senior managers and directors can (and should) prepare for the new regulatory focus on their individual conduct by clarifying their own responsibilities and reporting lines. Another good starting point would be to confirm the details of the personal liability protection available through D&O insurance or employer's indemnity. As these policies can be complex, it is often helpful to think about the following four aspects: coverage; access to the protection policy; access to legal advice and the protection timescales.

Issue	D&O policy	Indemnity policy
Coverage	Which employee categories are covered?	
Access to the protection policy	Is access dependent on a failure or refusal by the company to indemnify you?	What are the conditions for access? Under what conditions can the firm refuse to provide indemnity?
Access to legal advice	Does it provide you with access to independent legal advice in pre-enforcement dealings with regulators? Does it enable you to take legal proceedings to clear your name?	Does it cover all legal expenses, including independent legal advice?
	What restrictions are imposed on your ability to select lawyers? What restrictions are there in the conduct and control of any personal defence by you?	
	Can you get an advance for all defence costs and legal representation expenses pending resolution of any dispute between the company and the insurers?	
Protection timescales	What protection do you have against future claims if you retire or resign during the policy period? What protection do you have if the company is the subject or object of mergers and acquisitions activity?	

The issues of responsibilities, reporting lines and insurance protections may need to be addressed in meetings with HR colleagues, lawyers or insurance specialists. This investment of effort will be valuable as it will help you identify any gaps and agree the means to address them. For example, even if you find that the costs of legal representation in the context of regulatory investigations are not currently covered by the policies purchased by your employer, there are good solutions in the marketplace that will provide such cover including the LEAP policy offered by Willis Towers Watson⁷. Such a hope for the best/plan for the worst approach will secure the peace of mind necessary to return your focus to the challenges of the day job.

⁷ www.willisfinexglobal.com/pdf/leap.pdf

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The future of jobs within investment management

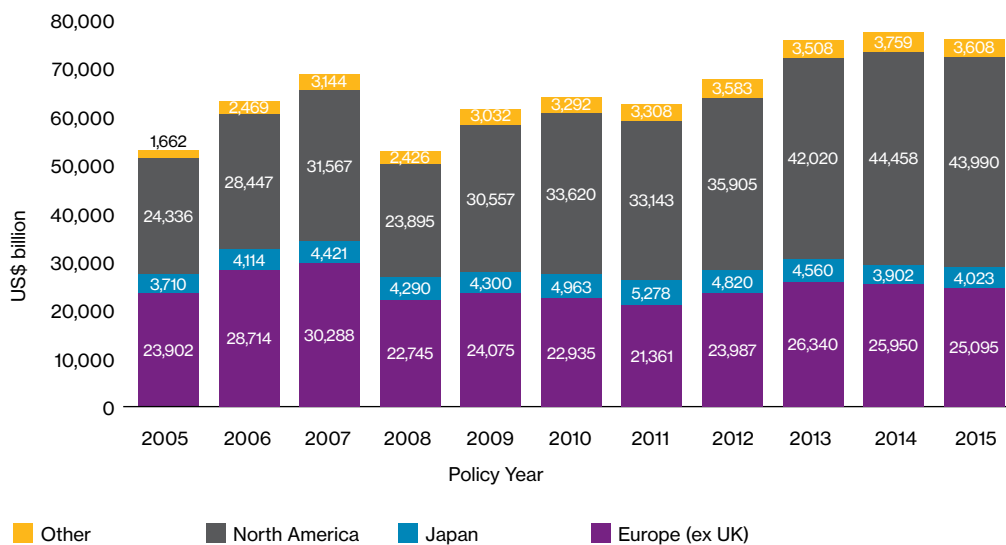
Jim Ward and Greg Kuczaj (contributor, Tim O’Neil)

As an industry, the investment management business has truly evolved over the last 30 to 40 years. Globally, the business was built on the premise that professional money managers were better equipped, compared to banks and insurance companies, to manage an individual’s money safely and with professional confidence. In the early days of the professional money management business investment portfolios were simple: stocks, bonds or cash. Since then, globalisation has expanded the geographic footprint significantly and investment portfolios have grown increasingly more complex and risky.

Today, non-traditional investments are a common component to portfolios: including real estate, private equity, commodities and other alternative investments. This has increased the professional expertise needed across the industry, in addition to increasing the risk and compliance oversight needed. The rise in pension plan assets across the US, UK and Japan, the largest pension markets, has also ignited a global industry that today is a significant component of the broader financial services industry.

In the US, from the enactment of The Employee Retirement Income Security Act (ERISA) in 1974 onwards, the investment business has grown from what was considered an insignificant operation buried within the trust department of a bank or insurance company, to a multi-billion dollar industry, which includes financial centres and trading platforms across the globe.

Total AUM of World’s Top 500 Managers



Source: 2016 Willis Towers Watson Ranking of The World’s 500 Largest Asset Managers, prepared using joint research by Pensions & Investments and Willis Towers Watson

¹ PwC, Asset Management 2020 report

What did ERISA do to ignite this industry?

Essentially, ERISA protects the retirements assets of Americans and by implementing rules that all qualified plans must follow to ensure plan fiduciaries do not misuse assets, the investment management industry was born. ERISA created the need for independent third-party managers to invest and manage these large pools of retirement assets, due in part because of the need for 'independence' in protecting the fiduciary rights of the investors and plan participants.

Since the 1970s the investment management industry has grown exponentially, so that today the world's top 500 managers manage over US\$76 trillion in assets, per the below chart. Together with alternative assets and funds from the high-net-worth (HNW) sector, total global fund assets are expected to reach US\$100 trillion by 2020¹.

Along with this growth the industry has also seen a change in investor expectations and sophistication in terms of where they want to invest and how they want to invest. This trend is not limited to the US, it is a global phenomenon. We have seen a trend over the last several years where asset flows into active management have slowed. The rise of investment indexing is placing significant pressure on those organisations specialising in active management. Investors, both retail and institutional, are putting pressure on the fees the industry has traditionally charged to manage their money. Moreover, we are seeing a shift in buyer behaviour as a result of the millennial generation becoming a greater force in the investment marketplace.

These dynamics and macro trends have had a profound effect on the future of jobs within the investment management industry. To meet the demands of investors in this increasingly competitive and complex industry, staffing and talent needs have evolved.



Where will the changes occur? How will they affect the future of jobs?

Investment talent, initially recruited from Wall Street trading desks, redefined the role of the portfolio manager. Portfolio managers with expertise in investment and portfolio strategy across fixed income and equities were, and will continue to be, in significant demand. The growth of this 'new' financial sector drove substantial investments in not only people resources, but also technology.

This surge in staffing also created the need for jobs in key investment areas such as research, trading, product and asset class specialists and compliance experts. Since the early days of this development we have seen the emergence of new growth areas and jobs, particularly in the areas of exchange traded funds (ETFs) and solutions based investing. Compliance roles have now become an integral part of every investment platform; the focus on risk aversion, both portfolio and compliance, being of paramount importance. This is a function that will not be outsourced but will continue to be a key business focus as investors demand stronger fiduciary oversight.

Changes will also continue to be seen within the traditional sales-driven distribution channels, both in the retail and institutional channels. Historically, investment management organisations have relied on market segmentation to deploy their sales teams to market products. On the retail side of the discussion, organisations are now discovering it is almost impossible to cover the estimated 300,000 US financial advisers. The expense associated with trying to cover this vast market has simply become prohibitive².

We see technology, digital media and big data creating new jobs but requiring **fewer** sales distribution jobs. This changing landscape will disrupt hiring and create a 'new' profile for the sales executive. Simply put, organisations will not need as many sales distribution professionals as sales channels become more simplified and digital media takes hold. In terms of the sales value chain, organisations will continue to reduce the number of distributors they partner with, in the attempt to reduce cost and improve revenue. This rationalisation has already led to the downsizing of sales roles across the industry.

² CaseyQuirk, 'Retooling US Intermediary Sales: New Advisor Targeting Strategies', 2016

This job disruption will also be seen in the ‘retail direct’ channel, affecting many mutual fund companies, particularly in how they sell through the traditional wirehouse intermediary partnership that exists today. We see a movement toward a more personalised digital advice channel, catering to the millennial investor. This highly personalised investment advice-type service will gain traction in the future, disrupting jobs and requiring fewer intermediary wholesaler roles. Leveraging social media and other digital platforms, as well as using ‘on-demand’ product specialists, will further increase efficiencies of the sales organisation.

As investor needs and expectations continue to evolve so too will the talent required to meet those demands. Though compensation will continue to be a top driver of attraction and retention for the new generations of talent within asset management, other drivers have and will continue to increase in importance. A firm’s reputation for example, and the ability to advance within the organisation, are becoming key decision criteria for employees, according to a biennial survey of employees and employers conducted by Willis Towers Watson (figure 1).

Rank	Attraction drivers		Retention drivers	
	Employee view	Employer view	Employee view	Employer view
1	Base pay/salary	Career advancement opportunities	Base pay/salary	Base pay/salary
2	Career advancement opportunities	Base pay/salary	Career advancement opportunities	Career advancement opportunities
3	Challenging work	Reputation of the organisation as a great place to work	Length of commute	Relationship with supervisor/manager
4	Job security	Opportunities to learn new skills	Ability to manage work-related stress	Short-term incentives (for example, annual bonus)
5	Reputation of the organisation as a great place to work	Challenging work	Trust/confidence in senior leadership	Reputation of the organisation as a great place to work

Source: 2016 Willis Towers Watson Global Talent Management & Rewards and Global Workforce Studies, Investment Management

Firms that are agile enough to align their employee value proposition with the key drivers of attraction and retention for the industry’s pivotal roles will have a competitive advantage.

So, what does the future hold for the investment management industry in terms of jobs? First and foremost, there will always be the need for third-party management of retirement assets for millions of investors around the world. However, the coming disruption in the sales distribution system, triggered by a changing investor base, the growing need to reduce operating expenses and the advanced role of technology, will transform jobs in the future. In terms

of absolute numbers, there will be fewer classic sales jobs. A reduction in the number of external wholesalers and the move to a more direct sales model with fewer external partnerships will drive this change. The industry will in many ways, similar to other industries, become more commoditised in its product offering. The coming disruption in the sales distribution value chain will create newer jobs, but at the same time there will be fewer jobs as asset managers strive to get closer to the end investor by relying less on distribution partners.

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A day in 2040: where blockchain could take us

Richard Magrann-Wells

Blockchain is more than science fiction. While you may not need to understand the mechanics behind this surprising technology, you need to understand that it is likely to drastically change our lives over the next 20 years. While that may sound bold, remember, 20 years ago, we were browsing the internet on Netscape, using our state of the art Motorola flip-phones and buying our first DVD players.

Two short decades ago the idea that we would hold a computer in our hands that could order a car, pay our bills, while playing a movie would have sounded absurd. While blockchain's impact may not be as perceptible as the

internet or as tangible as cell phones – the blockchain will succeed by removing the underlying impediments that have long created delays and annoyances in our daily lives.

What impediments will be removed? Middlemen and processing delays. It is easy to overlook the impact of these meddlesome obstacles until we envision a world without them. Middlemen are everywhere and, like processing delays, we tend to assume that they are simply a part of life. Visualising a day in the life of a business person in the year 2040 might allow us to understand how distributed ledgers could alleviate some of these tedious activities – and to understand what impact that could have on the business landscape as well as on our daily lives.

Assuming our business person is at a reasonably advanced financial institution – say a bank – their day might go something like this:

Morning at home

Lee always starts her day with coffee and a quick glance at the daily news and financial articles. Fortunately her flexible screen tablet is updated with articles from an incentivised block-chain based social media platform. Lee only pays for the articles she reads. Sometimes the cost per article is merely a fraction of a cent. This is only possible because the payments are made via a blockchain-based system that cost virtual nothing to utilise.¹ After checking the headlines and business news, Lee picks up her phone to summon a ride-share service. Lee has long been a devoted user of Uber but now prefers the new self-driving cars from Toyota². Both services offer clean, energy-efficient, autonomous vehicles, but the Toyota service is run via blockchain and that means any fees and transactions are completely transparent.³ Lee likes that.

¹ While there are other incentivised news platforms, cryptocurrency seems ideal for this purpose because of the low transaction costs and ease of payment. Steem is one company offering such services.

² Toyota, 'Toyota Research Institute Explores Blockchain Technology for Development of New Mobility Ecosystem', May 2017

³ A number of car manufacturers are investing in competing rideshare services. Toyota has specifically noted that DLT (distributed ledger technology) could revolutionise ridesharing, presumably eliminating dispatching services that charge additional fees.

Wire transfers and international payments

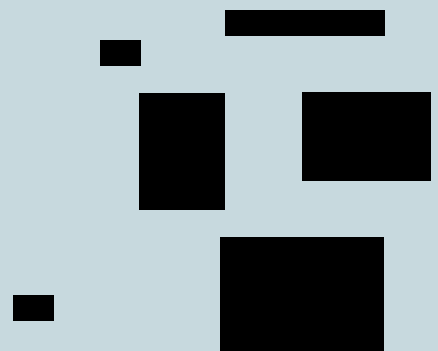
Once at the office Lee needs to manage a number of transactions. First priority is to initiate an international wire to pay a counterparty in Australia for their services as a loan underwriter. She remembers when such a purchase of foreign currency in the spot market meant a two-day delay. Banks would charge anywhere from 1 to 3 % of the notional amount of the transfer for retail customers. Then there was the tedious input of wiring instructions for both the sending and receiving institutions. With just a few strokes on the keypad, Lee keys in the simple details into her new wire system. Her bank still uses the, now 20-year old, blockchain system for sending such wires. The system uses the proprietary cryptocurrency called Ripple, or simply abbreviated as XRP, as a go-between method of converting currencies⁴. There are other competitors and newer products: ethereum-based and SWIFT have rolled out their own blockchain-based product some years ago⁵. However, her bank has stayed with Ripple.

Loans

Last week Lee's bank closed a syndicated loan transaction. The loan was to a Sydney-based fine arts auction house. It has taken three days to finalise the terms and have the dozen or so banks commit. While Lee has to admit it was stressful, she still remembers when such transactions took three weeks of shuttling documents back and forth by email, with messy marked-up versions, trying to figure out what was the latest position on each clause as well as the overall agreement, and getting all the parties to agree on a time for formal signing. The logistics were a nightmare. The new blockchain-based syndicated loan system radically improved that process and, most importantly, created an immutable record of every alteration in real time. It has also allowed everyone to commit remotely simultaneously. She finds it hard to imagine how they ever got deals done before.

Collateral

For Lee the interesting part of this transaction is dealing with an auction house. Much of the collateral for this transaction is unusual, including fine art and rare commodities like vintage wines. It is much easier to use such things as collateral now that they can all be easily tracked using the distributed ledgers for such items. The blockchain's ledger stores the provenance of bottle of wine or a masterpiece in a way that is beyond question – publicly. Building on the success of Everledger⁶ for diamonds back in the 2010s, there are now ledgers for all types of precious jewels, art and other kinds of collectibles. It makes it possible to buy, insure or lend against such collectibles without concern about the authenticity of the object.



⁴ <https://ripple.com/>

⁵ SWIFT, 'S WIFT explores blockchain as part of its global payments innovation initiative', January 2017

⁶ www.everledger.io/

Back home

With her workday done, Lee heads home and listens to streaming music. She likes the new bands out of Korea. She registered for a blockchain service that allows her to pay less than a cent (using Bitcoin) every time she listens to a particular song. She likes this system because she knows it encourages specific bands to create the kind of music she likes.

Lee still has chores to complete, including paying her property taxes, voting in local elections and paying her home insurance. These used to be time-consuming tasks, but in recent years, property titles, voting records and even insurance policies have been put on distributed ledgers to simplify payments and tracking. Lee completes all three tasks in a matter of minutes.

Property

Lee's bank used to hold substantial balances for large escrow companies. However, as all major cities began putting property titles on distributed ledgers, the process of transferring title no longer required complicated escrow processes. There was now no need for money to sit idle in escrow accounts. Titles, mortgages and tax payments become much simpler with transparency. If all the relevant (or permissioned) parties can see the title, all transfers and tax and mortgage payments – in real time – property becomes a relatively uncomplicated business. A trusted intermediary (such as an escrow) is no longer required.

Voting

Lee used to hate going to vote. It meant finding some odd polling place in the back of a school or someone's smelly garage – it always seemed absurd. (Although postal voting was an option in the past, there was still the hassle of getting the voting papers in the post.) The new nationwide online voting system only went live last year, but it has made a huge difference in voting participation. Virtually no one has an excuse not to vote

when it is a simple matter of logging on. This method of voting is now accepted in all local and national elections. Lee read on her personalised news feed that the SEC will be requiring online voting for shareholder meetings as well. She wonders if boards would act differently if all shareholders voted instead of usual one-quarter⁷.

Insurance

The way Lee now insures her condominium may represent the greatest blockchain effect. Twenty years ago companies were starting to introduce the concept of peer-to-peer (P2P) insurance – a form of mutual insurance. This year her college alumni association introduced P2P insurance for alumni. All of the alumni's car information (VIN, maintenance records, accident reports) are available on the Department of Motor Vehicle's Auto Record Ledger. The association's AI reviews alumni driving and car records and an underwriting algorithm quickly determines the best rate for the insured. Even small claims are evaluated and, if approved, automatically paid by the association's AI, employing 'smart contracts' (self-executing programs embedded in the underwriting software). All records associated with the insurance program are permanently stored on a blockchain that makes tracking the history of a claim easy for both insured and insurer.

Lee has read that the permanent blockchain records have also helped to reduce insurance fraud. She's learnt that all legal suits will soon be recorded on a digital ledger – creating an immutable record of every filing, every deposition and every legal matter worth tracking. All that data will be recorded (it is public record in any case) on a single distributed database. The data can be recalled and used as needed.

Lee tells her phone to turn off all the lights, reduce the heating and lock the house. She goes to bed.

It is easy to envision a blockchain-driven utopia and the truth is that, like most new technologies, blockchain will almost certainly fail to live up to its potential. It was Peter Thiel who said, "We wanted flying cars, instead we got 140 characters"⁸. However, the *concept* of blockchain is irrefutably valuable.

⁷ CNN, 'Just 27% of investors bother to vote', June 2014

Kevin Kelly, the author of *The Inevitable* puts it most succinctly, “An important aspect of blockchain is that it is a public commons. No one really owns it because, well, everyone owns it”⁸. The Web is now a common public utility and the idea of distributed ledger and blockchain has just created a means whereby we can recreate the (lost) trust across that utility.

Blockchain's ability to create distributed immutable records, reduce hacking and create trust over remote distances will make it a valuable tool for banking, insurance and many other fields. Even if we are not building the blockchain tools, it will be important for all of us wanting to use them to understand the risks and opportunities that distributed ledgers offer.

“ The Web is now a common public utility and the idea of distributed ledger and blockchain has just created a means whereby we can recreate the (lost) trust across that utility. ”



⁸ <http://som.yale.edu/peter-thiel-yale-we-wanted-flying-cars-instead-we-got-140-characters>

⁹ Kevin Kelly, *The Inevitable*, Penguin 2016

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