



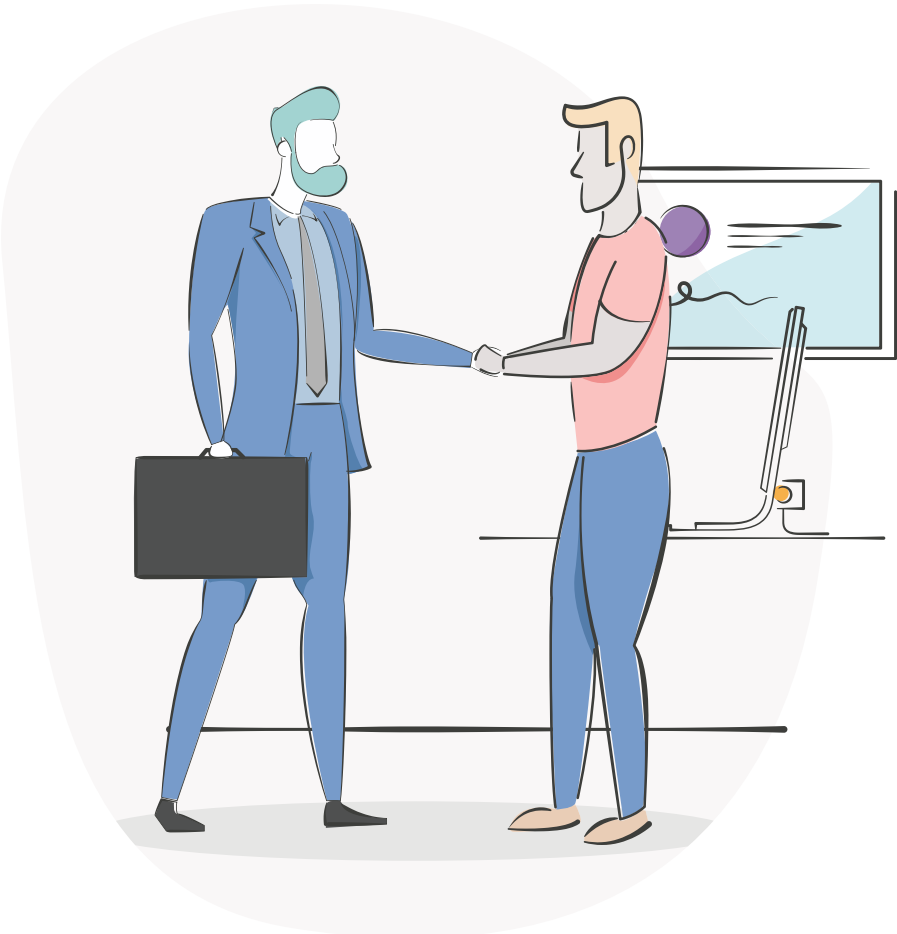
Future skills in financial services

January 2021



Contents

- The world is changing: future skills 04
- The financial services sector 04
- Sector trends 06
- Job family trends 08
- Data and analytics: integral to every role 12
- Digital leadership 14
- Risk and compliance, financial crime, and cyber security 15
- Build, buy, borrow or bot: what are employers doing right now? 16
- The skills landscape post-pandemic..... 18
- Mapping training opportunities to job roles..... 20
- Operating model of a bank..... 21
- Operating model of an insurer 22
- “Capability+” 35



The world is changing: future skills

The world is changing, and as it digitalises professionals must digitalise too.

Technology presents new ways to increase efficiency, automate processes, and provide ever-more accurate and instantly accessible data, and employers need a workforce that can make the most of this technology.

Research from the CBI shows that over two thirds of UK companies (67%) have unfilled digital vacancies, possibly because nearly half of them (46%) are recruiting from the same external talent pool, which is nowhere near large enough to plug the UK's skills gap.¹

Employers can use four methods to fill a skills gap:



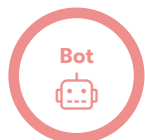
Developing skills internally, perhaps through an early talent programme that builds a 'talent pipeline' or a company-wide programme of training



Buying skills by hiring new staff who are already equipped with those capabilities



Borrowing skills by outsourcing tasks to third parties



Automating the task, thereby using a bot's skills instead of a human's skills

At BPP, we have taken time to examine this skills shortage. We have conducted a research review to identify the key training trends and future skills employers should be thinking about, drawing on:

- 160+ research reports and articles collected from industry experts and commentators
- Data analysis of 4000+ jobs from the top UK Financial services employers, conducted by BPP's Insights team
- Economic data and apprenticeship start data from the UK government
- Machine learning analysis of UK skills in 41 million job ads, conducted by Nesta
- Skills and capabilities data from the UK's apprenticeships standards database
- The expertise of programme design specialists, learning and development specialists, and academic staff from across BPP

67%

Over two thirds of UK companies have unfilled digital vacancies



In today's increasingly competitive and constantly changing world, it's your people that will keep you ahead. Your talent is an asset with limitless potential, and harnessing it is the key to future growth.



Graham Gaddes
CEO, BPP Education Group

¹ CBI: 'two thirds of firms cannot fill digital roles'

The financial services sector

The story in financial services echoes the story of most professions: automation is encroaching upon elements of almost every role, speeding up the time it takes a person to perform tasks or, in some cases, taking that task out of human hands entirely.

A decade from now, will every financial services job spec contain a shopping list of digital technical skills? How much time will employees dedicate to the ‘human’ skills that machines can’t replicate, like communication and empathy?

The answers to those questions vary depending on whether you’re talking about banking or insurance. They vary depending on the role in question. They vary depending on the company, and sometimes the answers vary depending on the individual manager you ask.

In the long term, perhaps 20 or 30 years from now, nobody knows how the balance between ‘human’ tasks and ‘technical’ tasks will shift.

In the short term, there are some certainties:

1. Some employees will refocus on ‘human’ tasks, majoring on skills that can’t currently – or won’t ever – be replicated by an algorithm.
2. Some employees will need greater technical skills: they will either work alongside this technology, or they will directly maintain the systems now required by business.
3. Technology is putting increasing pressure on regulatory compliance, cyber security, and financial crime risk in the financial services sector.

In response to all of these changes there are four training areas that must be a priority for any financial services employer:

1. Data and analytics
2. Digital leadership and digital skills
3. Cyber security and financial crime
4. Governance, risk, and compliance

18%

of financial services employers say that **the introduction of new technology has caused skills gaps²**

27%

of financial services employers find it **difficult to obtain advanced or specialist IT skills from applicants²**

26%

of financial services employers find it **difficult to obtain complex numerical/statistical skills from applicants²**

57%

of financial services employers say they have **funded or arranged training in new technology²**

² Employer skills survey 2019: UK findings.

Sector trends

In reviewing the latest financial services research, the following observations may shed some light on how skills are currently developing and what will likely be required in the future.

Retail Banking

In the recent past, being a competitive bank meant having a competitively large branch network. Now, digital banking is the priority with customers expecting internet and app-based interactions. Banking licences, technology, and advertising spend are a measure of competitive edge, not bricks and mortar via branches. As a result, retail banks are focusing their resource – both spend and headcount – on improving the digital banking experience.

Commercial Banking

For corporate banking, the next opportunity for digital innovation will be in the back office, where tasks such as servicing and default management can benefit from increased automation.

- Cyber security is paramount to rebuilding trust in the banking sector³
- Investment in online lending platforms by both start-ups and incumbents is still significant⁴
- The impact of digital innovations on banks' strategic choices includes: fintech, open banking, and PSD2 (revised payment service directive)
- The majority of the largest retail and commercial banks in the UK mention digital transformation in their mission statements and business strategies

Investment Management

- In contrast to Investment Banking, Private Banking is currently vulnerable to disruption from digitally innovative competitors: the client base has a weak affiliation to its provider, and robo-advice and other digital customer service experiences may draw clients away
- PwC: "Wealth management stands today as one of the least tech-literate sectors of the financial services industry"
- Customers want a digital transaction capability with an online interface



³ PwC: Retail banking 2020

⁴ Deloitte: 2019 banking capital markets outlook

Investment Banking

The high barrier to entry for investment banking means there are fewer challengers entering the market and therefore less competitive pressure to digitalise the way their clients engage with their services. As such they are undergoing digital change at a different rate, and with a different focus, to retail and commercial banks.

The main focus seems to be:

1. An attempt to harness digital transformation to reduce costs and improve customer experience. Many investment banks however struggle with operational inefficiencies that hamper implementation and success.
2. With reporting and regulatory requirements becoming increasingly complex, investment banks are focusing on optimising the accuracy and level of detail available in their risk and financial reporting.

While those working in investment banking are optimistic about the potential of new technologies, only a third of firms are investing sufficiently in the required tech or future skills required to maximise their use.

- 95% of people in the investment banking profession rate the potential for new technologies to reduce operating costs and inefficiencies⁵
- But only 28% of firms are investing 'sufficiently' in investment banking technologies⁵
- Investment banks are much less vocal about digital transformation in their mission statements and business strategies

Insurance

Most insurance is now predominantly bought online. Customers expect service to be digital, smooth, and instantaneous and insurance providers need to deploy technology to keep up with and ahead of such expectation.

Generally speaking, insurers intend to increase head count in the short-to-medium term. However, with robotic process automation (RPA) increasingly automating claims processes and underwriting decisions, roles such as actuaries, underwriters, and claims adjusters will be transformed. As automation frees up their time, these employees will need to invest that liberated time in higher-level and more strategic tasks.

Some insurers are 'decomposing' jobs⁶ – breaking them down to their constituent parts and analysing them – in order to identify tasks that can be streamlined or taken over entirely by automation. This is providing a clearer view of the tasks that no longer require human input and identifies the uniquely human skills that cannot be replicated through automation.

- Ideation/hypothesising and decision making skills will become more essential, while computation and distillation of data will become less essential⁶
- Additional training could be required to repurpose current and future staff and help them evolve along with emerging systems and technologies.⁶
- Integration of cutting-edge technology should help insurers attract younger, more tech-savvy workers into the industry⁶
- The majority of Insurers talk about digital transformation in their mission statements or business strategies



⁵ PwC: Tech and innovation in Europe's capital markets

⁶ Deloitte: Insurance industry outlook

Job family trends

The things we've been discussing so far have been relatively broad, relating to changes that are happening in entire sectors, but we also need to understand how individual jobs are going to be affected by digitalisation and technology.

Drawing on the latest research, we have identified key skills that will be essential for particular roles in the near future.

Actuaries

- Data science
 - Predictive social media and search history analytics
 - Technical digital skills: programming languages, automation, and A.I.
 - Big data, data visualisation, and predictive analytics
 - Cyber security
 - Making algorithmically-aided judgements and bias reduction
 - Ethics of data science
 - Communication skills
 - Specialised technical knowledge
 - Continuous learning and development
- Refer to skills table on **page 23**.

Claims

- Using video & mobile technology for claims
- Automation tools: cognitive claims computing, artificial intelligence
- Understanding blockchain and 'smart contracts'
- Data skills with a focus on: predictive analytics, use of drones, climate change, identity theft, cyber security, and IOT
- Customer service and customer experience skills
- Working alongside technology: photo apps, drones, natural language-based document screening, virtual assistants and bots
- Change of perspective: claims prevention instead of traditional claims handling

Refer to skills table on **page 24**.

Finance

- Understanding and using technology
- Digital technologies, capabilities, practices and strategies
- STEM, Augmented intelligence
- Financial reporting in real time; blockchain
- Corporate governance, Risk management, Ethics
- Communication
- Organisational strategy

Refer to skills table on **page 25**.

HR

- Data analytics: people analytics
- Data analytics: diversity, attraction and recruitment
- Design thinking
- Natural language processing, predictive algorithms, self-learning
- Predictive talent models

Refer to skills table on **page 26**.

Investment/Asset Management

- Digital skills: online investment platforms
- Understanding of Distributed Ledger Technology (Blockchain)
- Data analytics
- Understanding of machine learning technology
- Applications of robotic process automation (RPA)
- Digital marketing, field management technologies
- Client relationship management, communication skills

Refer to skills table on **page 27**.

Investment Operations

- Understanding and working with automation and A.I. technology
- Understanding Blockchain technology
- Data analysis: portfolio valuation, reconciliation and management
- A.I. and automated financial crime checks
- Data analytics and automation for margin calculations and other derivatives tasks

Refer to skills table on **page 28**.

Management capacity

- Interdisciplinary skills
- Innovation and risk-taking
- Digital capabilities
- Communicating in a digital environment
- Continual learning, the ability to instil a 'learning culture'
- Change management, empathy, creativity
- Decentralised leadership

Refer to skills table on **page 29**.

Project Management

- Artificial intelligence: scheduling, assigning resources
- Relationship building, negotiation, and empathy
- Utilising multiple PM methodologies
- Data science (data management, analytics, big data)
- Legal and regulatory compliance knowledge
- Collaborative leadership

Refer to skills table on **page 30**.

Relationship Management and Customer Service

- Human-machine collaboration: working alongside A.I.
- Relationship building, client experience, establishing/maintaining trust
- Customer communication, empathy, familiarity with communication technology, ability to perform in a virtual environment

Refer to skills table on **page 31**.

Risk and Compliance

- Big data
- Cybersecurity risk, data and IT systems risk, digital risk management
- Analytics, mid-level or an advanced level of technical IT knowledge
- Soft skills: organisational dexterity, effective communication, change management

Refer to skills table on **page 32**.

Sales and Trading

- CRM and data analytics
- The ability to code
- Solutions advice skills
- Data analytics: advanced segmentation, bespoke service provision
- Entrepreneurial skills and an 'agile mindset'
- Quantitative analysis of internal and external data

Refer to skills table on **page 33**.

Underwriters

- Customer-centric skills, sales
- Account management, risk assessment
- Familiarity with emerging technology
- Leadership and management
- Data analytics to aid decision-making
- Communication skills, creativity, innovation
- The ability to blend quantitative and qualitative analysis
- Blending human judgement and data analytics
- Teamwork, collective problem-solving

Refer to skills table on **page 34**.

For professionals working in Technology roles.

The rapid rate of change makes describing the current state of play for technology skills a considerable challenge, and identifying the future skills is virtually impossible.

One of the best pictures of the skills currently required for technology roles comes from a collaboration between **Nesta and Burning Glass Technologies**. Nesta conducted a machine learning analysis of 41 million job adverts in order to create a 'skills taxonomy.' We've used the results of Nesta's analysis to list the most common skills listed for the type of technology roles often required by financial services organisations.

While these are all hard technical skills, it's also recommended that technology professionals acquire soft skills, including: communication, teamwork, and creativity. Having these soft skills helps technical professionals to communicate the results of their work, collaborate with others in their teams and across the business, and tackle problems innovatively.

Cyber Security

Skills

- information assurance
- security implementation
- knowledge of iso iec 27001
- information security
- cryptography
- computer engineering
- Communication (soft skill)
- Teamwork (soft skill)
- Creativity (soft skill)

Products/Platforms

- ArcSight

Data Analyst

Skills

- data management
- business intelligence
- data warehousing
- extraction transformation and loading etl
- data modelling
- data architecture
- data integration
- online analytical processing olap
- unix shell scripting
- data mining
- quantitative and qualitative research
- predictive models
- Communication (soft skill)
- Teamwork (soft skill)
- Creativity (soft skill)

Products/Platforms

- Visual Basic
- Microsoft SQL
- Oracle PI SQL
- Microsoft Access
- Businessobjects
- Cognos Impromptu
- Qlikview
- Crystal Reports
- Informatica
- Microsoft SQL Server Integration Services Ssis
- Oracle Business Intelligence Enterprise Edition Obiee
- SQL Server Analysis Services SSAS
- SQL Server Reporting Services SSRS
- SAS
- Tableau
- SPSS
- R

Infrastructure Technician

Skills

- software use instruction
- it support
- computer hardware knowledge
- printer support
- application support
- troubleshooting technical issues
- network hardware software maintenance & configuration
- dynamic host configuration protocol dhcp
- network hardware
- computer installation and setup
- software installation
- phone systems
- problem analysis
- Communication (soft skill)
- Teamwork (soft skill)
- Creativity (soft skill)

Products/Platforms

- Microsoft Exchange
- IBM Notes

Network Engineer

Skills

- network administration
- wide area network wan
- network engineering
- network installation
- virtual private networking vpn
- network security
- video conferencing
- ospf
- global system for mobile communications gsm
- Communication (soft skill)
- Teamwork (soft skill)
- Creativity (soft skill)

Products/Platforms

- Avaya D

Software Developer

Skills

- software architecture
- database design
- software testing
- software development
- agile development
- relational databases
- version control
- object-orientated analysis and design ooad
- Communication (soft skill)
- Teamwork (soft skill)
- Creativity (soft skill)

Products/Platforms

- SQL
- Microsoft C#
- Java
- .Net Programming
- SQL Server
- Asp
- C++
- Scrum
- Extensible Markup Language Xml
- Unix
- Transact-Sql
- Perl
- Visual Studio

Data and analytics: integral to every role

The demand for data analysts and data science roles is rapidly increasing, and the number of applications for data science in accountancy, law, and actuarial science multiply every year.

The Royal Society's report 'the Dynamics of Data Science' shows that between 2013 and 2018:

- Demand for data scientists increased by 1287%
- Demand for data engineers increased by 452%
- Demand for data analysts increased by 43%

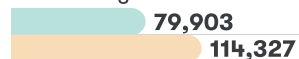
When we analyse the government's apprenticeship starts data, we can see that data analyst apprenticeship starts have more than doubled in the last year alone: last year there were 650 starts in total, while in Q3 2019 there were 1,330 starts.

DSA jobs

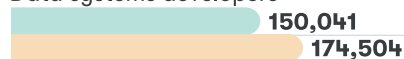
Data scientists and advanced analysts



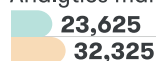
Data analysts



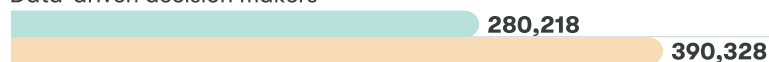
Data systems developers



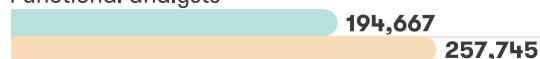
Analytics managers



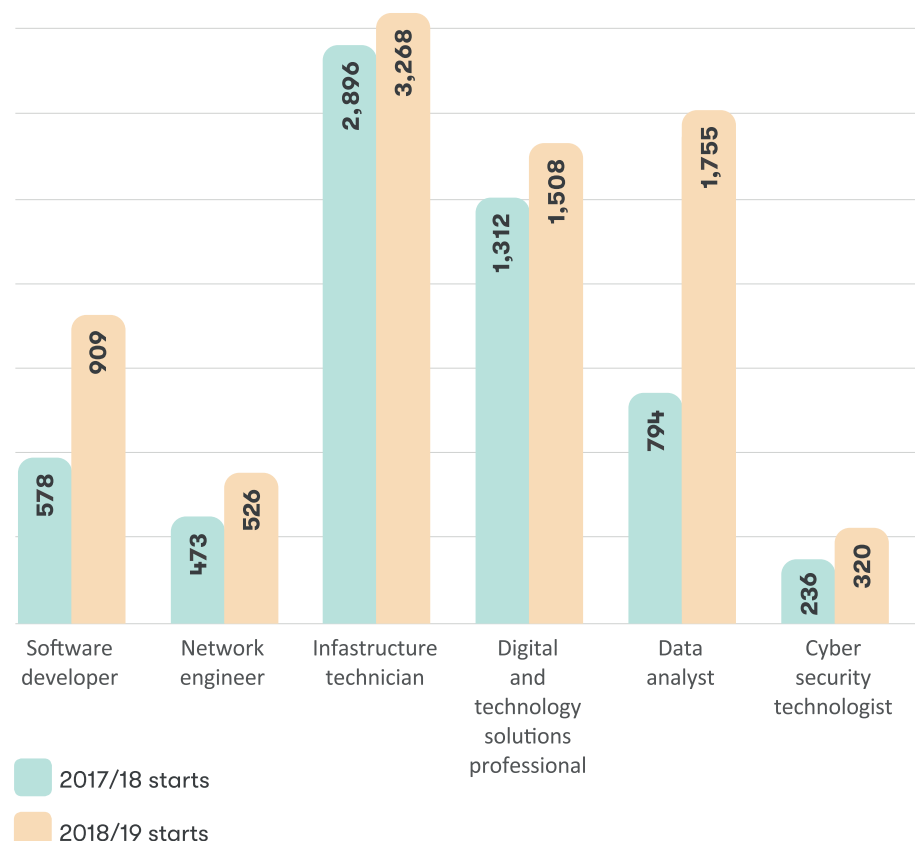
Data-driven decision makers



Functional analysts



Digital apprenticeship starts (levy supported, 2019)



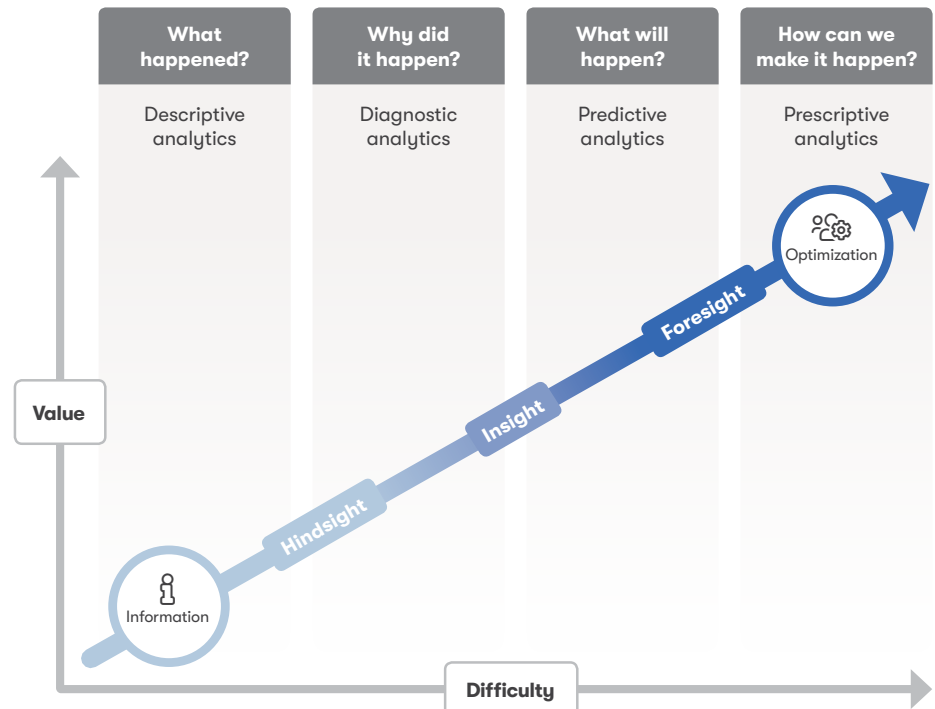
Data and analytics will be integral to almost every role in the future. So what, exactly, do we mean by ‘analytics’?

Analytics is the detailed examination of elements/data in an organised and systematic way usually to create a deep understanding of something in the form of insight. Gartner has a model that suggests there are four main types of analytics, each performing a different task:

- Describe
- Diagnose
- Predict
- Prescribe

*Find out more about Gartner’s ‘four analytic capabilities’ [here](#).

Gartner's analytics maturity model



The power of data and analytics is the ability to drive change and improvement. This is achieved through analytics providing deep understanding of problems and situations based on facts.

Viki Walker
Head of Customer Insight

Digital leadership

To be a successful leader in today's digital environment you must be prepared to tackle what technology means for your business and how you can embrace and harness it. Those who don't will simply get left behind.

Today's managers need to be digitally literate so that they can make data-driven decisions. In the near future however, they will need the ability to collaborate with AI and predictive analytic systems, and develop the skills needed to make decisions augmented but not dictated by automated technology.

Key Facts:

- The most critical need for most banks is for leaders to develop digital capabilities⁷
- Today, only 5% of companies feel they have strong digital leaders in place⁷
- 72% of companies are starting to develop new leadership programmes focused on digital management⁷
- Employers who “set the tone at the top by developing leaders who know how to act, think, and influence in this new working environment, promoting the organisation's revamped digital DNA” will have most success⁸



⁷ Deloitte: Developing digital leaders

⁸ Deloitte: Insurance industry outlook

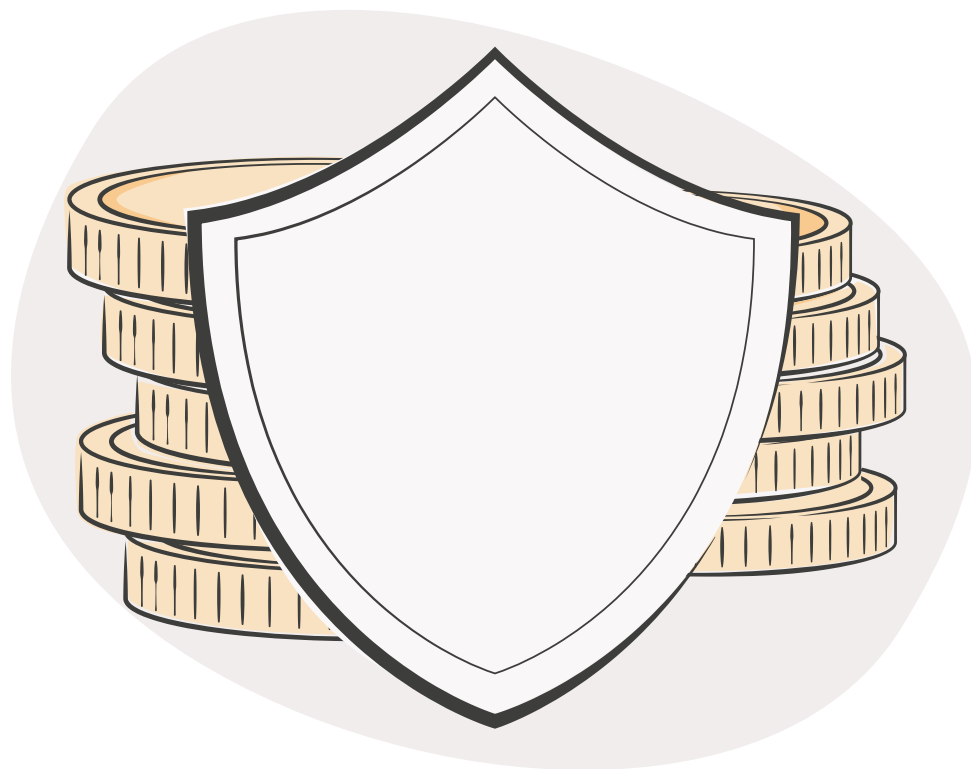
Risk and compliance, financial crime and cyber security

As financial services become increasingly digital, and with directives like PSD2 opening up customer data in unprecedented ways, financial crime risks increase and cyber security becomes critically important.

Training people on risk and compliance is one of the most effective methods of reducing financial crime and cyber security risk.

- 46% of organisations in 2018 have used training to understand what indicators of cyber security compromise to look for, to improve detection and provide clarity on cyber security⁹
- Cyber security was a priority for financial services organisations in 2018, with 35% saying that employee training on cyber security awareness was the top priority⁹

- BPP's own research "Confident compliance: Risk management in an age of digital disruption survey (in conjunction with the ICA)"** found that cyber security is the one topic that risk and compliance professionals in the financial services sector should be familiar with, above even data risk and management, money laundering, and financial crime¹⁰
- BPP's report also found that 82% of respondents felt compliance professionals should have at least a mid-level (e.g. MS Excel Macro, Pivot Tables, MS Access Database, SharePoint Creation) or advanced level (e.g. Programming, Database Creation, Data Manipulation and Analytics) of technical IT knowledge¹⁰



⁹ KPMG: Clarity on cyber security

¹⁰ BPP: Confident Compliance: Risk Management in an Age of Digital Disruption

Build, buy, borrow or bot: what are employers doing right now?



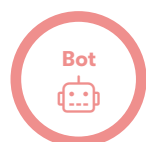
Developing skills internally, perhaps through an early talent programme that builds a 'talent pipeline' or a company-wide programme of training



Buying skills by hiring new staff who are already equipped with those capabilities



Borrowing skills by outsourcing tasks to third parties



Automating the task, thereby using a bot's skills instead of a human's skills

To find out how employers are addressing digital skills gaps in the present, we can examine job advert data and government apprenticeship data.

Job advert data gives us an idea of the skills employers are trying to 'buy' in by hiring employees who already have that skill.

Government apprenticeship data gives us an idea of the skills employers are 'building' into their businesses, by training new or existing staff in the skillsets their businesses require. Having conducted our own analysis of currently advertised vacancies in financial services, it is clear that the roles of 'Analyst' and 'Software Engineer' are consistently ranking top for financial services employers.

| Role | Financial services total | Retail and Commercial Banking | Insurance | Investment Banking |
|---------------------|--------------------------|-------------------------------|-----------|--------------------|
| Analyst | 13.9% | 12.7% | 15.8% | 14.7% |
| Software Engineer | 11.2% | 10.0% | 7.2% | 19.2% |
| Customer Service | 8.6% | 14.8% | 5.0% | 0.7% |
| Associate | 6.3% | 1.9% | 0.7% | 19.0% |
| Software Developer | 6.1% | 6.3% | 1.8% | 10.8% |
| Risk and Compliance | 4.7% | 4.5% | 2.2% | 8.3% |
| Underwriter | 2.0% | 0.1% | 7.3% | 0.0% |

*Jobs advertised by the top 35 financial services employers in the UK in July 2019. Analysis conducted by BPP's Insights team.

Use of the apprenticeship levy to upskill and reskill existing employees is an alternative way to addressing the digital skills gap.

Employers increasingly consider this a credible and viable option for creating a pipeline of talent who are hungry to develop and able to rapidly acquire new skills.

The Government's apprenticeship stats data suggests that employers are using apprenticeships to create a pipeline of technology talent: we can see a significant increase in the number of starts for data analyst, software developer, cyber security technologist, and digital and technology solutions professional apprenticeships.

| Sum of starts (Government data) | Technology | | | | | |
|---|---------------------------|------------------|--------------|--------------------|-----------------------------|---|
| Year | Infrastructure Technician | Network engineer | Data analyst | Software developer | Cyber security technologist | Digital technology solutions professional (Integrated Degree) |
| 2018/2019 Full year total (August-August) | 3,268 | 526 | 1,755 | 909 | 320 | 1,508 |
| 2017/2018 Full year total (August-August) | 2,896 | 473 | 794 | 578 | 236 | 1,312 |
| 2016/2017 Full year total (August-August) | 1,494 | 351 | 59 | 256 | 100 | 517 |

The skills landscape post-pandemic

The COVID-19 pandemic has changed the way that many people in the UK work. The crisis has led to the collapse of some businesses and the birth of others. The pandemic is in the process of changing the way that many businesses are structured.

All of these changes have skills implications.

The World Economic Forum (WEF), in their paper *The Future of Jobs Report 2020*, say that the COVID-19 pandemic lockdowns and the 2020 recession have “accelerated the future of work”, in part because the changes to the ways we work increase the pace of technology adoption.

The WEF also make predictions about the skills that will increase in importance between 2020 and 2025:

“Skills gaps continue to be high as in-demand skills across jobs change in the next five years. The top skills and skill groups which employers see as rising in prominence in the lead up to 2025 include groups such as *critical thinking and analysis* as well as *problem-solving*, and skills in *self-management* such as *active learning*, *resilience*, *stress tolerance* and *flexibility*.”¹¹

Many of these skills were predicted to increase in importance in the financial services sector before the COVID-19 pandemic, but what the WEF report tells us is that we should expect a significant increase in the demand for these skills and the speed with which business will want to acquire them – often through training their existing staff.

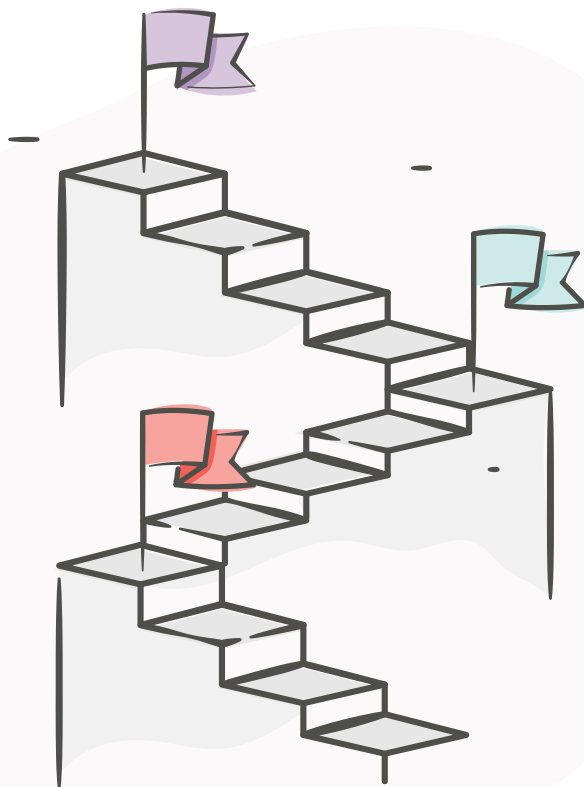
The financial services sector has been experiencing digital transformations with an unprecedented speed and rapidity as a result of the pandemic.

Mark Hoban, Chairman of the Financial Services Skills Commission, says:

“The Covid-19 pandemic has accelerated the global megatrends that have been driving change in the financial services sector. Digital transformations which could have taken years to implement have happened in days or weeks. This places even greater stress on the sector’s existing pool of talent and makes it all the more urgent to reskill and upskill people currently working in our businesses. The sector will also need to recruit and retain a much broader pool of talent to drive forward our digital transformation.”¹²

All of the skills predictions this report makes – many of them drawn from research conducted prior to the pandemic – are more urgent now than they were before.

Everyone working in financial services should be thinking about the skills they need as our workplaces change, technology adoption increases, and as skills requirements shift.



¹¹The World Economic Forum, *The Future of Jobs Report 2020*

¹²The City UK: Covid-19 accelerating skills challenges faced by financial sector

The World Economic Forum's Top 15 skills for 2025¹³

| | |
|---|---|
| 1 | Analytical thinking and innovation |
| 2 | Active learning and learning strategies |
| 3 | Complex problem-solving |
| 4 | Critical thinking and analysis |
| 5 | Creativity, originality and initiative |
| 6 | Leadership and social influence |
| 7 | Technology use, monitoring and control |
| 8 | Technology, design and programming |

| | |
|----|--|
| 9 | Resilience, stress tolerance and flexibility |
| 10 | Reasoning, problem-solving and ideation |
| 11 | Emotional intelligence |
| 12 | Troubleshooting and user experience |
| 13 | Service orientation |
| 14 | Systems analysis and evaluation |
| 15 | Persuasion and negotiation |



On average, companies estimate that around 40% of workers will require reskilling of six months or less and 94% of business leaders report that they expect employees to pick up new skills on the job, a sharp uptake from 65% in 2018.¹⁴

¹³ & ¹⁴ The World Economic Forum: The Future of Jobs Report 2020

Mapping training opportunities to job roles

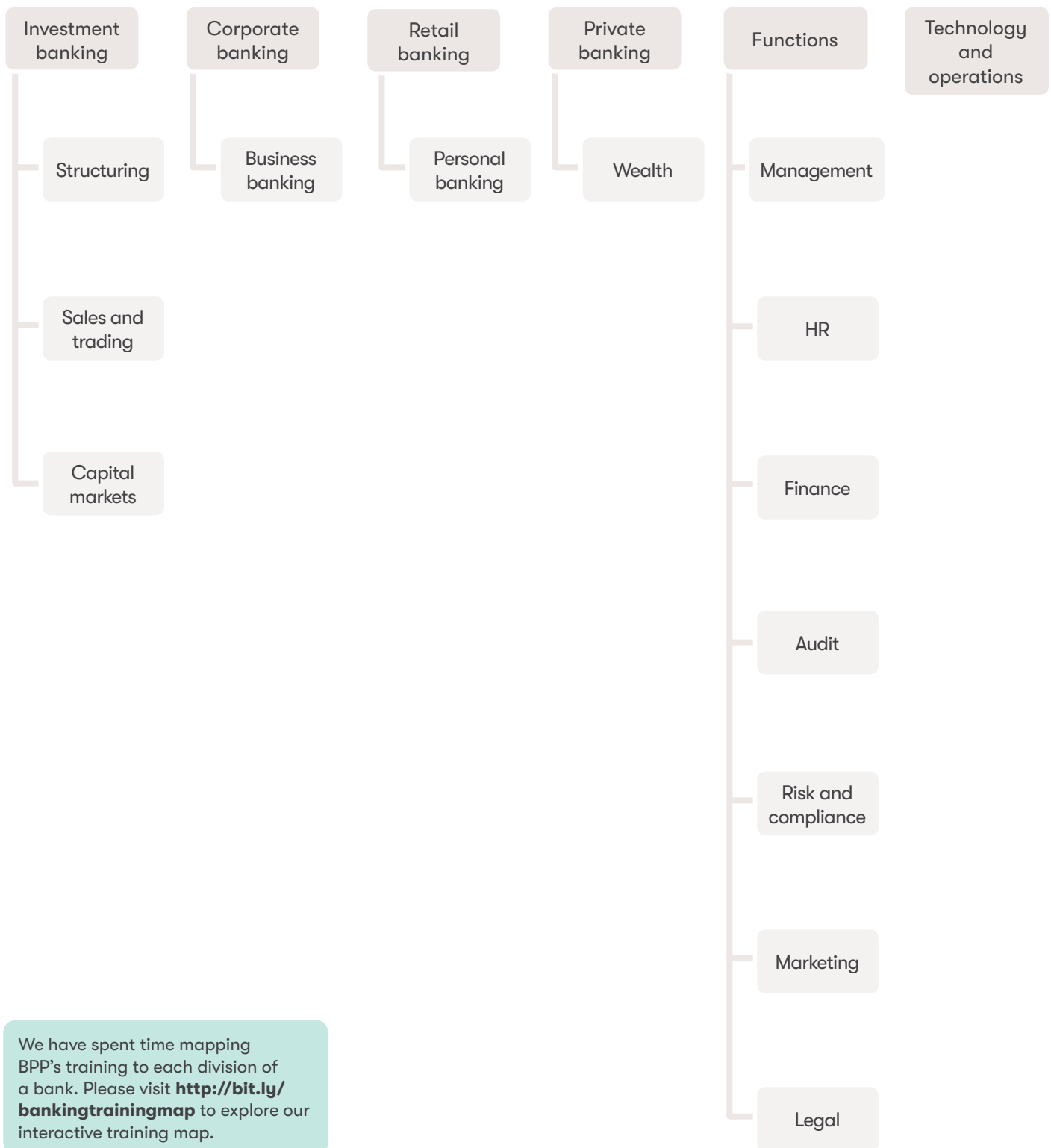
Our knowledge of the financial services market and the challenges employers are facing in light of digitalisation enables us to work with them to design tailored capability and learning plans for all their core job families.

Our objective is to help employers to support their employees to develop in their roles of 'today,' as well as developing them for the roles of 'tomorrow.' We are partnering with our clients to future proof our programmes by co-designing short courses/additional modules to cover future skills gaps, drawing on our breadth of expertise in data analytics, digital skills and digital leadership, financial crime and cyber security, and risk and compliance. We support our clients with a range of professional education options, including PD, PQ, Apps and degrees, matched to their operating model.

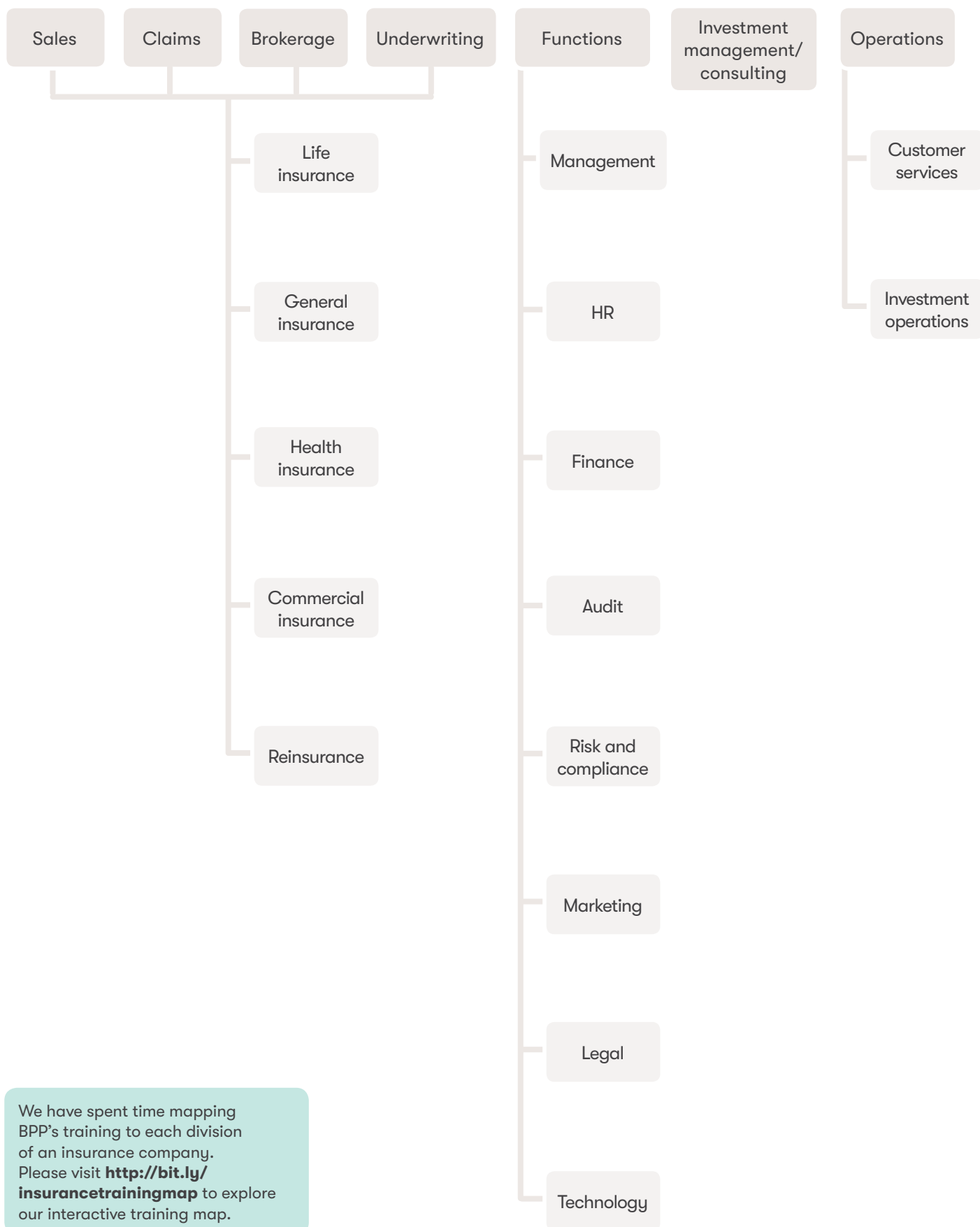
In order to help visualise how our training relates to your business areas, we've created the job family mapping on the following pages.



Operating model of a bank



Operating model of an insurer



Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Actuaries.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|---|
| Skills | |
| Data science | <p>"Actuaries are already applying Data Science to a number of insurance developments, including telematics devices in motor insurance; wearable fitness devices in health and care insurance; and advanced risk management (more detailed analysis of experience analysis) in life insurance."</p> <p>Institute and Faculty of Actuaries: Data Science in Insurance: Opportunities and Risks for Consumers</p> |
| Predictive social media and search history analytics | <p>"Insurers can take advantage of new sources of data to better target intended customers to specific, and potentially more suitable, products. Analysis of internet search histories or of social media content helps predict consumer preferences and behaviours."</p> <p>Institute and Faculty of Actuaries: Data Science in Insurance: Opportunities and Risks for Consumers</p> |
| Technical digital skills: programming languages, automation, and A.I. | <p>"Either learn to code or have a thorough understanding of computing. Learn the ideas behind automation and artificial intelligence, and make sure you know the benefits and risks. With your growth mindset, take an interest in new technologies and their applications."</p> <p>The Actuary: 'Actuary 2.0, the skillset of the future'</p> |
| Big data, data visualisation, and predictive analytics | <p>"There is not one phrase that really sums up what we are talking about, although big data, data visualisation and predictive analytics are used on occasion. We have tended to use the words 'data science universe' as the best catch-all."</p> <p>British Actuarial Journal: 'What data science means for the future of the actuarial profession'</p> |
| Cyber security | <p>"Finally, cyber risk is an important emerging area of risk, and Data Science contributes to insurers' exposure to it as more and more data is accumulated. In particular, the risks of data being lost, corrupted or stolen are important issues for users of Data Science applications to consider."</p> <p>Institute and Faculty of Actuaries: Data Science in Insurance: Opportunities and Risks for Consumers</p> |
| Making algorithmically-aided judgements and bias reduction | <p>"Human judgement also brings with it further public interest concerns. With Data Science becoming increasingly intrusive, there a risk of prejudice (or bias) creeping into any risk profiling applied. Some advanced pricing models may rely on algorithms rather than explicit rating factors, making it difficult to establish whether price discrimination is being applied."</p> <p>Institute and Faculty of Actuaries: Data Science in Insurance: Opportunities and Risks for Consumers</p> |
| Ethics of data science | <p>"Desirable actions identified by a member survey of the Institute and Faculty of Actuaries:</p> <ol style="list-style-type: none"> 1. Promotion of data science methods and opportunities for actuaries 2. Pre- and post-qualification learning to equip current and future actuaries with required tools and techniques 3. Support advancement of the subject matter through research and thought leadership 4. Collaborate with other professionals and disciplines to share knowledge and advance techniques 5. Ensure regulatory and ethical implications arising from data science are understood" <p>British Actuarial Journal: 'What data science means for the future of the actuarial profession'</p> |
| Communication skills | <p>"It is essential that actuaries have excellent communication skills to enable them to communicate actuarial ideas to non-specialists in a way that meets the needs of the audience."</p> <p>Institute and Faculty of Actuaries: 'What are the skill sets of an actuary?'</p> |
| Specialised technical knowledge | <p>"Actuaries have a deep technical understanding of at least one of the following areas: life insurance, general insurance, investment, corporate finance, risk management, pensions and healthcare"</p> <p>Institute and Faculty of Actuaries: 'What are the skill sets of an actuary?'</p> |
| Continuous learning and development | <p>"The 'growth mindset' is a learning theory developed by Dr Carol Dweck. It is the belief that you can improve intelligence, ability and performance through continued learning and development. I think that, given the relentless pace of change and search for more innovative ways of doing things, having a growth mindset and a thirst for learning will place you in a strong position to thrive as an actuary of the future."</p> <p>The Actuary: 'Actuary 2.0, the skillset of the future'</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Claims.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|--|
| Skills | |
| Using video and mobile technology for claims | <p>“New video solutions are enabling insurers to reduce the time taken to process a claim and thus improve customer satisfaction. They offer insurers the potential to capture and transmit claims evidence in real time via smartphones, while meeting stringent standards of data integrity. The use of video is moving into the mainstream and achieving adoption scale — one platform provider has processed over a million digital files through its platform”</p> <p>Cognizant: ‘The future of claims, unlocking the value of video’</p> |
| Automation tools: cognitive claims computing, artificial intelligence | <p>“[Insurtech start-ups] are developing intelligent automation tools to support cognitive claims computing and artificial intelligence. Every claims professional needs to be looking outward at these potential disruptors and asking themselves how this new generation of claims technologies will influence the claims function.”</p> <p>Accenture: ‘How will insurtech influence claims?’</p> |
| Understanding blockchain and ‘smart contracts’ | <p>“Insurers are also experimenting with the use of blockchain to enable “smart contracts.” While this is a nascent area, AXA last September revealed that it will use the Ethereum blockchain to offer parametric insurance (i.e., policyholders are compensated if pre-agreed triggers linked to specific risk parameters are hit) for delayed flights.”</p> <p>Cognizant: ‘The future of claims, unlocking the value of video’</p> |
| Data skills with a focus on: predictive analytics, use of drones, climate change, identity theft, cyber security, and IOT | <p>"Growing demand of data professionals to help across a number of areas including predictive analytics, use of drones, climate change, identity theft, cyber security, and the internet of things. As technology continues to advance it can improve the user experience and creates new opportunities and roles in the claims industry."</p> <p>PwC: ‘Claims workforce of the future: 2030’</p> |
| Customer service and customer experience skills | <p>“Customer experience and data and analytics become as important to the claims function as traditional technical and control roles.”</p> <p>PwC: ‘Claims workforce of the future: 2030’</p> |
| Working alongside technology: photo apps, drones, natural language-based document screening, virtual assistants and bots | <p>“Various technologies and digitization levers can align the insurer’s value proposition with the customer expectations. Sensors at home, in the car, and on the body can provide data feeds to enable the insurer to provide additional services—such as sending a plumber to fix a leak before serious water damage occurs. Photo apps, drones, or AI technologies can speed up claims assessment. Integrated rule-based triaging, natural language-based document screening, or using virtual assistants and bots can simplify claims settlement.”</p> <p>Oliver Wyman: ‘The future of insurance claims is now’</p> |
| Change of perspective: claims prevention instead of traditional claims handling | <p>“For example, sensors in buildings will alert owners and insurers when temperatures indoors get low enough to freeze pipes and automatically trigger integrated smart thermostats to turn up the heat. In areas vulnerable to hurricanes, smart homes will automatically deploy hurricane shutters based on weather notifications sent by the insurance carrier. Similarly, in the manual labor workplace, sensors embedded in workers’ clothing and telematics devices in machines will notice that an employee is working long stretches and prompt her to take breaks to maintain alertness.”</p> <p>McKinsey: ‘Claims 2030: dream or reality?’</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Finance professionals.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|--|--|
| Skills | |
| Understanding and using technology | <p>“Accountants rank ‘understanding and using technology’ (machine learning, AI and block chain) as the #1 additional skill accountants of the future will need.”</p> <p>AAT’s “The Future Accountant” survey</p> |
| Digital technologies, capabilities, practices and strategies | <p>“DQ (digital skills) are one of seven key skills areas for the future accountant defined as ‘The awareness and application of existing and emerging digital technologies, capabilities, practices and strategies’”</p> <p>ACCA’s ‘Professional Accountants – The Future’ Report</p> |
| STEM, augmented intelligence | <p>“Introduction of ‘assisted intelligence’ where ‘repetitive, standardised or time-consuming tasks’ are automated means there is an ‘increased demand for STEM skills to build new tech ecosystems’</p> <p>Accountants therefore need to develop ‘augmented intelligence’, where humans and machines collaborate to make decisions”</p> <p>PwC ‘Workforce of the Future’ Report</p> |
| Financial reporting in real time; blockchain | <p>“Introduction of blockchain technologies means ‘greater focus for accountants on interpreting the economic meaning of transactions, and providing information to support better decisions’ with more time on financial reporting in real-time”</p> <p>ICAEW: ‘Blockchain and the future of accountancy’</p> |
| Corporate governance, risk management, ethics | <p>“Corporate governance is a competency area for accountants over the next 5 to 10 years and it is second on the list of areas where vital skills are missing. Professional accountants want globally applicable best practice guidance on corporate governance, risk management and the associated internal and external reporting”</p> <p>“Professional and corporate ethics are third on the list of competency areas and third on the list of areas where skills are lacking. Professional accountants want more help with the ethical challenges they expect to face as part of an increasingly global and mobile profession. There is a gap between ethical theory and reality”</p> <p>ACCA’s ‘Professional Accountants – The Future’ Report</p> |
| Communication | <p>“With machines performing an increasing percentage of technical functions, accountants need to communicate the findings to stakeholders, acting as the bridge, having informed conversations with both technologists and business stakeholders ‘Communication’ is ranked the #3 additional skill accountants of the future will need”</p> <p>AAT’s “The Future Accountant” survey</p> |
| Organisational strategy | <p>“With increased automation and technological augmentation, accountants will focus less on the process of accounting and more on strategic decisions informed by accounting insights. Accountants ‘are metamorphosing from straight number crunchers to strategic advisers of organisational strategy’”</p> <p>Accountancy Age: ‘The most sought after accountancy skills for 2018’</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for HR.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|--|
| Skills | |
| Data analytics: people analytics | <p>“People analytics is one of six main trends in the future of human resource management”</p> <p>Willis Towers Watson: Six Trends in the Future of Human Resource Management</p> |
| Data analytics: diversity, attraction and recruitment | <p>“HR analytics are being used to; manage workforce costs (60%), handle workforce composition and diversity (51%), performance manage (48%), attract, recruit and select (47%), and L&D (44%)”</p> <p>The CIPD and Workday HR Outlook Winter 2016-17 Report</p> |
| Design thinking | <p>“3. Improving the employee experience by applying product design thinking: Design thinking approaches products and experiences from the viewpoint of the user. In an HR context, this would shift emphasis to the employee rather than focusing on the HR program or process itself. In practice, as one example, HR can use “journey maps” or other tools to lay out the crucial points in the employee life cycle, and understand what is or is not working at each stage.”</p> <p>Willis Towers Watson: Six Trends in the Future of Human Resource Management</p> |
| Natural language processing, predictive algorithms, self-learning | <p>“4. Targeted recruitment driven by social media and cognitive assessment: Recruitment can be honed and focused through digital tools such as social media and cognitive assessment. Examples of cognitive technologies include natural language processing, predictive algorithms and self-learning.”</p> <p>Willis Towers Watson: Six Trends in the Future of Human Resource Management</p> |
| Predictive talent models | <p>“5. Leveraging people analytics to improve organisational performance: The use of people analytics and predictive talent models can enable HR to more effectively and rapidly identify, recruit, develop and retain the right talent, which can help the business to improve organisational performance. HR’s access to these insights can help organisations better identify current pain points and prioritise future analytics investments.”</p> <p>Willis Towers Watson: Six Trends in the Future of Human Resource Management</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Investment or Asset Managers.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|---|
| Skills | |
| Digital skills: online investment platforms | <p>“New accelerated online platforms and applications improve the retail customer experience by providing bespoke but affordable services to help investors set their investment goals, choose the right product or service and manage their investment portfolios.”</p> <p>PwC, Beyond Automated Advice: How FinTech is Shaping Asset & Wealth Management</p> |
| Understanding of Distributed Ledger Technology (blockchain) | <p>“When viewed as a Distributed Ledger Technology (DLT), the blockchain could have a profound effect on post-trade settlement through streamlining, mutualising and cutting costs of the process. By using the DLT, the need for reconciliation of proprietary databases is eliminated. Also, embedding business logic in the code of a smart contract could impact the AWM value chain in terms of augmenting, streamlining or possibly completely reinventing current processes.”</p> <p>PwC, Beyond Automated Advice: How FinTech is Shaping Asset & Wealth Management</p> |
| Data analytics | <p>“A vast majority (90%) of the asset and wealth managers we surveyed found data analytics to be a ‘very important’ or ‘important’ trend. Being able to capture, transform and analyse data is now integral to asset managers’ ability to compete (figure 5). Data analytics also helps manage risks and compliance, and improve trading efficiency.”</p> <p>PwC, Beyond Automated Advice: How FinTech is Shaping Asset & Wealth Management</p> |
| Understanding of machine learning technology | <p>“Machine learning technology is transforming risk management by enabling computers to identify patterns in market behaviour and analyse transactions almost in real time. This, in turn, is reducing the asymmetry of information between small and large financial institutions and investors.”</p> <p>PwC, Beyond Automated Advice: How FinTech is Shaping Asset & Wealth Management</p> |
| Applications of robotic process automation (RPA) | <p>“The days of research teams with scores of analysts will soon be over. Instead, alternative intelligence powered robotic processes will monitor and analyse every public company, as well as other financial and nonfinancial data. They can also process supply chain analysis and the other new forms of data that asset managers are able to source.”</p> <p>PwC, Asset & Wealth Management Revolution: Embracing Exponential Change</p> |
| Digital marketing, field management technologies | <p>“Advances in technology can empower firms to focus on enhancing the user experience. In a competitive environment where clients expect immediate, personalized, and impactful reactions, human-driven distribution alone will no longer be a sustainable model. To that end, effective asset managers will seek to use new technologies to enable insight-led distribution, digital marketing, field management, and data management to drive efficiencies and increase the probability of acquiring and maintaining business”</p> <p>Deloitte, Ahead of the Curve: Forward-Looking Solutions for Tomorrow’s Leading Asset Management Firms</p> |
| Client relationship management, communication skills | <p>“Investment leadership will remain sought-after. However, other skills, such as client relationship management, communications skills and, in technical areas, data analytics and technological know-how, will be increasingly sought after skills”</p> <p>KPMG: Investing in the future, how megatrends are reshaping the future of the investment management industry</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Investment Operations.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|--|
| Skills | |
| Understanding and working with automation and A.I. technology | <p>“Reports from Deloitte and McKinsey & Company predict that automation using artificial intelligence – also known as intelligent automation – might be the next big game changer in terms of process efficiency.”</p> <p>Investment Magazine: ‘A view to the future of investment operations’</p> |
| Understanding blockchain technology | <p>“A view to the future of investment operations: “Industry players are increasingly relying on and delving into the electronic wizardry of developments such as blockchain’s distributed ledger technology.”</p> <p>Investment Magazine: ‘A view to the future of investment operations’</p> |
| Data analysis: portfolio valuation, reconciliation and management | <p>“The valuation, reconciliation and management of portfolios is being augmented with technology and data analytics, and the investment operations professional of the future will need to keep up. HSBC, for example, uses ‘TriOptima TriReduce’”</p> <p>HSBC: Portfolio reconciliation and dispute resolution</p> |
| A.I. and automated financial crime checks | <p>“Compliance and money laundering checks, an element of investment ops, is being increasingly automated: ‘multiple technical advances that are available to help implement and streamline the process of checking and verifying ultimate beneficial owners and promoting transparency. Automated systems and artificial intelligence programmes can be used to scour company documents for a streamlined electronic ID verification systems to verify personally identifiable information in conjunction with ID document verification and facial recognition technology to help paint a full picture of each beneficial owner of a business.’”</p> <p>Finance Monthly: ‘How technology can strengthen banks in the fight against money laundering’</p> |
| Data analytics and automation for margin calculations and other derivatives tasks | <p>“Margin calculations, another task taken on by investment ops professionals, is being automated. BNP Paribas, for example, recently deployed a real-time margin calculation system. Investment ops professionals will need to be comfortable working alongside these systems and have an appreciation for how they work.”</p> <p>FIS Global: ‘BNP Paribas moves to real-time margin calculations with FIS margin advisor’</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Management.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|--|--|
| Skills | |
| Interdisciplinary skills | <p>“A natural corollary of this is that leaders need interdisciplinary skills. Companies such as GE, IBM, Nestlé, Xerox, and Mastercard now bring leaders together for collaborative design and problem-solving exercises, challenging them to understand how different business functions, industries, and technologies come together to form solutions. The days of a line leader reaching the executive level in a sole function have ended.”</p> <p>Deloitte: ‘Leadership disrupted: pushing the boundaries’</p> |
| Innovation and risk-taking | <p>“Perhaps most important, innovation and risk-taking now define high-impact leadership. In the words of Mark Zuckerberg, CEO of Facebook, ‘The biggest risk is not taking any risk. In a world that is changing really quickly, the only strategy that is guaranteed to fail is not taking risks.’⁴ Risk-taking has become one of the most important drivers of a high-performing leadership culture.”</p> <p>Deloitte: ‘Leadership disrupted: pushing the boundaries’</p> |
| Digital capabilities | <p>“The most critical need for most organizations is for leaders to develop digital capabilities. Today, only 5 percent of companies feel they have strong digital leaders in place, according to our 2017 Global Human Capital Trends survey respondents. In a sign of positive change, however, 72 percent of respondents are developing or starting to develop new leadership programs focused on digital management.”</p> <p>Deloitte: ‘Leadership disrupted: pushing the boundaries’</p> |
| Communicating in a digital environment | <p>“Beyond technical skills, 41% of employees said they would value coaching or guidance on how to perform and communicate more effectively in an era of digital transformation.”</p> <p>HR Magazine: ‘Leaders unprepared to drive digital skills transformation’</p> |
| Continual learning, the ability to instil a 'learning culture' | <p>“Leaders need to set an example by learning new skills – whether that’s about how to empower employees to make changes or developing their own digital capabilities – and ultimately create a learning culture where everyone recognises that learning is an ongoing gradual process regardless of where they are on the career ladder.”</p> <p>HR Magazine: ‘Leaders unprepared to drive digital skills transformation’</p> |
| Change management, empathy, creativity | <p>“There is a need for people to get comfortable with the technicalities of using new tools to do their job. But it is managing their impact that is most crucial. For employees and leaders at every level, skills like change management, empathy and creativity are at the centre of this.”</p> <p>The Oxford Group: leading in a digital age, a look at leaders’ skills and psychological safety in the changing world of work</p> |
| Decentralised leadership | <p>“1. Transformation of leadership: Traditionally, the delegation of authority in an organisation usually follows a formal hierarchical structure with clear lines of accountability. The digitalised world has however found larger success with networked organisations. Such setups often enable individuals to initiate leadership – even if sometimes without formal authority – especially where the sources of work are plentiful and work relationships are numerous. Leadership in this new world will be less about leading people and more about orchestrating the ecosystem of work.”</p> <p>Willis Towers Watson: Six Trends in the Future of Human Resource Management</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Project Managers.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|--|---|
| Skills | |
| Artificial intelligence: scheduling, assigning resources | <p>“For digital project managers, technologies powered by AI will assist in prioritising projects and allocating resources for production. AI-powered bots can calculate the best projects to take on and quickly and efficiently schedule and assign resources in real-time. Real-time scheduling of operations means that organizations can adjust to any late-breaking developments in employee availability or client needs.”</p> <p>DPM: ‘Prepare for these 7 project management trends’</p> |
| Relationship building, negotiation, and empathy | <p>“Because we can use bots for fact-gathering and data analysis, project managers will find that aspects like relationship-building and negotiating enter as a critical part of the PM role. AI research teams are building machine learning systems to augment a project manager’s decision-making ability by analyzing data from multiple projects in the project portfolio. However, there’s no algorithm that can do project management tasks such as empathizing, actively listening, or tactfully negotiating.”</p> <p>DPM: ‘Prepare for these 7 project management trends’</p> |
| Utilising multiple PM methodologies | <p>“A cocktail, please, with a hint of Agile and a drizzle of Scrum, topped with a spritz of Waterfall... For project managers, methodology melding presents a challenge that is two-fold. First, PMs must ensure we continuously seek out education in the latest methods so we understand the mindset and environment of our teams.”</p> <p>DPM: ‘Prepare for these 7 project management trends’</p> |
| Data science (data management, analytics, big data) | <p>“Innovator organizations see the most important digital-era skills for prospective project leaders as data science (data management, analytics, big data), an innovative mindset, security and privacy knowledge, legal and regulatory compliance knowledge, the ability to make data-driven decisions, and collaborative leadership. Innovators also report investing in formal processes to develop project manager competencies in these skills.”</p> <p>PMI: ‘The Project Manager of the Future: Developing digital-age project management skills to thrive in disruptive times (2018)’</p> |
| Legal and regulatory compliance knowledge | <p>“Innovator organizations see the most important digital-era skills for prospective project leaders as data science (data management, analytics, big data), an innovative mindset, security and privacy knowledge, legal and regulatory compliance knowledge, the ability to make data-driven decisions, and collaborative leadership. Innovators also report investing in formal processes to develop project manager competencies in these skills.”</p> <p>PMI: ‘The Project Manager of the Future: Developing digital-age project management skills to thrive in disruptive times (2018)’</p> |
| Collaborative leadership | <p>“Innovator organizations see the most important digital-era skills for prospective project leaders as data science (data management, analytics, big data), an innovative mindset, security and privacy knowledge, legal and regulatory compliance knowledge, the ability to make data-driven decisions, and collaborative leadership. Innovators also report investing in formal processes to develop project manager competencies in these skills.”</p> <p>PMI: ‘The Project Manager of the Future: Developing digital-age project management skills to thrive in disruptive times (2018)’</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for RMs and Customer Service.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|---|
| Skills | |
| Human-machine collaboration: working alongside A.I. | <p>“As advances in technology interfaces make AI platforms more humanlike in managing customer interactions in commercial banking, AI will begin to assume a bigger role in front-office functions—including the basic relationship management functions that make up the primary job of RMs. Several banks today are already employing the term ‘Digital Relationship Manager,’ as they digitize many of the key elements where clients have turned to RMs in the past (obtaining copies of documents, opening new accounts, etc.)”</p> <p>Greenwich: ‘The Future of the Banker: Transforming Intellectual Capital Through A.I. and B.I.’</p> |
| Relationship building, client experience, establishing/maintaining trust | <p>“Banking has always been a relationship-driven business, but AI will shake at the heart of some of these long-held roots. These technology advances will help the role of the RM evolve in banking relationships... The RM will evolve and become more essential in relationshipbuilding, bringing in experts, client experience, and establishing/maintaining trust in an increasingly digitized world.”</p> <p>Greenwich: ‘The Future of the Banker: Transforming Intellectual Capital Through A.I. and B.I.’</p> |
| Customer communication, empathy, familiarity with communication technology, ability to perform in a virtual environment | <p>“Universal Service Advisor: The separation between digital, physical and remote service environments is breaking down. At any moment a customer may want serving in a branch, via chat app, voice, or in augmented or virtual reality. As mixed reality becomes the main interface between people and machines, highly skilled service agents, empowered to support customers across a variety of products, will be able to switch seamlessly between virtual and physical environments from anywhere anytime to meet customer needs.</p> <p>“Key skills: Critical skills for tomorrow’s customer advisor are a combination of product and domain knowledge with excellent customer communication and empathy. This will require a level of comfort with the key communications technologies, including performing in a virtual environment.”</p> <p>HSBC, Human Advantage: The Power of People</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Risk and Compliance.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|---|--|
| Skills | |
| Big data | <p>“Big data. Faster, cheaper computing power will enable risk functions to use reams of structured and unstructured customer information to help them make better credit risk decisions, monitor portfolios for early evidence of problems, detect financial crime, and predict operational losses”</p> <p>McKinsey: The future of bank risk management</p> |
| Cybersecurity risk, data and IT systems risk, digital risk management | <p>“Areas of focus for risk management identified as; cybersecurity risk, addressing risk data and IT systems, digital risk management</p> <p>“The technologies being used are; cloud computing (48%), big data and analytics (40%), and Business Process Modeling (BPM) tools (38%)”</p> <p>Deloitte: Global risk management survey</p> |
| Analytics, mid-level or an advanced level of technical IT knowledge | <p>“35% cited the lack of appropriate risk and compliance skills for digital disruption</p> <p>“82% felt compliance professionals should have at least a mid-level (e.g. MS Excel Macro, Pivot Tables, MS Access Database, SharePoint Creation) or advanced level (e.g. Programming, Database Creation, Data Manipulation and Analytics) of knowledge of technical IT</p> <p>“Seeing a shift from Big Data to Thick Data, where the focus is on not just the volume of intelligence created but its interpretation and application of analysis”</p> <p>Confident compliance: Risk management in an age of digital disruption (BPP and ICA) survey</p> |
| Soft skills: organisational dexterity, effective communication, change management | <p>“Combination of technical (compliance, IT or scientific) with soft skills which risk and compliance functions increasingly require are; organisational dexterity (49%), effective communication (47%), change management (38%) and an innovative mindset (38%) and business collaboration (35%)</p> <p>“Risk and compliance professionals should know about; cyber security (77%), data risk management (61%) anti-money laundering and other financial crime compliance (61%)”</p> <p>Confident compliance: Risk management in an age of digital disruption (BPP and ICA) survey</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Sales and Trading.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|--|--|
| Skills | |
| CRM and data analytics | <p>“CRM and data analytics: Sales teams are behind in leveraging the latest solutions to serve customers better, and as a result are missing out on opportunities. How do banks optimise their technology resources and make the best use of CRM and data analytics?”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |
| The ability to code | <p>“The biggest changes in banks’ sales workforces are at the flow end. Driven by the structural shift towards electronic execution, firms are looking for salespeople to be quantitative and technically proficient, able to code and advise clients on connectivity solutions. E-sales teams have developed with a more junior profile, and tend to manage a large pool of clients across asset classes. Far less emphasis is placed on traditional relationship management and detailed product knowledge.”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |
| Solutions advice skills | <p>“Second, now that steady progression up the product and client sophistication curve has been bifurcated, how to bridge the development gap in salespeople, from entry level ‘flow analysts’ to the solutions advisors of tomorrow?”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |
| Data analytics: advanced segmentation, bespoke service provision | <p>“Some banks have invested in CRM systems, although the difference between ‘1G’ CRM and new cloud-based CRM is huge. Platforms such as Salesforce and MS Dynamics have given sales management the chance to move beyond simple client relationship tracking to complex analytics and workflow. Leading banks are driving advanced segmentation and bespoke service provision through data analytics.”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |
| Entrepreneurial skills and an ‘agile mindset’ | <p>“Salespeople need a core set of analytical and entrepreneurial skills. Beyond that they should have an agile mindset, as well as be able to use, and more importantly interpret, advanced data analytics to fully understand their clients’ needs, and devise innovative solutions through technology or structuring, to maximise opportunities.”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |
| Quantitative analysis of internal and external data | <p>“Sales teams are now critically required to be able to marshal, comprehend and interrogate vast quantities of internal and external data, giving them a complete view of the customer, enabling them to make decisions and respond appropriately.”</p> <p>PwC: Future of Sales, how Investment Banks must adapt to a shifting sales landscape</p> |

Here are the training trends and corresponding Knowledge, Skills and Behaviours requirements for Underwriters.

| Knowledge, Skills and Behaviours requirements | Supporting findings |
|--|---|
| Skills | |
| Customer-centric skills, sales | <p>“The focus will shift away from internal processes and specific transactions (where underwriters have historically invested their time and energy) and emphatically toward market-facing relationships and sales (around which insurers of all types are re-orienting operations).”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| Account management, risk assessment | <p>“Increased automation and stronger analytical capabilities are a big part of the story, especially as they liberate underwriters to spend more time on higher-value activities, such as account planning, solution development, agent partnering, and nuanced risk assessment and decision-making.”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| Familiarity with emerging technology | <p>“Other powerful technologies — including sensors, telematics, location-based services, semantic web and mobile — promise to dramatically change the way underwriters work”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| Leadership and management | <p>“Looking ahead, it’s clear that their unique organizational position makes underwriters naturally suited to leadership roles within the modern insurance enterprise.”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| Data analytics to aid decision-making | <p>“Underwriter as decision scientist: The ‘analytics revolution’ that has fundamentally altered the insurance landscape in the last decade will only gain momentum, with significant impact on and benefits for underwriting. Multiple statistically based models will be used by skilled risk evaluators along with codified, heuristic underwriting rules to achieve new levels of sophisticated analytics and rules-based decision support.”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| Communication skills, creativity, innovation | <p>“The communications skills to engage a wider variety of stakeholders, and creativity and innovation to participate in new product development and other forward-looking processes”</p> <p>EY: The future of underwriting, a transformation driven by talent and technology</p> |
| The ability to blend quantitative and qualitative analysis | <p>“Great underwriters blend quantitative analysis with qualitative, forward-looking judgment about how exposures are likely to change.”</p> <p>McKinsey: From art to science: The future of underwriting in commercial P&C insurance</p> |
| Blending human judgement and data analytics | <p>“Risk selection: Blending human judgment with data-driven analytics. We observed that the highest-performing underwriters are those with a structured, intentional approach to analyzing exposures. In some cases, this approach is explicit and can be articulated. In others, it is implicit and reflects intuition based on hard-learned experience.”</p> <p>McKinsey: From art to science: The future of underwriting in commercial P&C insurance</p> |
| Teamwork, collective problem-solving | <p>“When successfully implemented, new data-driven tools supplement – rather than replace – human judgment. In addition, beyond the models, successful companies build a culture that systematically encourages qualitative debate around underwriting outlook... Collective problem-solving informs transaction decisions and translates into an adapted, sharpened underwriting appetite.”</p> <p>McKinsey: From art to science: The future of underwriting in commercial P&C insurance</p> |

Capability+

Helping you understand the current and future capability needs in your business.

Capability+ is BPP's unique capability diagnostic process that uses skills research and consultation with employers to describe the skills organisations need, review the levels of proficiency of those skills and focus your L&D strategy in the right areas.

As a trusted partner and adviser to our clients, we develop and share our insights on how the external environment will impact your business, both now and in the future, establishing your specific training needs to plug your all-important skills gaps.

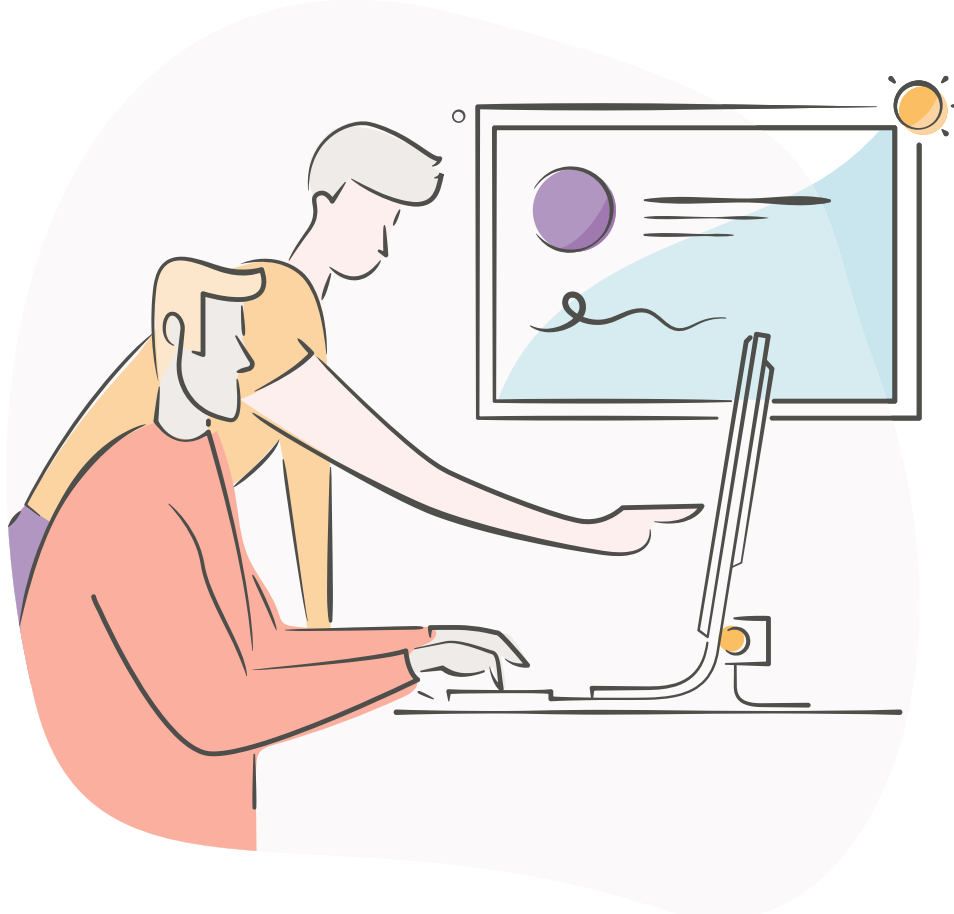
For more information on our Capability+ consultancy, visit:
www.bpp.com/business/capability-plus

The benefits

- Completely bespoke to your business and specific requirements
- Keeping you up to date on industry trends and current skills gaps
- Understand your current and future capability needs
- Focus your training on the right areas
- Ensure your employees have the skills they and you need to drive your business forward
- Building employee loyalty, retaining your existing talent and building your employer value proposition
- Creating the right environment for data and technology expertise, attracting the strongest future talent



Capability+



For more information about the way BPP works with employers to meet future skills requirements please contact:

Emma O'Dell
Director of Client Capability

✉ EmmaODell@bpp.com

David Palmer
Market Intelligence Partner

✉ david.palmer@bpp.com

7301

