



Industry Spotlight

AI in Financial Services

Against a backdrop of ongoing political and economic uncertainty, concerns around cybersecurity, reputational damage following 2018's widespread digital banking shutdowns and a shifting regulatory landscape, the UK financial services industry is changing rapidly. Consequently, the organisations currently finding a competitive advantage are those with the courage and foresight to place themselves at the forefront of innovation.

But even they must continue to evolve in order to keep up with changing market dynamics and business models and avoid being disrupted themselves. After all, the next chapter for the nation's financial institutions will involve highly personalised products and services throughout the customer journey, along with state-of-the-art fraud prevention and enhanced technical security. And

although this progress will, primarily, be made possible by automation, it is vital they equip employees with the skills and knowledge to work alongside AI and deliver smarter product recommendations, better investment advice and improved personal performance.

Global AI investment in the financial sector will top \$5.6 billion in 2019.

Meanwhile, both market opportunity and investor enthusiasm continue to grow. According to market intelligence firm, IDC, global AI investment in the

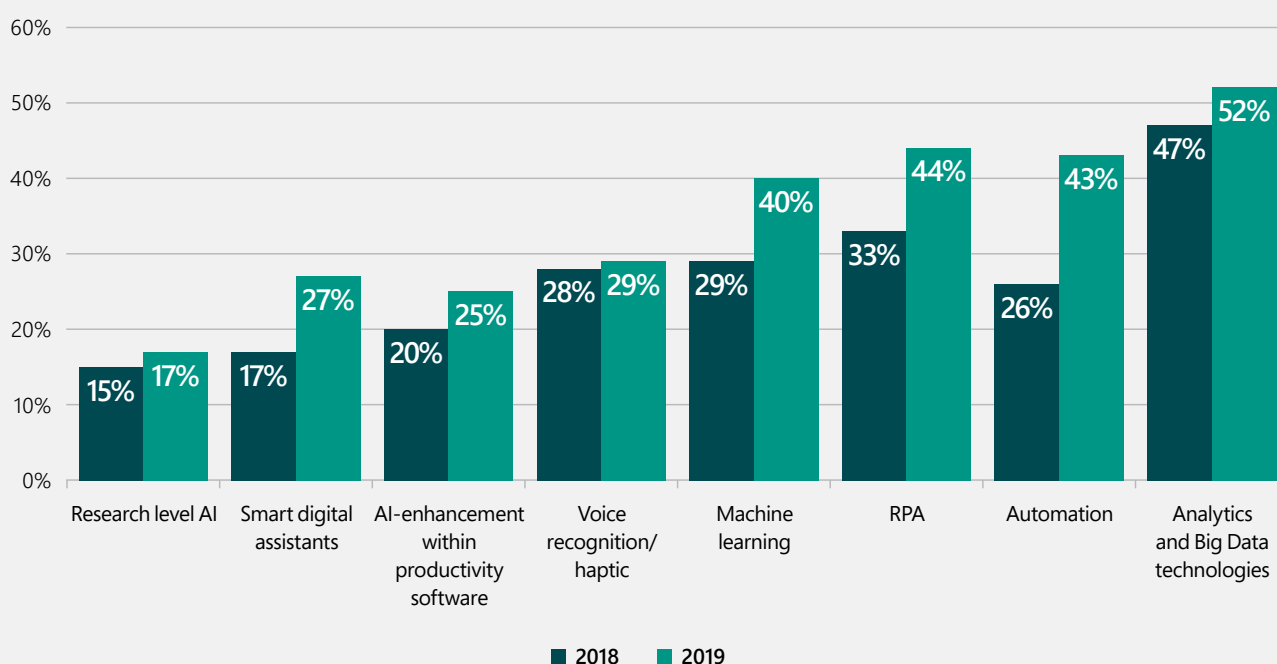
financial sector will top \$5.6 billion in 2019,¹⁰ once again underlining the faith being placed in AI's transformative potential. The latest estimates from Business Insider also suggest the technology could save banks around \$447 billion in costs by 2023, of which \$416 billion will come from the automation of front and middle office accounting.¹¹ This, in turn, can help them rebalance their cost/income ratio.

Progress amidst uncertainty

No surprise, then, that nearly three-quarters (72%) of the nation's finance leaders say their organisation is currently using AI – a 7% increase from 2018 and considerably higher than the national average of 56%. This includes a near-across-the-board rise in deployment of the various AI solutions available. (See Figure 11.)

Figure 11.

Use of AI in Financial Services



Alongside this burgeoning use of AI technologies, there is also a growing motivation among financial leaders to be seen as pioneers. Just over half (51%) want their organisation to be leaders in AI innovation while 46% believe the industry has the necessary structures in place to use AI to gain a competitive edge on the world stage. Again, both these figures are significantly higher than the national averages (38% and 30% respectively.)

This ambition and confidence, not to mention the investment discussed earlier, will stand the sector in good stead. The job for organisations now is to accelerate their AI journey by swapping small projects and experimentation for AI implementation at scale.

As Craig Wellman, Director of Financial Services at Microsoft UK, explains: "AI has the potential to transform the financial services industry as we know it, so it is encouraging to see our research reveal that the sector is reporting both a readiness and ambition to lead. This, coupled with AI's ability to drive cost-savings and efficiencies, is driving our sector towards a crucial moment in its history. Organisations that now strike the balance between technical innovation and responsible deployment while creating a culture of participation and reskilling are well-poised to set the industry standard and reap the benefits in the future."

"The focus now for the financial sector is on scaling AI – how do we do that in the right, safe way while generating tangible value?"

– Abhijit Akerkar, Head of AI Business Integration, Lloyds Banking Group

Understanding is key

Indeed, despite the positive picture, there is still much work to be done, particularly when it comes to truly getting to grips with AI itself. Our research found that half (51%) of financial services leaders say they do not know what to do if they disagree with an AI application's course of action while nearly three in five (59%) admit they are unaware of how the technology reaches its conclusions.

This begs the obvious questions of how they can possibly know if the technology is doing what they need it to and how they can step in and correct things if it is not.

"One of the biggest issues around AI for financial services is explainability. As you bring in more data and make more decisions based on that data, you need to understand how those decisions are being made."

– Janet Jones, Head of Industry Strategy - Financial Services, Microsoft UK

Increasingly, leaders are looking to external experts and software providers to help them rectify this explainability gap. Yet they must also recognise that solving it does not begin and end in the C-suite. We found that 60% of employees in the financial industry are yet to complete training on how to use AI in their job, while 93% say they have never been consulted by their

boss about the introduction of AI in their organisation.

While slightly lower than the national average of 96%, this is still a worryingly high figure and one that is certainly not conducive to fostering the collaborative and communicative culture that is evident in fully AI-enabled organisations.

Taking responsibility

As well as creating a more inclusive and empowering environment for staff, establishing this kind of open and democratic structure can help financial institutions tackle the other pressing issue at the heart of their AI-led digital transformation: responsible deployment.

Currently, just over half of leaders (53%) believe their organisation has the capability to identify bias and slightly under half (49%) know what steps to take when they do so. These are both marginally ahead of the national average although, less positively, so too is the view that addressing bias is someone else's job.

Again, the path to success lies with collaboration. A sense of shared responsibility and joined-up action – not just for getting the best out of AI technology but for ensuring it delivers the best possible outcomes for everyone involved too.

Charles Radclyffe, Data Philosopher and Co-author of *Stories from 2045*, recently created an online platform through which employees can raise concerns about what AI should and should not be allowed to do. And the advantages when it comes to promoting a transparent approach to ethics can, he says, be significant: "Whereas most organisations tend to follow a similar approach to ethics – i.e. meet behind closed doors – establishing a public platform in front of employees means you get to open these discussions up."

Business performance and cultural benefits aside, being able to demonstrate a fair, inclusive and open

approach to AI could also have a positive reputational impact for UK financial organisations – a welcome boost for an industry not unfamiliar with criticism and public scrutiny in recent years.

Ready and willing?

Clearly, then, compared to other industries, the financial services sector is well-positioned for change. There is a strong awareness of the benefits AI can offer, investment in the technology is rising and there is an evident enthusiasm to lead both domestically and internationally. Yet, at the same time, improvements are required in terms of re-skilling staff, building principles for open and responsible AI use and increasing understanding of how the technology actually works.

Indeed, perhaps above all, financial institutions find themselves at a tipping point. Operationally, financially and reputationally, AI offers a real and lasting opportunity to transform for the better. But to take it, they must act immediately to scale it at an organisational level. From the boardroom to the trading floor to the retail counter, now is not the time to let progress stall.



The expert view

Chris Skinner, Financial Author and Blogger



"For AI in the UK financial services industry, it is very early days although I would say that UK banks are pretty much on the same plain as the rest of Europe's financial firms, if not slightly ahead.

The banks in America and China are doing some really impressive stuff. For example, using an AI engine to analyse all contracts and do in one second what previously took 360,000 hours of legal time.

Of course, the biggest issue most institutions face is the fact they have 50 years of infrastructure that they need to now turn into a rationalised structure for intelligent customer servicing and marketing. For my new book, I interviewed five of the biggest banks in the world across Europe, Asia and

America to find out how they have been dealing with that.

The key thing that came out is nearly all of them started working out what to do by studying technology leaders and then trying to replicate how they organise internally using data intelligence. That means no hierarchy, no middle management, just a flat structure of small teams. For banks, this is a radical change, which I have not seen any of the UK institutions go through yet.

In fact, that is the bottom line in all this. Scaling AI is not a technology shift, it is a structure and mindset shift. Banks cannot embrace AI and digital transformation if they are just doing it as a project. They have to embrace it as a cultural change in the whole organisation."

"Scaling AI is not a technology shift, it is a structure and a mindset shift. Banks cannot embrace AI and digital transformation if they are just doing it as a project."

– Chris Skinner, Financial Author and Blogger



Case study:

NatWest

NatWest believes people want a bank that puts their interests first. Here, Roshan Rohatgi, Senior Innovations & Entrepreneurship Professional at NatWest, discusses the importance of establishing the right blend of procedure, governance and innovation in order to develop and deploy AI solutions that deliver real value for customers.



From your experience, what is the best approach to deploying customer-facing AI solutions?

AI that touches customers is – and will always be – subject to a very high level of scrutiny and governance. Before any kind of technical development or deployment it is important to establish how and why the AI solution will benefit the customer and what the risks are. Continuous human involvement is a prerequisite with business and specialist teams supporting efforts to implement and manage the technology ongoing. The most important thing is that the whole process is done in a safe, secure and repeatable fashion. Having a framework that supports and guides the development, procurement and deployment of AI is desirable.

How do you ensure the AI is being developed and used inclusively and responsibly?

Robust controls and measures are important tools where they support getting stuff done and are not prohibitive by nature. A transparent and clear approach for example using common terminology; having agreed principles; easy-to-follow governance that promotes consistency and helps facilitate effective collaboration between business and functional teams to achieve objectives and deliver value to customers. As the adoption of AI matures over time teams will become increasingly self-sufficient hence a systematic approach may be optimal efficiency wise. AI models also need to be evaluated and managed continuously for their performance, efficacy and relevance for example providing assurance around operating metrics like precision, consistency, resilience, fairness, explainable output, ethics and more. This requires business-friendly systems and procedures as well as the right mix of talent.

How do you then move towards scaling AI elsewhere?

Working at NatWest, I'm keen to support learning, exploration and innovation. In my opinion a workable medium between centralisation and federation supports collaboration as well as self-sufficiency and empowers teams to explore and innovate and promotes consistency where the emphasis is on what problem(s) you are trying to solve or opportunity we are trying to explore. The last thing you want is to have too much replication hence all staff should have visibility across all AI projects firm wide. That way, any part of the firm that is looking to introduce operational or consumer-facing AI can learn from and build on solutions that have already been proven to work elsewhere.