

What's in Store for Fintech in 2019?

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2019 will see Blockchain, Artificial Intelligence and Cloud facilitate huge improvements in price discovery, execution, straight-through-processing, data quality, risk management, portfolio management, reporting, compliance, cost-control, resilience, security, agility, and customer satisfaction.

Blockchain



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Crypto-currencies: 2018 saw NYSE create the cryptocurrency trading platform Bakkt with physically backed Bitcoin futures contracts; Fidelity announcing that it has been mining Bitcoin since 2015, and is now offering it to customers; Steve Wozniak joining an investment focused crypto start-up; Bill & Melinda Gates Foundation using Ripple's interledger protocol to help with payment services for the poor and unbanked; IBM partnering with Stellar Lumens for cross-border payment solutions; David Swensen investing some of Yale's \$29.4 billion endowment in two venture funds dedicated to cryptocurrency; Circle launching a

crypto finance company; Square's cash app allowing users to buy and sell Bitcoin; Coinbase being valued at \$8B; Venrock (owned by Rockefeller) investing in cryptocurrency; and, more initial coin offerings in the year than in all previous years added together. But this is just the beginning: the trend for 2019 will be sharply upwards for cryptocurrencies and digital currency exchanges.

Distributed ledgers: Increased use of Blockchain as an immutable, encrypted, distributed ledger in transaction processing and record keeping is an easy prediction for 2019. The industry spends huge amounts of money on a handful of processes where up to 99% of effort, money and time could be removed by using distributed ledgers. E.g. clearing and settlement; cross border payments; international trade finance; smart contracts; KYC; and, loyalty and rewards schemes. The Interbank Information Network (IIN) for payments (based on distributed ledgers, and launched by JP Morgan, Société Générale, and Santander in 2017) now has 75 members; while the largest bank in Australia and New Zealand (CBA) received permission in September 2018 from the World Bank to issue a Blockchain-based bond that will be governed by legally verified smart contracts. Growth in distributed ledgers will be huge in 2019.

Artificial Intelligence

Machine Learning (ML): ML is already seen in cyber-security; fraud prevention; portfolio management; personal finance; wealth management ('robo advisory'); algorithmic trading; customer services; and, message parsing. 2019 will see huge growth in its use in loan and insurance underwriting. By adopting ML, lenders and insurers will reduce manual effort, errors, fraud, risk and cost, while realising the many benefits of increased quality.

Deep Learning (DL): DL allows computer models to perform classification tasks directly from text, images and sound, and thus allow unstructured data to be integrated into models and analyses (from which pattern recognition and probabilistic methods can derive non-intuitive insights). Unstructured data can include news, social media posts; emails; web pages; video files; audio files; and, images. Use cases for 2019 will include risk management; portfolio management; balance sheet optimisation; corporate analytics; planning; and, deal tracking. It is hard to over-state the significance of this development for the industry.

Artificial Neural Networks (ANNs or Neural Nets): Neural Nets handle easily the uncertainty that cannot be accommodated by traditional expert systems. This makes them excellent for non-linear, data-driven modelling and prediction purposes in economic scenario analyses; stock market predictions; portfolio assessments and strategies; credit assessments; lending decisions; options pricing; forecasting FX rates; bankruptcy predictions, etc. Unlike traditional expert systems, it is the data that determines the structure of models, without any restrictive parameter assumptions (this is a huge step-forward). Unsurprisingly, Neural Net usage is increasing at nearly 30% across all industries, with financial services accounting for almost half of all usage currently: <https://www.technavio.com/report/global-neural-network-software-market>

Natural Language Processing (NLP). The growth of NLP and sentiment analytics has been huge in 2018 and steep growth will continue in 2019. NLP is being used in chatbots and other intelligent assistants; voice to text dictation; team collaboration; calendar management; customer service; and, IT help desk management tasks. Research by Spiceworks (<https://community.spiceworks.com/blog/2964-data-snapshot-ai-chatbots-and-intelligent-assistants-in-the-workplace>) found that 40% of large businesses will be using chatbots and intelligent assistants by the end of 2019, with financial services a huge user.

Ubiquitous infrastructure and Consumption-based IT

Infrastructure availability and cost is no longer a barrier to providing great service in a cost-effective manner. The reason being ubiquitous infrastructure / consumption-based IT services such as Cloud (which utilises Infrastructure-as-a-Service; Platform-as-a-Service; and, Software-as-a-Service) make the latest technologies, methods, and services available to anyone at affordable prices with shorter procurement cycles; increased agility; improved scalability; higher availability; better reliability, etc.

All aspects of ubiquitous infrastructure will continue to grow in 2019, with Hybrid Cloud, Multi-Cloud and Connected-Cloud continuing their steep growth from 2018.

Conclusions

2019 will be a make or break year for many financial institutions and their use of technology. They will either demonstrate long-overdue improvements in automation, digitalisation, analytics, quality, productivity, security and compliance or they will start going backwards. Luckily, Blockchain, AI, and Cloud now give them the ability to meet their challenges.

Source: <https://www.marketsmedia.com/whats-in-store-for-fintech-in-2019/>