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## The fintech revolution

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# THE FINTECH REVOLUTION

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### **"BLOCKCHAIN, THE TECHNOLOGY ON WHICH CRYPTOCURRENCY BITCOIN IS BASED, HAS PROMPTED A DIGITAL GOLD RUSH"**

The traditional dominance of established big-hitters in financial services is at an end. The market for many types of financial transaction is being disrupted by small businesses, start-ups and entrepreneurs. They are quicker off the mark in both spotting gaps in the market and developing state-of-the-art systems to respond to customer needs.

This includes extending consumer access to money and financial products outside of branches and beyond normal banking business hours, as well as adding unheard of levels of personalisation through the use of digital sensing and big data analytics.

As a result, the whole financial services sector is expected to see major improvements in efficiency and personalised customer services. The stakes are high. In 2016, in the European economies, financial services and insurance represented approximately 5.1% of total G.D.P. (gross domestic product), and employed about 2.6 million people. In the same period, the figure for the U.S. was 7.3% of G.D.P.

Large amounts of capital are available for technological innovation in financial services. This is a major factor facilitating the advance of fintech into areas such as operations management, lending and deposit services, peer-to-peer (P2P) lending, trading, risk management and investments. New financial models are also transforming the charitable giving sector, with crowdfunding the most visible innovation.

Fintech knows no boundaries. For example, the International Monetary Fund is taking a keen interest in the transformation of cross-border payment services. Western Union and Moneygram are losing market share in the global remittance market as fintech innovators provide lower cost, more accessible services for moving money from one country to another.

This is the tip of the iceberg. VentureScanner, ([www.venturescanner.com](http://www.venturescanner.com)), tracks new ventures in different start-up areas. In the fourth quarter of 2017, it listed 1,537 companies in 64 different countries. These received a total of US\$80.4 billion in venture capital funding.

But it is not only the private sector that is taking note. Central banks are interested in how the new technologies can help them better fulfil their roles. Speaking in March 2018, Bank of England governor Mark Carney said “There are clear prospects for new financial technologies to make the financial system more efficient, effective and resilient”.

Blockchain, the technology on which the crypto-currency Bitcoin is based, has prompted a digital gold rush. The central technical innovation associated with blockchain is digital ledger technology (DLT), which is defined as the use of decentralised trust verification through encrypted digital signatures.

The management consultancy firm PwC thinks that blockchain will extend beyond cybercurrency applications. It has identified a number of technology-driven disrupters that will have a visible impact on the financial services landscape by 2020. The fintech approach is expected to be the new universal model in financial services with mainstream products and services becoming more digitalized and offered through technology platforms.

Public cloud services are also forecast to dominate, particularly because of increased use of robotics and artificial intelligence systems. Cybersecurity is predicted to become a more critical risk to financial services firms than fraud and money laundering.

Customer intelligence is thought likely to emerge as the most important driver of profitability in financial firms and regulators will embrace fintech innovations in an attempt to stay one step ahead of the firms they oversee.

For most chief executives in the financial services industry, the question is not if their business will be disrupted by new entrants but when, by whom and how severely.

**Resources:**

Peter Gomber, Robert J. Kauffman, Chris Parker and Bruce W. Weber. “On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption and Transformation in Financial Services. *Journal of Management Information Systems*”, 35(1), 2018, 220-265.

Richard Dobbs, James Manyika and Jonathan Woetzel, (2015) “No Ordinary Disruption”, *The Four Global Forces Breaking All The Trends*.

<https://www.bankofengland.co.uk/research/fintech>