FINTECH LEADERS

FEBRUARY 2021

HIGHLIGHTS REPORT FOR...

COMARCH

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CEFPRO'S GLOBAL FINTECH RESEARCH REPORT:
PROVIDING A VOICE TO THE MARKET AND ASSESSING THE STATUS AS IDENTIFIED BY THE INDUSTRY

TABLE OF CONTENTS

TABLE OF FIGURES

ABOUT CEFPRO

The Center for Financial Professionals, CeFPro™, is an international research, events, and media company. CeFPro is the focal point for financial risk, technology, and regulatory professionals, advancing the profession through renowned thought leadership, knowledge sharing, unparalleled networking, industry solutions, and lead generation. CeFPro is driven by, and dedicated to, high quality and reliable primary market research. It is this market research that allows us to provide an excellent portfolio of peer-to-peer conferences, live interactive webinars, industry-led content, international surveys, and a membership area for the industry to connect.

Through the Fintech Leaders Report, CeFPro strives to provide insights, support, and benchmarks for organizations as the revolution of financial technology in financial services increases and gathers pace. Supported by more than 60 industry professionals from various sectors, positions, and backgrounds, the Fintech Leaders Advisory Board provides guidance, direction, support, industry insight, and knowledge to Fintech Leaders. The objective is to provide a comprehensive report examining the opportunities, investment priorities, key obstacles, and main benefits of the fintech industry. Findings are based predominantly on the views of the extensive international survey and the Fintech Leaders Advisory Board, with CeFPro's analysts and senior management reviewing the results and ensuring the integrity of the methodology and data reported in the final report.

The final Fintech Leaders report can therefore be viewed as 'the voice of the industry', assisting all relevant parties with a comprehensive understanding of and insight into financial risk, technology advances, governance and regulatory compliance, and other aspects of the fintech industry. Moreover, Fintech Leaders will assist all readers interested in the advances in fintech to make informed decisions on technology and business-related matters, with in-depth analysis of and insight into all fintech solutions and providers.

CeFPro is solely focused on financial risk, regulation, and technology, drawing on a decade of experience and expertise in the industry to provide a clear distinction from generic market research companies that cover multiple industries. Now in its third year, Fintech Leaders is increasingly recognized as the go-to resource, delivering unparalleled research and knowledge through the Advisory Board, CeFPro's analysts, and other industry professionals.

Visit www.cefpro.com for more information.

Join our global fintech community and receive complimentary updates, e-newsletters, webinars, and more: www.fintech-leaders.com

A WORD FROM COMARCH

COMARCH

Comarch is one of the biggest software houses in central Europe, employing over 6500 people. We were founded in Kraków, Poland, and have been around for more than 25 years.

At Comarch Financial Services, a business sector within the Comarch Capital Group, we specialize in developing software and IT systems for major financial institutions in banking, insurance and capital markets.

The history of our IT solutions for the world of finance dates back to the early days of the company's operations, that is the time when it consisted of only a dozen people — students and graduates of the AGH University of Science and Technology in Kraków.

Our primary advantage lies in the extensive domain knowledge. A growing number of implementations, know-how of our engineers and long-term relations with the leading banks and insurers help us improve the results of what we do all the time, every time. One of our top priorities is innovation.

OUR EXPERTISE

Corporate Banking	Accounting	Client Reporting, Performance & Risk
Digital Banking (www & mobile)	Loyalty for Banking	Cyber Security
Trade Finance	Loan Origination	Transaction Protection (tPro)
Factoring	Retail Banking	tPro ECC Token
Credit Management	Loan Origination	tPro Mobile Application
SME Banking	Loyalty for Retail	Identity & Access Management
SME Mobile App	Wealth & Mass Affluent	Anti-Financial Crime
Cash Management	Advisor Front-Office	Fraud Prevention & Detection
Invoicing	Client Front-End	Anti-Money Laundering

OUR HIGHLIGHTS

- Over 15 000 users of the Comarch Loan Origination system

- 3.7 mln transactions (+67% y/y) completed through the Comarch Corporate Banking mobile app in one of the largest Polish banks (2019)

- One of the largest loyalty programs for banking in Brazil — 19 million participants

- 300+ successfully completed security related projects

OUR COMMITMENT

We don't just make software and security hardware. Apart from that, we offer consulting services in terms of security issues, authentication tools, centralized user management, system integration, or IT infrastructure administration. In other words, we take end-to-end responsibility — from solution design and implementation up to maintenance. Just so our clients are confident that whatever happens, we're there for them. We pride ourselves on creating a family of cryptographic tokens designed to protect customer and transaction data by providing two factor authorization and authentication. They can be easily integrated with identity & access management software that controls the access to company applications and resources. At the same time we constantly develop our state-of-the-art solution for user and device monitoring enabling to guard firms and institutions against online frauds.

OUR COMPETITIVE EDGE

✔ Large domain expertise in research and development

- Innovation is our primary focus. More than 1100 of our IT engineers are directly involved in R&D in several locations in Europe

✔ Software and design in one package

- We understand your business needs and the technology you use — and create solutions accordingly. Our offer includes strict cooperation between in-house developers and designers, which results in a complete, thoroughly crafted product

✔ Regular presence in IT analyst ratings

- Our potential does not go unnoticed — and is highly regarded — by world-renowned research companies:

  - Analysys Mason
  - EU Industrial R&D Investment Scoreboard
  - Gartner, Forrester, Celent
  - IDC, TOP200 IDG, Truffle 100

WELCOME REMARKS

Dear Industry Professional,

Now in its third year, the Center for Financial Professionals' (CeFPro™) Fintech Leaders is fast being acknowledged as the most comprehensive business intelligence study on the status of the fintech industry. Fintech Leaders is the only research program of its kind, relying on responses and votes from industry end-users to establish the market leaders, trends, priorities, challenges, and investment opportunities within the fintech ecosystem. In addition, Fintech Leaders includes a guide to suppliers through the inclusion of a list of key solution providers, including a ranking of 30 different categories and an overall fintech solution vendor ranking system.

Like so many industries, and everyday life in general, this report has been significantly impacted by COVID-19. Included within the survey are interviews and questionnaire responses on the impact of the global pandemic, with some significant shifts on previous results. COVID-19 has had an exogenous impact on fintech priorities in just a few short months, with an instant and measurable effect on investment priorities and challenges. The overwhelming consensus is that the global pandemic has not only had a direct impact on the fintech path being set in the last decade but is expected to change that path. The extent of this impact is subject to much debate and discussion, however.

2020 was also the year that the world officially went mobile and digital; not to imply that this was not already the case for many, or the direction of movement anyway. The effect for fintech has been the maturing of a marketplace that many in the industry saw as having great potential – bringing seismic shifts equal to the change in warfare from the use of bow and arrow to the gun – but which required change to ensure resilience and business continuity. Within this Fintech Leaders report, this view is clearly illustrated through the views of survey respondents, as well as the views of many of the CeFPro Fintech Leaders Advisory Board members occupying senior level positions in some of the world's most influential fintechs and financial institutions.

We would like to thank the hundreds of respondents to the survey for their time and effort in completing the extensive survey. In a world without live meetings and events, the ability to connect remotely to gather data and insight has been challenging. As shown in the findings of Fintech Leaders, when needs must, resilience plans and business continuity management become very strategic requirements. In addition to the report findings and rankings, CeFPro has this year added an extra section of rising stars and distinguished companies, which we feel require additional recognition.

On behalf of CeFPro, I would also like to give a special mention and extend a special thank you to our Fintech Leaders Advisory Board; the 60+ industry professionals who have taken the time and effort to not only complete the extensive survey, but also to review data, provide insight and thought leadership, rationale analysis, and review the draft report, as well as, in some instances, put forward case studies and examples. Thank you all, with special appreciation to the Cabinet.

Finally, CeFPro would like to congratulate the winners of Fintech Leaders for their outstanding achievements. As the recognition is not ours, but made by the votes cast of those in the industry, this report is very much by the industry, for the industry, making the winners' accomplishments all the more impressive.

We trust you enjoy Fintech Leaders 2021!

Andreas Simou
Managing Director
Center for Financial Professionals

FINTECH LEADERS ADVISORY BOARD MEMBERS

CeFPro would like to thank all Advisory Board Members for their time, views, and opinions. Particular thanks go to the Cabinet of the Advisory Board for their recommendations during the drafting of this report.

Any views expressed in Fintech Leaders 2021 are those of CeFPro and are not endorsed by the Advisory Board or the organizations they represent.

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CEFPRO'S GLOBAL FINTECH RESEARCH
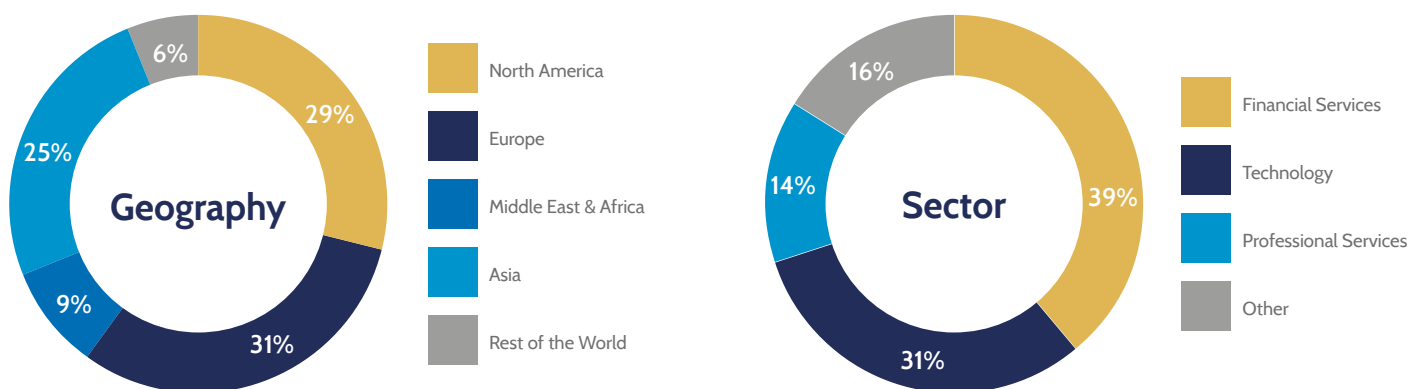
FIGURE 1: OVERALL SURVEY DEMOGRAPHICS

Geography
- North America — 29%
- Europe — 31%
- Middle East & Africa — 9%
- Asia — 25%
- Rest of the World — 6%

Sector
- Financial Services — 39%
- Technology — 31%
- Professional Services — 14%
- Other — 16%

FIGURE 2: FINTECH LEADERS CATEGORIES

Accounting & Treasury Management	Cybersecurity
Advanced Analytics	Data Management & Governance
Anti-Fraud	Financial Data
Anti-Money Laundering (AML)	Infrastructure
Artificial Intelligence (AI)	Insurance
Balance Sheet Risk	Know Your Customer (KYC)
Blockchain/DLT	Market Risk
Business Process Management (BPM)	Model Risk
Business Lending	Money Transfer & Wallets
Capital Markets & Trading	Operational Risk
Cloud Solution Provider	Payments Services
Compliance Reporting (for legal, notices, disclosure, etc.)	Personal Finance
Conduct/Culture Risk	Professional Services
Consumer Lending	Regulatory Reporting (for adhering to a regulator's requirements)
Core Banking/Back-End Systems	Stress Testing
Credit Risk	Third-Party Risk

> ❝ *The novel coronavirus has substantially challenged the way in which financial services firms and fintechs traditionally operate and driven important changes in consumer behavior. With unprecedented shifts in both the financial services industry and consumer behavior, the Fintech Leaders report clearly captures the way in which the industry is being impacted and provides important insights into perceptions about the changes that industry and consumers can expect in the future, both in the near term as well as the medium and long term. When we reflect back post-pandemic, this report is poised to become an important part of financial services history.* ❞
>
> Sabeena Liconte, *Deputy Chief Operating Officer & Chief Legal Officer,* **BOC International USA Holdings Inc., a member of the Bank of China Group,** *Fintech Leaders Advisory Board Member,* **CeFPro**
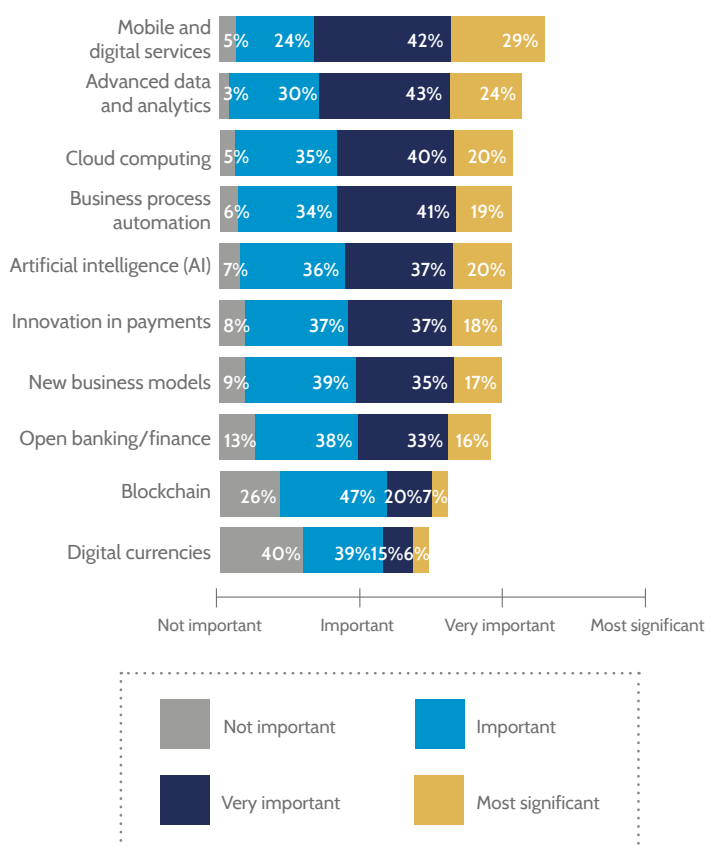
FINTECH OPPORTUNITIES NOW AND IN FIVE YEARS

GENERAL OBSERVATIONS ON KEY OPPORTUNITIES IN FINTECH

Previous Fintech Leaders surveys and reports indicated a shift towards automation and the use of data and advanced analytics, specifically artificial intelligence (AI) and machine learning, for increased competitive advantage and cost reductions. The key fintech opportunities across the industry were part of a process already in place, with increasing digitalization, mobile services, and remote access integral to customer expectations; remote access is now expected as standard by consumers. The global pandemic in 2020, COVID-19, has therefore accelerated a change that was already underway, catapulting key opportunities to the forefront of the industry.

Findings for Fintech Leaders 2021 show a seismic shift in the order and priorities of key fintech opportunities. The area of mobile and digital services has been catapulted from fourth position last year to first place in 2021. Interestingly, the percentage of respondents that ranked this area as 'very important' or 'most significant' remains almost unchanged at 71%; yet this was enough to propel it to the top position. Cloud computing, ranked sixth in last year's report, rises to third position in 2021. Moving in the opposite direction – and one of the greatest fallers in terms of the number of 'very important' and 'most significant' votes it received – is AI, dropping from second position last year to mid-table in 2021. Advanced data and analytics falls to second position; a key to the decline is that those who thought this was the 'most significant' opportunity more than halved, year-on-year. Arguably, advanced analytics is integrated in a mobile digital platform, which was ranked first; it is a selling feature of many mobile services, ensuring ease of use with in-house analytics. Therefore, as a category, advanced analytics may appear to have fallen in importance but is actually integrated in many of the other categories, such as digital services, AI, payments, and cloud computing. Blockchain and digital currencies continue to prop up the table, remaining in last positions for the third year in a row.

Across all fintech opportunities, there is a visible decline in the number of 'most significant' votes, with no category managing to gather more than a third. Compare this to last year when AI, business process automation, and advanced data and analytics each received more than 35% – in fact, more than half of respondents ranked advanced data and analytics as a 'most significant' opportunity in 2020. From a financial services perspective, the COVID-19 pandemic shifted client needs and objectives. Medium to long-term goals remained the same – automation and harmonization of processes to increase efficiency – but COVID-19 has forced a change in culture and flexibility toward remote working, requiring a more mobile and agile approach, with increased digitalization.

	Not important	Important	Very important	Most significant
Mobile and digital services	5%	24%	42%	29%
Advanced data and analytics	3%	30%	43%	24%
Cloud computing	5%	35%	40%	20%
Business process automation	6%	34%	41%	19%
Artificial intelligence (AI)	7%	36%	37%	20%
Innovation in payments	8%	37%	37%	18%
New business models	9%	39%	35%	17%
Open banking/finance	13%	38%	33%	16%
Blockchain	26%	47%	20%	7%
Digital currencies	40%	39%	15%	6%

Legend: Not important, Important, Very important, Most significant

BACK TO BUSINESS, BUT NOT AS USUAL

As a consequence, this drove short-term requirements to ensure greater security and flexible infrastructure to support staff working remotely, and away from the traditional office environment. Although much has already been written about the changing need of work-life balance, it was never the top priority in modern corporate culture until the arrival of COVID-19. Post-COVID-19 is an uncertain, and unknowable, world but many commentators have already described a continuation, at least part-time, of remote working, with less business travel and more video conferencing, which in turn offers great opportunities for more advancement of the fintech revolution as we aim to keep people connected while operating remotely. As a result of COVID-19, mobile and digital services were prioritized, with advanced data and analytics and AI declining in importance in the industry. The shift was a response to public policy and consumer demand favoring limited contact or non-contact interaction and transactions.

GOING MOBILE AND DIGITAL TO SURVIVE AND THRIVE

Global events in 2020, in particular COVID-19, have forced fintech firms to deliver and fulfil on their implied potential, enabling organizations to survive and in some cases thrive in a world that has changed beyond recognition in less than 12 months. Seen through the lens of COVID-19, the rise of mobile and digital services has allowed businesses and consumers to conduct financial affairs remotely and on the move. The global pandemic has forced large swathes of the employed population to work remotely. Consumers have also had to adapt as restrictions on movement have driven a rise in internet shopping and consumption. One obvious and well-publicized example is Amazon, which, year-on-year (October 2019-October 2020), has seen its share price almost double and its dominance in the retail space increase: Amazon accounted for almost half of all US ecommerce spending in 2019 and this figure is expected to rise significantly in 2020-21. In the US, other retailers such as Walmart and Target were considered essential and therefore not forced to close, but still established a reliable online presence, strong logistics, and ecommerce ability, allowing them to increase revenues and profits during the pandemic. In the UK alone, an estimated 6 million banking apps were downloaded in 2020. The phone, once used solely for telephony, is becoming the basis for banking and transactions, as well as retail and lifestyle changes. In turn, this makes digitalization in banking fundamentally different from past computerization of clerical processes.

The growing popularity of cell phones and apps has helped to facilitate demand for mobile and digital services. In some parts of the world – for example, India, parts of Africa, and Latin America – there are more cell phones than bank accounts. This inevitable rise and commercial opportunity has been accelerated by the global pandemic. For the consumer, the advantages are more than just convenience; mobile services also deliver cost savings, greater choice, and what some have termed 'consumer democracy'. It is clear that the rise in mobile and digital services goes beyond simply ease of consumption and an increased ability to work from home.

Recently, there have been signs of a credit quality implosion, creating openings for banks to enter the marketplace. There are also indications that private equity firms and investors have lost some of their appetite for fintech investment, severely impacting some fintech companies. Some well-publicized examples include Monzo, Revolut, and LendingClub, although

it can be argued that job losses have been felt across all industries and sectors, and fintechs should not be singled out. Even so, there is now an opportunity for established banks to advance their own digital and mobile services and expand on existing offerings to customers. A credit quality implosion does not mean the industry will implode, rather that access to funding, and customer loyalty, will separate the leaders from the pack. COVID-19 has opened doors and opportunities, with more participants entering the fintech space. Some fintech banks, such as Monzo and Revolut, appear to be doubling down on their products and services during the pandemic to expand their offerings and increase their client base.

The rise in mobile and digital services also presents an opportunity to remove manual processes in banking. Although there will be some human interaction, for example, in mortgage or loan applications for IDs, proof of address, payslips and so on, the move to automation, mobile, and digitalization will inevitably increase. This trend will continue, particularly with the advent of 5G networks allowing for greater productivity, opportunities, and cost savings. The B2B and B2C lines will become more blurred, facilitating one journey across the entire B-line without stops. For example, the integration of a corporation's accounting system into a bank will allow suppliers and vendors to pay invoices directly, enabling accounting and government tax systems to be incorporated into one seamless system. What is less certain going forward is the role of individual service providers and banks in providing money transfer services, and who will be responsible for transferring money and taking charges.

> ❝ *Payments have gone digital. Once payments go digital, banking goes digital. If a financial institution is not offering payment services over a mobile, it is not going to stay in business.* ❞
>
> Brandon James Davies, *Non Executive Board Director,* **Lintel Financial Services Limited & Obillex Limited,** *Fintech Leaders Advisory Board Member,* **CeFPro**

# ADVANCED DATA AND ANALYTICS: ONE CONSTANT IN A CHANGING WORLD

One area that has remained an important fintech opportunity is that of advanced data and analytics. The use of advanced techniques and tools to examine big data is becoming vital for businesses to effectively process, analyze, and store vast amounts of information in order to make informed decisions and project future trends, events, and behaviours – and, ultimately, gain a market advantage. Increased regulation and legislation have placed restrictions on data usage, such as the EU's GDPR, California Consumer Privacy Act, Canadian Privacy Act, and others yet to be introduced; for example, in the state of New York. The Basel Committee on Banking Supervision's (BCBS) standard number 239 requires financial institutions to understand the end-to-end points of their data; for example, origination, extraction, transformation, loading on applications, and how data makes its way into reports. For clarity, it should be stated that the reaction from governments and regulators around the world to the COVID-19 pandemic has been significantly different to that of the financial crisis of 2008-2010, or indeed the austerity measures of the 2010s that followed; in stark contrast, governments have spent unprecedented amounts to support their economies and provide welfare support.

However, for many in the industry there is a need to change mindsets and processes in order to completely break away from risk rating tools in financial services; not least because the global pandemic has rendered some of them obsolete. For example, commercial and residential real estate economic cycles can no longer be called traditional as a result of COVID-19, given that all relevant data on a global pandemic is over 100 years old and is therefore irrelevant. By that margin, underlying default data is also irrelevant in so far as its ability to drive predictive models in 2020. The volume of data in financial institutions is not in question; rather, the use and application of data in this new world requires a change of mindset by industry professionals.

One could also argue that the fintech areas in third and fourth positions (cloud computing and business process automation respectively) have significantly risen in the rankings to reflect the changing business environment in which financial institutions now find themselves. Remote home working prompted an exponential growth in cloud usage as organizations scrambled to accommodate this new normal. Consequently, this has reduced the need for physical infrastructures, thereby substantially cutting costs and, in many cases, accelerating the move away from inefficient servers. Cloud accessibility can be purchased in segments to allow smaller financial institutions to take advantage of the opportunity too, as well as benefitting from its associated security features.

FIGURE 4: COMPARING FINTECH OPPORTUNITIES FOR FINANCIAL SERVICES IN 2021 & 2026
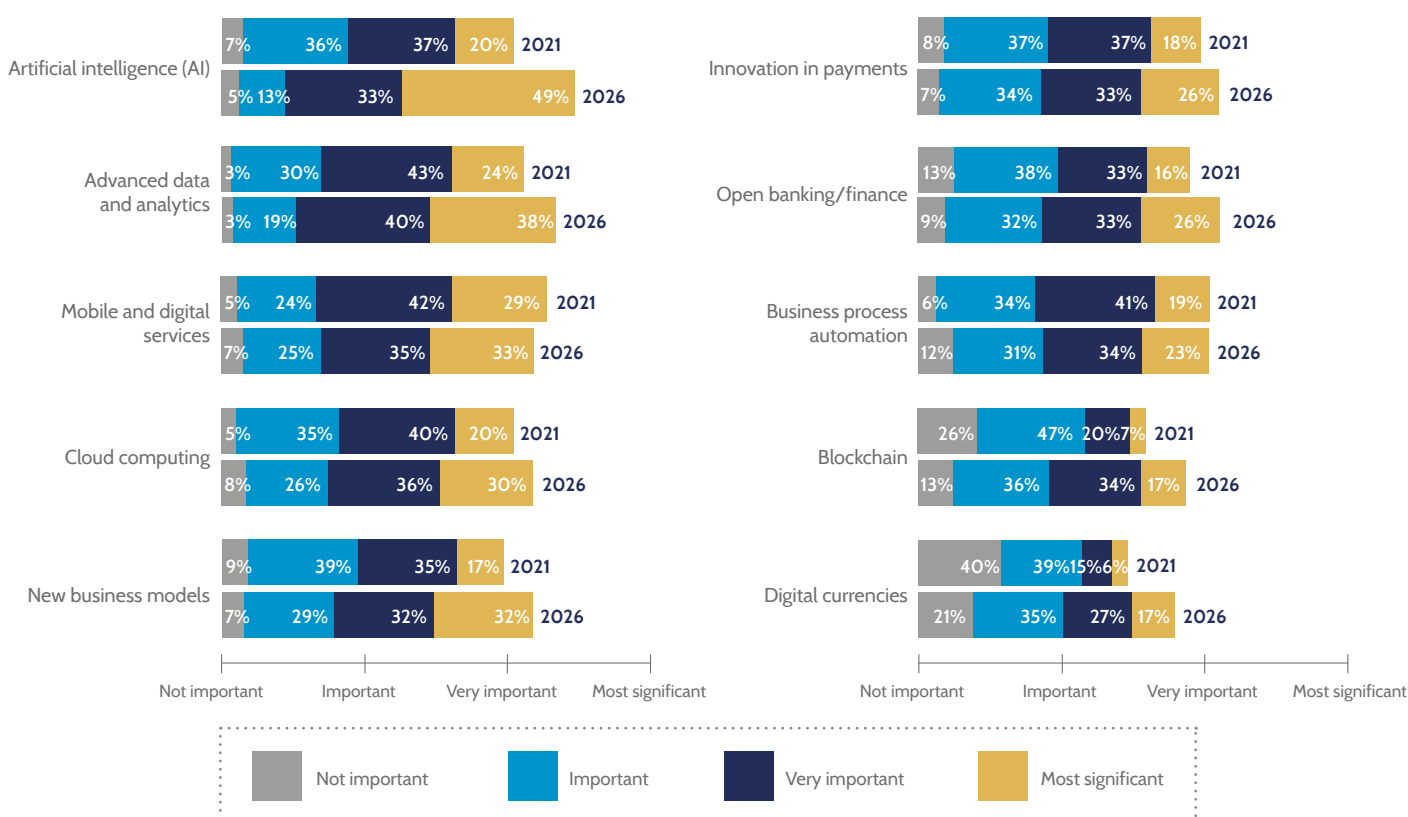
SECURITY TO CONDUCT BUSINESS DOMINATES FINTECH INVESTMENT PRIORITIES

WHAT DO YOU CONSIDER TO BE THE MOST IMPORTANT FINTECH INVESTMENT AREAS FOR 2021?
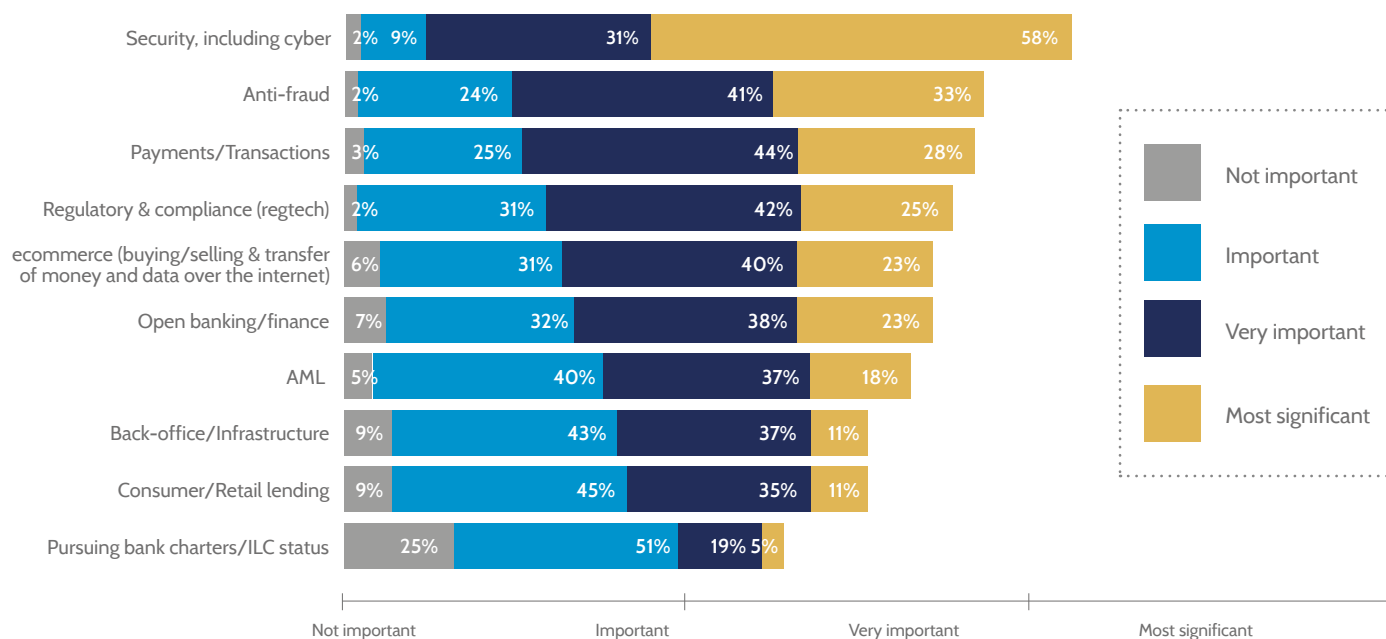
SECURITY DOMINATES FINTECH INVESTMENT PRIORITIES

Security, including cyber, remains the key investment priority for 2021. Possibly in response to the events of 2020, respondents that rated this area 'most significant' increased from 48% last year to 58% in 2021. Financial services, more specifically banking, is built on payments and transactions. In a COVID-19 environment, the need for safe and secure transactions requires adequate investment; this in turn requires adequate anti-fraud measures, which was ranked second. Both are considered significant expenses without which revenue generation, in the form of payments and transactions, cannot take place.

Resilience and business continuity are key business phrases often cited in 2020 across all industries and sectors. This is no less true for financial services and fintech. The global pandemic that swept the world in 2020 resulted in large swathes of the population working remotely, away from their usual offices and workstations. Accessing company infrastructures and networks

remotely through different domestic wi-fi environments meant security was a significant consideration for most financial institutions. The need to balance security, particularly cybersecurity, with business continuity was foremost in the minds of key decision makers. The role of biometrics as an underlying technology for security is also gathering pace as more innovative solutions are sought. The general consensus is that most cyber breaches are the result of human error; for example, passwords, computer usage, lapses in concentration, etc. In October 2020, Citigroup agreed to pay US $400 million to US federal regulators over long-running challenges in keeping daily operations under control; 'unsafe and unsound banking practices' were cited, including Citis programs to catch many launders. However, security also takes a physical form and there is still a need to safeguard offices. Firms must ensure that when the return to the workplace begins, there is adequate penetration testing to overcome all future challenges.

PAYMENTS, TRANSACTIONS AND REGTECH CONTINUE TO LEAD GROWTH

Information security, including cybersecurity, extends beyond remote working to include consumer and institutional businesses. The need to safeguard consumers not only from regulatory and legislative risks, but also from headline risk, was acutely important in 2020. From a business-to-business perspective, the priority was to ensure adequate safeguards to continue with business activity without the ability for direct human interaction. At the heart of all transactions, whether B2B or B2C, security is the foremost consideration. The scandal around German-based payment provider Wirecard had far-reaching repercussions, not only because of the use of outdated technology and fraud (despite the company's claims of having superior payment technology) but also due to working with unregulated institutions.

An interesting observation is that only 28% of respondents named payments and transactions as the 'most significant' investment area, given that COVID-19 has meant a radical reduction in the use of cash and a significant increase in transactions that are contactless, or moving in that direction. At the same time, a reduction in the use of cash and checks would result in cost efficiencies due to increased transactions.

Internationally, there are considered to be significant differences in the need to invest in payments technology. Parts of Europe and Asia have for some time already had a more advanced open banking and cashless society, allowing for a smoother transition to electronic payments, transactions, and ecommerce. For its part, the USA is making significant strides forward in payment and transaction investments. Other nations, such as India, have large swathes of the population that are unbanked or underbanked, providing great opportunities for financial institutions and fintechs to tap into a potentially lucrative market. As stated previously, with regards to fintech opportunities over the next five years, the rise of mobile and digital services could be a great tool to assist in this transition.

One area that has remained stable for the last few years is investment in regtech, which has maintained its position just

> *The report identifies fraudulent or suspicious transactions as a central pillar of a fintech's security needs, requiring them to provide the most effective overall security protection. Hopefully they will leverage real-time artificial intelligence to prevent outsiders from harming consumers and the wider payments ecosystem.*
>
> Frank Morisano, *Chief Risk Officer,* **Industrial and Commercial Bank of China,** *Fintech Leaders Advisory Board Member,* **CeFPro**

behind payments and transactions. Estimates vary on investment levels, depending on definitions of what constitutes investment in regtech, but conservative estimates suggest a 50% growth over the last five years. The increasing need by regulators for digital reporting means that regtech will only continue to grow (see dedicated regtech section on page 22).
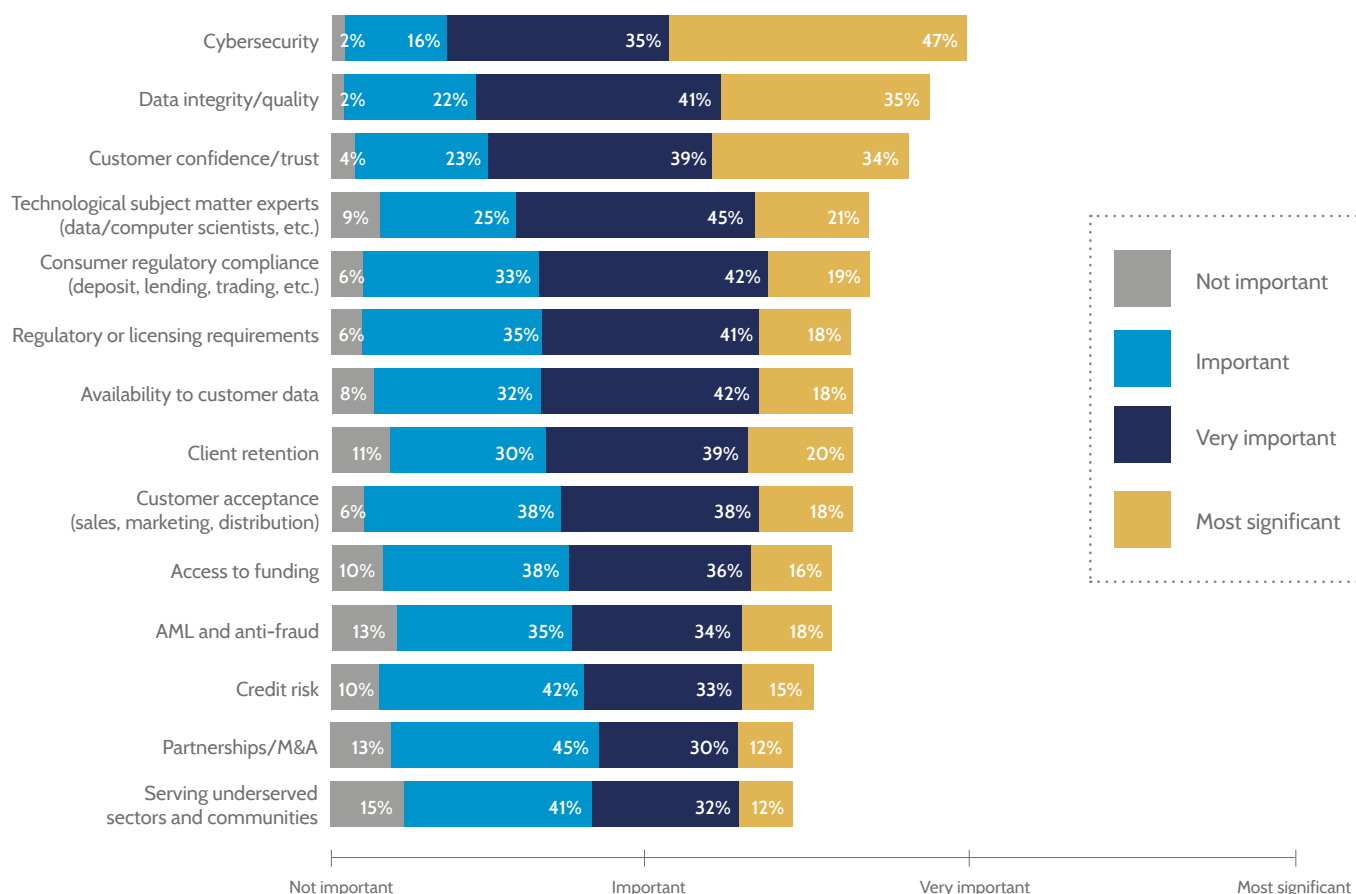
A key unifier for the top half of the table is Authorized Push Payment (APP) fraud; that is, when a customer is duped into authorizing a payment to an account controlled by a criminal. UK Finance, a trade body representing more than 250 credit, banking, and payment-related firms, reports that in the UK, this is the largest and fastest-growing fraud type – since early 2002, APP scams in the UK have amounted to over £450 million. While steps are being taken to diminish APP, increased investment in security, including cyber, and other anti-fraud measures is critical to the continued success of payments, transactions, and ecommerce; hence their joint standing in the top half of the table. Consequently, customer confidence is a significant challenge and requires action, as does operational resilience, while questions remain around the resilience of partner institutions and third-party providers.

> *The continued growth of fintech means that businesses have never been at greater danger for disruption, but it also means there has never been a better time to expand, partner, and/or acquire. Keeping up with fintech is now a fundamental responsibility of any executive in the financial services sector, and the Fintech Leaders report makes it so much easier by bringing insights and priorities directly from the end-users, whose decisions will decide the fate of so many companies in the space. It's one of my most important reads of the year.*
>
> Michael Middleton, *Head of Content Strategy,* **Markov Processes International,** *Fintech Leaders Advisory Board Member,* **CeFPro**

CYBERSECURITY AND TRUST REMAIN KEY OBSTACLES

FIGURE 6: WHAT DO YOU CONSIDER TO BE THE MOST IMPORTANT OBSTACLES TO SUCCESSFUL ADOPTION OF FINTECH?

	Not important	Important	Very important	Most significant
Cybersecurity	2%	16%	35%	47%
Data integrity/quality	2%	22%	41%	35%
Customer confidence/trust	4%	23%	39%	34%
Technological subject matter experts (data/computer scientists, etc.)	9%	25%	45%	21%
Consumer regulatory compliance (deposit, lending, trading, etc.)	6%	33%	42%	19%
Regulatory or licensing requirements	6%	35%	41%	18%
Availability to customer data	8%	32%	42%	18%
Client retention	11%	30%	39%	20%
Customer acceptance (sales, marketing, distribution)	6%	38%	38%	18%
Access to funding	10%	38%	36%	16%
AML and anti-fraud	13%	35%	34%	18%
Credit risk	10%	42%	33%	15%
Partnerships/M&A	13%	45%	30%	12%
Serving underserved sectors and communities	15%	41%	32%	12%

Despite significant changes in opportunities and investment priorities, the key obstacles to successful fintech adoption have remained consistent year-on-year. The top three – cybersecurity, data, and customer confidence – are clearly the most significant considerations and will remain so for some time. However, upon closer examination of the proportion of respondents deeming them 'very important' and 'most significant', there is marginal difference from last year and any decline is very much in line with other areas, such as investment and benefits.

FIGURE 7: CHANGE IN PERCENTAGE THAT VOTED 'VERY IMPORTANT' OR 'MOST SIGNIFICANT' IN 2020 & 2021

	2020	2021
CYBERSECURITY	89%	82%
DATA INTEGRITY/QUALITY	80%	76%
CUSTOMER CONFIDENCE/TRUST	78%	73%
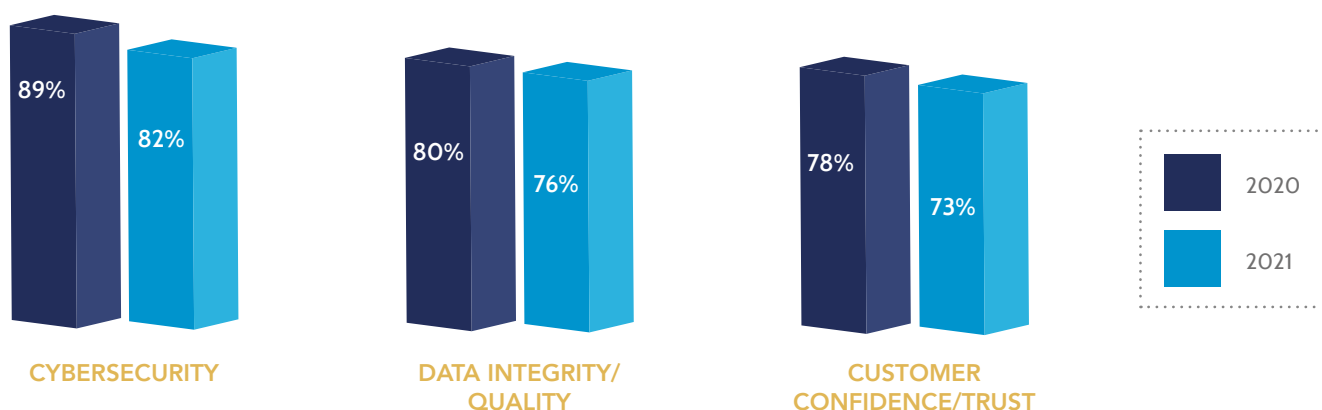
There is a close interconnectivity between cybersecurity, data, and customer trust; these are prerequisites, without which any organization will face significant headline risk and impacted business operations. When the global pandemic is added to the equation, including the requirement for a large proportion of the population to work remotely, the areas of cybersecurity and data become foremost considerations in customers' minds. Additional issues, such as increased third-party risk and cloud technology, also require further security measures when compared to working in an office, which will have easier tracking, checks, and processes in place. Questions have also been raised over whether cybersecurity is sometimes confused with anti-fraud. However, there is no evidence to suggest that fintechs suffer any more or fewer security breaches, such as ID hacks, synthetic IDs, account takeovers, and so on, than traditional established banks and physical branches.

In regard to data, this can be viewed as both a regulatory and compliance issue. Data is treated as a commodity, and the most valuable currency any organization has. It is therefore critical that it is not only protected but used in the correct manner. No organization would like the headline risk which has confronted a number of high-profile companies in recent years, such as Cambridge Analytica, Facebook, and Equifax. There have been, and will continue to be, increased regulatory requirements around data, such as the EU's GDPR, California Consumer Privacy Act, and Canadian Privacy Act, all aimed at protecting consumers and their data. Consumers are in turn more aware than ever of their rights surrounding data. Consequently, many organizations are going above and beyond the minimum requirements to ensure customer confidence and trust.

THE IMPORTANCE OF PARTNERSHIPS AND SUBJECT MATTER EXPERTS

Partnerships are now considered less of an obstacle to fintech adoption, with 42% of respondents ranking the area as 'very important' and 'most significant', compared to 63% last year. There is an acceptance that if there is a mutually beneficial business relationship between incumbent financial institutions, fintech challengers, and/or technology companies, this is no longer an obstacle to moving forward. As one Fintech Leaders Advisory Board member comments, 'people still trust banks more than a fintech or technology company'; therefore, working together to take advantage of the financial technology revolution is in all parties' interests. Fintechs, in general, are considered smaller, more agile, and more responsive to changing environments, operating in a limited regulated environment. Banks on the other hand operate in a highly regulated environment, having to comply with strict standards and guidelines. Consequently, the logic is that greater collaboration, which could include strategic partnerships, mergers or acquisitions, is required to service the changing requirements of customers. In addition, regulators will have to fine-tune regulations to ensure a safe and secure flow of payments.

However, while strategic partnerships are becoming more widely accepted, one notable riser in the table is access to technology talent. Subject matter experts, such as data and computer scientists, rank just outside the top three, with 66% deeming this a 'very important' and 'most significant' obstacle to fintech adoption. Interestingly, 45% of respondents believe that a lack of relevant talent is 'very important'; higher than the corresponding scores of the top three obstacles, although not judged by either survey respondents or the Fintech Leaders Advisory Board to be as 'most significant' as the top three. This may be because, unlike the global challenges of cybersecurity, data, and customer confidence, talent restriction

is a more regional concern. A number of commentators have observed that technology talent in general is not the challenge; rather that there is a need for high numbers of experienced data scientists in the US and parts of Europe in particular. Data scientists require several interrelated skillsets, such as programming, statistics, machine learning, data challenges, and software engineering, in order to assist organizations in overcoming sophisticated obstacles. In the case of the US, a number of commentators raised issue with the H-1B visa, which could limit the number of skilled workers from overseas entering the country while the US education system adjusts syllabi to take into account the new business realities. Consequently, the use of third parties and freelancers was another option, although questions were raised over costs and quality of implementation.

> *Fintech solutions post-COVID will be challenged with adapting their platforms to enhance customer reach while increasing transparency at each point of contact. The real value offered by partnering with financial innovators will increasingly depend on their ability to strategically incorporate metrics of emerging user behaviors of interest to their existing client base.*
>
> Alessia Falsarone, *Managing Director, Portfolio Strategy and Risk DMFI,* **PineBridge Investments,** *Fintech Leaders Advisory Board Member,* **CeFPro**

Business requirements were also cited as a concern with regards to subject matter talent. ERP, which helps organizations' business data through various software solutions, can be complex. Dozens of ERP systems requiring integration to a solution is a significant undertaking and poses challenges to resources, experience, and knowledge, as well as security and customer service-level expectations. The challenge for fintech and start-up organizations is that, while agile and responsive, they often lack the experience and know-how to take on significantly larger projects; these may require more established players with clear guidelines and solid reputations to step in. As such, ERP and solution providers will start to offer solutions that will increasingly make processes easier within treasury teams, freeing treasury professionals to further optimize internal processes.

CASE STUDY: FRAUD, FINTECHS AND FINANCE

The Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act, is a $2.2 trillion economic stimulus bill passed in March 2020 in response to the economic fallout of the COVID-19 pandemic in the US. The CARES Act was designed to assist individuals and families, as well as businesses of various sizes, during an unprecedented economic and financial downturn; the package of measures was the largest economic stimulus package in US history and accounted for nearly 10 percent of US gross domestic product.

As part of the CARES Act, the Paycheck Protection Program (PPP) was passed and administered by the US Small Business Administration (SBA) to provide small businesses (defined as those with under 500 employees) with resources to fulfil payroll obligations, re-employ staff, and provide other forms of financial assistance. In an effort to distribute much-needed funds to small businesses as expeditiously as possible, financial technology companies were also enlisted to assist banks in automating the loan application and approval process.

In the second round of government funding, of all the PPP loans granted, fintech firms handled 15 percent. According to the US Department of Justice (US DOJ), it is estimated that 75 percent of PPP loan fraud was through a fintech. This including companies such as Kabbage and BlueVine. In some cases, records revealed that an applicant's business did not exist or was dormant. In other cases, the funds were acquired by a validly existing business but illegally spent, wasted or abused. In one of the first cases brought by the US DOJ, a Florida man was arrested and charged for obtaining $3.9 million in PPP loans and using those funds to purchase a Lamborghini sports car valued at $318,000. The US DOJ seized the sports car, in addition to $3.4 million from bank accounts at the time of the arrest.

Against this backdrop of fraud, there has been no accusation of wrongdoing on the part of fintechs or of SBA guidelines not being followed; rather, the loan process has been an issue due to applicants over-relying on self-certification as the qualifying criteria for the SBA loan proceeds.

Therefore, the true challenge has been that fraud checks did not happen sooner, and that the need for speed and action overrode standard fraud checks and balances normally associated with the loan issuance process, all of which were backed by the SBA. In retrospect, fintech firms demonstrated that their automation and systems worked effectively, as loan approvals were granted within hours and without human intervention in a large proportion of the cases handled by them.

The scale of the fraud in 2020 is hard to calculate, with more cases and examples appearing. What is evident is that fintech firms have shown that they have the ability to act decisively, automating processes that would normally take longer. However, criminals are aware of the opportunities for fraud created by the availability of the PPP funds, and the industry is struggling to strike the right balance between employing more robust due diligence checks to mitigate fraud, and delivering the prompt action needed to inject funds into struggling small businesses trying to stay afloat as a result of COVID-19. Evidence of enhanced security as a fintech investment priority is clear, though fintechs are by no means alone or should be blamed for fraud, as it has been widespread in many areas during these unprecedented times and circumstances.

Sources: Bloomberg and FT

FINTECH BENEFITS CHANGING WITH THE TIMES
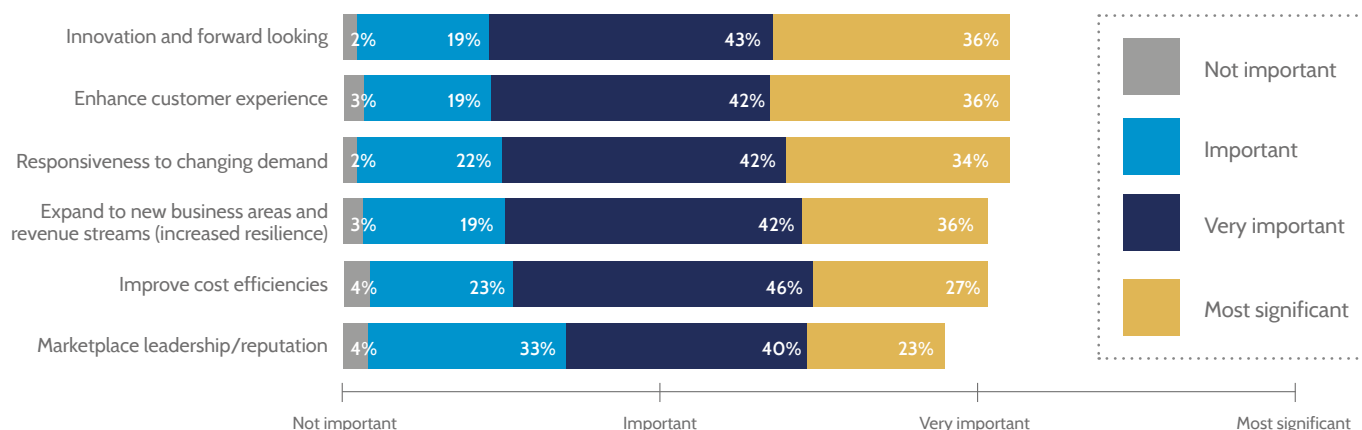
The customer remains at the center of the fintech world. Delivering an enhanced customer experience, meeting their needs regarding convenience and accessibility, is still a key motivator. One example, which was mentioned a number of times in the survey, was that of Apple and its ecosystem that provides interconnectivity and ease of use for the customer. Moreover, as Apple products are considered contemporary, with a highly regarded brand identity, the customer is willing to pay a premium. However, respondents to this year's survey indicated that a great customer experience alone is not enough; being forward looking and innovative are just as important, if not slightly more so.

Many commentators would argue that, despite the advances in fintech, the potential it has to offer still far outweighs the advances made so far. Many ideas are repackaged or reinvented, allowing for the rise of companies such as Tesla or Apple, in the form of electric cars and smartphones respectively. There is increased simplicity in some fintech solutions, such as using camera phones for banking checks, or credit cards becoming more diverse with an abundance of options from store cards, coffee shop cards, Apple Pay, and others. However, there remain significant differences across regions and industries in what can be considered advances and innovation; within the US, advancements in bill paying technology are some way behind parts of Europe and Asia, while insurtech (insurance technology) is often cited as an area with great growth potential.

Compared to last year, the percentage of respondents who stated that enhanced customer experience and responsiveness was 'most significant' ranked in the mid-40s; this year, this figure fell to the mid-30s. Interestingly, the percentage of respondents who stated that cost was a 'very important' and 'most significant' benefit of fintech to their organization remained the same as last year, although still ranked lower than enhanced customer experience and responsiveness. While the income ratio of fintech organizations is significantly better than established banks, it is also a hindrance to surviving an economic downturn, as Kabbage can testify.

What certainly seems to have changed in a year is that the customer experience is not the overriding benefit of fintech. In a post-COVID-19 world, the fintech business model is being reconsidered and offering fintech benefits for increased 'sign-ons', without an economically viable commercial and business plan, now raises question marks. As one Fintech Leaders Advisory Board member commented, there will be a number of 'winners' in the fintech industry who will 'take it all', but not all can survive. The fintech race can be compared to the railway companies that sprang up in numerous countries in the 19th century, all competing for the same routes and clientele; while some survived, the vast majority did not. Arguably, the increasing use of smartphones allows for an enhanced customer experience and forward-looking innovations, with more advances to come. Plus, in some countries the proportion of smartphone users is growing, and will continue to do so, allowing the underbanked and unbanked the opportunity to join the fintech revolution.

> ❝ *The advantages of gathering the consolidated views and opinions of those in the industry within the Fintech Leaders report builds the foundation of our success as the fintech sector matures. On the back of an increasing demand for technology in financial services, the importance of the sector in sustaining growth will increase further…. (Fintech Leaders) also addresses the needs of underserved markets, including the financially excluded, and helps to tie together an increasingly interconnected world, promoting trade and global growth. The collaboration of the contributors to the Fintech Leaders report certainly helps achieve this.* ❞
>
> Peter Smith, *Director,* **Seneca Investment Management,** *Fintech Leaders Advisory Board Member,* **CeFPro**

CYBER AND DATA SECURITY REMAIN REGTECH INVESTMENT PRIORITIES
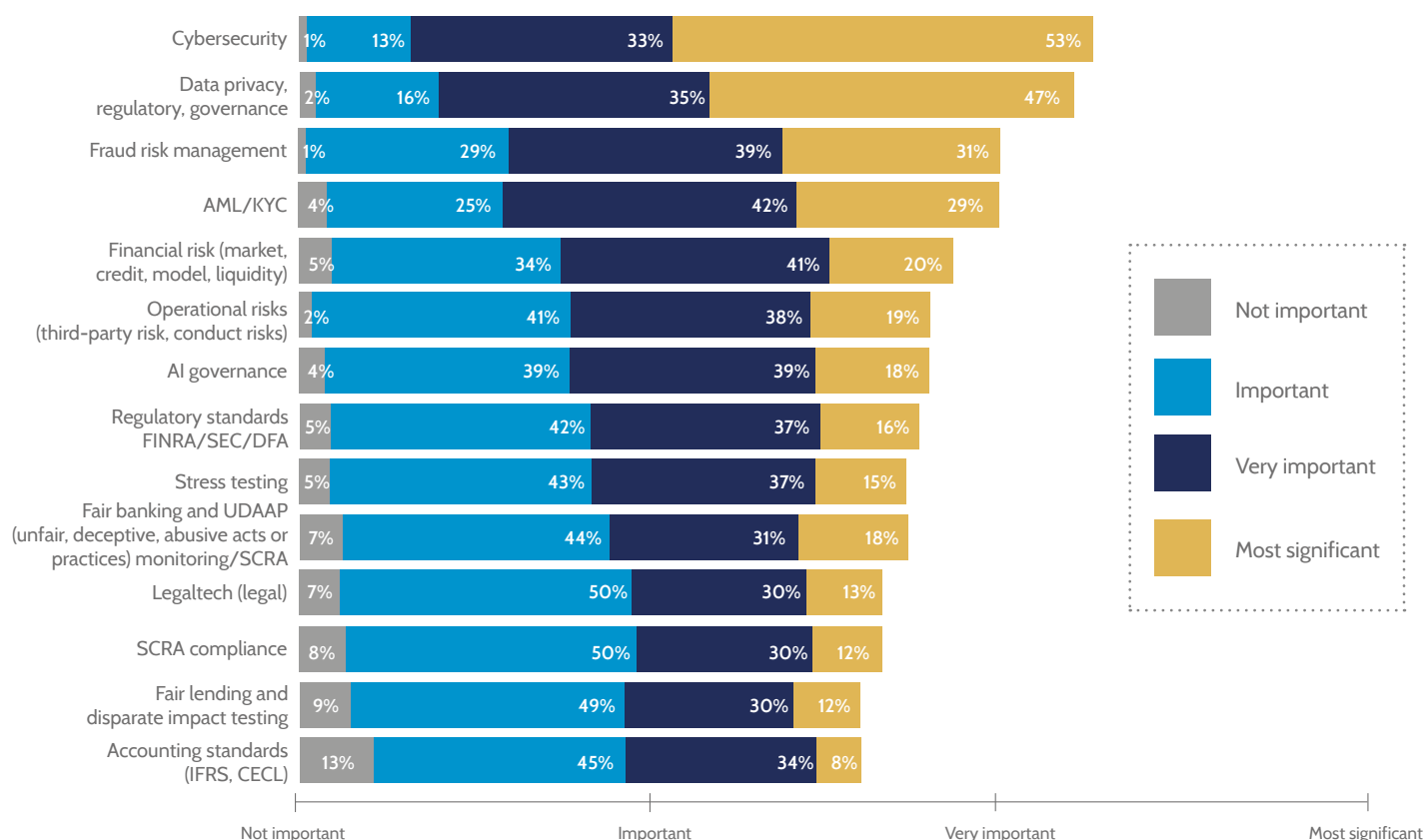
Investment in the key fintech subset of regulation technology (regtech) is not new. It has been gathering pace since the financial crisis more than a decade ago and shows no sign of slowing down, with some arguing that it is actually gathering traction. The growth appears to come from both new market entrants and via organic growth of existing firms. Regulators around the world are increasingly developing strategies to increase regulatory effectiveness and efficiency. As recently as 2019, the Bank of England stated that new technologies may provide opportunities to streamline organizations' regulatory processes and save on some of the estimated UK banking industry costs of up to £4 billion a year; while the New York Department of Financial Services (NYDFS), a New York state regulator, was seeking to hire a director to design, build, and manage a program to facilitate testing of regtech solutions and improve supervision of regulated financial organizations. The risks of non-compliance, including financial penalties and reputational impact, are therefore key motivators for financial institutions to implement regtech solutions at an accelerated pace.

Cybersecurity, along with data, heads the pack as a regtech investment priority. There are several reasons why this is the case. For a start, remote working has increased cybersecurity and data concerns significantly in 2020. Although many organizations were already geared towards more remote working, the scale of change as a result of the global pandemic was completely unprecedented. There has also been an increased use of third parties, including virtual private networks (VPN), additional licences for video conferencing, additional storage, and the use of cloud provider services, all of which have contributed to enhanced cybersecurity measures.

Protection of data is closely aligned with cybersecurity and comes a close second as a regtech investment priority. Employee data, such as personnel files and medical and financial records, is one consideration, but the area of data protection is vast, requiring significant expertise and investment. Just some of the data and cybersecurity considerations needed include data encryption, firewalls, access controls, network protection, secure web gateways, and sandboxes to protect primary networks.

As mentioned previously, regulatory changes and requirements need special attention and it has been stated that adequate investment cannot be made until legislation is fully implemented; the California Consumer Privacy Act underwent four major revisions before being confirmed, and other states in the US are undertaking similar processes, requiring a 'wait and see' attitude before investments are made.

One of the advantages of regtech is increased automation, resulting in fewer staff, the outsourcing of tasks, and lower expenses. In this regard, fraud risk management, AML, and Know Your Customer (KYC) are some of the greatest improvements made within regtech in recent years. In the case of AML, regtech solutions can strengthen an organization's processes to meet its regulatory obligations, reducing the workload by automating AML controls. AML regulations vary according to different countries and regions; however, financial institutions are obliged to implement KYC procedures for customers on board to determine a client's risk level. The role of biometrics can also contribute to this, identifying physiological or behavioral characteristics such as fingerprint, face or iris recognition for the former, and signature, keystroke or voice recognition for the latter.

There are a number of regulatory challenges in the bottom half of the table, many around regulations that have been with financial institutions for years. One Fintech Leaders Advisory Board member commented that 'the top half of the table can have a material, headline risk to your organization and therefore the investment level and attention needs to be greater'. Another interesting observation is that regtech and automation can only assist up to a certain level, after which point human involvement is required.

One topic that generated stronger views and some differences of opinion centered around legaltech, which was ranked fourth from bottom. A number of commentators stated that so many aspects of their work involve legal departments, begging the question whether all or part of it could be automated. Recent advances in legaltech and documentation, plus the repetition of sections within contracts, were also cited as examples of why this area should be considered a higher investment priority within regtech.

> **"** *Most, if not all, fintech leaders are focused on addressing a real problem; their time is spent building a business that is viable and sustainable. This report creates a platform for all fintechs to get their name out there. It creates a benchmark which B2B can use as part of its supply chain and recognizes innovation. The benefits are that it is a consolidation of information in one platform which is independent and unbiased, and can be relied upon when making business decisions.* **"**
>
> Caitriona Whelan, *Former Chief Strategy Officer,* **Payen,** *Fintech Leaders Advisory Board Member,* **CeFPro**

CASE STUDY: EQUIFAX AND ITS PARTNERSHIP WITH FINTECH PROVIDER ACTIVE NAVIGATION TO TRANSFORM ITS CYBERSECURITY AND INFORMATION TECHNOLOGY SYSTEMS, INCLUDING THOSE RELATED TO DARK DATA

In September 2017, Equifax, one of the largest consumer credit reporting agencies, experienced one of the worst data breaches in history. It resulted in a $700 million settlement with the US Federal Trade Commission, as the data of 147 million individuals (including names, birth dates, social security numbers, and driver's license numbers) was compromised due to a large-scale hack on Equifax's systems. In February 2020, the US Department of Justice discovered that four members of the Chinese Liberation Army had been at the heart of the breach and they were subsequently charged for their role in the incident.

For the first time since it experienced the breach, Equifax made public a partnership it started in 2018 with a key, new fintech partner (Washington-based data privacy and governance provider Active Navigation) to help the credit reporting agency enhance its security and technology. Announcing a $1 billion commitment, Equifax is in the process of undergoing a complete cybersecurity and information technology transformation over the next five years.

In particular, through a recognition that hacking efforts are relentless and data breaches are now more of a 'when' than an 'if', Equifax has been working with Active Navigation to understand and map how its 'dark data' is collected, processed, and stored, and how to identify and delete unnecessary records. The goal of the partnership is to proactively reduce Equifax's overall data surface area, facilitate data privacy compliance, and regain public and regulator trust. Equifax's large-scale investment in such cybersecurity and IT measures also signals a trend that investments in data privacy are viewed as a competitive advantage as data breaches continue unabated.

'Dark data' refers to data or information assets that companies collect, process, and store as part of their regular business or operational processes, but generally fail to use for other purposes (for example, analytics, business relationships, and direct monetizing). Dark data is often viewed as having no intrinsic value, as it refers to data, intelligence or other information that is dormant, or that has been collected and stored but not analyzed or even effectively categorized. However, dark data can be voluminous and placing a low priority on its storage and security can leave it susceptible to risk of unauthorized access.

Source: FT and Active Navigation

IMPACT OF COVID

FIGURE 10: THE COVID-19 PANDEMIC HAS HAD AN EXOGENOUS IMPACT ON FINANCIAL SERVICES. DO YOU BELIEVE THIS WILL DRAMATICALLY SLOW THE GROWTH OF FINTECH OVER THE NEXT FIVE YEARS?

55%

Disagree

28%

Somewhat agree

13%

Agree

4%

Strongly agree
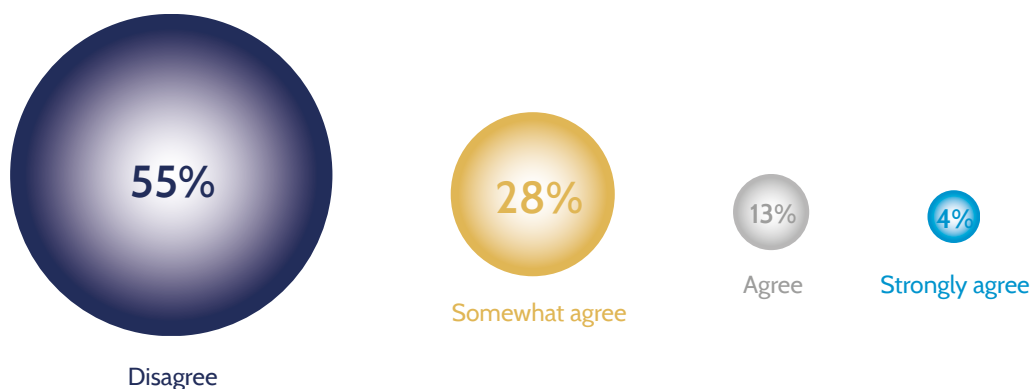
The majority of respondents believe that COVID-19 will not dramatically slow the growth of fintech over the next five years. However, at 55%, this is by no means an overly convincing or overwhelming view. Nearly one in six respondents agrees, or strongly agrees, that COVID-19 will have a dramatic effect on the continued rise of fintech.

What is certain is that technology in general has had a profound impact on everyday life: in healthcare, the renewal of medication is now online, with initial medical assessment often by video conference call; in retail, there has been an exponential rise in online shopping and, conversely, a significant decrease in footfall in physical stores; while in commercial and residential real estate, the effects on large towns have been dramatic, with occupancy rates at levels not seen in most people's lifetimes. Within financial services, there are numerous examples, as stated throughout this report; the need for remote working, a cashless society, and increased electronic transactions and payments have meant that fintech has touched all our lives in 2020.

Long COVID is a term that was coined in late-2020 for people who recovered from the immediate effects of coronavirus only to continue to suffer from symptoms weeks, and in some cases months, later. Some commentators believe that, just like the health of the population, the events of 2020 will have a longer-term impact on the rising status of the fintech industry. While it is too early to judge how this will transpire and what the situation will look like in one or five years time, there are some early stage indicators.

Access to funding for start-ups and early stage fintech organizations is more challenging than a year ago, by at least a third year-on-year. Investor appetite is not the only change; so are the deep dives into the fintech business models. One such model has been free offerings to entice customers, in a bid to build a client base to harness services and offerings. This is now being questioned as a long-term strategy and more direct revenue-generating business models are being sought. Multiple-event scenarios are also being investigated – if

COVID-19 can impact organizations in one way, what else could impact the growth of fintech? If Kabbage, ranked and favored so highly in CeFPro's Fintech Leaders report last year, can go from accelerated riser status to potential buy-out by AmEx, what other considerations should be made?

However, as indicated, the majority of respondents do not expect a dramatic slowdown in growth, rather a reduction in certain areas, such as business lending or real estate, with other areas expected to continue to prosper. The general consensus is that technology growth, including financial technology advances, is to remain a constant for the foreseeable future, if somewhat more targeted to specific needs and made more commercially viable. One such area is the move from business lending to banking services in general, which in turn would drive demand from customers and establish a new platform upon which growth and development can continue. As stated, this potential is from the supplier side, including incumbent banks and fintech banks, but offers great benefits to the general public, including the unbanked and underbanked. Another impact of COVID-19, for either online or fintech banks and established financial institutions, is the rise and increasing use of phone apps and digitalization.

> *I think it is fundamental to gather the industry and ecosystems together to support an industry-wide need for the Fintech Leaders report. This helps inform government and stakeholders for trade and investment and demonstrates the key infrastructure value of fintech. This collection of expert views broadly covers the past successes, current state, and future objectives in key areas that include demand, capital, regulation, policy, and talent.*

Peter Smith, *Director,* **Seneca Investment Management,** *Fintech Leaders Advisory Board Member,* **CeFPro**

FINTECH LEADERS SURVEY, RANKING AND METHODOLOGY

CeFPro's Fintech Leaders report is unlike other fintech studies and reports, which focus on capital investment, technology rankings, or expert opinions of analysts within the research company. Instead, CeFPro has devised a painstaking methodology that reflects the views and opinions of the industry; 'the voice of the industry'. The Fintech Leaders report is the most comprehensive study of its kind, examining the business requirements and status of financial technology in financial services, and the key solution providers.

Initial work on the Fintech Leaders survey and report began in late February 2020, followed by several rounds of one-to-one and group calls with the Fintech Leaders Advisory Board members. This was further supplemented by CeFPro's research team who gathered the opinions of independent industry professionals and past respondents to the survey. The online survey was live on Monday 15 June, closing on Friday 25 September. Anyone with an interest in financial technology within financial services was invited to participate, although votes for rankings were only selected from end-users and any conflicts of interest were discarded. In addition, all shortlisted companies, including last year's winners, were invited to participate in the survey, and to provide additional supporting data.

The rankings in the report reflect the views, opinions, and experiences of industry professionals, specifically the end-users of solutions and services. In addition, CeFPro undertakes extensive research, gathering the insight and opinions of the 60+ Fintech Leaders Advisory Board members, whose votes and opinions are both incorporated within the overall ecosystem, and used as a benchmark and validation process. In addition, CeFPro's research and analysis team also undertake an extensive review of all votes, data, and report drafting. Best in categories are determined by eligible votes cast on a 'first past the post' voting system. Rankings of the overall Fintech Leaders ecosystem are taken predominantly from the weighted scores of each of the categories, plus the open text responses within the survey, and ranked accordingly.

CeFPro aims to continuously refine the process and methodology each year, to develop, define, and ensure that the most accurate end-user rankings report is delivered. In short, CeFPro validates the data and report through several stages of independent verification.

KEY STAGES OF CEFPRO'S FINTECH LEADERS RESEARCH AND METHODOLOGY

✔ Extensive research with past respondents of Fintech Leaders, industry professionals, and key Fintech Leaders Advisory Board members

✔ One-to-one and group discussions with Fintech Leaders Advisory Board members to define the survey scope, market participants, and key industry categories

✔ Sign-off of the final survey by CeFPro's research team and members of the Advisory Board

✔ 'Push survey' campaign to industry professionals, as well as members of the Fintech Leaders Advisory Board, gathering more than 1793 eligible votes

✔ 30 individual interviews with Fintech Leaders Advisory Board members, based on findings of the survey results and key themes in the industry

✔ Review of data provided by vendors and consultants, including case studies, insights, and interviews

✔ Hundreds of independent reference checks by CeFPro analysts to validate data

FINTECH LEADERS 2021: TOP 50 OVERALL ECOSYSTEM RANKINGS

KEY HIGHLIGHTS

- IBM retains top spot thanks to its diversity and range of fintech offerings
- Moody's Analytics, Oracle, and SAS retain top five positions
- Wolters Kluwer, Refinitiv, and MetricStream make significant gains to jump into the top ten
- Moody's Analytics moves to second spot from fifth

HIGHLIGHTS OF THE RANKING MOVEMENTS INCLUDE:

- Microsoft Corporation leaps 34 places to 13th position
- AxiomSL enters the top 50, ranked 21st position
- Wolters Kluwer jumps 10 places to 5th position
- RSA Archer leaps to 22nd place from 45th position
- Fiserv/First Data moves from 39th position to 23rd
- MSCI rises to 16th place from 33rd position

TOP 50

2021	2020		2021	2020	
1	1	IBM	26	7	Revolut
2	5	Moody's Analytics	27	26	Quantexa
3	3	Oracle	28	-	Equifax
4	2	SAS	29	24	Murex
5	15	Wolters Kluwer	30	-	Affirm
6	6	FIS	31	20	BlackRock
7	4	Bloomberg	32	-	Cisco
8	11	Refinitiv (formerly Thomson Reuters)	33	-	OneTrust Vendorpedia
9	9	Amazon/AWS	34	-	QRM
10	19	MetricStream	35	40	IHS Markit
11	10	Finastra	36	-	PayTM
12	17	SAP	37	-	LexisNexis
13	47	Microsoft Corporation	38	-	S&P Global Market Intelligence
14	13	FICO	39	-	MORS Software
15	21	Ant Financial	40	-	Kabbage
16	33	MSCI	41	-	Stripe
17	41	BAE Systems	42	12	PayPal
18	22	Google	43	-	MCO (MyComplianceOffice)
19	23	Experian	44	-	R3
20	-	Lombard Risk/Vermeg	45	18	Coinbase
21	-	AxiomSL	46	-	Comarch
22	45	RSA Archer	47	-	Clari5
23	39	Fiserv/First Data	48	-	Funding Circle
24	32	McKinsey & Co.	49	-	Moneytree
25	43	NICE Actimize	50	14	SoFi

FINTECH LEADERS 2021: NOTABLE MENTIONS AND RISING STARS

CLARI5

Clari5 is a bolt-on system that harnesses the power of automation, AI, and machine learning with real-time decisions. Clari5 has been recognized in a number of areas, such as customer experience and due diligence, though more specifically in enterprise fraud management and AML.

A new addition to CeFPro's Fintech Leaders top 50 best providers, Clari5 is a rising star with great potential. Its offerings are in line with the fintech opportunities, investments, and obstacles of the Fintech Leaders report.

COMARCH

Breaking into the Fintech Leaders top 50 through votes in a number of categories, Comarch is an established solution provider of innovative software and security hardware, as well as consulting services of security issues, IT infrastructure, and authentication.

Comarch is 'one to look out for' with offerings in line with the challenges and opportunities respondents to the Fintech Leaders survey highlighted, including cybersecurity, anti-fraud, and banking technology, including AI and machine learning.

EQUIFAX

Equifax has re-entered the Fintech Leaders top 30 with a blend of data, technology, and advanced analytics, expanding its traditional consumer credit base to include being a provider of insights to assist in better informed decisions. Recent collaborations with not-for-profit and leading financial institutions have also enforced its position as an organization that is expanding in fintech.

Equifax provides innovation in credit risk data and analytics, using AI patterns and methodology to provide better informed decisions in lending decisions and with consumers. Expansion and new applications in areas such as credit risk, analytics, fraud, and compliance provide new opportunities in fintech going forward.

EXPERIAN

Experian have entered Fintech Leaders top 20 for the first time, with a global presence across large markets including the USA, UK and Brazil and serving 1 billion+ consumers and 145 million+ businesses across multiple industry verticals.

Experian provides leading industry expertise, most notably recognized within the Fintech survey as leaders for their data, decisioning and analytical capabilities. They cement their place, and have been once again very highly regarded, as a leading player within credit risk, most notably for SME's and excelled within the areas of data management and modelling. Experian continue to make large strides in the Fintech space and are one to continue to watch out for in 2021 and beyond.

INSCRIBE

Inscribe is building a future where businesses can trust customers with minimal effort and with greater accuracy through its service by evaluating documents to find signs of fraud.

MIDDESK

Middesk (YC W19) offers business verifications, legal and regulatory checks, and industry classification products for companies selling to businesses.

Where trust between businesses used to rely on a handshake, building trust between companies today requires a new suite of tools that deliver complete and reliable data at scale. Middesk aims to redefine how businesses build trusted relationships.

QUANTEXA

Founded in 2016, Quantexa continues to make waves within the fintech arena through their use of advanced analytics and technology to integrate into organizations' networks. Their contextual decision intelligence technology in particular, which focuses on entity solution and network generation, enables Quantexa to effectively connect data together through multiple data sets and systems in an automated fashion.

Quantexa's key offerings, particularly around Anti-Fraud and Anti-Money Laundering, feature highly throughout the report as some of the key fintech investment areas for 2021 and beyond, as well as solutions for key fintech obstacles to overcome. Their services are very much aligned with the challenges and opportunities that have been highlighted through the FinTech Leaders report, including ranked in the top 30 and a number of the categories.

REPRISK

RepRisk utilizes both AI and machine learning and is moving from pure reputational risk into all aspects of non-financial risks. The company has been expanding its partnership with market data providers such as ICE, which has propelled it into exponential growth.

Born out of credit risk management, RepRisk systematically identifies and assesses material ESG risks to provide transparent, rules-based methodology and daily updates, ensuring consistent, timely, and actionable data at their fingertips.

SENTILINK

SentiLink verifies identities in real time using proprietary clustering technology and the latest machine learning techniques. Its platform enables partners – from top ten US banks to fintech companies – to provide their customers with a frictionless identity verification experience while stopping fraud before it occurs.

SentiLink's technology helps combat synthetic fraud, a crime in which fake identities are created and used to defraud financial institutions and government agencies. Its real-time API identifies fake people during the application process and prevents them from hurting your bottom line.

TISA

The Investing and Saving Alliance's (TISA) ambition is to improve the financial wellbeing of UK consumers by bringing the financial services savings industry together to promote collective engagement, to deliver solutions and to champion innovation for the benefit of people, our industry, and the nation.

TURN (TISA Universal Reporting Network) is an industry blockchain solution for the collection and dissemination of fund-related data. The overall aim of the solution is to increase market compliance, reduce regulatory and operational costs, and provide a better service to investors.