



CFA Institute



NATIONAL RESEARCH
UNIVERSITY

FINTECH SURVEY 2: HAS AI AND MACHINE LEARNING ADOPTION ADVANCED?

June 2020

FINTECH SURVEY 2: FOUR YEARS LATER

June 2020

The mission of CFA Institute is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

CFA Institute, with more than 170,000 members worldwide, is the not-for-profit organization that awards the Chartered Financial Analyst® (CFA) and Certificate in Investment Performance Measurement® (CIPM) designations. CFA®, Chartered Financial Analyst®, AIMR-PPS®, and GIPS® are just a few of the trademarks owned by CFA Institute. To view a list of CFA Institute trademarks and the Guide for the Use of CFA Institute Marks, please visit our website at www.cfainstitute.org.

© 2020 CFA Institute. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright holder. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional service. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

Contents

Introduction	1
Respondent Profile	3
Summary of results	4
Survey results	5
Summary	23



This page intentionally left blank

Introduction

CFA Institute has been actively monitoring the development of fintech in the investment management industry for a number of years. From robo-advisers to marketplace lending, distributed ledgers to artificial intelligence (AI) and machine learning (ML), the past decade has seen many attempts to disrupt the profession of managing money. As with any new technology, understanding what is real and what is hype is a large part of the challenge.

In 2016, CFA Institute conducted a Financial Technology (FinTech) Survey¹ of its members to ascertain the level of penetration of fintech into the financial services industry at that time. Furthermore, the survey attempted to gather member insight into future challenges faced and imposed by this technology. The respondents showed a high awareness of fintech in 2016, with a particular focus on automated tools, such as robo-advisers and marketplace lending. Unsurprisingly, asset management was considered to be the sector that would be most affected by automated financial advice tools, followed by banking, securities, and insurance. These findings were intuitive given the increasing proliferation of robo-advisers at the time.

According to respondents, robo-advisers and marketplace lending were the technologies that would have the greatest impact on the financial services industry in the short term, ahead of blockchain. It appeared at the time that the lack of proven use cases for blockchain technology in the investment management industry meant that automated tools would continue to dominate industry concerns. Strong regional differences could be observed, however, when it came to the short-term impact on the financial services industry. In the Americas, robo-advisers were judged to promise the greatest impact on the industry, whereas in the Asia-Pacific region, the plurality of respondents thought that marketplace and peer-to-peer (P2P) lending would have the greatest impact on the financial services industry. Blockchain dominated the respondents' thoughts at the longer five-year time horizon. Clearing and settlement, alternative currencies, and commercial banking were the top three areas identified as the most likely use cases of blockchain technology.

Since this survey, the first wave of fintech hype has receded. Robo-advisers have become part of the landscape and have broadly disappointed both in terms of their ability to make

¹ *FinTech Survey Report* (CFA Institute, April 2016), <https://www.cfainstitute.org/-/media/documents/survey/fintech-survey-report-2016.ashx>.

money as well as their ability to disrupt the industry. Marketplace lending (i.e., P2P lending) seems to have similarly disappointed in its ability to extend credit at scale or to estimate credit risk in a materially superior way to incumbents. More than a decade since bitcoin arrived in 2009, blockchain still seems to be a solution in search of a problem, although it has spawned derivative technologies with their own hype cycle, such as initial coin offerings (ICOs)² and central bank digital currencies.

What has occurred is that far from being disruptive — in the Clay Christensen³ sense of the word — fintech has proven to be sustaining. That is, large incumbents with significant resources have largely been able to absorb the useful innovations produced by fintech companies and have integrated them into their own processes. This trend of large incumbents buying in innovation and depriving the economy of potential new competitor firms is part of a larger and more important phenomenon — the decline of public equity. This topic is discussed in detail in the CFA Institute 2018 report “Capital Formation: The Evolving Role of Public and Private Markets.”⁴ It is also something that was observed in the initial fintech revolution — the rise of algorithmic and high-frequency trading.⁵

CFA Institute has covered this process as it relates to fintech, in particular, in its 2019 report “AI Pioneers in Investment Management,”⁶ which surveyed investment management industry practitioners on a case-study basis to ascertain what truly were the AI applications enabled by ML and AI. The report found that relatively few investment professionals were exploiting AI and big data applications in their processes. As of 2019, the report found that only 10% of portfolio managers were using AI or ML techniques, while the majority relied on spreadsheets and desktop market data tools (e.g., Bloomberg). The motivation of the report was to use the experience of managers at the AI vanguard as case studies for the industry.

Their experience showed three core use cases of AI and ML techniques. First, these techniques could be used for natural language processing and computer vision based on AI and ML to process and interpret alternative data, such as speech, video, and audio. This

² *Initial Coin Offerings — Too Soon or Too Late* (CFA Institute, November 2019), <https://www.cfainstitute.org/-/media/documents/article/position-paper/initial-coin-offerings.ashx>.

³ “Disruptive Innovation,” Christensen Institute, <https://www.christenseninstitute.org/disruptive-innovations/>.

⁴ Sviatoslav Rosov, “Capital Formation: The Evolving Role of Public and Private Markets,” CFA Institute (29 November 2018), <https://www.cfainstitute.org/en/advocacy/policy-positions/capital-formation>.

⁵ Sviatoslav Rosov, “What Fintech Can Learn from Decline and Reinvention of High-Frequency Trading,” *Market Integrity Insights* (blog), CFA Institute (1 August 2017), <http://blogs.cfainstitute.org/marketintegrity/2017/08/01/what-fintech-can-learn-from-decline-and-reinvention-of-high-frequency-trading/>.

⁶ Larry Cao, “AI Pioneers in Investment Management,” CFA Institute (30 September 2019), <https://www.cfainstitute.org/en/research/industry-research/ai-pioneers-in-investment-management>.

analysis could be used, for example, in sentiment analysis. Second, they could use ML to improve the effectiveness of various algorithms used in the investment process. This can be, for example, an application of ML and advanced statistical techniques to perform know-your-customer (KYC) and anti-money-laundering tasks. Third, AI and ML techniques could be used to process large unstructured data more efficiently. This can involve the use of algorithms to find patterns in large data sets without human guidance.

The report highlighted five significant hurdles to the adoption of fintech: cost, talent, technology, leadership vision, and time. These are the same hurdles that could be observed for robo-advisers, marketplace lending, and blockchain, or any new technology. Senior management that distributes scarce resources must be convinced that pursuing fintech has a positive cost-benefit trade-off. To date, relatively few practitioners in the financial services industry have decided that the cost-benefit trade-off for any of these technologies has been worth their deployment at scale.

To understand whether this trade-off analysis has changed, or is at least moving in a positive direction, CFA Institute has partnered with the Higher School of Economics in Moscow to conduct a follow-up fintech survey to determine whether the level of penetration of fintech into the financial services industry has advanced and, if so, by how much. The 2020 survey was not a direct reproduction of the 2016 survey — the questions posed in both surveys are included in the appendix.

Respondent Profile

The survey was sent to an opt-in pool of CFA Institute members with a declared interest in the fintech topic. The survey opened on the 6th of January 2020 and closed on the 14th of January 2020. 3,302 members were invited to participate in the survey and between 217 and 260 valid responses were received (not every question needed to be answered to submit the survey form) for a response rate of around 7-7.5% and a margin of error of $\pm 4.0\%$

In response to the 2020 CFA Institute Fintech survey, 508 survey forms were submitted, which equaled a response rate of 15%. Approximately half of these survey forms, however, had only demographic data about the participants and no responses to the questions. As a result, between 217 and 260 data points were usable, depending on which categories were being analyzed.

Respondents by region were as follows: 282 from the Americas (56%); 138 from Europe, the Middle East, and Africa (EMEA) (27%); and 88 from Asia Pacific (17%).

Coincidentally, this proportional breakdown is exactly the same as it was for the 2016 edition of the survey. The experience level of the respondents (as proxied by length of time as a CFA® charterholder) was diverse, with 29% having held the charter for between 2 and 5 years, 22% for 6–10 years, 16% for 11–15 years, and 33% for more than 15 years. The amount of job experience was also diverse, with 17% having less than 3 years' experience, 24% having between 3 and 7 years' experience, 28% having between 8 and 15 years' experience, and 32% having more than 15 years' experience.

Approximately half of the respondents (253) identified their employment as being in investment management, and approximately 15% of respondents are working in the finance department, 10% in risk management, and an additional 14% in “other” departments. In terms of company size, the respondents showed interesting diversity. Specifically, 39% of respondents work in firms with fewer than 50 employees, 21% in firms with 50–1,000 employees, 13% in firms with 1,001–5,000 employees, 6% in firms with 5,000–10,000 employees, and 21% in firms with more than 10,000 employees.

Of the approximately 217 to 260 valid responses (depending on the question), the demographic breakdown was largely similar to that noted for respondents by region. The largest single group of respondents were American investment management professionals with more than eight years' work experience who have held the CFA® charter for at least six years and work either for a small firm with fewer than 50 people or a large firm with more than 1,000 employees.

Summary of results

This survey provides three key takeaways. First, it is still the case that the majority or a significant plurality are not using big data analysis, ML, or AI in their sphere of business activity. This is the case across risk management, compliance, and the investment decision process. Of the respondents who are using big data analysis, it is often the case that they are in the investigation or consideration phase of using these tools. A relatively small minority is typically already deploying these tools. This finding is broadly consistent with the findings in the CFA Institute 2019 report “AI Pioneers in Investment Management.”⁷

Second, we did not find a significant difference in the rate or stage of deployment among the Americas, Asia-Pacific, and EMEA regions. Although the rankings of the three regions in terms of their state of deployment varied across the different questions, it did

⁷ Cao, “AI Pioneers in Investment Management,” <https://www.cfainstitute.org/en/research/industry-research/ai-pioneers-in-investment-management>.

not appear to do so in a systematic way. The most significant regional variation, instead, was seen in the response to the question of the suitability of existing local financial regulation to deal with fintech.

Third, large firms appeared to have an advantage in deploying fintech. Contrary to the perception of start-up “disruptors” posing a threat to incumbents, it appeared that only large firms could afford to dedicate the resources necessary to implement fintech methodologies that have uncertain cost–benefit trade-offs at this stage of their development.

Survey Results

1. To what extent, if any, is the risk control department in your firm using big data analysis and AI techniques for estimating risk (either operational risk, market risk, or regulatory risk)?
 - a. Investigating its use
 - b. In the process of implementing these tools
 - c. Using in limited applications
 - d. Widespread use
 - e. Not at all

Summary:

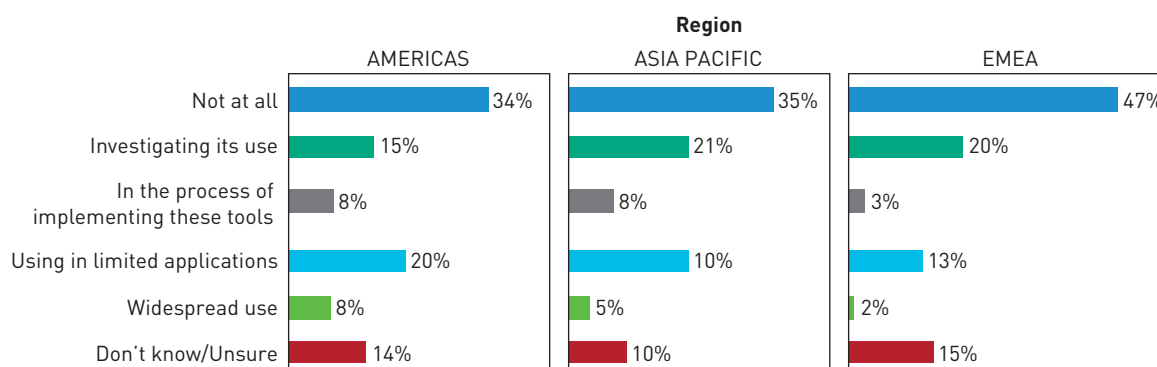
- Between 15% and 30% of respondents are using the tech in some capacity already.
- Another 15–20% is still investigating the potential use cases.
- EMEA is lagging behind across all dimensions.
- Half of investment management respondents are not using the technology at all.
- Larger firms tend to be further ahead in deployment.

The plurality of respondents across all three regions do not use big data analysis or AI techniques to estimate risk (figure 1). A relatively constant 10–15% do not know whether their firm is using these techniques, and 15–20% are investigating the use of these techniques to estimate risk operational, market, or regulatory risk.

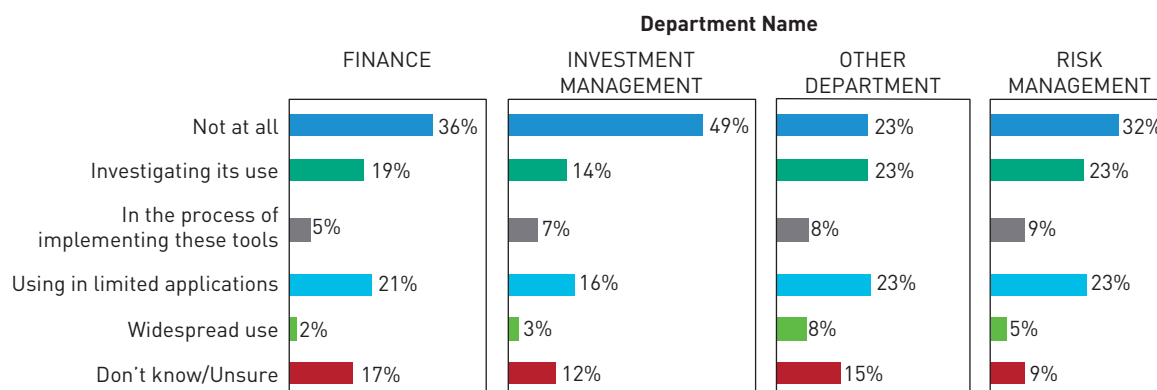
Looking at the proportion of respondents using these techniques in either a limited or widespread manner, we see that between 15% (EMEA) and 28% (Americas) of respondents are using the technology in some way. The Americas and Asia-Pacific respondents are similar with about 20% using these tools in a limited manner, and a small percentage (8% Americas, 4% Asia Pacific) is using them in a widespread manner.

EMEA respondents not only are lagging in terms of not using the technology at all (47% vs. 34% in Americas, 35% Asia Pacific) but also have noticeably fewer respondents using the technology in a limited (13% vs. 20% in Americas, 21% in Asia Pacific) or widespread (2% vs. 8% in Americas, 4% in Asia Pacific) manner.

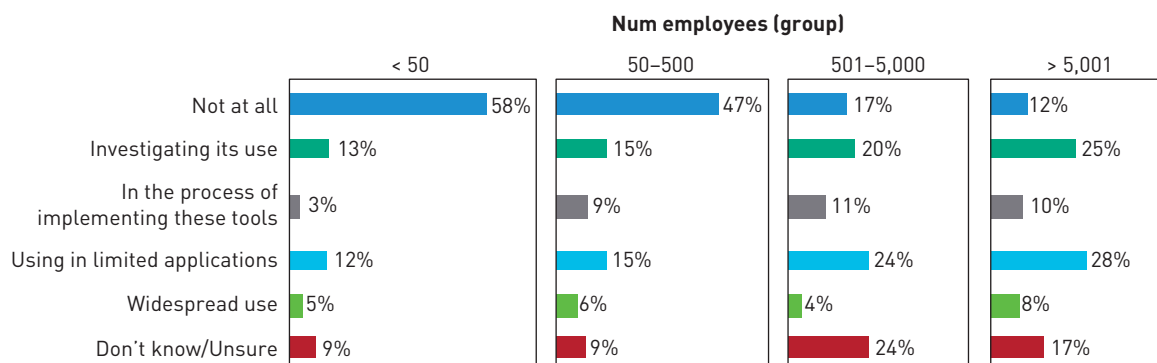
FIGURE 1. EXTENT TO WHICH THE RISK CONTROL DEPARTMENT IS USING BIG DATA ANALYSIS AND AI TECHNIQUES TO ESTIMATE RISK (N = 245)



The vast majority of respondents work in just four departments: finance, investment management, risk management, or a catchall “other” department (figure 2). Looking at the responses by department, it is interesting to note that investment management stands out as being the most negative in its approach to big data and AI — that is, almost half (49%) of respondents are not using this technology at all. This is likely because these respondents are mainly portfolio managers who focus on asset allocation, stock selection, and portfolio construction tasks rather than risk management. This finding suggests that they do not see a use case for big data and AI in the investment management process. In contrast to this finding, the use of this technology across the other departments was relatively similar without any significant differences in the patterns of responses.

FIGURE 2. USE OF AI ACROSS TYPES OF DEPARTMENTS (N = 216)

The analysis of responses by firm size presents an interesting stylized fact — that is, small firms (fewer than 500 people) are particularly hesitant to use big data and AI technology, likely because of the focused nature of boutique investment management firms as well as the resources and expertise needed to obtain value from big data and AI techniques (figure 3). It was clear in the responses that the larger firms are more advanced in the implementation of these tools, even accounting for the larger proportion of employees from large firms who are unaware of the status of big data and AI within their firm.

FIGURE 3. RESPONSES BY FIRST SIZE (N = 245)

2. Is the compliance department in your firm using fintech (e.g., blockchain, machine learning, etc.) tools in verifying information from counterparties?

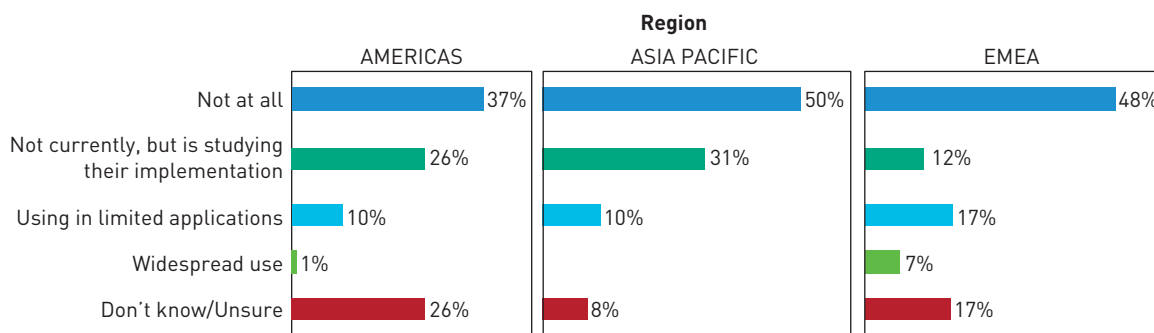
- a. Using in limited applications**
- b. Widespread use**
- c. Not at all**
- d. Not currently, but is studying their implementation**

[Text box] For answers (c) and (d), please provide a description of the type of tools used (e.g., blockchain, AI, big data analysis).

Summary:

- EMEA is ahead in deployment of counterparty verification tech.*
- Investment management does not appear to see a use case for this tech.*
- KYC checks the main focus.*

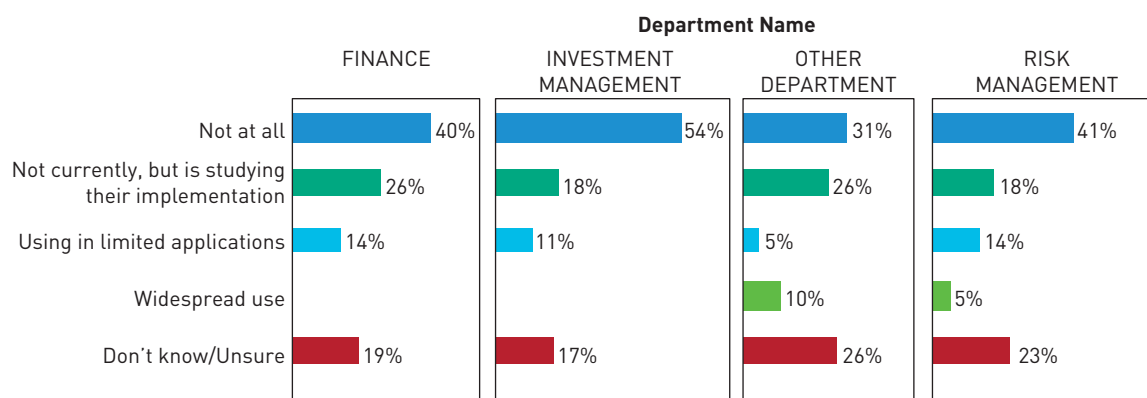
FIGURE 4. REGIONAL BREAKDOWN FOR USE OF FINTECH (N = 246)



The regional breakdown for use of fintech, such as blockchains or ML, to verify counterparty information is somewhat different from question 1, with respondents from the EMEA region reporting limited (17%) or widespread (7%) use of these technologies

(figure 4). In both cases, these figures are greater than the equivalents for the Americas or Asia Pacific where only 10% of respondents are using these technologies in limited applications, and around 26–31% are still at the investigation phase of implementation.

FIGURE 5. PROPORTION OF RESPONDENTS USING FINTECH TOOLS TO VERIFY COUNTERPARTY INFORMATION BY DEPARTMENT (N = 217)



The proportion of respondents using fintech tools to verify counterparty information varies by the department in which the respondents are employed (figure 5). First, it is clear again that investment management is the least interested in this technology: 54% of respondents do not use this technology and another 17% are not aware of its use. This leaves less than a third of investment management respondents either studying the implementation (18%) or using fintech in a limited manner (11%) to verify counterparty information. Respondents from the risk management and “other” departments seem to be those who are most advanced in the deployment of counterparty verification tech (5% and 10%, respectively).

The response breakdown by size of firm once again suggests that the larger firms (more than 500 employees) are more likely to have deployed (in a limited manner) fintech to verify information from counterparties.

The word cloud analysis provided by the open-ended textbox answers suggested that KYC checks are the focus of deployment for this technology (figure 7).

FIGURE 6. RESPONSE BREAKDOWN BY SIZE OF FIRM (N = 246)

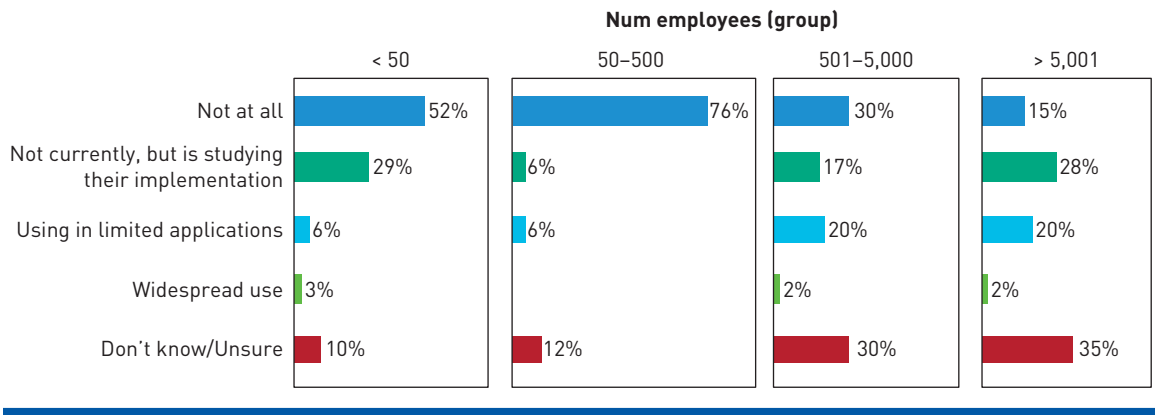


FIGURE 7. WORD CLOUD ANALYSIS



3. How are the risk and compliance departments in your firm monitoring positions in new instruments (e.g., cryptocurrencies and ICOs)?

- a. They are not monitored.
- b. They are monitored using existing tools.
- c. They are monitored using newly developed tools.
- d. We do not have such positions.

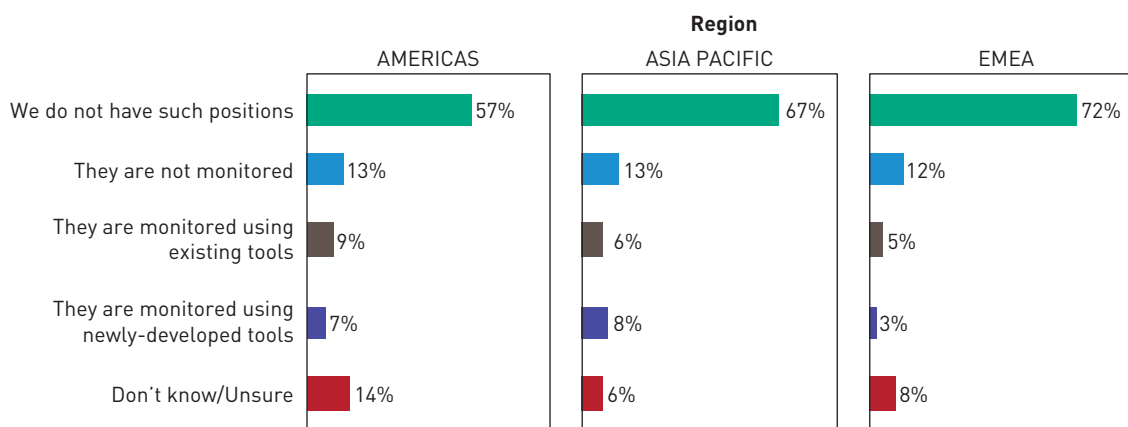
[Text box] For answer (c), please provide a brief description of the type of tools used.

Summary:

- *The vast majority of respondents do not have positions in new instruments, such as cryptocurrencies and ICOs.*
- *Very large firms are marginally more likely to do so.*

The most striking observation in the responses to this question, although not entirely unexpected, is that the vast majority (57–72%) of respondents do not hold positions in new instruments, such as cryptocurrencies or ICOs (figure 8). There is also little

FIGURE 8. RESPONDENTS WHO DO NOT HOLD POSITIONS IN NEW INSTRUMENTS BY REGION (N = 246)



variation regionally between the respondents who do hold such positions: just 12–13% of respondents with such positions do not monitor them. This observation that the vast majority of respondents do not hold ICO or cryptocurrency positions also manifests in the departmental breakdown (although it seems the finance department is marginally more active in this space; figure 9) and the firm size breakdown (although it seems that larger firms are more likely to have positions; figure 10).

FIGURE 9. RESPONDENTS WHO DO NOT HOLD POSITIONS IN NEW INSTRUMENTS BY DEPARTMENT (N = 217)

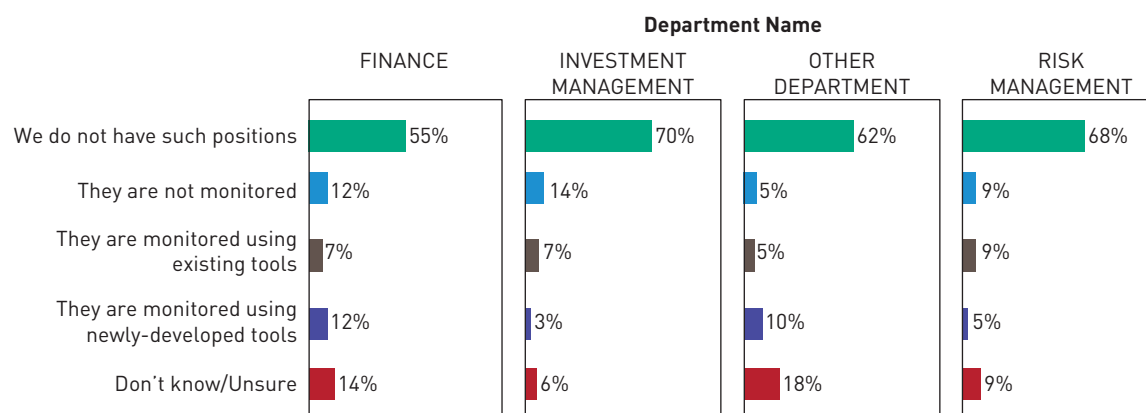
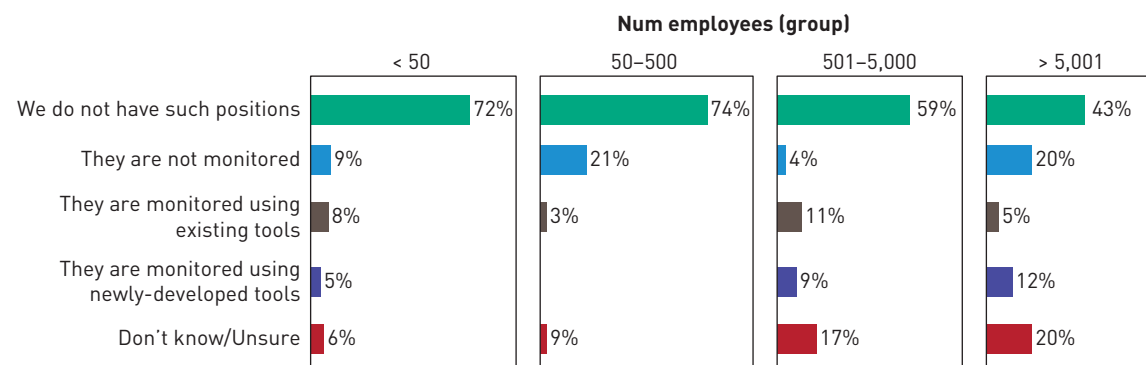


FIGURE 10. RESPONDENTS WHO DO NOT HOLD POSITIONS IN NEW INSTRUMENTS BY SIZE OF FIRM (N = 246)



4. Do you believe that AI-based decision-making frameworks need to be treated different from traditional human-based processes?

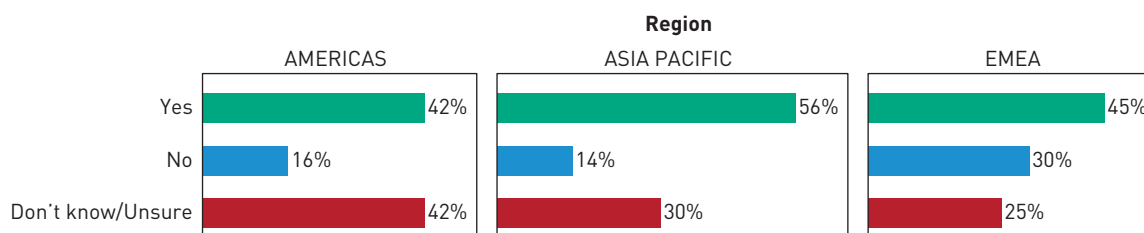
- a. Yes
- b. No

[Text box] For those who answer (b), please elaborate on how they should be different.

Summary:

- Respondents show high levels of uncertainty about how AI-based decision-making frameworks should be treated.
- The plurality thinks new thinking will be required.
- Respondents from EMEA and risk management departments seem most comfortable using the existing frameworks.

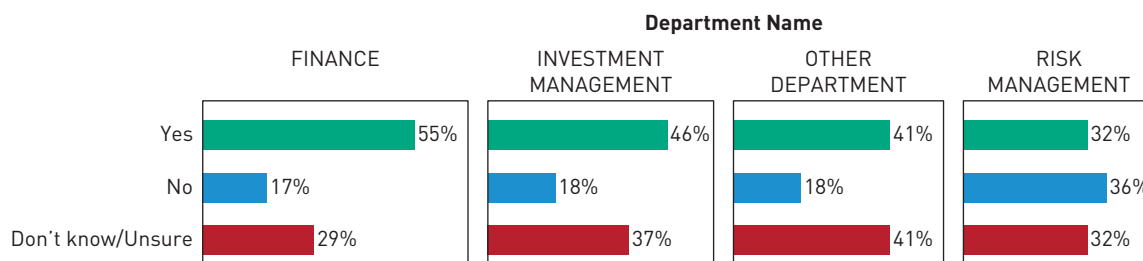
FIGURE 11. WHETHER AI-BASED DECISIONS SHOULD BE TREATED DIFFERENT FROM TRADITIONAL HUMAN DECISIONS (N = 246)



Two interesting observations can be made about the regional breakdown of respondents to the question of AI-based decision-making frameworks. First, respondents show a high degree of uncertainty around this topic with between 25% (EMEA) and 42% (Americas) being unsure whether AI-based decisions need to be treated different from traditional human decisions. Second, of those who answered either “yes” or “no,” we see a much greater divergence in responses in the Asia Pacific (56% want a new framework, 14% do not) relative to EMEA (45% want a new framework, 30% do not). EMEA respondents

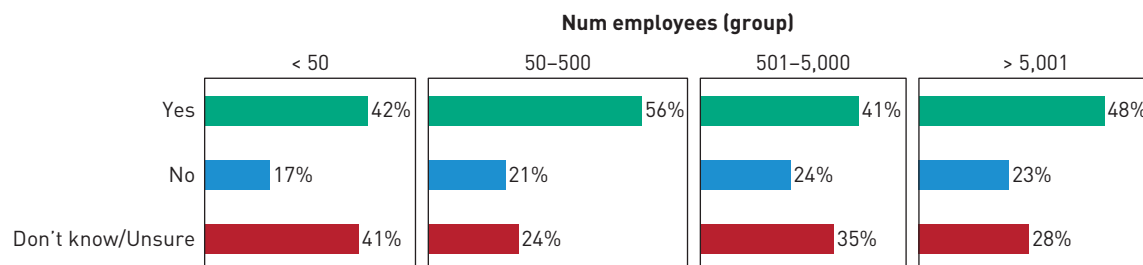
appear to be the most comfortable with the transferability of their decision-making frameworks from human-based to AI-based decision making.

FIGURE 12. WHETHER AI-BASED DECISIONS SHOULD BE TREATED DIFFERENTLY BY DEPARTMENT (N = 217)



It is also noticeable that respondents from risk management departments also have a relatively high confidence in existing frameworks (36% see no need for a new framework, compared with 17–18% in finance, investment management, or other departments; figure 12).

FIGURE 13. WHETHER AI-BASED DECISIONS SHOULD BE TREATED DIFFERENTLY BY FIRM SIZE (N = 246)



Finally, it also is interesting that little variation exists in the responses by firm size (figure 13).

The world cloud analysis for the open-ended textbox answers suggests that respondents believe humans must still be required and at the center of any AI-based decision making to ensure that risk is mitigated and to supervise and monitor all AI-based outcomes



© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

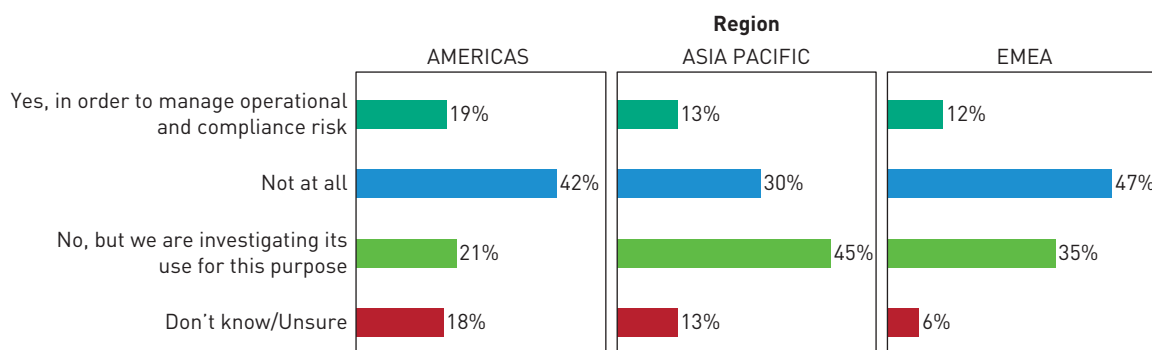
5. Does your firm use big data analysis to predict client behavior?

- a. Yes, in order to manage operational and compliance risk.
- b. Not at all.
- c. No, but we are investigating its use for this purpose.

Summary:

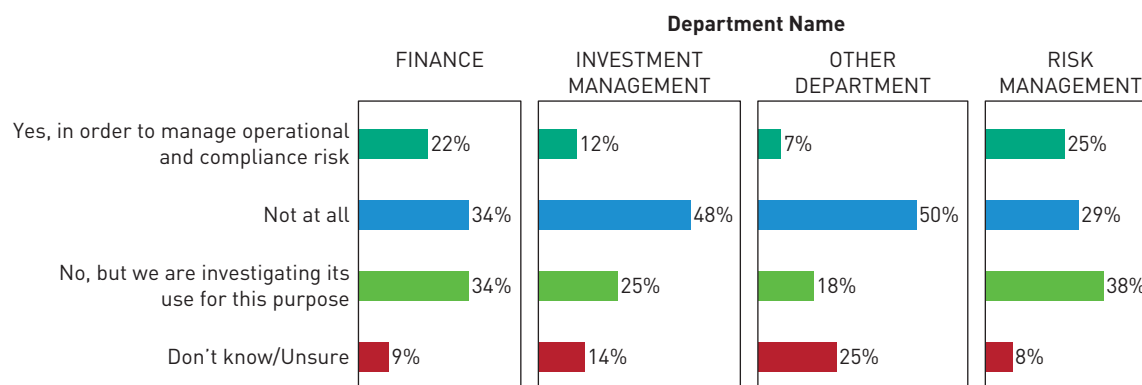
- The overwhelming majority of respondents do not use big data analysis to predict client behavior, yet.
- However, 12–19% are using it to manage operational and compliance risk, and an additional 20–45% are investigating its use.
- Approximately one-quarter of respondents in risk management and finance functions are using this kind of analysis already.
- Larger firms (more than 5,000 employees) are most likely to be using this tech.

FIGURE 15. USING BIG DATA ANALYSIS TO PREDICT CLIENT BEHAVIOR BY REGION (N = 260)



Survey respondents seem bifurcated on the issue of using big data analysis to predict client behavior (figure 15). Between 30% (Asia Pacific) and 47% (EMEA) of respondents do not use these techniques at all, whereas 40% (Americas) to 58% (Asia Pacific) are either investigating their use or applying them already.

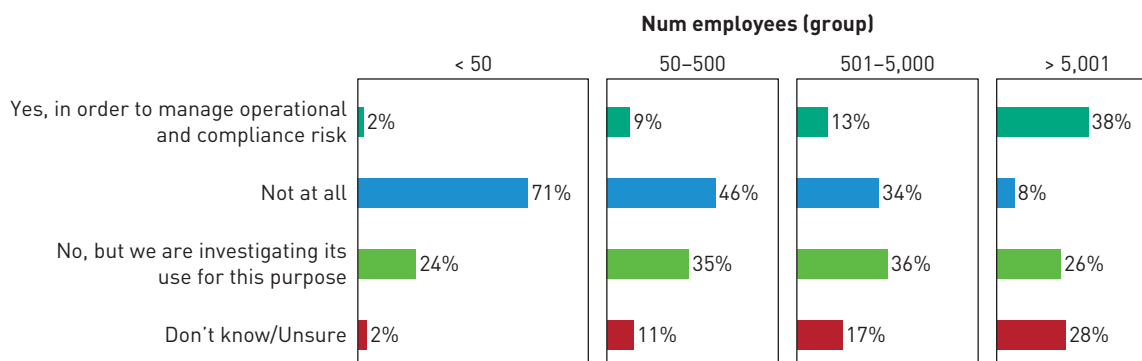
FIGURE 16. USING BIG DATA ANALYSIS TO PREDICT CLIENT BEHAVIOR BY DEPARTMENT (N = 223)



Intuitively, the highest usage of big data to analyze client behavior can be seen among respondents from the finance and risk management functions (22% and 25%, respectively), whereas only 12% of respondents working in investment management do so (figure 16).

Finally, it is striking that respondents from the largest firms in our sample are using big data most intensively (figure 17). Once again, we see that deploying fintech in practice appears to require resources that only large firms can afford.

FIGURE 17. USING BIG DATA ANALYSIS TO PREDICT CLIENT BEHAVIOR BY FIRM SIZE (N = 260)



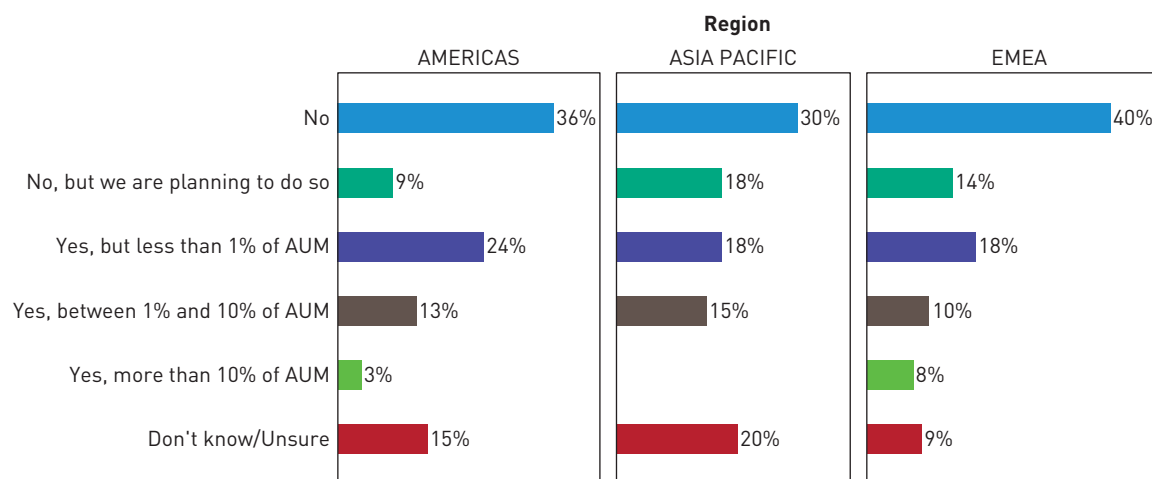
6. Does your firm invest into fintech firms or other fintech investment opportunities?

- a. Yes, but less than 1% of AUM.
- b. Yes, between 1% and 10% of AUM.
- c. Yes, more than 10% of AUM.
- d. No.
- e. No, but we are planning to do so.

Summary:

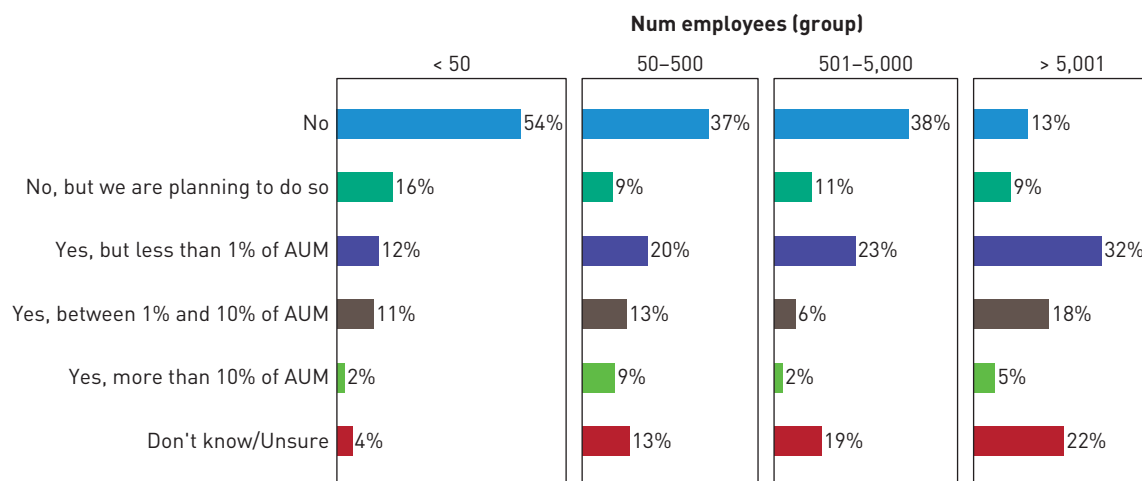
- The plurality of respondents do not invest into fintech firms or other fintech investment opportunities.
- Around one-fifth of respondents have invested up to 1% of assets under management (AUM), and another 10–15% of respondents have invested up to 10% of AUM.
- Very large firms (more than 5,000 people) are most active in this space.

FIGURE 18. FIRMS INVESTING IN FINTECH OR OTHER FINTECH INVESTMENT OPPORTUNITIES BY REGION (N = 260)



Of those respondents that are investing into fintech firms or other fintech investment opportunities, the regional breakdown shows a fairly consistent 18–24% of respondents have invested less than 1% of AUM (figure 18). This finding suggests that around one-fifth of respondents have dipped their toe into fintech investment. Another 10–15% of respondents have invested up to 10% of AUM, with only single-digit percentages in EMEA (8%) and the Americas (3%) having invested more a greater share.

FIGURE 19. FIRMS INVESTING IN FINTECH OR OTHER FINTECH INVESTMENT OPPORTUNITIES BY FIRM SIZE (N = 260)



We also observed that the larger the firm size the more likely it is that it is investing relatively more AUM into fintech investment opportunities (figure 19). Although 54% of firms with fewer than 50 employees are not investing in fintech at all, this number goes down to 37–38% for firms with between 50 and 5,000 employees, and down to 13% for firms with more than 5,001 employees. Although 55% of firms with more than 5,001 employees have invested at least 1% of AUM, this proportion is 31% for firms with between 501 and 5,000 employees, and 42% for firms with between 50 and 500 employees.

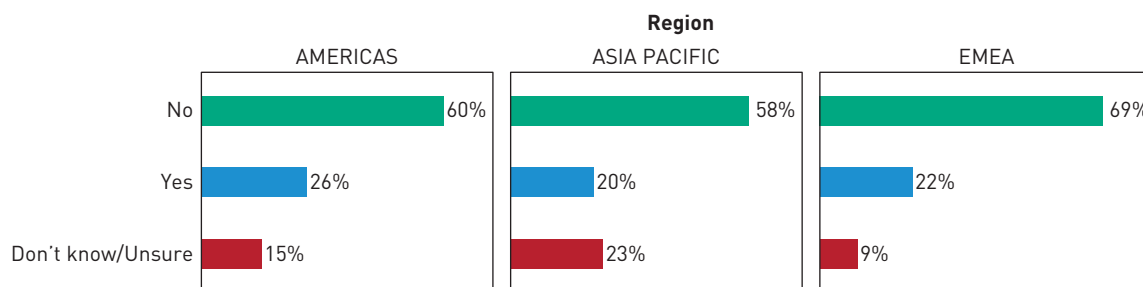
7. Does your firm use big data analysis and machine learning techniques to conduct market research that leads to investment decisions?

- a. Yes
b. No

Summary:

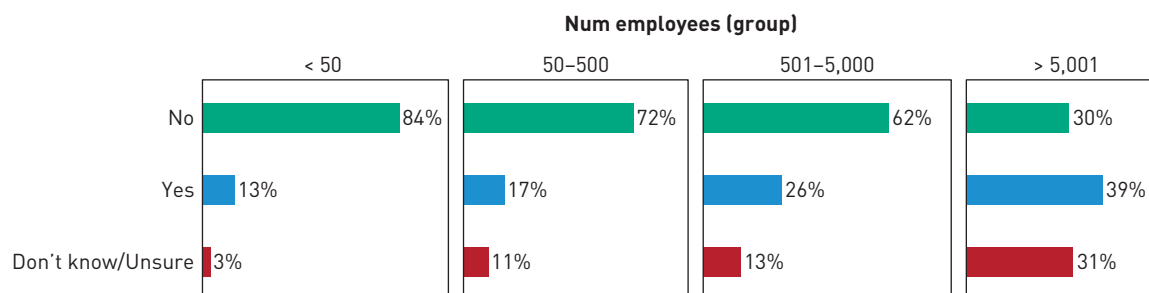
- Between 20% and 26% of respondents use big data analysis and ML techniques to conduct market research that leads to investment decisions. Between 58% and 69% do not.
- Large firms (501–5,000 employees) and very large firms (more than 5,000 employees) are more active in using these techniques than small firms.

FIGURE 20. FIRMS USING BIG DATA ANALYSIS AND ML TECHNIQUES TO CONDUCT MARKET RESEARCH BY REGION (N = 258)



The use of big data analysis and ML techniques to conduct market research is one of the key use cases for the technology in investment management (figure 20). In particular, AI and ML techniques open the possibility of analysis of alternative and unstructured data that otherwise is not accessible. Only a minority of between 20% (Asia Pacific) and 26% (Americas) of the respondents, however, are taking advantage of this technology to conduct market research.

FIGURE 21. FIRMS USING BIG DATA ANALYSIS AND ML TECHNIQUES TO CONDUCT MARKET RESEARCH BY FIRM SIZE (N = 258)



A noticeable skew sees large companies being more likely to adopt these technologies in pursuit of market research (figure 21). In fact, the plurality (39%) of firms with more than 5,001 employees are using big data and ML to conduct market research. This proportion falls as the size of the firm measured by the number of employees falls, such that only 13% of firms with fewer than 50 employees use big data and ML to conduct market research.

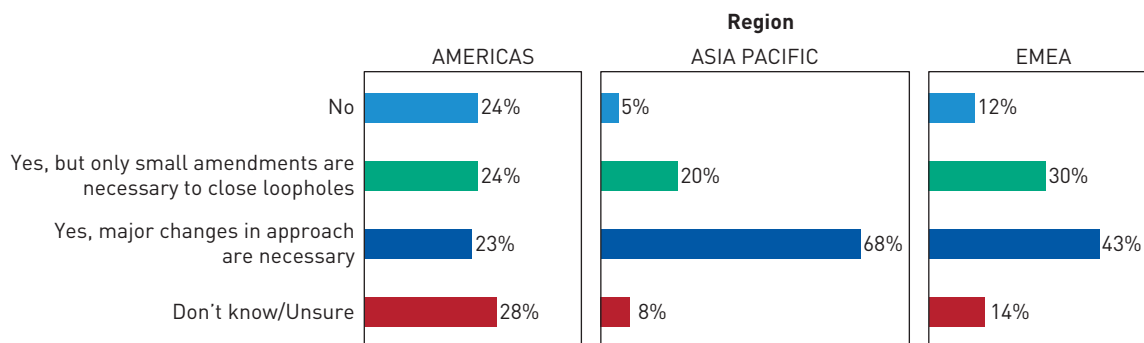
8. Do you think the regulator in your home jurisdiction needs to create new regulations to manage the rise of new technologies in financial services?

- a. Yes, but only small amendments are necessary to close loopholes.
- b. Yes, major changes in approach are necessary.
- c. No.

Summary:

- All regions agree that changes to regulations are necessary. Asia-Pacific respondents, however, are particularly certain that major changes to regulations are necessary to manage the rise of new technologies in financial services.
- The highest proportion of respondents who think existing regulations are sufficient are in the Americas (24%).

FIGURE 22. WHETHER REGULATORS SHOULD PURSUE A TECHNOLOGICALLY AGNOSTIC APPROACH TO FINANCIAL REGULATION BY REGION (N = 260)



CFA Institute previously has argued for regulators to pursue a technologically agnostic approach to financial regulation.⁸ That is to say, regulations should promote market integrity, market fairness, and strong investor protections, irrespective of the technical manifestation of the financial service in question. The consensus among regulators has been that this is the correct approach but implementing it would require certain adjustments to avoid technical loopholes and inconsistencies being used to drive regulatory arbitrage.

Responses to this question show the largest regional variation of any of the survey questions (figure 22). Specifically, it is striking that 68% of respondents from the Asia-Pacific region think their existing regulations are not at all sufficient for managing the rise of new technologies in the financial services industry and require major changes. An additional 20% think only small changes are necessary, but only 5% of respondents think existing regulations are fit for purpose. Respondents in EMEA are more confident in their existing regulatory regime, with 42% thinking regulation can be unchanged or only amended slightly to correctly manage the rise of new financial technologies. Respondents from the Americas have the least appetite for large changes in regulations to deal with fintech: only 23% of respondents want to see significant amendments, whereas 48% are happy with existing or slightly amended regulations.

⁸ Sviatoslav Rosov and Rhodri Preece, "Joint Committee Discussion Paper on Automation in Financial Advice," CFA Institute (4 March 2016), <https://www.cfainstitute.org/-/media/documents/comment-letter/2015-2019/20160304.ashx>.

Summary

The results of our second fintech survey suggest that the fintech revolution has been somewhat harder and slower to adopt than first imagined. Rather than rapid adoption of new technologies by agile start-ups, we instead have seen a slow and piecemeal adoption of certain use cases by very large firms with excess resources available to devote to uncertain technological experimentation. These findings are consistent with other aspects of CFA Institute survey research in the past several years.

It can be argued that we are only at the end of the first phase of this process. With the initial wave of hype deflated, large companies are slowly wading through fintech's promise use case by use case and adoption is occurring according to strict cost-benefit trade-offs. Smaller firms, in contrast, are limited in their ability to deploy resources on complex, costly, and uncertain fintech use cases.

For the future, we might expect three key nonmarket drivers for implementing fintech in the investment industry: (1) strong regulation initiatives, (2) rapid changes in consumer behavior, and (3) a high penetration of e-commerce and digitization worldwide after the Covid-19 crisis passes.



CFA Institute

Author

Sviatoslav Rosov, PhD, CFA

Contributors

Vasily Solodkov, PhD

Veronika Belousova, PhD

Alexander Kudrin, PhD

Dmitry Ryabykh, CFA

Pavel Shalnov, PhD

Mikhail Sukhov, PhD

Olivier Fines, CFA

Anas Ben Chekroun

Kurt Schacht, CFA

Gary Baker, CFA

THE AMERICAS

(800) 247 8132 PHONE (USA and Canada)

+1 (434) 951 5499 PHONE

+1 (434) 951 5262 FAX

915 East High Street

Charlottesville, VA 22902-4868, USA

292 Madison Avenue

2nd Floor

New York, NY 10017-6323, USA

ASIA PACIFIC

+852 2868 2700 PHONE

+852 2868 9912 FAX

23/F, Man Yee Building

68 Des Voeux Road

Central, Hong Kong SAR

Si Wei (Beijing) Enterprise Management Consulting Co. Ltd.

Unit 5501, 55/F China World Tower B

No. 1 Jianguomenwai Avenue, Chaoyang District

Beijing, 100004, China

CFA Institute India Private Limited

702, 7th Floor, A Wing

One BKC Tower, Bandra Kurla Complex, Bandra (E) Mumbai 400 051,
Maharashtra, India

EUROPE, MIDDLE EAST, AND AFRICA

+44 (0) 20 7330 9500 PHONE

+44 (0) 20 7330 9501 FAX

67 Lombard Street

7th Floor

London EC3V 9LJ

United Kingdom

Rue du Champ de Mars, 23

1050 Brussels, Belgium

Al Maqam Tower, 7th Floor

ADGM Square, Al Maryah Island

Abu Dhabi, United Arab Emirates



CFA Institute

www.cfainstitute.org
info@cfainstitute.org