

ORACLE + Savanta:

# Money and Machines: 2021 Global Study

People now trust robots more than humans to manage money. What does this mean for the future of finance, and what role should technology play in helping with our finances at home and at work?



# Foreword

---

As humans, irrationality is embedded in our DNA. So, naturally, when it comes to making financial choices – both at home and at work – things can get complicated.

I know this with great confidence after spending the better part of two decades helping people master their money. I've been a financial journalist in major newsrooms, written three books on the topic, coached everyday people through their financial struggles, and interviewed thousands of experts for a deeper understanding of our relationship with money.

Insecurity and anxiety can overshadow our ability to make confident choices. On the flip side, some of us have overconfidence which can lead to too much risk-taking and failure. Others may struggle with financial literacy and can't save, much less invest.

We have overwhelming feelings about money for reasons that are too long to list. As a result, we feel challenged to make the best financial choices related to planning, saving, paying off debt, and investing. And I don't just see this in people's personal finances. Many business leaders I speak with also struggle with managing budgets, approvals, financial planning and reporting on top of their day-to-day activities. The truth is, managing finances can be hard.

This emotionally-charged relationship with money predates our generation, but has definitely been exacerbated by the COVID-19 pandemic. Many are left unsure they can trust themselves to make wise money moves. More than that, some aren't even sure they trust the experts, such as personal finance advisors or corporate finance professionals.

But here's the better news: Not all is lost. In fact, by virtue of the world we live in today, and with the advances in technology, there is so much to gain. Technology – specifically AI and robots - is facilitating and enhancing our financial lives in unprecedented ways and, as the latest Oracle Money & Machines global survey suggests, we're

not only benefiting from it, we are eager for more of it. Two in three people, in fact, say they would trust robots more than humans to manage their finances. And 8 in 10 people think robots will replace finance professionals in the coming years.

Personally, I love answering a series of online questions and having my robo-advisor create an optimal investment portfolio for me. And can we talk about taxes? My CPA can perform clients' taxes in half the time and at a consistent efficiency unmatched by humans, thanks to automation capabilities within some of today's best financial software. For me, it means a maximized and speedier refund.

With these changes come opportunity. Will robots upend and replace the entire finance world? Not even close. While AI can provide us with unbiased data to provide efficiency and efficacy both in our personal and professional lives, finance professionals will increasingly serve the important role of being, well, human. People still look to finance professionals to do the things that robots can't – creating relationships, negotiating, understanding our unique goals, and making major decisions. Together, the two forces can help to rebuild trust in ourselves and the financial system and help to simplify our financial lives as the consumers, investors and business leaders of tomorrow.

*Farnoosh Torabi, personal finance expert and host of the [So Money](#) podcast.*



# Introduction

---

Money. On paper it all seems black and white - a balance sheet in the professional world and a bank account in our personal lives - but the reality is very different.

The truth is: money is not about finances. It's about emotions. It's about deeply held beliefs. And it's personal. Very personal. Money is survival, opportunity, freedom, status and power. In fact, 54% of consumers globally believe their financial situation defines their self-worth.

Our deep, subconscious and often irrational relationship with money affects every aspect of how we think about and manage money in our personal and professional lives. It has always been that way, but it might be about to change.

New technologies – from artificial intelligence and digital assistants to blockchain and analytics – have reached the mainstream and are now impacting our relationship with money at home and at work. As our trust in these technologies grows, consumers and business leaders will need to consider the role of AI and robots in managing money in our personal and professional lives.

To explore the impact of technology on our relationship with money, Oracle partnered with one of America's leading personal finance experts, Farnoosh Torabi, and Savanta, Inc. to survey more than 9,000 consumers and business leaders across 14 countries.



# Key numbers summary

The pandemic has drastically increased financial anxiety and sadness and has changed our relationship with money, causing us to turn to robots for help. As finance becomes increasingly automated, the role of finance professionals has changed.

**01**  
The impact of COVID-19 on consumers and professionals has been considerable.

**+103%**

Financial anxiety and sadness among consumers and business leaders more than doubled in 2020.

**02**  
Trust in humans has been broken. Robots are filling the gap.

**67%**

of people would trust robots more than humans to manage finance.

**59%**

of people now say they would trust a robot with finances more than themselves.

**03**  
The role of finance teams and financial advisors will never be the same.

**85%**

of people believe robots will replace finance professionals.

**46%**

believe robots will replace finance professionals in the next 5 years.

**04**  
It's time to embrace AI to manage finance.

**87%**

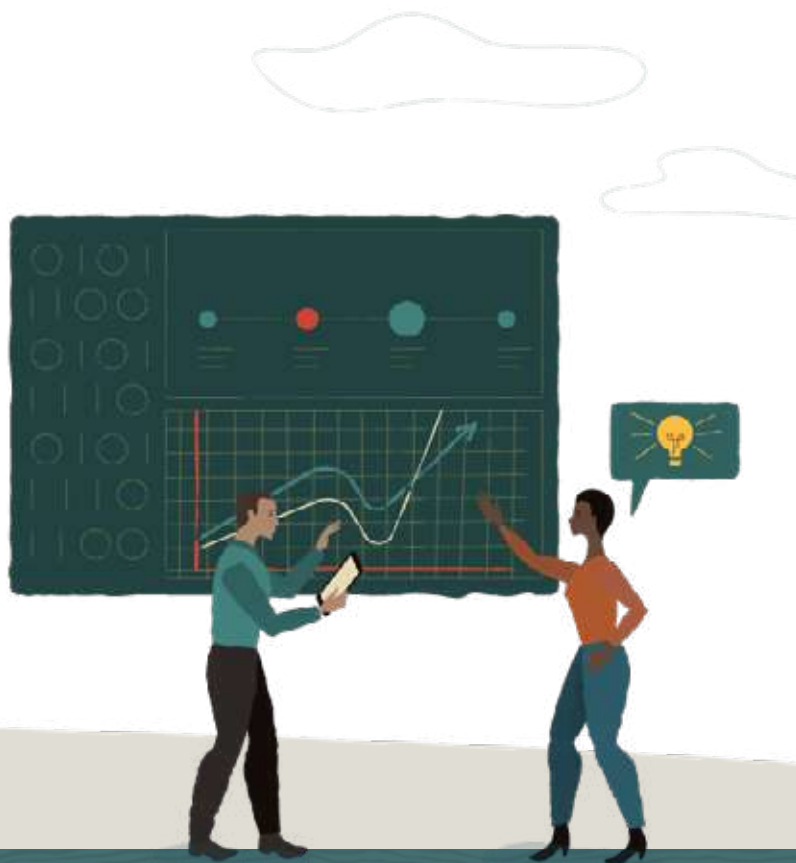
of business leaders believe that organizations that don't rethink finance processes will face risks, including:

- Falling behind competitors (44%)
- Inaccurate reporting (36%)
- More stressed workers (36%)
- Reduced employee productivity (35%)

# Survey Methodology

Research findings are based on a survey conducted by Savanta, Inc. between November 10 – December 8, 2020 with 9,001 global respondents from 14 countries (United States, United Kingdom, Germany, Netherlands, France, China, India, Australia, Brazil, Japan, United Arab Emirates, Singapore, Mexico, and Saudi Arabia).

The survey explored attitudes and behaviors of consumers and business leaders towards money, finances, budgets, and the role and expectations of artificial intelligence (AI) and robots in financial tasks and management.



## Respondents by country

US	1500	Japan	500
UK	1000	Singapore	500
Germany	1000	India	500
Netherlands	500	UAE	500
France	500	Saudi Arabia	500
Australia	500	Mexico	500
China	500	Brazil	500

## Respondent types

Consumers

70%

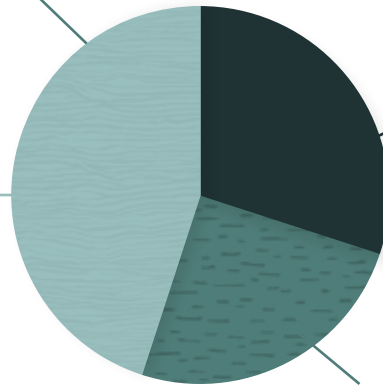
Business leaders

30%

Manager 45%

C-level 30%

VP/Director 25%

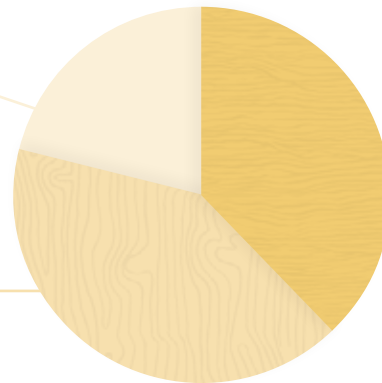


## Respondents by age group

56+ years old 21%

21 - 35 years old 38%

36 - 55 years old 41%



## Respondents by gender

Male

55%

Female

45%



# The effects of COVID-19

Financial anxiety, sadness and fear. The impact of COVID-19 on consumers and professionals has been considerable.

The unexpected and devastating spread of the COVID-19 pandemic across the globe has shaken people's outlook on life. One area that has been especially impacted is our relationship with money, both personally and professionally.

Simply put, in 2020, the levels of financial anxiety and depression doubled.

It's no surprise that 9 out of 10 of business leaders are fearful about the impact of COVID-19 on their organizations. Indeed, more than half (51%) are concerned that we will enter a deep recession from which recovery will be long and slow. Consumers are similarly pessimistic. Over three quarters (87%) are suffering from various degrees of financial anxiety, with more than a third (41%) saying their financial stress is keeping them awake at night.

Financial anxiety and sadness among consumers and business leaders more than doubled in 2020.



## Among business leaders

**186%**

Increase in anxiety and stress as a result of COVID-19.

**116%**

Increase in sadness as a result of COVID-19.

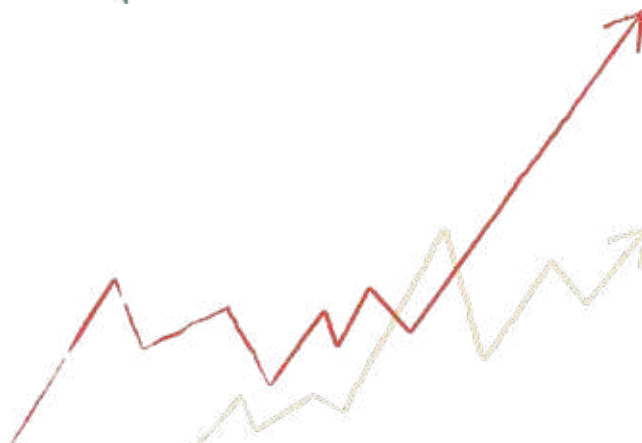
## Among consumers

**100%**

Increase in anxiety and stress as a result of COVID-19.

**70%**

Increase in sadness as a result of COVID-19.



**90%**

of business leaders are worried about the impact of COVID-19 on their organization.

Top 3 scenarios making business leaders anxious

Slow economic recovery/deep recession

**51%**

Losing key resources and tools due to budget cuts

**38%**

Organization going bankrupt

**27%**

**87%**

of consumers are experiencing financial fears as a result of the pandemic.

Top 3 scenarios making consumers anxious

Losing job

**39%**

Losing savings

**38%**

Never getting out of debt

**26%**





# Our evolving relationship with AI

Our trust in ourselves is broken; we now trust robots more than ourselves to manage our finances.

**67%** of people trust robots more than humans to help manage finances.

With so much uncertainty surrounding us, who and what we trust is changing, with the majority of people now trusting robots more than even themselves to manage finances.

The reality right now is that a staggering 77% of business leaders admit to having more trust in robots than in their own finance teams for help with financial-related tasks. And it's a very similar situation in our personal lives. A majority of consumers (63%) stated that they would trust

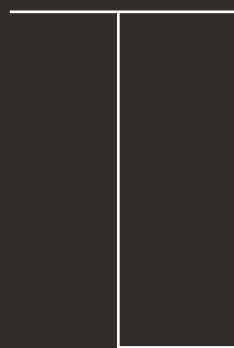
robots more than their personal financial advisors to effectively manage their financial affairs.

This increasing trust in robots goes further. More than half (53%) of consumers said they would trust robots over themselves to make financial-related decisions. And when business leaders were posed the same question, 73% of them felt the same way.

But how exactly do people think that robots can help? Business leaders said the top ways that robots can improve their work is by detecting fraud, creating invoices and cost/benefit analysis. Consumers also pointed to fraud detection as a key opportunity for robots to assist them, followed by reducing general spending and investing in the stock market.



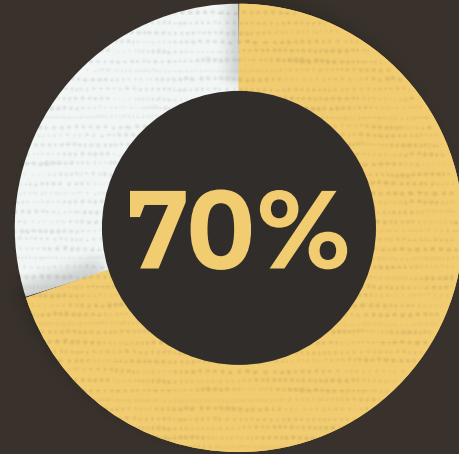
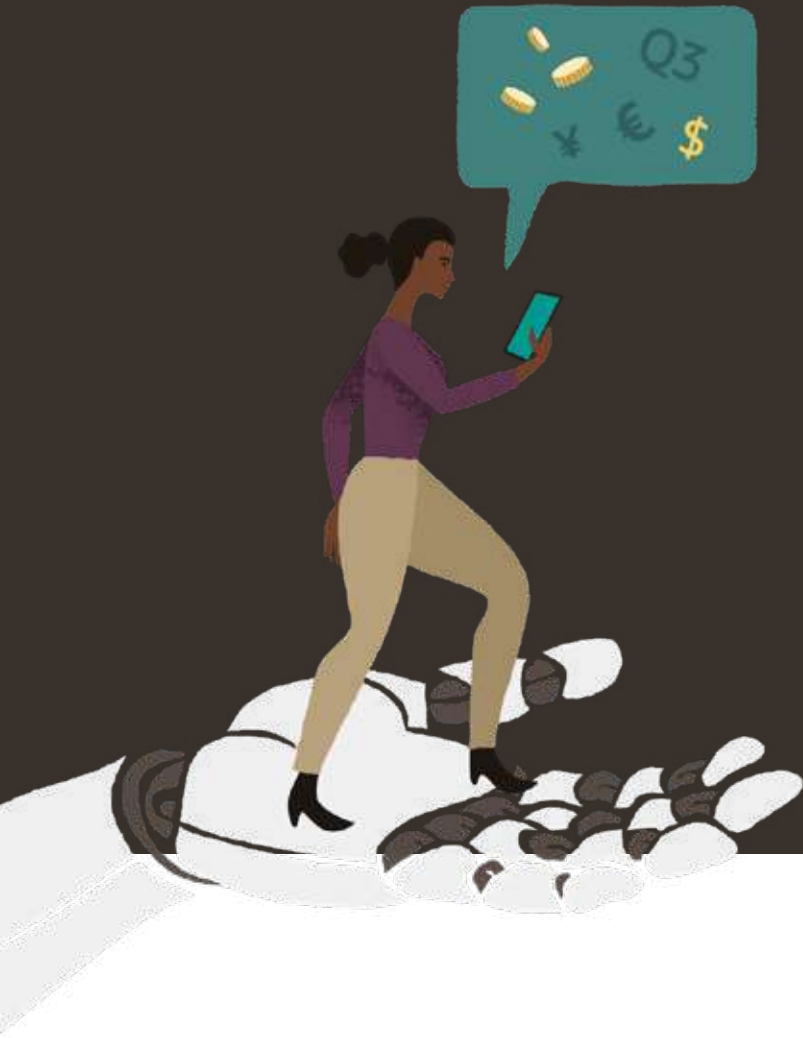
**67%**  
of people would trust robots more than humans to manage finances.



**77%**  
of business leaders would trust robots more than finance teams



**63%**  
of consumers would trust robots more than personal finance advisors



of people would trust a robot to manage their finances

**80%**

of business leaders would trust a robot to manage their organization's finances

Top 3 tasks business professionals would trust to robots over humans

Detecting fraud

Creating invoices

Conduct cost/benefit analysis

**34%**

**25%**

**23%**

**66%**

of consumers would trust a robot to manage their personal finances

Top 3 tasks consumers would trust to robots over humans

Detecting fraud

Reducing spending

Investing in the stock market

**33%**

**22%**

**15%**

# The future of finance teams and financial advisors

The role of finance teams and financial advisors will never be the same.

85% of people believe robots will replace finance professionals. 46% believe it will happen by 2026.

While it may seem far-fetched, the increased trust in robots is understandable. Humans have varying levels of expertise and competence. They take days off. They make mistakes. Humans are, well, only human. On the other hand, robots are consistent number crunchers, they never have a bad day, and are available 24/7.

That's why nearly all business leaders (90%) think robots will replace finance teams in the future. More shockingly, over half (56%) think it has already happened or will do so in the next five years.

Consumers are also convinced that change is afoot. 82% believe robots will replace personal

financial advisors in the coming years. Nearly half (42%) are of the opinion that the change has already taken place or will do so in the next five years.

While our growing faith in technology will significantly change the role of corporate finance teams and personal finance advisors, change is not bad news. Business leaders and consumers are looking for finance professionals to take on new and valuable roles. For example, communicating with customers, negotiating discounts, and approving transactions.

And consumers will continue looking for human interaction when it comes to major purchases or life events, such as buying a house, buying a car, or discussing retirement plans. There's no algorithm that can replace working with another person before making or approving life-changing decisions.



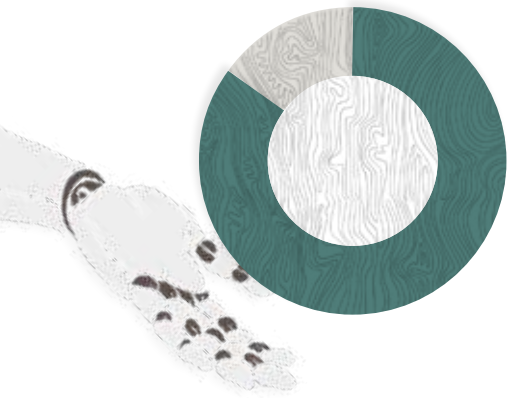
90%

of business leaders believe that robots will replace financial teams in the future

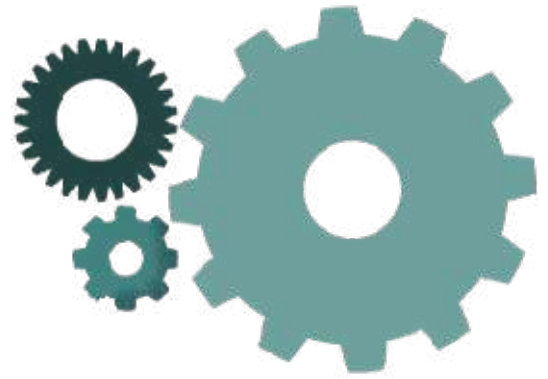


56%

believe it'll happen in the next 5 years or already has



**85%**  
of business leaders  
want help from a robot



The top four tasks for which business leaders would seek robot support



**43%**

Approvals



**39%**

Budgeting and  
forecasting



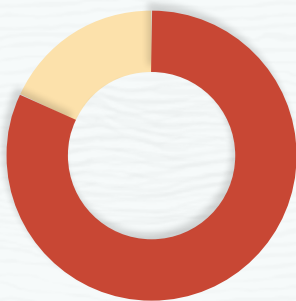
**38%**

Reporting

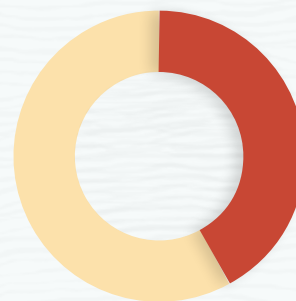


**38%**

Compliance and  
risk management



**82%**  
of consumers believe that  
robots will replace financial  
professionals in the future.



**42%**  
of consumers believe it  
will happen in the next  
5 years or already has.

**Consumers also want help from a robot**

The top three tasks which consumers think robots can help with



**33%**

Free up more time



**31%**

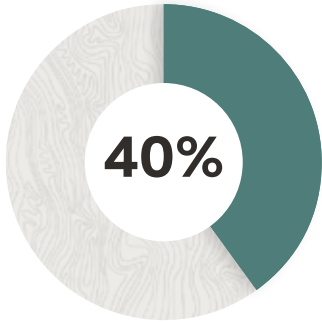
Reduce unnecessary  
spending



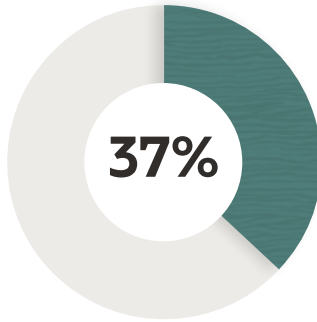
**25%**

Increase on-time  
payments

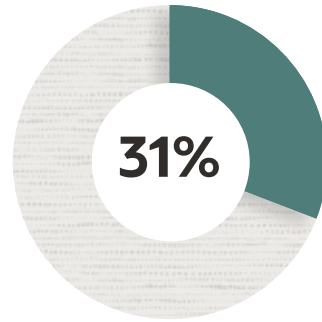
**However, business leaders still trust finance teams more for some tasks.**



Communicating with customers

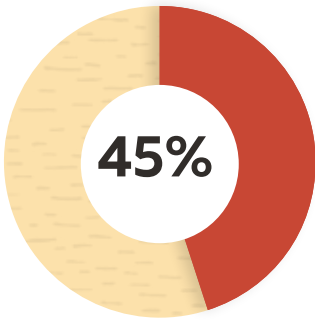


Negotiating discounts

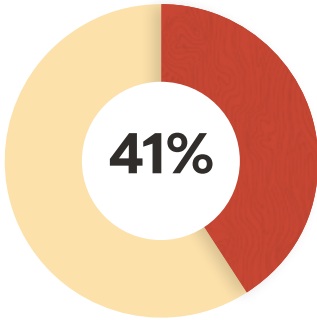


Approving transactions

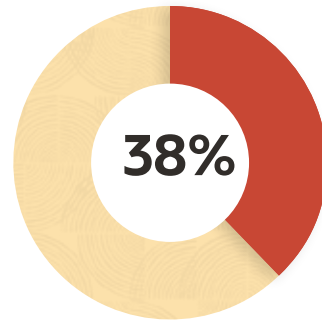
**And consumers still trust a financial advisor over a robot for guidance with major purchasing decisions.**



Buying a house



Buying a car



Planning for retirement



# Embracing AI to manage finance

**Our relationship with money has changed. It's time to embrace AI to manage finance.**

Our changing relationship with money has been accelerated by the COVID-19 pandemic, with over half (60%) of consumers saying the pandemic has changed the way they buy goods and services.

Globally, there has been a shift away from handling cash. In fact, almost three quarters of people (72%) say the events of 2020 have changed how they feel about handling cash, with people feeling anxious (26%), fearful (23%), and dirty (19%). And nearly a third (29%) stated that cash-only is a deal breaker for doing business.

Businesses have been quick to respond to the shift in consumer behavior. Nearly three quarters (69%) of business leaders say their organizations have invested in new digital payments capabilities in response to COVID-19. A similar number (64%) have created new forms of customer

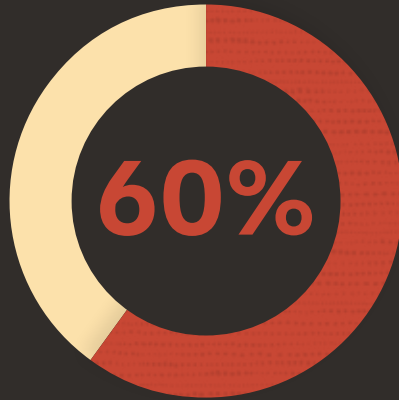
engagement or have adopted new business models to open up new revenue streams.

COVID-19 has also significantly increased the adoption of digital business platforms and payments technology, which will only accelerate the ability of robots to manage finance processes at work and at home.

The transition has already begun, and 51% of organizations are already using AI to manage financial processes. Only 27% of consumers are currently using some form of AI to manage their personal finances. But these figures will only trend in one direction...up.

A clear majority of business leaders (87%) believe that organizations that don't rethink financial processes will face mounting risks, including falling behind competitors, increasingly stressed workers, inaccurate reporting, and declining productivity.



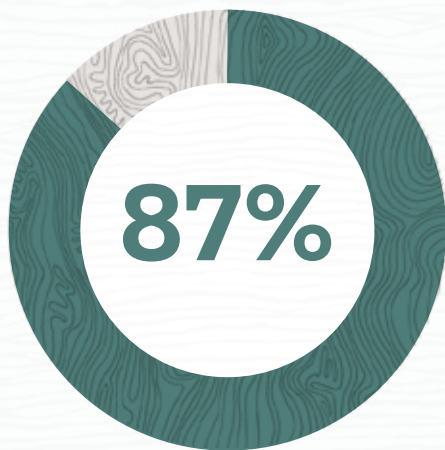


60% of consumers say the pandemic has changed the way they buy goods and services.

51% of organizations are already using AI to manage financial processes but only



27% of consumers use some form of AI/robots to manage their personal finances.



87% of business leaders believe that organizations that don't rethink finance processes will face risks, including:

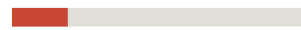
- Falling behind competitors (44%)
- Inaccurate reporting (36%)
- More stressed workers (36%)
- Reduced employee productivity (35%)

Only **9%** of consumers expect to use more cash after COVID-19.



**72%**

of consumers say that the events of 2020 have changed how they feel about handling cash. The most common changes were feeling:



Anxious  
**26%**



Fearful  
**23%**



Dirty  
**19%**

**29%** say that cash-only is a deal-breaker for doing business.

**Businesses have been quick to respond and have changed the way they go to market**



of businesses have invested in digital payment capabilities.



of organizations have created new forms of customer engagement or changed business models to cultivate new revenue streams during COVID-19.



# Conclusion

---

Our relationship with money has been changing for several years and the events of 2020 accelerated many of those trends. We now see robots as better positioned to manage many of the core elements of finance in our personal and professional lives.

While these trends may initially appear to present a threat to corporate finance professionals and personal finance advisors, the truth is robots will complement the softer skills of these professions.

The addition of these consistently rational and always accessible co-workers will enhance the speed, accuracy and decision-making of corporate finance professionals and personal finance advisors, and reshape the skills required for

a career in finance. For business leaders overseeing a budget and consumers trying to manage finances at home, robots can provide timely insights and data-driven recommendations to improve financial outcomes.

The only rational next step is for finance professionals, business leaders and consumers is to embrace these changes. Organizations and individuals resisting this change will be taking a poorly calculated risk.

There is a lot to be gained in decisively moving towards AI, for both consumers and corporations alike, and the level of decisiveness will fundamentally shape your financial growth trajectory.

To learn more about how you can embrace AI to manage finance, visit our [Money & Machines](#) and [Oracle Fusion Cloud Enterprise Resource Planning \(ERP\)](#) pages.

