MX

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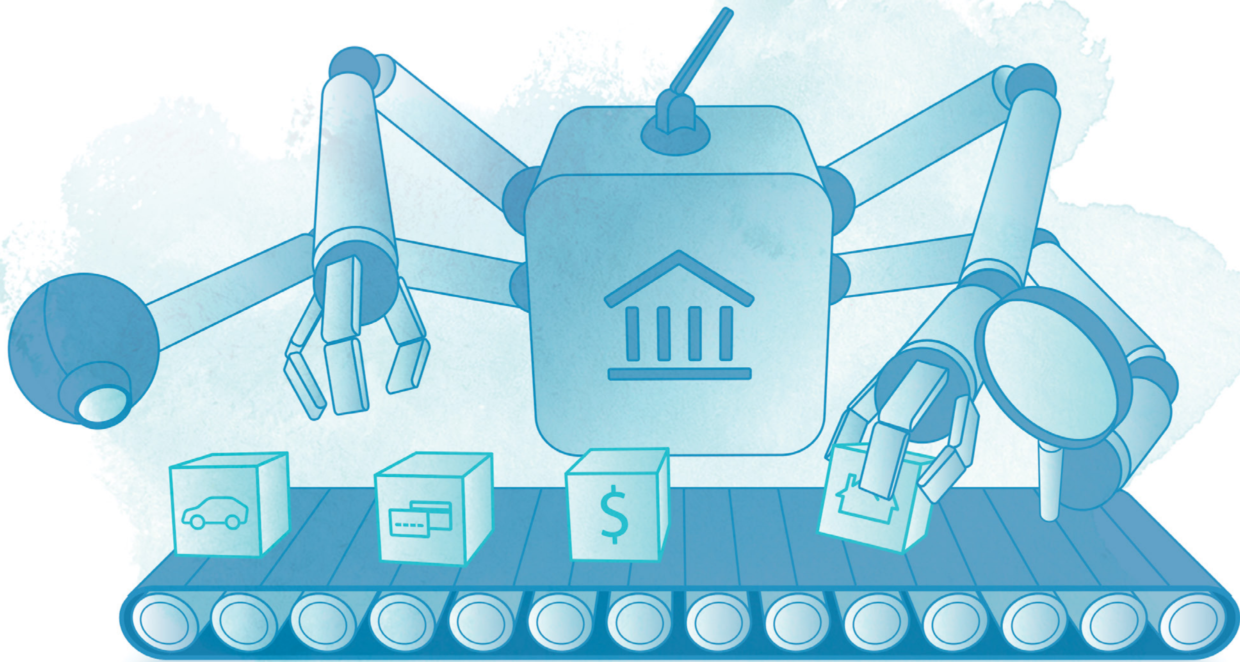
The Ultimate Banker's Guide to the FUTURE OF WORK



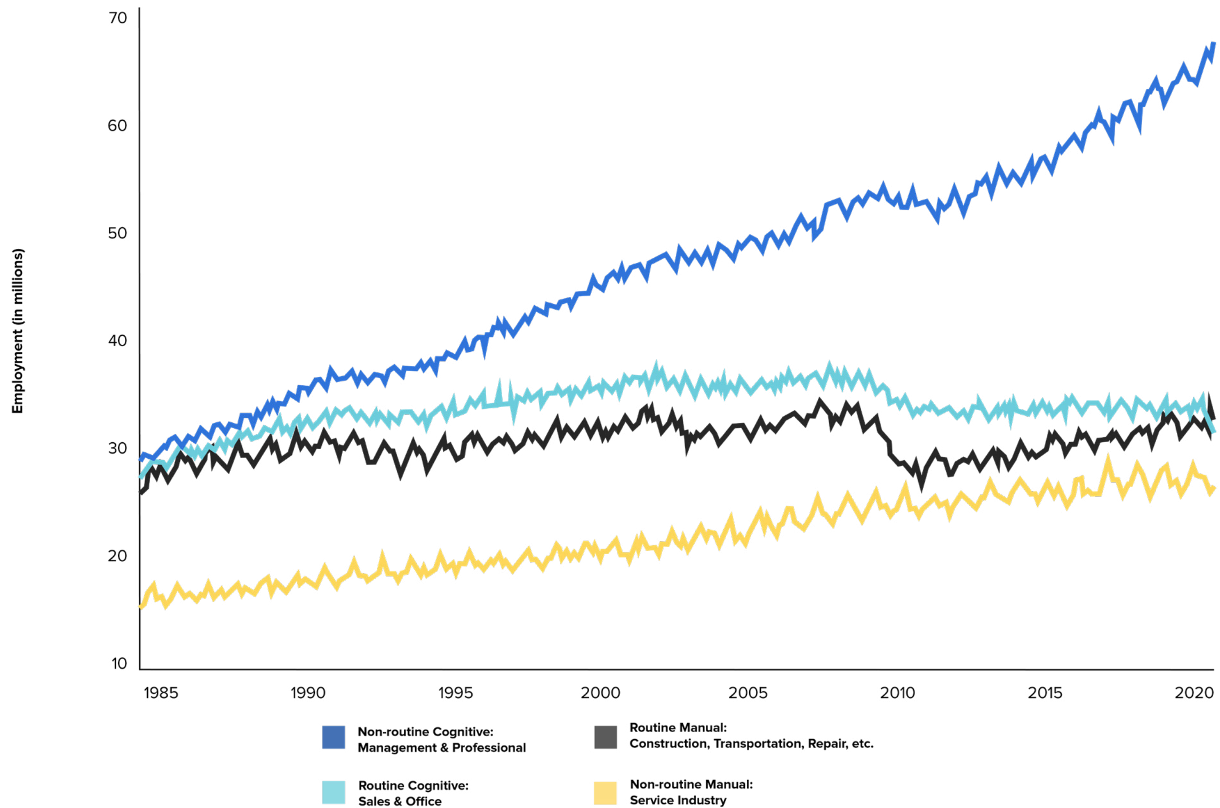
The **Evolution** of **Work**

At the rise of our species many millennia ago, human work mostly consisted of searching for roots, fruits, vegetables, mushrooms, and hunting a range of animals. For the majority of our existence this is what work has meant.

Then, around 12,000 years ago, work evolved as farming became the predominant mode of labor. In fact, around 55-75% of Europeans still worked in agriculture as recently as 600 years ago.

This trend continued into the industrial revolution when farming saw a steep decline as people migrated to factory work. Today, thanks to widespread technological innovation, farming consists of just 2-5% of the workforce in these countries. Technological improvements in farming made most of those jobs redundant.

55-75% of Europeans still worked in agriculture as recently as **600 years ago.**

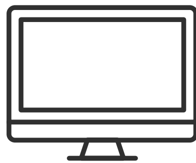


At the same time, the number of knowledge workers has exploded, growing by 230% in the United States since the early 1980s — indicating yet another shift in the way we work.

What does any of this have to do with banking?

More than anything, it shows that the only constant in human work is evolution driven by new technology, which is clearly the case in financial services.
You've read about it in the headlines:

- "Tech forecast to destroy more than 200,000 US bank jobs"
- "Citi issues stark warning on automation of bank jobs"
- "Deutsche Bank job cuts are tip of the iceberg for the finance industry"



Jamie Forese, president at Citigroup, estimates that

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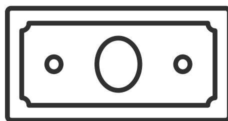
of their 20,000 technology and operations staff will be replaced by machines in the next five years.



4.27 TRILLION

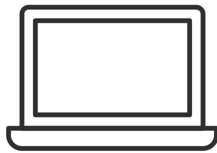
invested in index funds has eclipsed the total invested in actively managed funds.

When it comes to investment banking, the changes in recent decades have been dramatic. The cost per trade has plummeted from hundreds of dollars to zero thanks to digitized platforms. Trading floors from London to New York to Chicago, once full of humans shouting trades across a crowded room, have been replaced by machines and algorithms. To illustrate: Goldman Sachs employed 600 traders at their equities trading desk two decades ago. Now they employ just two traders there, alongside 200 computer engineers.

Jamie Forese, president at Citigroup, estimates that half of their 20,000 technology and operations staff will be replaced by machines in the next five years.

Investment bankers are simultaneously facing the rising popularity of passive management, enabled by increased trust in automated investing. When Warren Buffett famously (and handily) won a million-dollar bet against hedge funds, he bolstered his claim that most Americans would be better off putting their money in passively managed index funds instead of actively managed stocks. Money has been pouring into index funds to the point that the $4.27 trillion now invested in index funds has eclipsed the total invested in actively managed funds, necessitating fewer active fund managers in favor of algorithms.

But it's not just investment banking. Bankers from all lines of work should ask whether algorithms will replace them and what implications this might have for the future of work in banking.



1970

Economist Juanita Kreps predicted the rise of computers would enable people to retire at the age of 38

We now have nearly half a million ATMs and nearly the **same number of tellers**.

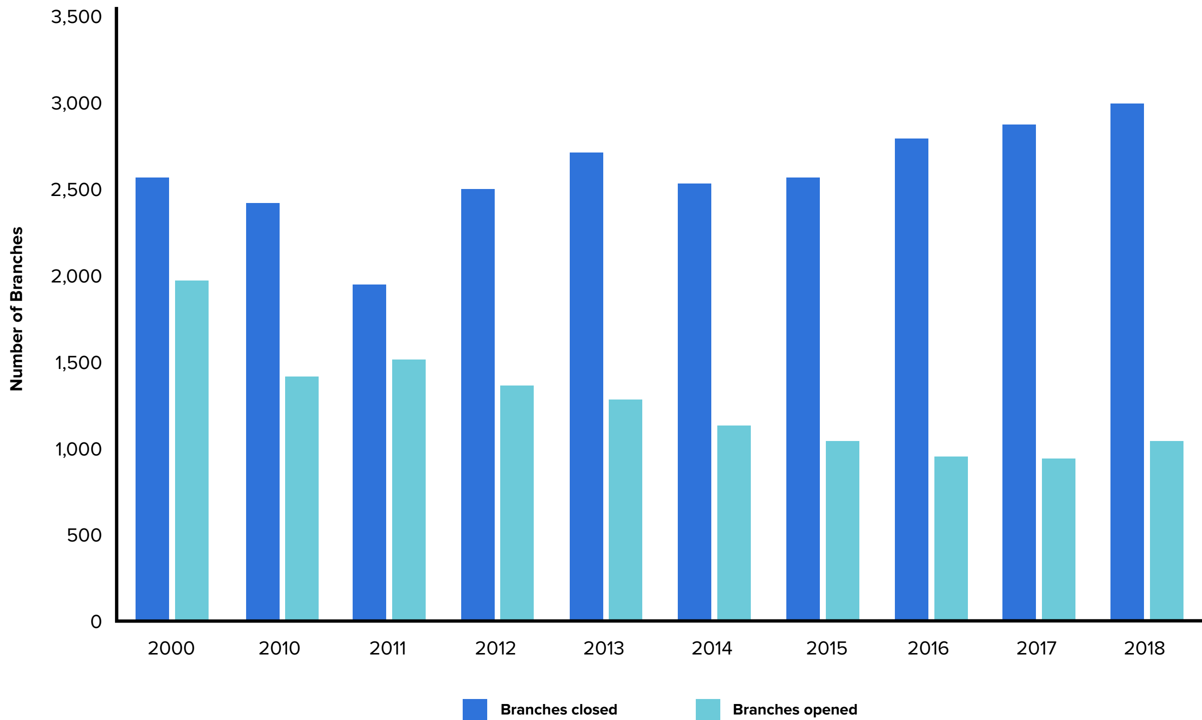
“We’ve Heard This Story Before”: Why ATMs Didn’t Replace Tellers

At this point, you might be thinking that you’ve heard all this before. And you likely have.

Economists have long predicted monumental economic change due to modern technological innovation. For instance, John Maynard Keynes wrote in 1930 that modern innovations would result in a 15-hour work week within two generations. And Juanita Kreps, economist and commerce secretary under Jimmy Carter, predicted in 1970 that the rise of computers would enable people to retire at the age of 38.

When it comes to banking, predictions have similarly been overblown. For example, in the early 1970s experts believed that ATMs would replace tellers (“up to 75 percent,” according to a New York Times article in 1973).

But it hasn’t happened. Instead, tellers jobs have grown slightly faster than the general labor force. We now have nearly half a million ATMs and nearly the same number of tellers. ATMs simply have not replaced humans.



Source: S&P Global Market Intelligence

The reality is that while ATMs reduced the number of tellers per branch (from 21 to 13 in the average urban branch), the reduction made it cheaper to build branches — which increased the number of branches and therefore increased the number of tellers. As it turns out, the same thing happened with the textiles in the 19th century: Automation decreased prices, which increased demand as well as the total number of people working in textiles.

And Yet...

And yet this time may truly be different. When it comes to banking, financial institutions are now closing branches far more often than they're opening them.

In other words, there are now fewer tellers per branch and fewer branches overall. It's no wonder, then, that the Bureau of Labor Statistics now estimates there will be 12% fewer tellers by 2028.

But that's just the cusp of the evolution in retail banking. Financial institutions are now facing innovation on a range of fronts, including:

- Interactive teller machines
- Online banking
- Mobile banking
- Digital payments
- Big tech competitors
- Neobanks
- Digital loan servicing
- Autonomous finance

In other words, it's no longer just a story of ATMs versus human tellers. It's a story about a host of new technologies combining into an omnichannel experience.

And that changes everything.

In this piece, we'll look at three ways that people in financial services can successfully navigate the future of automation:

1. Get a clear sense of the automation debate
2. Reskill within financial institutions
3. Guide customers toward financial strength

It's no longer just a story of **ATMs versus human tellers**. It's a story about a host of new technologies **combining into an omnichannel experience.**

1. Get a **clear sense** of the debate around **automation**

Too often, conversations about automation carry the false notion the debate is done — that all experts on the topic agree that automation is set to wipe out huge numbers of jobs.

In reality, opinions vary widely. One study from Oxford calculates that 47% of all jobs will soon be automated. Specifically, they put the likelihood of computerization for tellers, loan officers, and brokerage clerks at 98% — meaning that machine learning and algorithms will more or less completely replace the people who do these jobs.

Contrast that prediction with one from the Organisation for Economic Co-operation and Development (OECD), which says that only 9% of current jobs are automatible.

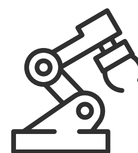
And contrast *that* with a report from McKinsey, which pins the number at fewer than 5%.

In addition, there's enormous disparity about whether specific activities within a job will be automated. IBM CEO Ginni Rometty is bold on this front, saying, "I expect AI to change 100 percent of jobs within the next five to 10 years.

> "I expect **AI** to change **100 percent** of jobs within the next five to 10 years."
>
> **GINNI ROMETTY**
>
> CEO at IBM

By contrast, McKinsey says they believe that only 30% of current jobs include automatible activities. For example, McKinsey writes, “Mortgage-loan officers will spend much less time inspecting and processing rote paperwork and more time reviewing exceptions, which will allow them to process more loans and spend more time advising clients.” In other words, mortgage-loan officers will still exist, but their day-to-day activities will change.

And then there are those who say that fears of automation are completely overblown. For instance, in his piece “Chill: Robots Won’t Take All Our Jobs” business columnist James Suroweiki shows that the annual job churn rate generally is way down — from 37% turnover each year in the 1950s to 6% turnover in 2010-15. For Suroweiki this decline indicates that fears of automation are overblown, since digital automation has increased for decades and yet people have generally not been losing their jobs.



30%

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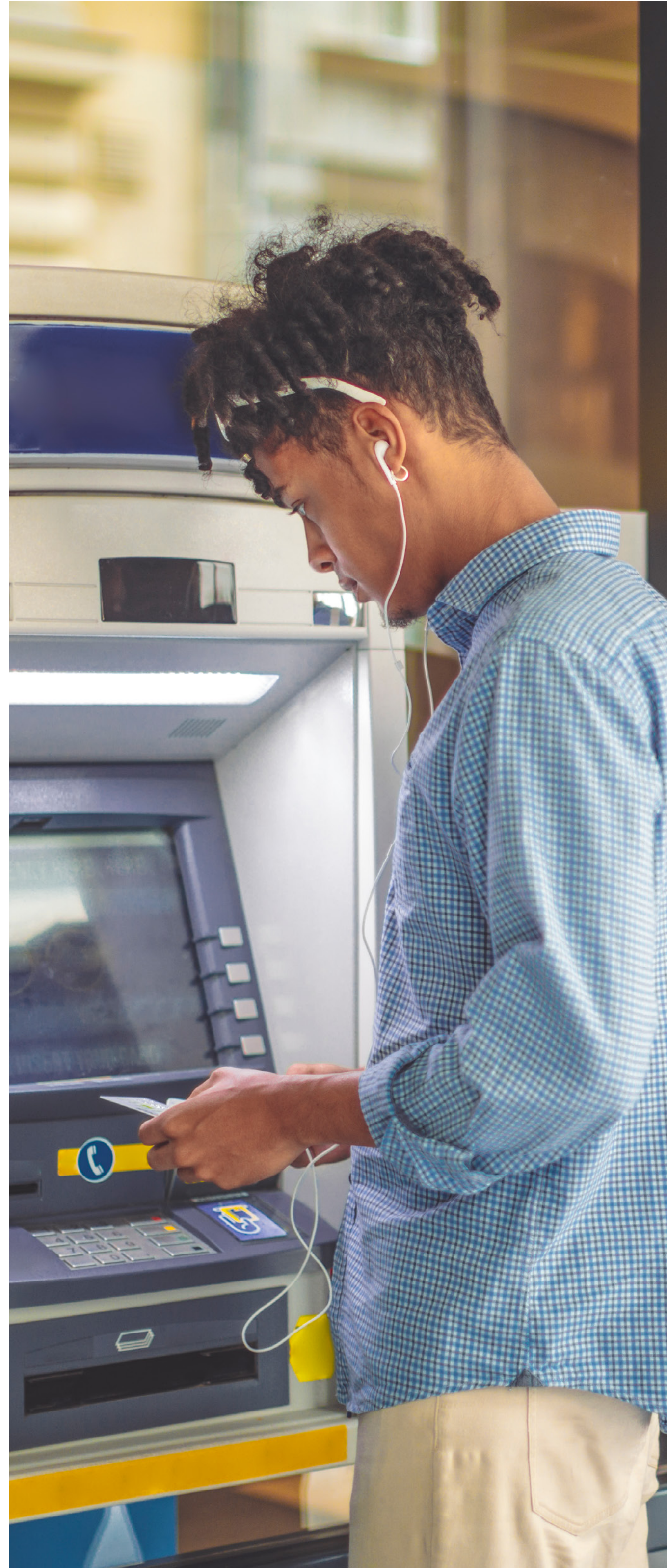
In a similar vein, Noah Smith, professor of finance at Stony Brook, points to two datasets to make his case that we're not facing an automation crisis. First, he shows that productivity (output per human hours worked) hasn't increased over the past decade and has in fact been declining. Second, he shows that countries that employ more robots per factory (including Korea, which employs more than 3x the number the U.S. employs) have strong manufacturing employment. Both datasets are the exact opposite of what we'd expect if the rise of automation over the past two decades had been erasing jobs.

That said, there's a strong case to be made that automation isn't entirely eliminating jobs as much as replacing well-paying jobs with low wage work (a subject we'll explore in the section on the gig economy).

> “ In our bank we have **people doing work like robots.** Tomorrow we will have **robots behaving like people.**”
>
> **JOHN CRYAN**
> CEO at Deutsche Bank



When it comes to banking, opinions are likewise all over the map. Jamie Dimon, CEO at JPMorgan Chase, says that too many people are “massively overreacting” to the fear of automation. “My guess is our headcount will go up over the next 20 years, not down,” he says.

John Cryan, CEO at Deutsche Bank, is bullish on automation by contrast, saying, “In our bank we have people doing work like robots. Tomorrow we will have robots behaving like people. It doesn’t matter if we as a bank will participate in these changes or not, it is going to happen.” Similarly Mike Mayo, a senior analyst at Wells Fargo, estimates that 200,000 jobs will be cut over the next decade.

Other analysts agree with this general sentiment. Michael Tang, Engagement Finance Analyst at Deloitte, saying, “It will be a dramatic change in contact centers, and these are both internal and external.” He adds, “We’re already seeing signs of it with chatbots, and some people don’t even know that they’re chatting with an A.I. engine because they’re just answering questions.”

Likewise, in their report "The Future of Talent in Banking," EY writes, "Not only is technology likely to change the number and kinds of people working in banks, but the nature of banking careers is also changing. Traditionally, bankers have followed a straight line up through one business or hierarchy." EY then cites a bank executive who claims, "We fully expect people to have four or five 'careers' within the bank."

This last point — that people will have multiple careers within their career — is perhaps the most helpful way to think about the future of work.

Why? Whether your job will be eliminated in five years or 50 years or 100 years or 1,000 years, the most important thing to focus on right now is continual learning and reskilling. While opinions around automation vary widely, two things are certain:

> "We fully expect people to have **four or five 'careers' within the bank**."
>
> BANK EXECUTIVE
> in an EY survey

1) As technology improves, the way we work changes. 2) As time goes on, the rate at which technology improves accelerates (barring a cataclysmic event).

In other words, given a long enough timeline, all jobs are bound to change. In the meantime? Keep evolving.

If you've worked in a financial institution for any length of time, you've almost certainly encountered reskilling of some kind — from learning a new type of software to learning a new type of process. To this extent, automation is already well underway in financial services even in instances where it doesn't result in complete job loss.

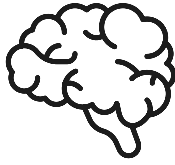
The first thing to keep in mind when it comes to preparing for the age of automation is to develop a culture of continual reskilling.

2. Reskill within **financial** institutions

In his book *Thank You for Being Late* New York Times columnist Thomas Friedman argues that the only way forward in today's economy is to not slow down, but to instead move faster. He compares our current economic situation with whitewater kayaking, writing that "when so many things are accelerating at once, it's easy to feel like you're in a kayak in rushing whitewater, being carried along by the current at a faster and faster clip. In such conditions, there is an almost irresistible temptation to do the instinctive thing—but the wrong thing: stick your paddle in the water and try to slow down."

Contrary to what a novice kayaker might think, slowing down in such conditions is the most likely way to flip your kayak. "The only way to steer," Friedman writes, "is to paddle as fast as or faster than the rate of change."

If you're in whitewater rapids, the worst thing you can do is stick your paddle in the water to slow down or stop. Instead, you have to paddle faster than the water beneath you. The same is true for keeping up with digital transformation.



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3%

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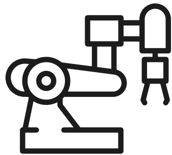

Only

1/4

of employees are "ready to work with AI."

It's a useful metaphor for what the future ofbanking holds in store for employees. As Nick Reed, Group General Manager Risk at ANZ Bank says, "We need people who are adaptable, because work is changing and it's changing rapidly. We're much more likely to hire you on the basis of your mindset and your ability to adapt than we are on your specific and deep subject matter knowledge, because that might not actually be that relevant in a year's time."

McKinsey says, "early growing pains will ultimately give way to a transformation of banking, with outsized gains for the institutions that master the new capabilities." More specifically, they say they see "a second wave of automation and AI emerging in the next few years, in which machines will do up to 10 to 25 percent of work across bank functions, increasing capacity and freeing employees to focus on higher-value tasks and projects."

> "As AI becomes more nuanced, its role in banks is **moving beyond automation to elevating human capabilities**."
>
> **ALAN MCINTYRE**
>
> Senior Managing Director at Accenture

All of this sounds pleasant enough. After all, who doesn't want to be freed up "to focus on higher-value tasks and projects"?

Unfortunately, bank executives aren't doing enough on this front. In "Banking: Realizing the Full Value of AI" Accenture found that of the 100 bank executives they surveyed, only 3 percent were planning to "significantly increase" their investment in "reskilling their team in the next three years" — even though they believe only a quarter of employees are "ready to work with AI."

This is a tremendous oversight. Alan McIntyre, a senior managing director at Accenture, says, "Banks' lack of commitment to upskilling and reskilling employees to learn how to collaborate with intelligent technologies will significantly hinder their ability to deploy and benefit from them." He adds, "As AI becomes more nuanced, its role in banks is moving beyond automation to elevating human capabilities. To benefit from the potential of AI, banks need to implement 'applied intelligence' — combining technology and human ingenuity — across all areas of their core business."

Put simply, the financial institutions that thrive in the future will be those that work alongside intelligent technology, coupling that technology with the human touch. This requires reskilling.

What does this reskilling look like? It might consist of something as simple as having ongoing digital training for all new software products. Or, more effectively, it might consist of a mix of in-person and digital training, with dedicated in-person help.

To offer an example: WaFd Bank (formerly Washington Federal) partnered with MX to train their employees on becoming personal bankers who guide customers toward financial health. To do this, WaFd introduced the MX FinStrong program — which educates users about the essentials of financial wellness — to all 1,800+ of their employees. This not only trained bank employees on how to offer financial literacy to customers, but it also helped employees improve their own financial health.

“There is an assumption that because someone works for a bank they know everything there is to know about finances, which is simply not true,” says Lisa King, WaFd Bank’s Chief People Person.

Cathy Cooper, Retail Banking Group Manager, adds, “There was a feeling that employees needed to have a stronger foundation of financial knowledge and wellness for themselves, which would also lead to helping our clients to do the same.”

Executive and regional leaders promoted the program and the objectives of education, wellness, and community advocacy. In addition, each geographic division and functional department had a peer-level leader who spearheaded team communication and reinforced participation, ensuring that no one fell through the cracks. To further incentivize employees, the team with the best average improvement in FinStrong scores (a financial wellness metric) received $100 per person and one participant's name was drawn and awarded $1,000.

In the end, 90% of employees participated in the 12-week program and 80% reached 100% completion. Most importantly, employee FinStrong scores rose from an average of 54/100 to 83/100 over the course of the program, indicating a dramatic improvement in the financial strength of WaFd employees. Each employee has now taken their learnings to better guide WaFd customers toward smarter financial decisions.

Another example worth noting here comes from JPMorgan Chase, which has dedicated [$350 million] to job retraining and has started a program named "Skills Passport" to help team members map their skills to new job opportunities at the bank and then receive guided training to move into those new opportunities.

However reskilling within a bank happens, it's about getting your team to be more human, which is how bank employees will distinguish themselves from the algorithms that threaten to automate banking jobs.

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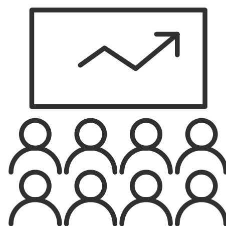

JPMorgan Chase has dedicated

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million to job retraining

3. **Guide** customers toward **financial strength**

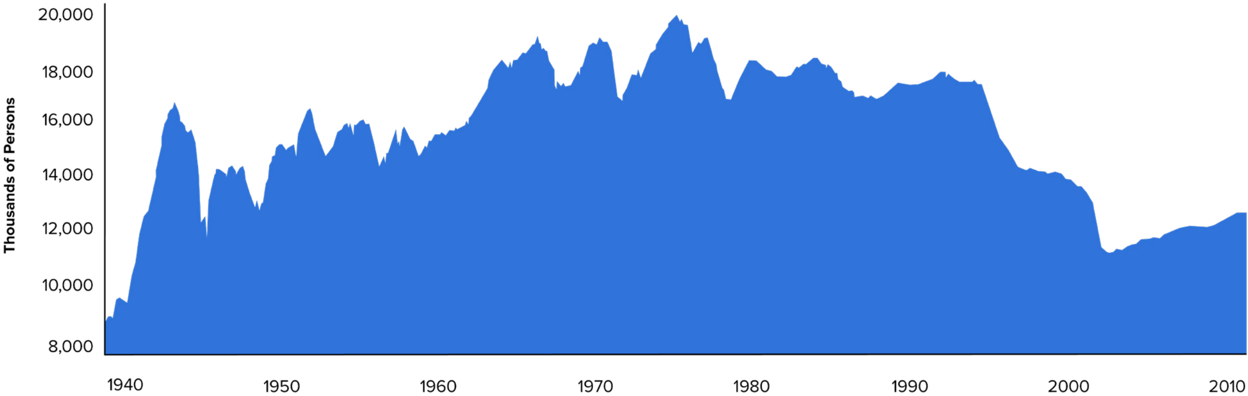
Even though the state of employment has generally improved in the years since the Great Recession, too many people are still struggling to find work that enables them to enjoy true financial strength. They juggle a host of jobs and flounder to move beyond living paycheck to paycheck.

Isabel Sawhill of the Brookings Institute ran a series of focus groups with Americans who have been left behind in the contemporary economy and found that the frustration is real. One participant said, “Making ten dollars an hour now when I made that ten or fifteen years ago is like a slap in the face. An insult.” Another said, “I can find a job easily at McDonald’s or Taco Bell.” Another said that their choices come down to making $8 an hour or $7.25 an hour.

It’s no wonder that Americans are too often unhappy with their jobs — especially if they’re in the bottom 20% of income earners.

It’s no wonder that Americans are too often **unhappy with their jobs** — especially if they’re in the **bottom 20%** of income earners.

Many of these people used to have manufacturing jobs that paid them $20-30 an hour. Unfortunately, for all the promises to bring these jobs back in recent years, employment in manufacturing has barely budged upward. It certainly hasn't rebounded to where it used to be in the late 1970s.

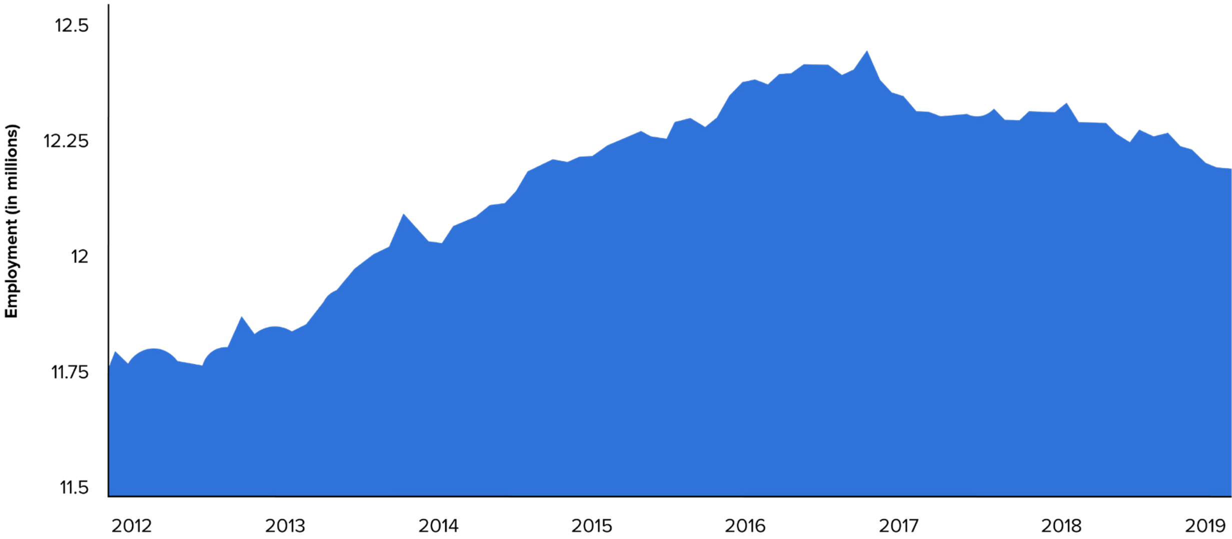


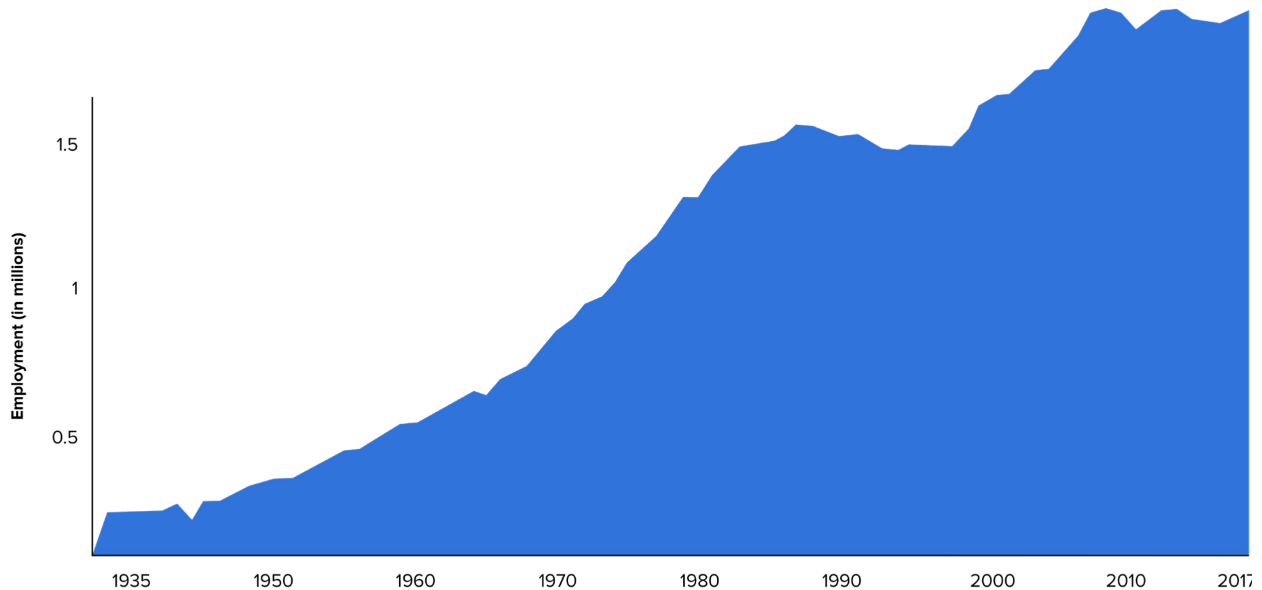
And, as you can see from the chart on the next page, the rate consistently plummets during recessions (marked in gray), indicating we should expect something similar when the next downturn hits.

But it's not just manufacturing.

Employment on oil and gas rigs has plummeted even as the rig count has risen. Brick-and-mortar retail is also in decline, and, as we've mentioned previously, it appears the same peak may have hit banking.

Decline in Oil Rig Employees
Number of Employees
195
190
185
180
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
2015
2016
2017
Source: Bloomberg News


Decline in Brick-and-Mortar Retail
Employment (in millions)
12.5
12.25
12
11.75
11.5
2012
2013
2014
2015
2016
2017
2018
2019
Source: Bureau of Labor Statistics



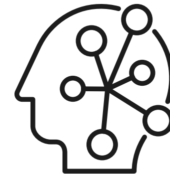
Source: U.S. Bureau of Labor Statistics via St. Louis Fed

Looking at this data, it's easy to understand why the US now has [57 million people who work in the gig economy](). Side hustles and freelance work — it has all become commonplace.

What are financial institutions doing to help these people?

According to Ron Shevlin, Managing Director of Fintech Research at Cornerstone Advisors, the answer is… not much. He writes that "banks are watching this opportunity slip through their fingers" and lists more than half a dozen fintech companies (including Azlo, Cogni, and Joust) that are specializing on this front.

What might this kind of help look like?



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> “Banks are watching this opportunity **slip through their fingers.**”
>
> **RON SHEVLIN**
> Managing Director of Fintech Research at Cornerstone

Azlo partners with BBVA USA to give users an FDIC-insured deposit account alongside the ability to create and send personalized invoices directly from that account, enjoy free payments and transfers, and integrate Square and Stripe.

Cogni describes themselves as a “tap-and-go Visa debit card,” which lets prospects register online, deposit cash at partner locations such as Walgreens and 7-Eleven, and implement single-use cards for online purchases.

Joust markets themselves as “business banking for self-employed workers.” Like Azlo, they partner with a bank to offer a FDIC-insured deposit account. They also offer the ability to create invoices with contracts

to ensure payment, pay thousands of billers directly, and connect existing accounts with their app. They're planning to expand into bookkeeping, timekeeping, expense management, and more.

In a similar vein, MX offers a mobile banking app that enables financial institutions to attract people in the gig economy by helping them manage personal and business expenses, categorize transaction history for tax purposes, see real-time cash flow, and more. In addition, we pave the way to have a lending strategy with native mobile origination so freelancers have digital access to commercial offerings.

In a similar vein, MX offers a mobile banking app that enables financial institutions to attract people in the gig economy.

Another company worth mentioning in this space is Uber, which has launched Uber Money with the intent to give 10% more spending power to Uber drivers by helping them access, grow, and manage their money. To help drivers access money, Uber gives drivers the ability to accept cash, get paid on demand at the end of every trip, and deposit funds from other companies in their Uber account. To grow money, Uber gives diamond-level drivers 6% cash back on gas with the new Uber Debit Card, 2% cash back on purchases at places like Walmart, and a $100 fee-free overdraft (which 56% of drivers use). To manage money, drivers and end users can use the Uber wallet to see all spending on the platform and get 5% cash back for all spending. Uber has also joined BlackRock's Emergency Savings Institute, Commonwealth Financial Network, Center for Advanced Hindsight Common Cents Lab, and the Financial Health Network — all of which guide their users toward greater financial strength.

However you go about it, what's clear is that freelancers in today's economy are in real need of financial guidance. This is a market with enormous upsides for financial institutions as they lock in these customers over the long term.

In addition to guiding freelancers to manage their money, financial institutions should look at new loan opportunities and partnerships with retraining programs to give people valuable skills.

"The future of work won't be about degrees," says Stephane Kasriel, CEO of Upwork. "More and more, it'll be about skills." She adds, "The fastest-growing segment of the workforce — freelancers — have realized more than most that education doesn't stop. It's a lifelong process."

Jamie Dimon agrees. "The new world of work is about skills, not necessarily degrees," he says. "Unfortunately, too many people are stuck in low-skill jobs that have no future and too many businesses cannot find the skilled workers they need. We must remove the stigma of a community college and career education, look for opportunities to upskill or reskill workers, and give those who have been left behind the chance to compete for well-paying careers today and tomorrow."

"The future of work **won't be about degrees**. More and more, **it'll be about skills**."

STEPHANE KASRIEL

CEO of Upwork

Opportunities to develop new skills — including software development, IT, data analytics, design, machine learning, and more — might happen via education-focused companies such as PluralSight and Lambda School. For instance, Lambda School offers income share agreements (ISAs), a loan method where participants get their education for free upfront and then pay a portion of their income for a set time after getting employed (17% for two years, in the case of Lambda).

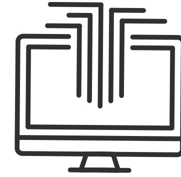
In this way, participants aren't cut off from the possibility of reskilling simply because they don't have funds upfront. Financial institutions could look at similar models as they look to empower the next generation of workers. The key, above all, is to find innovative ways to be part of the solution gig workers are hungry for.

The Way Forward: Banks + Fintechs
Mike Mayo, Director at Wells Fargo, says that the contemporary state of bank represents the "greatest transfer from labour to capital." This is great news if you're a capitalist. It's a nightmare if you're not.

How can we all thrive in the new economy? The best way is to paddle faster — and to help others paddle faster as well.

And the best way to make this happen is via bank-fintech partnerships. As McKinsey notes, financial institutions dedicated only 35% of their IT budgets to innovations while fintechs dedicate 70%. They add that financial institutions risk becoming a "footnote" if they don't keep up with the pace of technological change. Banks need the innovation fintechs bring. Fintechs need the stability banks bring.

The age of automation is upon us. We must ensure that we all thrive together as work continues to evolve at an increasingly rapid pace.



financial institutions dedicated only

35%

of their IT budgets to innovations while fintechs dedicate

70%

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