SMA TECHNOLOGIES

Automate or Die Hiring

How Automation Can Drive Growth at Banks While Keeping Hiring Costs Under Control

Financial institutions – especially the vast majority that are not massive, global enterprises – increasingly must figure out how to do more with less. Budgets are not unlimited, and banks and credit unions need to balance spending on growth, innovation and customer acquisition with day-to-day activities of running the bank.

It can be difficult to toe this line, especially as keeping up with digital innovation usually means having to buy or build new technology and hire more staff to maintain it. With job markets in all sectors becoming ultra-competitive, hiring quickly becomes an expensive path to potential growth. .

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>
> - Todd Weiss, Vice President of Product Management at SMA Technologies

"Bank budgets are not increasing, at least not at the rate of inflation," says Todd Weiss, Vice President of Product Management at SMA Technologies. "More and more is being asked of CTOs and CIOs about innovating and upgrading digital capabilities, but 85% of their time is spent keeping the lights on."

This leads to many challenges facing IT staff in financial institutions. Many do not have the budget to add enough staff to keep up with new demands, so existing employees must take up the slack. And increased workloads can lead to staff burnout, which further exacerbates the staffing challenges. As more people leave, taking institutional knowledge with them, more time must be spent training their replacements, leaving IT staffs spinning their wheels.

A survey taken by efinancialcareers during the early-to-mid part of the pandemic illustrates this issue, and how it has increased over the last two years.[1]

Some bank technologists describe their workloads this way:

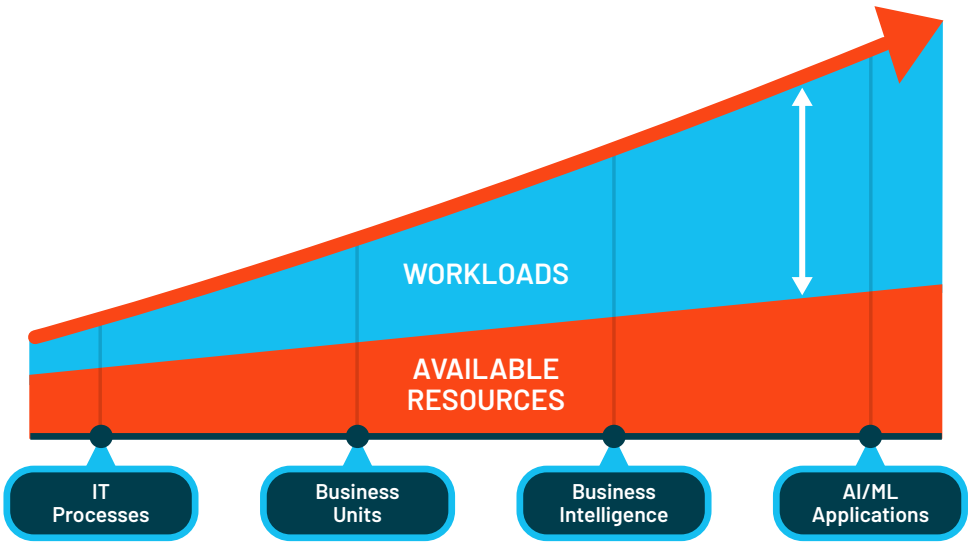
> We're overworked, with more demands and unclear priorities.

> Constant long hours, permanent change, every project being pulled forward by months or years.

> Kicked off multiple critical projects all with tight deadlines.

There is also a significant IT skills gap that financial institutions must overcome. They are competing with not only one another as well as innovative fintechs for tech talent, but also companies in other industries. This makes it hard to recruit technologists. In some countries, the shortage of tech talent working in finance is so dire that the industry has called on the government to create a new body dedicated to filling skill shortages in financial services.

The tech talent gap in banking is nothing new, but it has been growing in recent years, exacerbated by the "Great Resignation" that has occurred since the start of the COVID-19 pandemic. It's clear that for many organizations, the capabilities of in-house tech departments are not sufficient to meet the increasing challenges of stretched resources, growing workloads and overworked employees.



> With tech staff overworked just doing the basic job of running the bank, it leaves precious little time for projects related to growth and innovation.

This is due, in large part, to the complexity of most financial institutions' tech infrastructure. Maintaining this infrastructure takes up most of the time for the IT staff. Years of acquiring new systems, migrating to the cloud and integrations due to mergers and acquisition (M&A) activity have left most banks and credit unions with a complex web of tech.

In a world where customers want real-time personalized digitized products and services, this is a headache for bank technologists.

> Banks are now expected to process transactions in real time, be able to stitch together partnerships with fintech companies in a matter of weeks, release new features frequently, be able to scale (up and down) their infrastructure needs at will and even execute on M&A quickly.

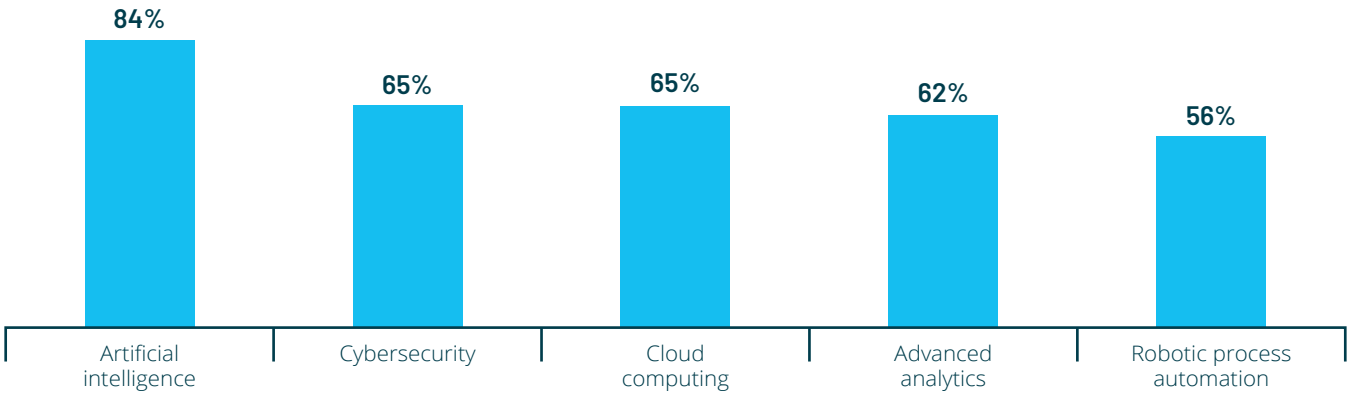
"With the advent of digital banking, cloud and APIs, banks have seen a significant shift in the way banking products and partnerships are constructed," says McKinsey. (APIs are application programming interfaces, or software code that allows one website, app or program to interact with another.) "Banks are now expected to process transactions in real time, be able to stitch together partnerships with fintech companies in a matter of weeks, release new features frequently, be able to scale (up and down) their infrastructure needs at will and even execute on M&A quickly."

The firm continues: "In addition to the existential issues listed above, banks endure some tactical day-to-day pain points with legacy core banking systems. These problems vary from bank to bank, but include a dwindling engineering talent pool, excessive undocumented customization leading to a complex code base that can be difficult and risky to change and various vendor-support issues."

It's no surprise then that the work taken up by simple daily maintenance prevents many banks from pursuing tech innovation, as seen in the chart below.

Banking challenged to deploy advanced technologies

Percentage of respondents whose firms faced challenges adopting these technologies



Source: Deloitte

This constant daily maintenance work also makes it difficult to attract top tech talent and exacerbates the aforementioned IT talent gap, observes Todd Dauchy, CEO of SMA Technologies.

> People typically don't like mundane jobs, which is what you're doing in just keeping the bank running.
>
> - Todd Dauchy, CEO of SMA Technologies

Even if banks and credit unions offer more money to attract tech talent, often that is not enough to attract top talent if they don't find the job compelling.

"Let's say I offer someone $250,000 per year to sort paper clips and staples," says Dauchy. "At first it would sound great but after a week that person would probably become incredibly bored. It's not always a compensation thing but a motivation thing."

Then there is the issue of the siloed operations that most banks deal with. Typically, different systems from different lines of business do not "talk" to one another, which presents difficulties for financial institutions in a number of ways. It means they struggle to get a full view of the customer journey. It also leads to difficulties in regulatory reporting and getting sightlines into the security and fraud threats institutions face.

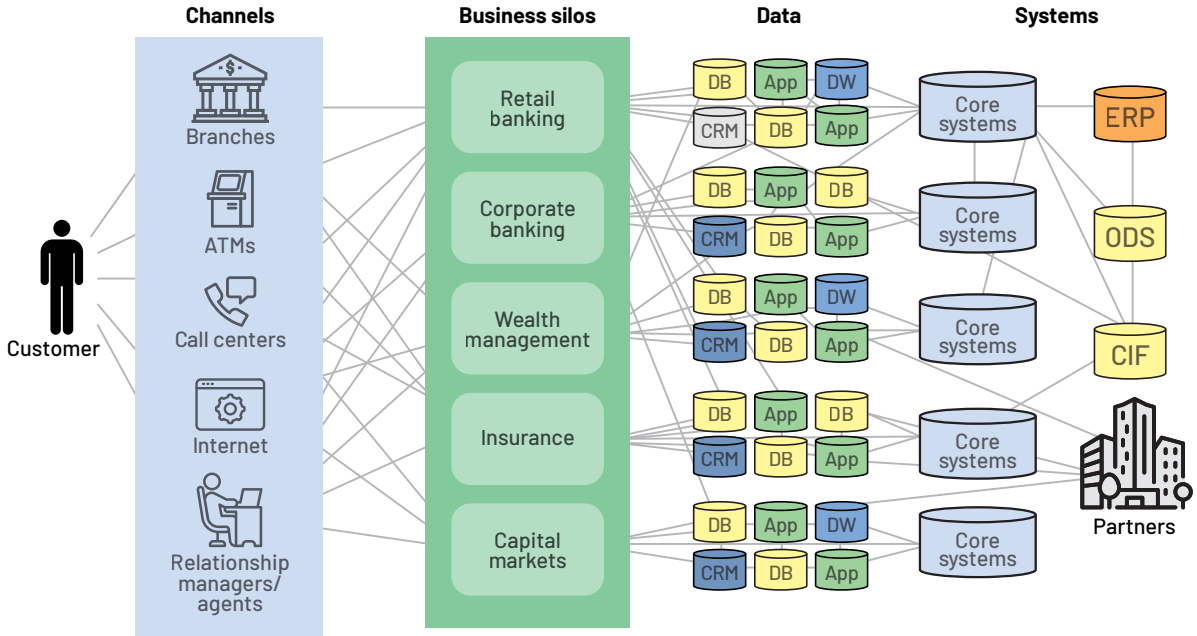
In turn, this environment forces internal IT staff to do a lot of manual work connecting disparate data between systems. Dauchy writes in The Financial Brand that "Financial institutions, in particular, have many types of silos — by accident or design. Siloed departments and functions. Siloed data. Siloed products and business lines. And siloed operations. Although these silos may have served a valid purpose at one time — as a way to protect a firm's data and intellectual property from outside forces — eventually and inevitably they impact the organization's internal culture and its ability to innovate, grow and scale."

Silos may have served a valid purpose at one time, but inevitably they impact the organization's internal culture and its ability to innovate, grow and scale.

According to research and analyst firm Capgemini, this siloed structure also leads to unproductive interdepartmental rivalries.

"Employees who are limited to their respective departments don't grasp the bigger picture, and the bank's ability to cooperate across organizational lines is squelched, thereby increasing costs and decreasing the organization's effectiveness in selling and serving current and potential customers," the firms states. "A bank will underperform versus newcomers that are moving in sync to cross-sell and promote a consistent message."

Current Banking Systems Landscape



Data silos make it difficult for banks and credit unions to get an end-to-end, holistic view of their operations and their customers. Credit union members and bank customers expect digital services that are fast, reliable, and error-free. However, internal IT staff are often so busy and overwhelmed that they don't have the time to focus on new initiatives that will have a meaningful impact on member and customer satisfaction. And the siloed structure of most financial institutions makes it difficult to develop and create real-time digital services that work across the entire customer journey.

These Trends Are Fueling the Need for Automation

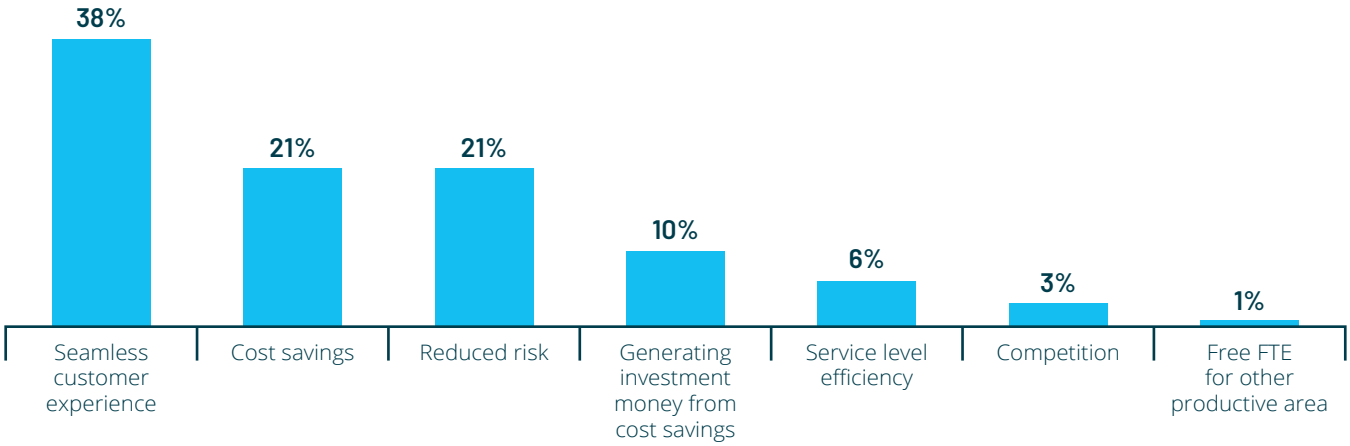
It may seem like a tall task for banks to maintain the level of digital innovation needed to keep up with what customers demand today given the circumstances noted above. However, financial institutions can in fact do this without breaking their budgets by hiring dozens of new tech workers. This is where automation comes into play. Fully 90% of the manual tasks and processes that are part of the day-to-day running of the business and general upkeep can be automated to not only save time, but to reduce the human errors that come with manual work. More importantly, this frees up IT staff to focus on strategic contributions related to digital transformation initiatives and innovation. Automation can enable financial institutions, as well as organizations across a wide range of industries, to overcome the tech talent gap, achieve unprecedented efficiency, and pursue market-beating growth.

As noted in a scholarly article from "Management Study Guide," an educational portal, manual IT work in banking "takes up a lot of time and effort from their staff as well as making them do routine activities over and over again, leading to loss of productivity and missing the chance to move up the value chain. On the other hand, automation reduces the redundancies in their operations and frees up staff that can be deployed for activities that are more productive. This is the reason why banks and financial institutions are among the largest users of IT."

> 'Given the need for profits and any means of reducing costs that are necessary in this uber-competitive business landscape, banks and financial institutions have found that automation greatly improve's their bottom line and leads to synergies between their processes.'

Despite these benefits, one survey showed that the automation efforts at nearly two-thirds (65%) of financial institutions remain at the early or proof-of-concept stages if they've done anything at all. And yet nine out of 10 respondents professed that process automation is critical to their business plans, both now and in the future.

Benefits Bankers Seek from Process Automation



Source: Cognizant

Software is a tool, like a hammer, and there are a thousand things you can do with a hammer.

Part of the challenge with automation is it's this big wide tool and executives sometimes struggle to realize they need automation because they don't associate with a particular use case.

Part of this lag in adopting automation can be partly attributed to banks simply not knowing where to begin, says SMA's Weiss.

"Software is a tool, like a hammer, and there are a thousand things you can do with a hammer," Weiss says. "Part of the challenge with automation is it's this big wide tool and executives sometimes struggle to realize they need automation because they don't associate with a particular use case."

There are often other internal hurdles that prevent further automation of routine and manual business process that must be overcome.

Often banks and credit unions are simply not aware of all the processes that can be automated and the benefits, says Dauchy.

"When we first start an engagement with a client, we often find it is more of a mindset thing," he adds. "One of the biggest barriers to automation is simply the unknown of what's possible and what's not. Once they embrace automation, they start to see where the benefits are in many different areas."

The Financial Brand further notes several potential hindrances to financial institutions adopting automation.

These include concerns such as misconceptions from upper management that automation requires an overall tech overhaul. Decision-makers may be concerned that such a project may require extensive coding or interaction with legacy systems, when it actuality it does not. There may also be risk, security or compliance concerns. Executives may be wondering about how automating some processes affects regulatory reporting, or if there are potential flaws in the process that can lead to cyberattacks or issues with security.

"For instance, what if a software bot fails, or encounters a security issue?" The Financial Brand article asks. "How quickly would managers be alerted, and how quickly would a human be available to respond?"

It's important to note that automation is not about remaking IT. In fact, it is about increasing revenues and driving business growth, says Weiss. Making the business case for automation is the most compelling way to convince skeptics and remove internal roadblocks. One such case is the cost of manually maintaining legacy systems.

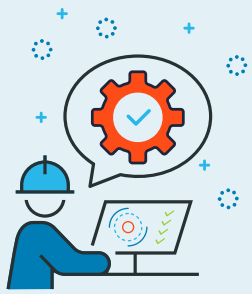
Capgemini notes that the resources a business spends maintaining legacy systems can have a significant impact on overall expenditure and profitability.

It's important to note that automation is not about remaking IT. In fact, it is about increasing revenues and driving business growth.

"The complexity of legacy systems means they can dominate management focus," the firm states. "And, as the complexity and cost of sourcing the right skills and maintaining security rise, crucial opportunities can be missed. Simply put, money spent on legacy systems could be spent adding value to the business. Automating management tasks surrounding legacy systems eliminates these costs and saves money overall through greater efficiency and better resource utilization."

In addition to generating cost savings, automation has the potential to help drive growth, Capgemini continues.

"Many businesses that have taken the automation plunge now see it as critical to their competitiveness," Capgemini says. "Those that don't make the transformation could soon find themselves lagging behind, with uncompetitively expensive operations and time-to-market journeys that are simply too long. With more and more born-in-the-cloud market entrants, staying competitive is perhaps the biggest driver for adopting automation."



Ultimately, the case for automating at least routine businesses processes is too compelling to ignore. Even banks that are too cautious to embrace automation fully should explore areas where to begin implementing this technology.

"Eliminating person-hours spent completing repetitive tasks frees up staff to spend time on higher-value assignments while critical business imperatives are running themselves with unmatched reliability," says Weiss.

Automation – Where to Begin?

Banks and credit unions should take a strategic approach to automation in order to unlock the potential of their IT organization and optimize their digitization efforts.

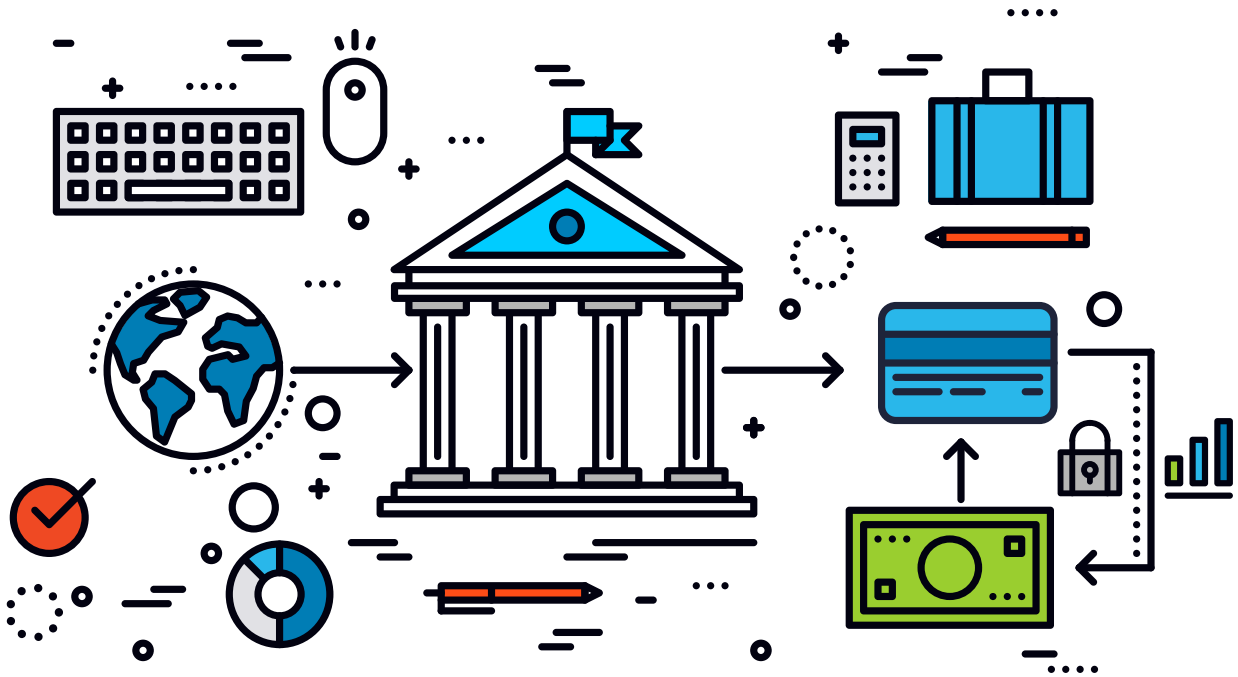
For most banks and credit unions, automating routine business processes helps to manage routine transactions faster and more efficiently than if a human completes them manually. Process automation is the first step to streamlining any financial institution's technical processes and making them more efficient.

"Starting with core processing is an easy one [to automate] right out of the gate," says Dauchy. "In finance, everything runs in and out of core systems. Automation can also help connect disparate systems that were not designed to work together."

Orchestration is the next step. The most robust workload automation tools also have orchestration functionality. Orchestration allows your IT team to coordinate processes across multiple complex IT environments. In other words, with orchestration, organizations combine multiple moving parts into a harmonious whole.

> When automation and orchestration are combined, the joint effort creates a clear pathway to doing business better and reducing inefficiencies for internal IT teams.

A clear place to start is by automating core processes.



"Although there are several modernization options, any start is a smart choice because anywhere you choose is better than not starting at all," advises Deloitte. "The gap between digital leaders and banks hampered by their legacy systems is growing wider every day. And the challenges, costs, and risks associated with operating and maintaining outdated core systems and applications will only increase the longer you wait."

Deloitte further notes that automating core systems helps address the talent shortage by creating an IT environment that is attractive to younger workers, because many of the rote manual tasks IT had previously been doing are now automated. Automation also captures the priceless institutional knowledge that is locked up in legacy systems—and in the heads of employees who support those systems— and transfers it into more advanced solutions, Deloitte adds. This is critically important given the trends in the last few years, including the "great resignation." Banks cannot be at the mercy of an employee who decides to leave, taking institutional knowledge with them.

Automation, in a way, is almost like buying fractional hours of work for a specific function that an employee might do without needing the budget for a full-time employee, Weiss says. So, this means paying maybe $20,000 on an automation tool for a specific function that frees up 75% of the time of an existing IT staff member that would be performing the function. The bank has then essentially gained almost an entirely new full-time employee for far less than it would cost to hire an additional person, he explains.

And even if an institution outsources its core processing, automation can still be a great help. As the operational infrastructure for banks and credit unions grows more complex, many financial institutions are finding it increasingly difficult to integrate across multiple function-specific software platforms, including those housed on-premise and outsourced to third party providers. This can result in reduced access to siloed data, less control of recurring daily processes, and limited visibility into integrated systems and solutions.

Implementing workload automation helps financial institutions to maintain visibility and control, even while outsourcing more of their operations. In the next section, we will examine the five specific use cases for automation that offer the biggest return and potential for business growth.

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Payment Processing

Payment processing is among the biggest and most beneficial use cases for automation. Online payments and related actions such as remote deposit capture, Check 21 and ACH processing can benefit greatly from automation-fueled efficiency. Every financial institution runs these processes daily, yet they continue to go through the same messy steps instead of a streamlined and optimized process.

Accounts payable processes are another aspect of payments that is ripe for automation. AP is generally a manual, paper-based operation. The entire AP cycle, from invoice receipt to approval to executing the payment, tends to be filled with many steps, making for a lengthy process.

However, most financial institutions still find themselves using batch processes that are complex and time-consuming to process payments, Weiss notes. Take, for example, one of the simplest ACH payment processing tasks, making direct deposits into an employee's bank account.

To make direct deposits into an employee's bank account, the following steps must take place:

1. The company's bank has to receive an ACH transfer request entry from the company.
2. The bank then debits the company's account.
3. The bank proceeds to send the entry on to an ACH operator.
4. The operator then sends the entry to the employee's bank.
5. The transaction gets settled by the Federal Reserve and the employee's account gets credited the amount of the payment.

Automation can help save time and money for any kind of payments processing banks and credit unions have to do. Both ingoing and outgoing payments of all types can be automated to free up staff to work on more strategic tasks. Even processes for investigating issues involving potential fraud related to payments can be automated.

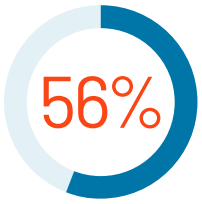
Let's go back to AP as an example. The average cost for manually processing an invoice is estimated at anywhere from $10 to $30, depending on the size of the organization. Automating that can save a significant amount of money.

> When it comes to accounts payable, time IS money. Automated payments allow companies to process payments instantly and automatically. No more misplaced invoices, no more time wasted hunting down payments, and no more wondering when a payment will be approved.

"When it comes to accounts payable, time IS money," says Finextra. "Automated payments allow companies to process payments instantly and automatically. No more misplaced invoices, no more time wasted hunting down payments, and no more wondering when a payment will be approved. Faster approval time offers your company greater flexibility and improved cash flow. Automated, electronic payments guarantee that orders and invoices get to where they need to be, and ensures that your suppliers and contractors can be paid faster."

Mortgage Loan Origination and Servicing

Even in today's digital world, loan origination and servicing are still highly manual and paper-based processes for many financial institutions. Anyone who has ever bought a home is all too familiar with the process of bringing a stack of paperwork and tax documents into a bank branch. This is an issue for several reasons. It is costly for financial institutions themselves, as employees must spend excessive amounts of time on manual, repetitive tasks.



> 56% of bankers pointed to the manual collection of data and subsequent back and forth with the client when asked to identify their biggest challenge in initiating the loan process.
>
> - Moody's Analytics

Furthermore, as various information from a customer's file is keyed in by the lender's employees into its systems, the possibility for human error and mistakes in data entry opens up. According to a survey of bankers conducted by Moody's Analytics, when asked to identify their biggest challenge in initiating the loan process, 56% of respondents pointed to the manual collection of data and subsequent back and forth with the client.

Ongoing loan servicing is also a highly laborious –and costly – process for banks and credit unions. Tasks such as sending payments statements, collecting monthly payments, collecting and paying taxes and dealing with delinquencies take up a lot of time and manual effort for financial institutions. These efforts take up much time for employees and are also prone to the same manual errors discussed above with loan origination.

Automation, however, can mitigate the inconsistency and delays of manually collecting financial data and other mandatory customer information, Moody's further notes.

"Customer-facing web-based portals and application program interfaces (APIs) can facilitate digital onboarding of new prospect and existing customer data straight to the lender's loan origination platform," Moody's says. "After data is received, lender-defined business rules can automate the next step in the process, differentiating between loan applications that are ready for decision and loan applications that require more documentation."

According to Insider Intelligence, by enabling a fully automated mortgage underwriting process, financial institutions can realize the following benefits:

1. Extract data efficiently and allow underwriters to easily verify information, while the software processes documents and flags any inconsistencies
2. Compare borrower information against employment databases
3. Generate property valuations without the need for official appraisals
4. Reduce fraud incidents

Utilizing automation in mortgage servicing can also streamline formerly manual tasks such as the billing process, as well as quickly and accurately reflect payments and balances in an institution's mortgage servicing platform.

Automation in loan servicing can provide great benefits: One Florida credit union, after implementing workload automation in its mortgage department realized gains of up to 60 times faster daily processing, and accelerated monthly processing that is up to 24 times faster.

Business Intelligence and Reporting

Financial institutions have more data on consumers than virtually any other industry. They have insight into how much they spend and where, the amount they pay for various kinds of bills, their cash flow, and much more. Yet, they often do not know their customers well. It's an all-too-common occurrence for a bank to mail a mortgage offer for a customer that already has a home loan through that bank, or a credit card offer for a card the customer already has.

Bankers say automation can offer robust business intelligence tools that give banks the adaptability needed to excel in both business-as-usual conditions and in more turbulent economic times. Automation can also open the door to enhanced efficiency by shining a light on areas ready for cost-cutting measures, new business prospects and more, and can make it easier to spot patterns and bottlenecks.

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Business Intelligence processes that can be automated include ETL (extract, transform and load) functions, data transformation, and data movement to the data warehouse through automation to ensure the financial institution's business leaders always have the latest data to make strategic decisions.

Automation can also turn regulatory reporting from a headache for institutions into a much more streamlined process. Banking is probably the most regulated industry globally, and financial institutions employ many full-time equivalents who spend countless hours on regulatory reporting. It is a labor-intensive and time-consuming process.

In the future, the entire regulatory reporting process will likely be automated end-to-end, from source system data to report mapping and business rule automation to report generation, says Deloitte. In the meantime, however, organizations can still take advantage of the opportunities available today by focusing on key parts of the regulatory reporting process that are ripe for automation.

Key Business Benefits of Automating Regulatory Reporting

1. Execution of currently manual tasks on a 24x7 schedule with minimal human supervision
2. Redeployment of skilled resources to more value-add tasks
3. Enhancements in quality of the data, documentation and overall report accuracy
4. Ability to further streamline the process with every cycle by enhancing the bots with additional logic based on new requirements and errors identified during any submission cycle

Document Imaging and Storage

As an industry that relies heavily on paper documents, financial services companies can reap significant time and cost savings from the use of document imaging. By automating forms and paperwork using intelligent document processing, banks and credit unions can easily sort, store and extract data that currently exist in unstructured formats such as paperwork, emails, PDFs and more.

> Automating document imaging and storage not only creates internal efficiencies, but benefits the customer experience as well.

Automating document imaging and storage not only creates internal efficiencies, but benefits the customer experience as well. Take lending, for example. Customers taking out a loan often struggle with printing, scanning, file-size limits, bounced emails and simply tracking which documents they have returned and which still need attention, a recent article in the ABA Banking Journal notes. This can lead to frustrated customers who may simply abandon the application process halfway through.

A robust, automated data warehouse opens up endless possibilities for financial firms. With easily accessible data, features such as automated member retention programs and data-based personalized marketing campaigns can become a reality.

On the other hand, loan officers, administrators and other internal personnel need to manage documents in different formats arriving in disparate ways, following up with customers for missing data and waiting for responses. This is not only an inefficient way to work but can easily lead to human error when inputting data, and even lost files.

Once automation is implemented, financial institutions can then extract any data needed and route it where it needs to go via workflow automation tools. This turns a haphazard, manual process rife with the potential with human error into a streamlined, easily manageable task. Financial institutions save money and create more efficient internal processes, while customers are able to apply and be approved for new products quickly and seamlessly, without a continual back-and-forth sharing of data and files with the bank or credit union.

Automating complex workflows like document imaging and storage also improves company culture and fosters an environment of innovation. By freeing up staff from doing these rote tasks, it helps promote a culture of empowerment by allowing end-users more freedom to innovate and experiment.

A robust, automated data warehouse opens up endless possibilities for financial firms. With easily accessible data, features such as automated member retention programs and data-based personalized marketing campaigns can become a reality. Up-to-date information and reporting allow for better management and nimbler operations. In fact, one financial services firm with over 500 employees was able to reduce data processing times by 25% to 30% by implementing automation, and also reassign four to five staff to higher-level strategic initiatives.

Digital Banking

Being able to offer cutting-edge, innovative digital tools is vital not only to stay competitive now, but to remain so in the future. Banks and credit unions risk obsolescence if they do not provide the real-time digital services and offerings that customers want. As the younger customers of today grow their wealth and begin to invest, buy a home and have a more complicated financial life in the future, they will remain loyal to the financial services providers that give them the digital experience they desire now. Currently, less than half of Gen Z even has an account with a traditional financial institution.

> Workload process optimization is a key tool enabling banks and credit unions to offer streamlined, digitized banking services to their tech-savvy customers.

They are increasingly looking for digital tools to help them do things like manage their money, give them financial advice and help manage their digital assets. The ability to automate manual processes enables banks and credit unions to innovate and offer the real-time digital products and services this cohort is looking for. Workload process optimization is a key tool enabling banks and credit unions to offer streamlined, digitized banking services to their tech-savvy customers. By using tools to automate repetitive tasks, limit employees' need to deal with IT, and let the IT team put its expertise toward higher-value work financial firms can deliver the innovative, digital experience that consumers want.

More than four out of five Gen Zers utilize a money transfer fintech app, compared to half of Baby Boomers. Another one out of five used a buy now, pay later service at least once during 2021.

"Gen Z enjoys fashioning a quilt-like medley of banking apps," notes The Financial Brand. "More than four out of five Gen Zers utilize a money transfer fintech app, compared to half of Baby Boomers. Another one out of five used a buy now, pay later service at least once during 2021."

As banks and credit unions strive to innovate and meet expectations in an ever-changing, increasingly digital world, workload automation and orchestration can provide the engine to make it happen.

Conclusion: Automation and the Path Forward

The financial services industry is not viewed as a particularly innovative one, especially when compared with big tech companies like Google, Amazon and Apple, as well as savvy fintechs and digital neobanks. But banks and credit unions do in fact have the capability to act as digital-first, innovative organizations. And it doesn't take a massive budget or the need to hire an excessive amount of new IT staff.

Smart automation is imperative in a world where every customer expects a seamless, real-time digital process.

"The world has changed, and financial institutions have to innovate at a faster pace than ever before because consumer habits are rapidly changing," says Dauchy.

As financial institutions work to innovate and meet member and customer expectations, workload automation and orchestration can provide the support to make it happen.

By freeing up IT staff from spending their time on routine, repetitive tasks, financial institutions can focus on innovation, running the businesses more efficiently and ultimately becoming more profitable.

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