Aite PARTNER. ADVISOR. CATALYST.

IMPACT BRIEF

MARCH 2020

Aite Group Research Team

COVID-19: Challenges and Opportunities in Financial Services

As governments around the world attempt to defend against COVID-19, financial institutions (FIs) and their technology vendors are facing significant operational constraints as well as a rapidly deteriorating business climate, and they are experiencing an urgent need to identify bright spots. In this report, Aite Group analysts identify a range of near-term challenges and opportunities for FIs in key verticals of the industry—Banking & Payments (Retail Banking & Payments, Wholesale Banking & Payments), Securities & Investments (Institutional Securities & Investments, Wealth Management), and Insurance (Health Insurance, P&C Insurance, Life Insurance)—and across the Fraud & AML and Cybersecurity functions. This report also provides analysts' recommendations to FIs and their vendors.

TABLE OF CONTENTS

BANKING & PAYMENTS

In this section, we highlight near-term challenges and opportunities in Retail Banking & Payments and Wholesale Banking & Payments.

RETAIL BANKING & PAYMENTS

The U.S. government's partial shutdown in late 2018 and early 2019 brought to light the precarious nature of many households across income levels.[1] Many FIs responded to federal workers' plights by waiving interest and fees, or even postponing loan payment due dates. But COVID-19 will directly and indirectly affect a population several orders of magnitude greater than the 800,000 federal workers with paycheck delays. The sections that follow outline the challenges and opportunities that COVID-19 presents in retail banking and payments as well as Aite Group's recommendations.

CHALLENGES

- **Consumer lending:** Many consumers will feel increased financial distress, and it will be harder for FIs to immediately discern who either might need a loan to bridge a gap or is most at risk of becoming delinquent on a loan.
- **Branch banking:** As individual and regional quarantines as well as social distancing continue to affect personal and business interactions, more FI customers will be reluctant or unable to visit branch locations, further contributing to the decline of the branch channel.
- **Debit and credit cards:** COVID-19 may push consumers toward payment methods that require the least physical interaction. As a result, consumers may choose to pay with a contactless card or mobile wallet, since those do not require contact with POS terminals. The threat of infection through physical contact will make the industry shift gears toward the cashless and frictionless payment.
- **ATM cash replenishment:** Some consumers will feel that they need to stockpile cash, so FIs will need to account for a potential increase in ATM cash withdrawals. FIs should also consider the risk of "infected" ATMs or cash, particularly if used currency is loaded into cartridges. Customers may claim the ATM or cash from the ATM was how they contracted the new coronavirus.

1. According to the May 2019 Board of Governors of the Federal Reserve System's "Report on the Economic Well-Being of U.S. Households in 2018," only 61% of adults say they would cover an unexpected US$400 expense with cash, savings, or a credit card paid off at the next statement.

- **The underbanked:** These consumers may well be one of the most highly affected groups in society as COVID-19 explodes across the globe. Often, underbanked individuals are the lower-middle class or the working poor, and even in the best of times, some of them depend on their migrant worker relatives for financial support. Further financial strain will hamper these consumers' ability to create or solidify relationships with FIs.

- **Peak load on bank systems:** FIs may experience peak load on bank systems and infrastructure, as there may be concerns about bank stability as a result of the crisis, similar to those experienced during the 2008 financial crisis.

OPPORTUNITIES

- **Digital banking and e-commerce:** People forced to stay at home to contain the virus will increase their digital banking and online shopping. This may consistently increase the share of digital transactions in the payment mix at the expense of "free" payment methods such as cash, and FIs will earn higher income as a result.

- **Contactless technology and digital wallets:** These tools can keep consumers away from devices that may be platforms for the new coronavirus. The lack of friction and physical contact in digital payments not only accelerates commerce but also keeps the economy moving at a time of crisis.

- **Analytics:** Vendors that can help FIs make sense of their own copious stores of data—and incorporate real-time indicators of borrowers' financial health—may facilitate better decision-making that helps both the FI and consumers who are suddenly faced with financial insecurity.

- **Global remittances:** The underbanked may well bear the brunt of a global recession and depend even more on financial support from relatives or governments for basic living expenses and medical care. As such, there will be an increase in the volume of global remittances around the world, and digital-first players such as Remitly, TransferWise, and WorldRemit are well-positioned to further secure their leadership in the market. These companies offer competitive rates for global remittances, and their digital customer experiences allow remitters to send payments from the comfort of their homes—a benefit over the traditional agent-based models that require exposure to the public. Whether digital-first remittance providers or incumbent players, these companies will play a key role in distributing aid around the world; they have an opportunity to expand brand awareness as well as a social responsibility to bring the cost of remittances down during this crisis.

RECOMMENDATIONS

- **Increase staff to adequately support remote banking services.** Track customer service metrics more frequently with key performance indicators and continually evaluate ongoing business activities. Assess options for remote operations, thereby easing potential for infection on-site. Frequent internal communication to all personnel is essential.

- **Market capabilities that can be done easily and securely through digital and automated channels.** Promote the ability to remotely cash a check, conduct person-to-person or intrabank transfers, or video chat with a banker. Whether through in-app, text, and email messaging, or through social media streams, FIs should also share up-to-date information with their customers regarding branch closures and resource availability.
- **Increase remote deposit, ATM, and card transaction thresholds.** Allow customers to make more or larger deposits to or withdrawals from their accounts. FIs should also consider waiving fees, delaying due dates for payments, and providing additional financial education.
- **Raise the dollar limits for contactless payments.** "Tap-and-go" card payment without PIN entry or signature helps to avoid physical contact with the terminals. Issuers that already issue contactless cards or support mobile wallet types may consider promoting these options as ways to stay safe during this pandemic.
- **Accelerate contactless payments initiatives.** Issuers that do not yet issue contactless cards or support all mobile wallet types may want to accelerate those initiatives in case there is increased consumer demand for these options.
- **Promote personal financial management and financial wellness tools.** Consumers need these tools to manage their everyday finances, plan for expected wage loss, and pay for unplanned medical expenses. Reinforce digital capabilities to help consumers manage their finances more effectively and understand what options they have if they experience financial hardship, and specifically highlight solutions that can help alleviate financial distress, such as early wage access or loans.
- **Assess in-house and vendor capabilities to identify particularly vulnerable borrowers at risk of becoming delinquent.** Determine what types of mitigation strategies to deploy under varying scenarios. At the same time, FIs should also determine how best to provide offers to customers with immediate credit needs.

WHOLESALE BANKING & PAYMENTS

Commercial lending operations are a double-edged sword. In economically good times, when credit conditions are benign, commercial lending provides FIs a mission-critical and lucrative entree into businesses that purchase more profitable services, such as payments, cash management, commercial cards, and supply chain finance. But when an economic climate or credit cycle turns—as they inevitably do and always with unhelpful speed—the ugly side of lending is revealed. Commitments to borrowers get fully utilized, debt-service coverage ratios crater, and deals turn out not to be structured as intended. Unfortunately, such will be the case as the COVID-19 pandemic and its attenuating cancelations, business closures, and social distancing surge tsunami-like through the world of small and midsize businesses that borrow from FIs.

CHALLENGES

- **Liquidity squeezes:** With so many businesses simultaneously experiencing a squeeze to their income statements—revenue way down, fixed costs flat, and some variable costs down—borrowers across a variety of industries will suddenly make far heavier use of their borrowing commitments; some will fully tap these facilities. Funding such a jump in borrowers' usage of lenders' liquidity will make for significant challenges at funding desks.
- **Asset-conversion slowdowns:** To the degree that businesses remain open and their business models are unharmed, the process by which services are converted into invoices, invoices into receivables, and receivables into cash will become pressurized. After all, many small and midsize businesses still get paid by check, rely on paper-based workflows, and lack access to FIs' digital processes. Slower asset conversion, such as income statement compression, will mean reduced ability to service debt.
- **Supply-chain disruptions:** Shuttering thousands of work sites around the globe, the pandemic is affecting supply chains in unpredictable ways. Beyond the predictable reduction in the volume of payments, there will be other challenges as firms try to manage the crisis through direct business action (i.e., placing trade restrictions on goods). This amounts to invisible tariffs, giving firms an excuse not to pay. Such actions would impair borrowers' asset conversion cycles, impeding their ability to service debt.
- **Covenant breaches:** Soon, borrowing businesses with reduced revenue will begin breaching financial covenants based on operating cash flow or earnings before interest, taxes, depreciation, and amortization. Here, think restaurants, movie theaters, and a variety of entertainment-related businesses, such as the concessions vendors with contracts at local stadiums that now host games with empty stands. Covenant breaches present a dilemma in times of economic stress: A lender can use the opportunity to restructure the loan or call it and liquidate all the related collateral, against which a lender hopefully—but may not—has properly documented Uniform Commercial Code (UCC) filings.
- **Insufficient work-out knowledge:** When banks look to their work-out departments to manage newly troubled loans, gaps in institutional knowledge will be revealed. The last credit cycle downturn was 12 years ago; the employees that worked out troubled loans during the global financial catastrophe of 2008 might have left for jobs at other banks or may have retired.
- **Trouble for commercial real estate lenders:** Rent will be among the most significant fixed costs that won't budge for businesses during the pandemic. In other words, the pain among businesses small and large will spill over to the commercial real estate market, where real estate developers and landlords will suffer missed rent payments from their lessors and become less able to service their own debt.

- **Reduced fee income:** The pervasive reduction to a range of human activities will mean reduced fees for noncredit products. This means a lower volume of processed payments in general, lower interchange fees, and reduced use of corporate cards as travel and entertainment (T&E) activities get put on hold. Importantly, these sources of income lack a capital requirement and have—for years—been boosting risk-adjusted return on capital and making up for thin margins on loans.

- **Trouble for consumer lenders:** In the pain that businesses large and small will soon encounter, the reserves to which borrowing businesses' principals have access will be important. First, there's the liquidity and capitalization of their own business. But here, optimism should be guarded. It's quite possible that businesses, accustomed as they've become over the last five or more years to easy credit, have become lax in managing their liquidity and capital. Unfortunately, the principals of borrowing businesses are likely to tap into their personal credit cards and home equity lines of credit—a concerning expectation for retail lending operations.

- **Increased fraud rates:** Desperate for credit, some principals of cash-strapped businesses—otherwise law-abiding citizens—have the potential to engage in credit abuse to save their troubled businesses. Expect increased rates of loan stacking and the use of fraudulent financial statements or invoices as businesses increasingly seek the debt needed to stay afloat.

OPPORTUNITIES

- **Data set exploitation:** New since the last credit downturn is broad adoption of commercial loan origination systems. Terrific about this is the resulting back-end data sets, against which a variety of standardized reports, custom reports, and ad hoc queries can be run. All new such forms of data-driven visibility will be key to identifying early on the borrowers that are getting into trouble or the legitimate operators that have begun to abuse a lender's credit extending capabilities.

- **Deeper loyalty:** During this crisis, principals and other leaders of borrowing businesses will be focused more on survival than on finances. Lenders, equipped as they are with an eagle eye into borrowers' finances and cash flows, are in a unique position to provide advice about managing borrowers' trade and financial commitments optimally and maximizing their resilience. Helping a borrower during a crisis is a sure way to invoke long-term loyalty.

- **New operational assists:** While T&E cards have little use in a world with no travel and little entertainment, the increase in remote business activity and telecommuting is likely to lead to renewed interest in electronic payment tools that can be rapidly deployed, proving a positive push for virtual cards and tools for card program management. Receivables capabilities can also see their day in the sun as an antidote to pain for small and midsize businesses. Most banks have been slow to roll out receivables capabilities to their small and midsize businesses. Several fintech companies have taken advantage of the opportunity as businesses have gone directly to them for solutions. The current environment will highlight the level of urgency and need for such capabilities. Those banks with offerings will be well-positioned to deepen client relationships and offer value during a time of need. Fintech companies will also likely see an influx of new business as the value proposition of their offerings intensifies.

RECOMMENDATIONS

- **Watch that digitalization.** Up until several weeks ago, competition in the small-and-midsize-business lending world was all about squeezing every iota of process friction out of the lending process. Now it’s time to let some of that friction back in; it’s how you’ll avoid extending bad renewals or booking a loan based on fraudulent documents.

- **Check those liens.** When loans go to work-out, always problematic seems to be the accuracy of liens, which turn out not to be perfected because of errors. When completing a UCC filing to secure collateral, an errant comma or “Inc.” can mean the difference between possessing that pledged collateral and losing it. This is just a matter of staring and comparing, and it’s readily done by artificial intelligence. Systems exist for this, and it’s not too late to make that investment.

- **Tune those noncredit products.** All banks, regardless of size, must look for ways to broaden their product offerings and the value they deliver to customers, or they risk losing that business to more forward-looking banks and nonbank competitors. Unexpected events, such as the COVID-19 pandemic, shine light on critical product gaps, such as receivables capabilities. Once that business is lost, it will be tough to regain. Expect corporate cards to play a role here. Issuers need to brace themselves for declines in transactions but should not abandon their recent investment in commercial card capabilities. Automated, digitally integrated commercial card programs that can offer greater visibility, control, and automation of payments will be needed more than ever to meet the evolving challenges facing businesses of all sizes.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

SECURITIES & INVESTMENTS

In this section, we highlight near-term challenges and opportunities in Institutional Securities & Investments and Wealth Management.

INSTITUTIONAL SECURITIES & INVESTMENTS

Across capital markets, the new coronavirus is pushing FIs' boundaries to accommodate various operational and market structure issues. Just as teams are being asked to work from home, financial markets are experiencing record orders, trades, and message volume as well as massive uncertainties. Investment and trading fluctuation is occurring at when business risks are at their highest levels, and many seasoned employees have never had the opportunity to work from home. But there are some rosy elements within the gloom, and some key lessons being learned along the way will provide solace in many ways for the capital markets and their prospects.

CHALLENGES

- **Work-from-home policies' institutional risks:** Capital markets companies have been scrambling to deal with "institutional work from home" business activities. When putting together their business continuity plans, few asset managers and banks ever dreamed of the implications of portfolio management or trade and trade-support scenarios all having to be done from a home office. As many have pointed to Software-as-a-Service-based functionality (e.g., Slack, Zoom, Skype) to be primary workarounds, the changeover is occurring during highly sensitive market conditions.
- **Market volatility and liquidity concerns:** Repercussions in market activities have been significant. The reduction in market participation due to trading-from-home activities, along with the risk mitigation efforts and wide spreads of firms such as electronic liquidity providers, is leading to extreme liquidity challenges. Unfortunately, more questions than answers remain at this point.
- **Staffing issues due to uncertain timetable:** The unknown timetable for staff to return poses new risks. If employees are out of the office for nonwork-related coronavirus issues, the inevitable gaps in coverage could have a larger market impact. The closures of NYSE and CME Group trading floors are especially noteworthy by way of example.
- **Potentially compromised front-office tasks:** Trading-related jobs and institutional procedures and operations may be more challenging to perform at home. Think about this in terms of a trading desk that typically shares market color and information in a live format, especially in over-the-counter and fixed income markets that do not trade electronically as much as others do. Additionally, a higher degree of trade breaks and compliance challenges are possible if functions are somehow excluded or reduced in coverage.

- **Market data and technology concerns:** Having enough screens and managing live market conditions are challenges that arise from the home office setup. Firms may be trading billions of dollars, and traders who are insufficiently trained to work from home are now using new technology. This includes multiple systems that are often required to navigate micromarket structure (e.g., Bloomberg/Refinitiv, portfolio/order/execution management systems, Slack, instant messaging).
- **Error-prone staff and tools:** Staff who may lack experience with new workflows may lead to high-cost errors, inconsistencies, or performance issues. This also includes home computers and networks that need to work with market data feeds and live news as well as manage highly sophisticated and latency-sensitive functions that may not work properly on home broadband.
- **Heightened vendor risk:** FIs may encounter significant counterparty risks during the crisis. This risk also highlights FIs' differing levels of resilience during the crisis, and some of these differences may depend on where firms are headquartered or how well-equipped their business is to deal with various short-term and long-term issues related to insulated or noninsulated business functions.
- **Extended time frames for capital markets projects:** Post financial crisis and after 9/11, there was a clear pullback by the capital markets to tighten budgets for nonessential items. But this definition also extended to allocations toward new projects and innovation that did not prove immediately beneficial in the short term. With regard to recent projects, this could push the time frame back on plans for the nice-to-have but more peripheral items, including technology projects and people. Of course, the first areas of consideration include the latest high-growth areas (e.g., artificial intelligence/machine learning, distributed ledger, cryptocurrency) but will extend into more developed areas as well. As companies batten down the hatches, the balance between critical functions and innovation will be felt noticeably.

OPPORTUNITIES

- **Market volatility's benefits to transaction-related businesses:** During times of panic and crisis, it is often challenging to be the optimist in the room, but market volatility is clearly beneficial to transaction-related businesses. Over the past few years, trading volume in listed and exchange-linked products has been increasing, but not at the pace that many within the sell-side or execution venue community would like in order to compensate for the level of fee compression and overall reduced commission outlays the Street has endured. With the CBOE VIX index increasing more than five-fold during Q1 2020 (from a December 31, 2019, close of US$13.78 to US$80.82 as of March 16, 2020), the asset management community has had to adjust and significantly pivot its portfolios. For better or worse, the recent drop in share prices allows companies to deal in greater volume for the same amount of capital deployed. Net-net, this will prove to be a major revenue boost for electronic liquidity providers, market-makers, agency broker-dealers, traditional sell-side brokerage houses, execution venues (including exchange and dark pool operators), and technology providers that profit from variable pricing models around trading activities.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

- **Execution venues and sell-side firms' long-lasting impressions:** Even with trading activities spiking over the past few weeks, market disruptions have been limited and isolated. As circuit breakers have triggered limit-down market halts in both overnight futures markets and during live market hours, execution venues have been holding up extremely well. Comparing the properly functioning markets to previous market events, such as the financial crisis in 2008 or the flash crash in 2010, the industry has progressed a long way in its ability to scale up when needed. Also, the media has reported very few outages or broker-dealer failures in terms of trade-related breaks, with the exception of Robinhood.

- **Tech providers' validated offerings:** Many will see in these results a clear validation of the hard work that has been put in by the industry and regulators to improve market resiliency. Further, the scalability that new technologies and infrastructure providers have brought to market is shining. Often catering to a high-throughput audience, technology and data providers frequently discuss this as an area of differentiation. Clearly, the winners' narrative is playing out, and they should be applauded for their accomplishments, which will continue to raise the table stakes going forward.

- **Reinforced outsourcing services:** There is a clear rush by FIs to amplify their buying decisions for remote-based activities that may fill a void. In this regard, outsourced services (including data centers, which are traditional providers of business continuity services), communications providers, outsourced trading desks, data providers, and front-office technology providers all stand to benefit. In recent conversations with some of these firms, all of them mentioned an uptick in business inquiries and suggested that prospects are reaching out about solutions that will help to fill current business gaps.

RECOMMENDATIONS

- **Focus on business strategy and communication.** Have regular discussions and metrics, including scorecards with key performance indicators and quantitative inputs, to evaluate ongoing business activities and steer the front, middle, and back office.

- **Categorize staff.** If going completely remote is not realistic, develop a categorization of staff so that those personnel who might not be considered essential to operations can work remotely, thereby easing potential for infection on-site. Frequent communication is essential to all staff.

- **Embrace the cloud.** Many companies, including banks and broker-dealers, have made significant strides in shifting from on-premises to virtual arrangements over the past few years. This tangential development will prove to be the linchpin that holds together the necessary elements that will be necessary to get through these difficult times.

- **Consider outsourcing options.** Evaluate certain areas of the operations that can be outsourced, especially to create redundant capabilities. Reallocate budgets and people to support these areas.
- **Keep an eye on vendor risk management**. Stay alert and aware to vendor reactions to the pandemic and how they are handling certain situations. For trading-related activities, firms should have backup procedures in place and be ready for any potential disruption to vendor-related products and services.

WEALTH MANAGEMENT

The wealth management industry is in a better position today than at any other point in history to meet the challenges of COVID-19. Well-capitalized incumbents that have recently invested in modernizing their firms' front-to-back technology capabilities and that have embraced digital client engagement models will be in a better position to weather the current storm than technological laggards. Nevertheless, it is very likely that this crisis will cause substantial stress for investors and cause some to switch providers due to shortcomings displayed by wealth management firms and financial advisors. Firms that come into this crisis with a weak balance sheet or have missed the opportunity to embrace the latest technology will risk losing clients and possibly go out of business.

CHALLENGES

- **Technology gaps exposed:** Digital engagement will play a pivotal role in the current crisis, which is characterized by high market volatility and social distancing that will make it hard for wealth management clients to meet with their advisors. While digital capabilities are a key enabler to engage with clients at this time, a digital front end alone will not be sufficient to keep the engine humming. The current crisis will mercilessly expose areas in key processes, such as client onboarding or client servicing, that are not fully system-based and in which manual intervention is still common. Some of these processes will not be able to be completed altogether if staff is not in the office, while others will just take longer to complete. These types of situations put client acquisition and retention at risk, especially in times that are characterized by heightened operational volume, nervous clients, and operations staff working remotely. A crisis situation of this magnitude demonstrates how important solid front-to-back technology capabilities are for wealth management firms. It can be expected that wealth management firms will come out of this crisis with a laundry list of process improvements that need to be addressed as soon as possible.
- **Accelerated economic compression:** Beyond technology, additional risks to the wealth management industry will center on accelerated economic compression in a volatile market. In the current environment, wealth managers are not hesitating to exercise margin calls on their clients, which could lead to cash crunches. Especially considering that the current landscape of exchange-traded funds (ETFs) gives incumbents virtually limitless low-cost options to diversify across asset classes, investors using leveraged products must exercise caution in extreme volatility (e.g.,

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

an ETF that returns three times the S&P in either direction). These ETFs change value rapidly, are reset daily, and cannot be held long term without depreciating or appreciating.

- **The zero-commission trading environment:** This is also the first economic crisis that happens in a zero-commission trading environment. The ability to trade at zero cost may create added levels of risk for self-directed investors who do not adopt a longer-term view of their holdings. Testament to this new normal are intermittent system outages that were experienced by self-directed trading platforms and that have created frustration among investors who expect access to their online accounts at times of market stress. Robinhood, a platform that recently went to self-clearing, has gone down at least three times over the last several weeks. This is likely to leave a lasting negative impression on its large base of millennial investors. Moreover, it speaks to the importance of having a robust client service and communication model, which the firm also seems to lack. Slick technology in and of itself is not enough to compete in this environment. The more mature online brokers, having survived the flash crash and responded with significant infrastructure investments, will win new clients as reliability will outshine bells and whistles in tough situations.
- **Untested digital investment management firms:** The current market conditions will also put the investment models of digital investment management firms (aka robo-advisors) to the test. This will be the first economic downturn experienced by this new market segment, which was created during this decade-long boom market currently drawing to a close. The verdict is out on how the largely self-directed clients of robo-advisor platforms will respond to the sharp market declines. Investors who cash out of these models will inevitably incur losses and may have adverse tax consequences. Those who do not cash out will become frustrated with their portfolios' performance. The recent additions of financial planning and goal-setting capabilities to digital investment management platforms might help to avoid compulsive trading behavior often displayed by self-directed investors, assuming the tools can demonstrate that their goals are not jeopardized by the market crash.

OPPORTUNITIES

- **Modern communication technologies:** Pressure on wealth management firm models will increase as COVID-19 disrupts the global economy and capital markets. There will be meaningful opportunities for wealth management firms to fully leverage modern communication technologies and client management and reporting systems. Those wealth management businesses, financial advisors, and investors who have embraced the tools of digital engagement are in a better position to cope today than those who lag in digital adoption. Leading firms have integrated advisor-client screen sharing and video chat. The availability of these capabilities will take on a new level of urgency now. Additionally, advisors who have diversified their practices with tech-savvy millennials and staff will benefit from their heightened knowledge of social platforms and digital communication.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

- **Marketing automation vendors and tools:** The sheer volume and breadth of client communications from the crisis will become untenable for many wealth management firms and advisors, however. Firms employing marketing automation vendors and tools will increase response times, improve continuity of messaging, and free up resources for other front- or back-office activities. Marketing automation will also enable wealth management firms to be more proactive in keeping clients up to date and informed on a variety of market, investment, planning, and client-account issues.

- **Robust client portals and integrated systems:** It is apparent that wealth managers that have deployed robust client portals (e.g., access to relevant content, self-service tools, and communication capabilities) and have completed a shift to a goals-based wealth management process will stand to better alleviate client anxiety over the next several months. Beyond digital engagement, advisors will have to be able to rely on integrated systems for trading, rebalancing, risk management, document generation, and storage to help guide clients through the heightened market volatility that goes hand in hand with the pandemic. Firms that overly rely on manual intervention of in-office operations staff to complete key processes will find it hard to keep up with demand in times of social distancing.

- **Vendors' increased service and support levels:** For vendors to the wealth management industry, Aite Group sees considerable opportunities to add value to their client firms by increasing service and support levels and remaining flexible during the crisis. Vendors that step up to the plate over the next few months have an opportunity to develop deeper client relationships, build trust, and articulate and evolve their value propositions under adverse circumstances. Custodians that have been criticized for their service models have a unique opportunity to erase prior missteps—if, and only if, they increase client support. We expect that advisors will find added levels of service invaluable as their assets under management vacillate from one day to the next, volatility increases, and nations around the globe prepare for regional or national lockdowns.

RECOMMENDATIONS

- **In a historically high-touch industry, focus on client communication.** Digital engagement will be vital to allow clients to feel close to the institution and advisors who manage their wealth, even if in-person meetings are not possible. When heightened fear in the financial markets is paired with great limitations to meet in person, traditional wealth management service models are being put to the test. As the dust settles, the outbreak will bring digital engagement in financial services to a new level of appreciation and awareness.

- **Increase client training and education, which are essential for the adoption of digital tools.** Many digital tools and client portals are fairly new offerings for firms, and current usage by clients overall is low. Wealth management firms, advisors, technology vendors, and service providers will need to ramp up efforts to increase client awareness and educate them on how to use these digital capabilities to realize their full benefits and potential.

- **Reassert your firm and demonstrate incremental value.** This crisis is unprecedented and resets the service bar for financial providers. Those that can help navigate their clients through this crisis will demonstrate new value and create client loyalty. The collective client memory will reward these service providers when we emerge. If they have not done so already, financial advisors should embrace a goals-based wealth management process that focuses on ensuring a client’s goals are intact despite the volatile market conditions and that can provide peace of mind for clients who might face a health crisis in addition to the challenging markets.
- **Incumbent wealth management firms should reassure their clients of their corporate and operational strength.** The financial crisis will be a threat not only for firms with a weak balance sheet but also for those firms with an operational and technology setup that cannot be scaled to the current demands. While wealth management has seen many disrupters enter the industry during recent years, many of these new players’ platforms will experience pressure at current levels for the first time. The current environment will provide an opportunity for incumbent firms to win back clients from struggling disrupters.

INSURANCE

In this section, we highlight near-term challenges and opportunities in Health Insurance, P&C Insurance, and Life Insurance.

HEALTH INSURANCE

The new coronavirus has spread around the world, prompting health authorities and governments into action. Healthcare providers have already been on the front lines caring for patients and triaging incoming cases. This is a pivotal moment for health plans and their FI partners to consider the landscape that will shape the years to come. Regardless of the turbulence that lies ahead, history shows that calm returns after the storm, enriched with new insights we gain from the experience. Until then, the goal is to keep calm; be forthcoming, timely, and transparent in communications; and do the best we can as the situation unfolds—preparing for the worst and striving for the best. The ensuing sections outline the challenges and opportunities that COVID-19 represents in health insurance and healthcare payments as well as Aite Group's recommendations.

CHALLENGES

- **New rules for COVID-19 tests:** A lack of coronavirus testing may lead to additional viral infections and start the vicious cycle over again. So the IRS and Centers for Medicare & Medicaid Services (CMS) have instructed health plans to offer no-cost testing, and health plans have announced that such tests for those with high-deductible health plans (HDHPs) will be predeductible so people won't shy away from testing due to cost. HDHP holders are often on the brink of hitting their deductibles in March and April, but for those members who are not, this is a critical piece of information that can prompt them to get tested. In addition, there are talks of waiving copays, and a federal bill is pending that requires health insurers to absorb the full cost of coronavirus tests. If the bill passes, HDHPs will cover the testing, without requiring patients to share in its cost.
- **Treatment coverage in flux:** Health plans face unprecedented implications, as they explore whether and to what degree they will be required to absorb any costs associated with treatments over the coming months. Financial losses are increasingly likely and never comfortable. FIs will face delayed loan repayments and, worse, defaults. All said, lost revenue can be restored later, but loss of human lives cannot.
- **Era of payment inaccuracy:** In January 2020, Centers for Disease Control and Prevention's National Center for Health Statistics (CDC's NCHS) announced International Classification of Diseases (ICD) codes for COVID-19. This information may take time to trickle down the line of communication within health systems and cause errors in billing, creating downstream wrinkles in the form of administrative reworks, denials, and requests for additional medical records when health plans

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

review incoming claims for accuracy. This will have a ripple effect on health systems' receivables at a time when they need to be receiving payments swiftly.

- **Sharp shifts in prepaid card transaction patterns:** Extended periods of workplace closures and emphasis on social distancing will change how consumers use their prepaid debit cards. Consumers will eschew physical trips to stores as much as possible and prefer card-not-present (CNP) transactions. The result will be an uptick in card transactions at online pharmacy and medical device suppliers. Financial institutions, card processors, and technology partners will be instrumental in ensuring the smoothness of these transactions as well as monitoring fraudulent or abusive card usage.

- **Breaches:** Public demand for updates and information on the new coronavirus provides an opportunity for cyberattacks and data breaches, compromising network servers and endpoint users, not to mention creating the ability to share inaccurate information with an unsuspecting public.

OPPORTUNITIES

- **Remote work technology:** Digital tools that enable employees to work remotely have matured and are ready for prime time. Videoconferencing, endpoint security, multifactor authentication, and cloud-based apps let businesses of all sizes allow their workers to access business applications anywhere, anytime.

- **The analytics game:** Current events are likely to affect the financial strength of health plans going forward, so this is a critical time for putting data and analytics tools in place, if they aren't already. Tracking patient and illness info and the ensuing impact of incoming claims and reimbursements to providers will be instrumental components of financial planning and cash flows for the months and years ahead.

- **Clear guidance and education to enhance engagement:** COVID-19 will affect many enrolled members deeply and personally. Health plans and their FI partners have an opportunity to be the source for trusted advice. Providing consumers with easy-to-digest and relevant information on their medical bill payment options is a valuable opportunity to enhance engagement.

- **Open enrollment:** Open enrollment will soon be here. This is a good time to review and refresh onboarding and enrollment processes and then put plans in place with ample time for employers and employees to digest any changes to their plan options, policies, and benefits.

RECOMMENDATIONS

- **Walk the customer-centric talk.** This is the time for health plans to demonstrate customer-centric practices and support patients in multiple ways:

    - Plans can waive prior authorizations for diagnostic tests if the test results reveal a COVID-19 infection.

    - They can also waive prescription refill limits so patients who have illnesses or compromised immune systems may continue their treatment without adding workload to health systems.
    - Plans need to promote digital payment channels to encourage online payments rather than check payments. This will help reduce administrative burdens and move the needle in favor of a more streamlined payment and collections stream. Technology partners, payment processors, and FIs have payment channels that can serve these needs.
    - Plans can use digital channels such as telehealth and mobile applications to communicate with their enrolled members and provide information, guidance, and access to medical professionals 24/7.
- **Be the proactive partner.** Benefit providers must work proactively with employers, communicating legislation about paid sick leave as well as support for childcare, elderly services, and work absences. Beyond the nuts and bolts of such benefits, benefit providers must offer strategic guidance and recommendations for their clients, depending on their industry, given that some clients engaged in travel and entertainment, hospitality, conference organization, and food and beverage, along with other local businesses, will be affected more negatively than others.
- **Go digital.** Like health plans, health systems would benefit from encouraging telehealth as a channel to engage with providers and patients and a way to help contain the spread of the virus. Promoting digital payments to curb paper checks both from patients and payers, would also lower administrative costs. The time for digital benefit payment eligibility capabilities and invoicing is now.
- **Design wellness 2.0.** The virus will likely recur over the coming years and require ongoing health and wellbeing measures through vaccinations or preventive measures to avoid costly treatments and hospitalization later. Wellness providers will have an opportunity to be on the front lines of communicating information, whether offering discounts and incentives for enrolled members or personalized coaching and advice services. Technology partners also have a role to play in designing wellness 2.0 using their data and analytics capabilities to identify those at risk.

P&C INSURANCE

The P&C insurance industry will feel many effects from consumer and government actions as a result of the COVID-19 virus. The ensuing sections outline the challenges and opportunities that COVID-19 represents in the P&C market as well as Aite Group's recommendations.

CHALLENGES

- **Declines in usage-based insurance:** Carriers that have built usage-based products could see a decline in those products' premium revenue as travel restrictions continue to proliferate, workers reduce commuting, and commercial establishments are directed to close. However, any declines could be offset by usage-based

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

insurance policyholders who are using their cars to deliver food as restaurants move to takeout or delivery.

- **Upended travel insurance market:** The spread of COVID-19 has led to travel restrictions that have forced last-minute travel cancelations. Many of these canceled trips were covered with travel insurance policies, which have a wide range of exclusions, including global pandemics. But some travel insurance policies don't have those types of exclusions and could be on the hook for significant payouts. Outside of carriers with poorly written travel insurance coverage, perhaps the more acute risk that carriers will face will be travel insurance premium loss—meaning that the fewer trips taken, the fewer requests for travel insurance.
- **Processing claims:** With social distancing being the new normal for the foreseeable future, carriers will likely have to figure out a way to adjudicate and process claims with a constrained workforce.
- **Pressure on reserves:** The rapid spread of COVID-19 has roiled world markets with unprecedented levels of uncertainty. Investors are fleeing equities in search of the relative safety of bonds, which serve as the foundation for most carriers' portfolios. This flight to safety has driven bond yields down to near historic lows and put pressure on carriers' reserves. Some carriers might have to consider capital infusions to ensure minimum levels of liquidity if claims spike.
- **Business continuity insurance payout questions:** Businesses are grappling with how to maintain operations in the face of COVID-19 as supply chains have been broken and workers have been forced to stay at home. To be certain, many business insurance policies specifically exclude government decrees that prevent workers from going to work and supply chain interruption. However, if a sick worker has infected a piece of machinery, rendering the machinery inoperable, then it is possible that a claim would be paid out. Carriers can expect to deal with more questions related to business interruption claims.
- **Increased legal turmoil:** As a corollary to a few of the challenges named above, carriers could see increased legal action as aggrieved policyholders seek to overcome any ambiguity in coverage exclusions related to a global pandemic such as COVID-19.
- **Potential policyholder discontent:** Carriers run the risk of alienating policyholders with narrow exclusion interpretations and refusals to pay out for any incurred losses for travel insurance or business interruption insurance.

OPPORTUNITIES

- **Technology enhancement:** Embracing technology can certainly help carriers address a wide range of challenges, including those that are present because of factors other than COVID-19. Technology can play an important role in updating claims policies to adapt to the new reality of social distancing as well as provide a layer of protection from potential fraud as a result of this turmoil.

- **Policyholder engagement:** Carriers can continue efforts to treat policyholders the way other industries treat their customers—with respect and transparency. Effective communication strategies will not only bolster carriers' efforts to build relationships with their customers but also help mitigate potential coverage issues resulting from the new coronavirus.

RECOMMENDATIONS

- **Work toward a more touchless claim.** Not only does this encourage social distancing, it's more efficient and can surprise and delight policyholders who are making a claim.
- **Embrace policyholder experience.** Carriers can be more transparent in their policy exclusion definitions, can be clearer in their language, and can build processes that enable customer interactions. Any of these steps can go a long way toward providing a favorable policyholder experience.
- **Do the right thing.** The world is in uncharted territory; there is no blueprint when it comes to paying claims in the midst of a global pandemic. Specific to any COVID-19 claims, carriers should employ some element of flexibility when it comes to claim payouts, especially for small businesses. This is not to say that carriers should pay out claims when there is a clear-cut reason not to pay, but if there is a gray area, carriers should do what they can to pay something.

LIFE INSURANCE

The COVID-19 pandemic's impacts to the life and annuity industry are many. It isn't just about the deaths and payouts that were not expected, as most carriers have stress-tested their reserves to the gills. It is about the future financial stability for the carrier and the consumer experience. As a given, the new coronavirus will have a negative impact on the industry both today and in the future, but there is great opportunity to provide positive experiences by keeping the promises they made to consumers at the time of purchase. This section will outline the challenges and opportunities that COVID-19 represents in the life and annuities industry as well as Aite Group's recommendations.

CHALLENGES

- **Impact to surplus and reserves:** Life and annuity carriers are constantly stress-testing their financials for the worst-case scenario, going as far as 0% interest tests, so the impact of COVID-19 today isn't as big as it will be in the future. Most carriers are prepared to pay out all liabilities based on their assets under management—it's the future that is not clear. Most carriers plan for catastrophic loss, but the long-term investment that accounts for the majority of the surplus will be affected by decreasing yields for future acquisitions, therefore affecting the future income of the overall portfolio. As bond yields continue to decrease, carriers will have to look to alternative means to meet the reserve requirements for the future, such as increased product premiums and reduced annuity payments.

- **Increased death claims:** During this unexpected pandemic, life and annuity carriers will expect to see an increase in mortality that was not planned for. Again, while reserves are ready for this type of loss, the unexpected increase in mortality will deplete reserves. The most dire impact is to those individuals 65 or older, who have the highest concentration of life insurance and annuity contract ownership. In addition, these policy/contract-holders own the highest-value products. So, while only about 50% of these individuals own one or both types of contracts, the impact of the death of one individual 65 or older is much higher than the impact of the death of someone younger (and less likely to die from the coronavirus).
- **New policy sales:** With consumers being told to stay inside and carriers informing their agents and brokers to heed caution, it is obvious that new product sales will take a dramatic hit. Additionally, sales from online channels could see increases, but these may be fraudulent, as those that may have contracted the new coronavirus could be applying for immediate coverage. Granted, if death does occur, this will likely fall under contestability clauses and never get paid out.
- **Product pricing increases:** As mentioned previously, low bond yields and the impact to future reserves are going to force carriers to make up for the loss in their investments through pricing increases, not only for new product sales but potentially for all current policyholders. Products that offer guarantee payouts are likely to be too expensive for the general public, and carriers could lose policyholders as a result of unexpectedly increased premiums.
- **Claims processing:** With an increase in death claims, the claim service areas are going to be greatly affected. Carriers may not have the scalability to support the number of claims coming in and thus will end up with long processing times, causing a poor customer experience.
- **Business continuity and customer experience:** Carriers' ability to enable work from home for service areas such as claims and customer service will be tested during this pandemic. While many carriers have developed work-from-home capabilities, systems are much slower when working through virtual private networks (VPNs), and service providers don't have all the tools that they typically have at their hands when in the office, such as multiple screens, which make it easier to move quickly through a claim payment. Any delays in claim payouts will have a negative impact on the customer experience and on the industry overall.
- **Increased legal turmoil:** Carriers are likely to see increased legal action as aggrieved policyholders seek to overcome any ambiguity in coverage exclusions related to a global pandemic such as COVID-19, especially for those policyholders who are still in contestability periods.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

OPPORTUNITIES

- **Policyholder engagement:** Carriers should take advantage of the opportunity to speak to their policyholders during this time. Create a line of communication to answer questions, provide coaching, and be transparent about how you are handling things internally and about any expectations.
- **Future policy sales:** This is a great time to show the world what carriers do for their policyholders. Life insurance carriers are there to fulfill a promise; being there in this time of need and making good on promises could spark a peak in sales after the dust settles.

RECOMMENDATIONS

- **Seek automated claims.** Create automated claims payouts for policyholders who have perished as a result of the new coronavirus. These claims shouldn't take much investigation, as long as they are outside the contestability period, and should be paid quickly.
- **Develop new products.** Pandemics such as the COVID-19 pandemic don't fall under any certain insurance coverage and are likely to hit again and again, like the flu. Consider riders or products specific to these types of pandemics.
- **Evaluate and redesign business continuity plans.** Carriers need to learn from this situation and evaluate how they responded, what the customer experience was, and how to improve to be more prepared for future situations.

FRAUD & AML AND CYBERSECURITY

In this section, we highlight near-term challenges and opportunities in Fraud & AML and Cybersecurity.

FRAUD & AML

Bad actors thrive in times of chaos and uncertainty, and they have been quick to capitalize on the fear that surrounds the global outbreak of COVID-19. This section outlines the challenges and opportunities that COVID-19 represents in the fraud and AML arena as well as Aite Group's recommendations.

CHALLENGES

- **Successful phishermen:** COVID-19-based phishing attacks on consumers are already rampant. While legitimate businesses are sending reams of emails (rife with hyperlinks) to customers to reassure them in this time of uncertainty, crime rings are capitalizing on this and interspersing their own emails, designed to capture sensitive data and implant malware.
- **Malware and phone-based scams:** Criminals are exploiting the public's thirst for information and have set up their own COVID-19-tracking websites. Organized crime rings are selling a malware infection kit in the dark web that leverages the Johns Hopkins interactive coronavirus infection map as a tool to disseminate malware and harvest usernames, passwords, and payment card information that is stored in the user's browser.[2] Phone-based scams have been rising across the globe for the past few years and are already invoking COVID-19 in their attacks as well.
- **Sharp shifts in transaction patterns:** CNP transactions will rise as a result of people holing up at home and avoiding brick-and-mortar shops as well as increased usage of digital services such as Xbox and Netflix. The result will be an uptick in complaints as more people get pinched by the higher rate of CNP false declines as well as higher losses as fraudsters take advantage of the shift to ramp up their CNP fraud attacks. Fraudsters are also setting up a variety of bogus storefronts, which will result in a surge in disputes once consumers realize they've been duped.
- **Accounts payable scams:** Fraudsters may submit fictitious invoices to both banks and corporations claiming to have disinfected physical locations, ATMs, or other equipment. Since managers may be authorized to hire local companies to disinfect, the chances of such a scam succeeding are higher than normal.

2. Brian Krebs, "Live Coronavirus Map Used to Spread Malware," March 12, 2020, accessed March 13, 2020, https://krebsonsecurity.com/2020/03/live-coronavirus-map-used-to-spread-malware/.

- **Productivity impacts:** The combination of forced work-from-home mandates as well as mass school closures will have an inevitable impact on productivity, and fraud and money laundering prevention efforts will be affected. FIs may have to raise dollar thresholds or make other adjustments to reduce the number of alerts generated. Again, organized criminals will take note and tailor attacks accordingly.

- **Uptick in internal fraud:** Internal fraud always rises during times of recession, which appears to be inevitable in the wake of the coronavirus. While it is critical that companies take a flexible approach with employees, they must remain vigilant as well.

- **New points of vulnerability:** Many companies are encouraging employees to work from home, and this is mandatory in countries under lockdown. This opens a new set of exposure points to hacking and malware, particularly if the employees are using their personal laptops to perform their duties.

- **Onboarding delays:** Completing Know Your Customer/customer due diligence processes at onboarding and ongoing monitoring reviews will be even slower than usual, as it will be challenging to obtain and validate necessary customer information. This will cause delays in new accounts and transaction processing, leading to frustrated customers.

OPPORTUNITIES

- **Remote workers:** The shift to working from home has the potential to reduce operational expenditure if this can be sustained. It not only broadens the potential pool of workers but also reduces the physical office space required to house an analyst or investigations team.

- **Analytics:** People will be travelling less, so that should make cross-border fraud a bit easier to detect.

- **Engagement:** Customers will be heavily engaging in CNP transactions, so this could be an opportunity to educate and engage customers with capabilities such as two-way text and card controls that not only help them better manage their risk but also ensure better long-term security.

RECOMMENDATIONS

- **Adjust CNP detection strategies in the same manner you would around the holidays.** Plan to see an overall bump in activity, and reduce your declines. You'll absorb a bit more fraud, but you'll also keep more good customers happy.

- **Be flexible with your workforce and be vigilant with temps.** Encourage employees to work from home, when possible. Experienced employees doing their jobs are likely more efficient than temporary employees. Also ensure all temporary employees' work is screened the same as regular employees to detect any theft of funds or data, or other unacceptable actions.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

- **Anticipate an uptick in fraud claims.** Financial services firms are already seeing a sharp uptick in attacks in the wake of the new coronavirus. Have a strategy in place so investigators aren't overwhelmed.
- **Education is important.** Get the word out to your consumer and business banking clients to be particularly vigilant for phishing and scam attacks.
- **Give the issuers and merchants a break.** The payment networks should consider pushing back the liability shift for automated fuel dispensers as well as the April 2020 mandates that require issuers to support the enhanced dispute collaboration processes.

CYBERSECURITY

COVID-19 and the World Health Organization's calls for social distancing opened new cybersecurity attack vectors and created new threats, all of which will be exploited by hackers immediately. The following sections outline the challenges and opportunities that COVID-19 represents in the cybersecurity arena as well as Aite Group's recommendations.

CHALLENGES

- **Anxious and vulnerable employees:** Employees and their credentials are attackers' most common targets. Employees will be anxious for updates from management and will therefore be attractive targets of COVID-19-themed and CDC-themed phishing attacks and ransomware that are stirring fears related to health and financial markets.
- **More remote workers:** Employees and contractors will be working from home and connecting remotely to internal networks and systems at higher numbers than ever. Most FIs do not have policies permitting large numbers of workers to access sensitive assets and back-office systems from untrusted home networks. They will have to adjust with VPN access and careful privilege management.
- **Business email compromise (BEC):** Frazzled, hard-working, and well-meaning employees will be more susceptible to fraudulent requests for money transfers. Commonly, these take the form of an impersonation of a CEO requesting a wire transfer to a bank account. With entire companies working from home, this type of fraud will be easier to do and be more prevalent.
- **IT falling behind:** IT departments will be shorthanded, and work will be slowed, causing maintenance backlogs and slower response times. Updates and regular maintenance are considered best practices to shorten windows of vulnerability. Attackers use out-of-date systems to compromise security and execute ransomware.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

- **Strange new activity:** Incident response teams and security operations centers (SOCs) will be burdened with thousands of "new" events, as hundreds or thousands of workers connect remotely. Security analysts already see more "regular" events than they can easily process. With thousands of new locations and hundreds of new types of connections due to the remote workforce, SOC teams will be overwhelmed.

- **Unusual connections:** Infrastructure will be taxed in unusual ways, such as a shortfall in VPN licenses or in the ability to support concurrent connections. Employees and contractors still have urgent work to perform, despite working remotely. However, licenses are expensive and are usually kept to the lowest quantity.

OPPORTUNITIES

- **IT, cybersecurity, and cloud service providers:** FIs will look to providers of strong authentication, secure connectivity, distributed access, and managed security monitoring to help them extend private networking environments securely. IT, cybersecurity, and cloud service providers have an immediate opportunity to address the problem of large remote workforces and remote access to business-critical systems.

- **Acquisition of intellectual property and capabilities:** Continued pressure on the capital markets will likely spill over to venture capital and private equity appetite for risk. This could mean less funding in the near term for security startups and acquisitions. Cybersecurity companies without a clear path to profitability may have to merge or shut down. This will provide opportunities for well-funded vendors to acquire intellectual property and capabilities for lower valuations.

RECOMMENDATIONS

- **Institute multifactor authentication as a prerequisite to accessing internal networks, data, or applications.** Attackers exploit identity credentials to perform their most frequent and most damaging breaches. By protecting identities and credentials, organizations will make their networks more resilient.

- **Defend against BEC by vigilantly implementing a callback policy with no exceptions allowed.** Upon receiving a request for assets or information, the employee should hang up and call the requester back using numbers from the company directory.

- **Prioritize application and operating system updates so patch levels of servers and applications remain up to date.** Regular system updates keep attackers at bay.

- **Ensure that VPN licenses and certificates are plentiful.** More remote workers will mean more licenses will be in use concurrently than in the past.

- **Increase diligence around physical security.** The weeks ahead will bring unusual activity in and around facilities.

101 Arch Street, Suite 501, Boston, MA 02110 • Tel +1.617.338.6050 • Fax +1.617.338.6078 • info@aitegroup.com • www.aitegroup.com

- **Use identity and access management systems to remove privileges related to nonessential roles.** Ensure that privileges are current to the employee's needs and not an aggregation of former roles and privileges.
- **Enhance incident response, both in the SOC and among other members of the incident response team (IT, HR, legal, etc.).** Rotate in other members of IT and information security departments to enrich the knowledge base and speed up responses.
- **Emergency procedures in cybersecurity should follow the flow of security.** Secure authentication first, then authorization controls, administration processes, and incident detection and response—in that order.

ABOUT AITE GROUP

Aite Group is a global research and advisory firm delivering comprehensive, actionable advice on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, insurance, wealth management, and the capital markets, we guide financial institutions, technology providers, and consulting firms worldwide. We partner with our clients, revealing their blind spots and delivering insights to make their businesses smarter and stronger. Visit us on the web and connect with us on Twitter and LinkedIn.

CONTACT

For more information on research and consulting services, please contact:

Aite Group Sales
+1.617.338.6050
sales@aitegroup.com

For all press and conference inquiries, please contact:

Aite Group PR
+1.617.398.5048
pr@aitegroup.com

For all other inquiries, please contact:

info@aitegroup.com

RELATED AITE GROUP RESEARCH

Top 10 Trends in Wealth Management, 2020: Wind of Change, January 2020.

Top 10 Trends in Cybersecurity, 2020: More Ransomware, Evolving Strategies, and New Tools, January 2020.

Top 10 Trends in Fraud & AML, 2020: Faster, Higher, Stronger, January 2020.

Top 10 Trends in Institutional Securities & Investments, 2020: Entering the Tumultuous Twenties, January 2020.

Top 10 Trends in Retail Banking & Payments, 2020: Transforming by Elevating the Customer Experience, January 2020.

Top 10 Trends in Wholesale Banking & Payments, 2020: Modernizing and Future-Proofing, January 2020.

Top 10 Trends in Insurance, 2020: Consumers and the Industry Become More Proactive, January 2020.