COVID-19

Initial Lessons Learned and Considerations for Managing a Pandemic

sifma

protiviti

Face the Future with Confidence

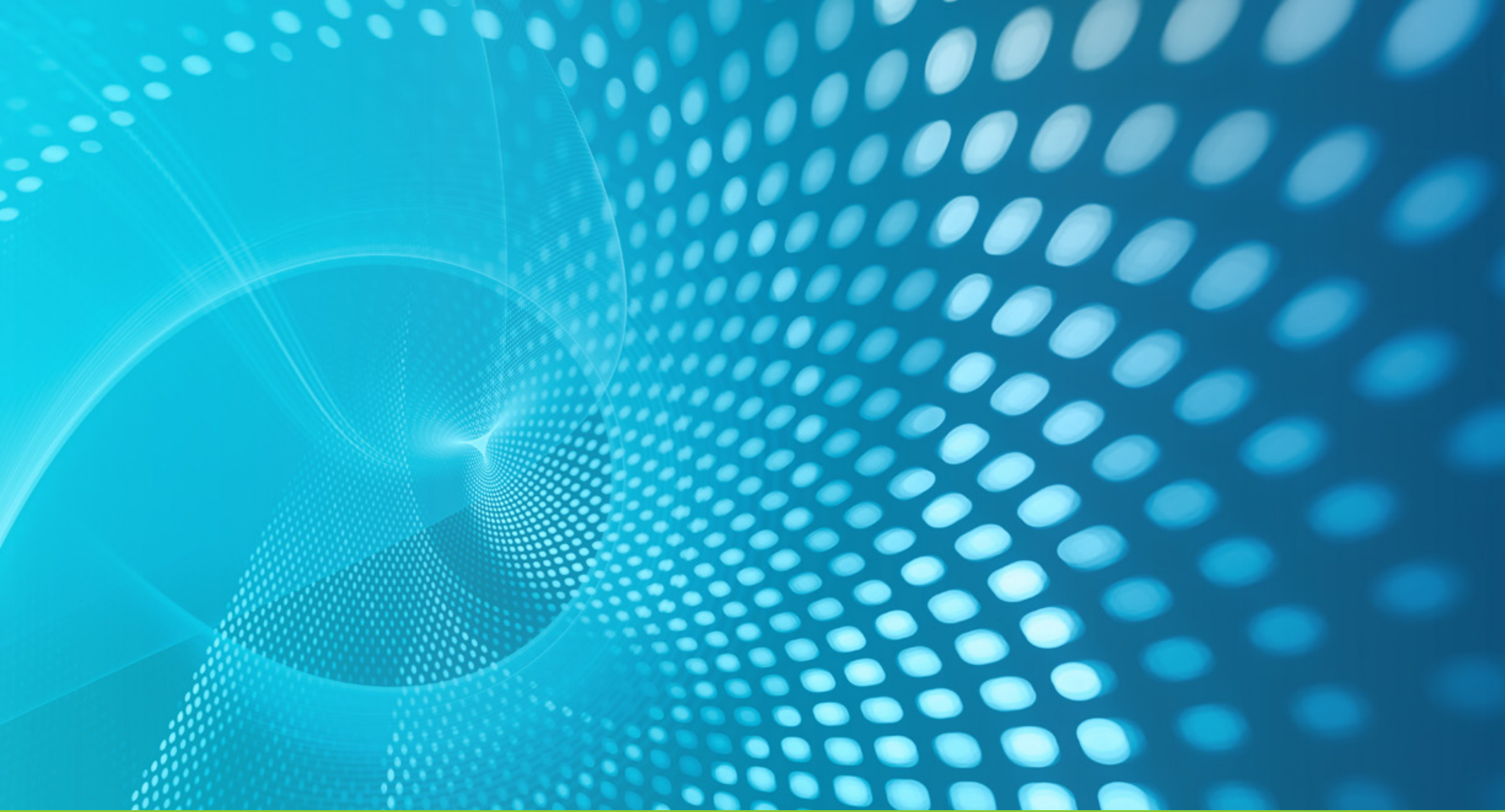

Table of Contents

Back to Table of Contents

Executive Summary

The novel coronavirus (COVID-19) pandemic has been unsparing in its impact around the globe. Beyond the direct and severe health and wellness impacts experienced over the past six months, how we live and work have changed in ways many would have previously considered unthinkable.

The financial sector and the capital markets have adjusted to the impacts of the pandemic, making a broad range of changes to their operating models, use of technologies and market activities. The direct operational impacts of a shift to remote work were compounded by a period of extraordinary market volatility as the outbreak first took hold in Asia Pacific and eventually reached the United States. The market volatility and economic dislocation, largely driven by measures initiated to contain the virus, created liquidity, capital outflow, supply chain, regulatory and operational challenges for financial institutions of all sizes and types, including broker-dealers, investment banks, asset managers, and clearing and settlement institutions.

Even with these obstacles, the financial industry kept markets running, provided businesses with much-needed liquidity during a time of severe stress, continued to serve and advise clients, and ensured timely clearance and settlement activities.

These achievements were not without challenges. Indeed, COVID-19's continuing impact has taught the financial industry many things about resiliency – and we expect the list of lessons learned to continue to expand as the crisis stretches on. For now, embracing agility and technology enablement in the workplace; managing third-party, cyber and concentration risks proactively; enhancing customer security and privacy protections; building stronger governance and processes around crisis management and communication; and developing financial discipline across the enterprise, are just some of the key considerations that should be top of mind for financial services leaders.

While much is being learned in real-time from COVID-19, the pandemic has also reaffirmed many of our expectations around pandemic risk management. For instance, we know preparedness for a pandemic requires the establishment of infrastructure and capacity, a process that can take years to build. Pandemic preparedness presents many unique challenges due to the significant uncertainties around scale and duration of impact. To be effective at mitigating such a severe but plausible event, institutions should continue to enhance their pandemic and business continuity plans, as well as test and exercise those plans, recognizing that COVID-19 did not produce certain worst-case scenarios (such as a 50-percent incapacitation of staff due to illness or death) that some feared were possible and that could happen in future pandemics.

Government leadership and support are paramount during a pandemic. As COVID-19 has shown, in the event of a pandemic, the full participation of all levels of government and all segments of society is a critical part of the response. It is in this spirit of collaboration and shared objectives that the financial sector and governments around the world have been working together on various types of regulatory relief needed to mitigate the financial and operational impacts of the pandemic.

In this report, we discuss the range of issues and events accentuated by the pandemic and the industry's multifaceted and effective response thus far, efforts that leaned on a crucial pandemic exercise that SIFMA and the Financial and Banking Information Infrastructure Committee (FBIIC), the Financial Services Sector Coordinating Council (FSSCC) and the U.S. Treasury organized in 2007. We identify key lessons learned to date from managing this crisis, weighing the benefits and disadvantages of various responses and approaches, and provide key considerations that should be top of mind for business leaders as they strategize over how to build resilience and thrive in this new environment.

In the report, the lessons learned from the pandemic and the key considerations for leaders are categorized under several themes, as illustrated below.

Go-Forward Operating Model

- Building a Remote Workforce of the Future
- Enhancing Resilience of Global Operations
- Optimizing Operations through Automation
- Modernizing the Regulatory Landscape

New Risk Profile

- Ensuring Employee Health and Wellness
- Reassessing the Changing Security Landscape

Enhanced Response and Recovery

- Enhancing Communication and Coordination
- Building Operational Resilience

Some of the key considerations in the report are summarized below:

- Health and wellness of the workforce should be a paramount consideration in the formal risk management structure of organizations, alongside enterprise, operational, financial, and IT risks.
- Firms should consider conducting an after-action analysis of what went well and what did not with respect to their work-from-home (WFH) capabilities. Some firms may benefit from adopting a hybrid workforce model, if done so in a thoughtful and secure manner.
- The benefits of maintaining globalized operations were tested in this crisis. Going forward, and inclusive of supporting third parties, these systems need to embrace operational resilience strategies and practices to increase their robustness, identify geographic and vendor concentration risks and minimize the risks of failure.
- It is important that firms invest in and embrace automation and critical digital tools, particularly to support operational areas where downtime risk could be most severe.
- The industry should continue to collaborate with regulators to put in place critical regulatory relief during the pandemic, including forms of relief that would promote working remotely, trading virtually, and extending the filing deadlines for statutory reports. This also means institutions should continue to pay close attention to forthcoming regulatory guidance to stay current on new requirements.
- As the industry returns to normal working arrangements, firms should work with regulators and infrastructure providers to identify opportunities to make permanent the more efficient operating models adopted during the pandemic. This include moving away from requirements for physical documents and communications, such as dematerialization of physical securities and moving to e-delivery of client communications.
- Institutions should continue to build stronger technical infrastructures, with emphasis on countering the escalation in cyber threats due to many employees working from home.

Background

More than seven months after major lockdowns[1] were initiated by governments around the world to slow the spread of the coronavirus, business continuity planning, cybersecurity and operational resilience remain among the top agenda items in boardrooms across the industry. Industry directors and leaders are asking tough questions, such as: Are current business continuity management programs adequate? How do we enhance operational resilience in the face of this new normal? What lessons have we learned from this pandemic and how can we use them to prepare for future large-scale disruptions? Before we tackle these crucial questions, we must first understand how we got here.

Before COVID-19: Financial Industry Pandemic Preparedness

Planning for a pandemic has been a feature of public health since the late 1970s. Conceptually, the financial industry has long contemplated the unique risks and challenges of a pandemic but actively began to coordinate and test its resilience to such events in the early to mid-2000s following the 2002-2003 SARS outbreak and the release of the National Strategy for Pandemic Influenza (the strategy) by President George W. Bush on November 1, 2005. The strategy provided a high-level approach that the federal government will take to prepare for and respond to a pandemic, and articulated expectations of how non-federal entities should prepare themselves and their communities.

The release of the national strategy was a major catalyst for development and exercising of pandemic plans in the financial industry around the world. For example, in December 2005, the UK's Financial Services Authority (FSA) established a forum, the Financial Sector Discussion Group on Pandemics, to share good practices and identify areas where the Tripartite Authorities (FSA, HM Treasury and the Bank of England) could help the sector better prepare. The UK held market-wide exercises in October and November of the following year, with more than 3,000 individual participants. The exercise simulated nearly six months of the first phase of a pandemic and the scenario progressed through increasing levels of absenteeism.

In the United States, SIFMA joined the FBIIC, FSSCC and the U.S. Treasury in the fall of 2007 to organize a crucial pandemic exercise that provided a roadmap for institutions to develop their own pandemic-specific business continuity plans and learn how to navigate different scenarios posed by a potential pandemic.[2] More than 2,700 U.S. financial services organizations participated in this three-week exercise, which compelled participating institutions to confront their vulnerabilities to a pandemic and external dependencies. In addition to taking away critical lessons that have guided many through the COVID-19 crisis, their engagement in the exercises provide a window into the industry's pandemic response capabilities at the time. Highlights of responses to an after-action questionnaire that was developed as part of the exercises show many firms at the time had well-developed pandemic plans to deal with issues related to communications, infrastructure dependencies, human resources and telecommuting or WFH capabilities:

- **Communication plans:** A large majority of participants reported that they had developed pandemic communication plans to provide information to their employees, customers, and suppliers during a pandemic.
- **Infrastructure dependencies:** A majority of participants indicated that they had developed some continuity plans regarding their dependence on external infrastructure; 97 percent of respondents stated that they understood their dependencies on telecommunications, and a majority had plans to address service interruptions. Dependencies on information technology (IT) suppliers, building services suppliers, and other entities were also generally considered well-understood.
- **Telecommuting:** Most participants reported that they had a good understanding of their telecommuting or WFH capabilities. In addition, a majority of medium-sized and large organizations indicated they had already developed plans and, in some cases, had exercised those capabilities.
- **Human resources management:** The exercise looked at a variety of human resources management issues that might occur during a pandemic, such as employee education, employee counseling, distribution of antiviral medication and personal protective equipment and employee payment concerns. More than half of the medium-sized and large organizations stated that they were educating employees about these preparedness steps.
- **Trading and trading hours:** A majority of the market respondents did not believe that absenteeism rates would cause significant problems in their trading or associated risk management operations or require suspension of trading in certain products. The exception was large organizations, 52 percent of which indicated that there could be significant problems. However, most did not believe it would cause them to suspend trading in any products.
- **Clearance and settlement:** At the peak of a pandemic, 88 percent of large firms stated they expected to be delayed by at least two hours, and approximately 25 percent predicted that the delay would be more than four hours.

[1] www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020
[2] www.fbiic.gov/public/2008/jan/Pandemic_flu_Jan08.pdf

Back to Table of Contents

The pre-COVID-19 pandemic exercises had a direct and obvious effect on the industry's response to the 2009 (H1N1) pandemic and set the stage for institutions to hone their pandemic plans over the years, as epidemics like the swine flu of 2009-2010, MERS in 2012, and Ebola in 2014-2016, as well as the COVID-19 pandemic in 2019-2020, increased in severity and frequency.

When COVID-19 came along, many of the assumptions from these earlier pandemic exercises proved to be correct and prescient, although, in some ways, COVID-19's impact has so far proved to be less than some anticipated in 2007. For example, markets continued to operate during the March/April peak of the pandemic in the United States (albeit with a shift to fully electronic market operations and the closure of physical floors). Similarly, clearance and settlement were not delayed, as many large organizations feared in 2007. Although some firms did experience a higher-than-usual level of fails and other trade breaks, the overall number of fails was largely due to the concomitant increase in trade volumes.

COVID-19: A Timeline of Significant Events

In early January 2020, SIFMA began coordinating industry resources and kicked-off efforts to discuss the issue internally and with its members, as well as to discuss next steps for the sector. Years of coordinated pandemic planning allowed the industry and many firms to quickly activate response protocols weeks before the World Health Organization declared COVID-19 to be a pandemic on March 11.[3]

Beginning early March, a number of financial institutions quickly introduced restricted cross-border travel or halted all non-essential business travel for their employees.[4] As the spread progressed, companies successfully shifted to new ways of working to protect employees and while responding to clients' needs, the most significant being instituting WFH and remote access for employees. Firms took these actions while managing historic trading volumes and mitigating a potential uptick in operational risks, including cyberattacks. Financial market infrastructures (FMIs) and financial market utilities (FMUs) also managed productivity challenges from the pandemic effectively – an issue many had confidently signaled they could handle as far back as 2007.

The following is a chronological look at significant events spurred by the COVID-19 outbreak, beginning with SIFMA's action in early January and ending with the opening of the New York Stock Exchange in May.

[3] WHO: www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020
[4] www.reuters.com/article/us-health-coronavirus-citigroup/citigroup-and-wells-fargo-restrict-all-cross-border-travel-as-coronavirus-spreads-idUSKBN20P2OS

Back to Table of Contents

JANUARY	5	World Health Organization (WHO) publishes its first Disease Outbreak News on the new virus, "Pneumonia of unknown cause – China".
	Mid-January	SIFMA and the Financial Services Information Sharing and Analysis Center (FS-ISAC) host cross-sector calls on the pandemic.
FEBRUARY	21	Italy begins lockdown, starting in the Lombardy region.
		California lockdown – San Francisco and five other Bay Area cities are among the first in the nation to issue stay-at-home orders.
		SIFMA activates its Crisis Management Command Center to assist market response, disseminate vital information and facilitate market response and recovery actions.
	27	Various U.S. stock market indices including the NASDAQ-100, the S&P 500 Index, and the Dow Jones Industrial Average post their sharpest falls since 2008.
MARCH	3	FED cuts interest rate – 50 bp.
	6	The Federal Financial Institutions Examination Council (FFIEC) issues guidance identifying actions that could potentially minimize the adverse impacts of the pandemic, with a focus on business continuity planning (BCP) and pandemic plans.
	9	Trading halts as market hits level one circuit breaker (trading was also halted on March 12).
		Financial Industry Regulatory Authority (FINRA) is one of the first regulatory bodies to issue relief in through its "Pandemic-Related Business Continuity Planning, Guidance and Regulatory Relief" notice.
	11	WHO declares COVID-19 a pandemic. Industry/market participants move quickly to review and evaluate pandemic playbook and contingency plans, activate response protocols.
		U.S. imposes strict travel restrictions on passengers from Europe. UK and Ireland added to ban three days later.
		The U.S. Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA) issues guidance on essential critical infrastructure workforce designation – SIFMA works with Treasury on financial services being included as essential.
	17	The UK Bank of England (BoE) and HM Treasury launch the COVID Corporate Financing Facility (CCFF), a lending facility, to provide liquidity to large firms.
	18	The European Central Bank (ECB) launches the Pandemic Emergency Purchase Program (PEPP), a €750 billion temporary asset purchase program of private and public sector securities.
		Malaysia issues its first lockdown order.
	19	California is the first state in the United States to issue a statewide stay-at-home lockdown, shelter-in-place orders/border closures around the globe.
	20	New York issues stay-at-home lockdown order.
	23	DTCC suspends all physical processing/securities repatriation services. NYSE temporarily moves to full electronic trading.
	24	The Government of India under Prime Minister Narendra Modi orders a nationwide lockdown for 21 days.
	27	The President of the United States signs $2T stimulus package.
APRIL	2	Coronavirus infection rate surpasses 1 million cases globally.
	3	The Small Business Administration's Paycheck Protection Program (PPP) goes into effect to provide relief for U.S. small businesses.
	8	China reopens Wuhan after a 76-day lockdown.
	28	US surpasses 1 million confirmed cases of COVID-19.
MAY	26	NYSE trading floor reopens after more than two months.

SIFMA Actions

SIFMA kicked-off an industry forum in early January 2020 to help coordinate the financial industry's business continuity planning efforts. The forum brought together financial firms, exchanges, industry utilities, the FBIIC, FSSCC, U.S. Treasury, government agencies, the Financial Services Information Sharing and Analysis Center (FS-ISAC) and public sector emergency managers. The teams initially met weekly but moved to a tri-weekly cadence as the pandemic progressed.

Over time, the Centers for Disease Control and Prevention (CDC) launched weekly meetings with the private sector to discuss health issues and its recommendations for keeping the population safe and healthy. SIFMA engaged in the CDC meetings and twice-weekly forums conducted by the U.S. Department of Homeland Security/Cybersecurity and Infrastructure Security Agency to share information regarding the pandemic's spread as well as emerging cyber threats and fraud activities typically seen during major disasters.

Closer to home, as New York City became ground zero for new cases, the New York City Office of Emergency Management (NYCEM) began holding weekly sessions for public-sector members. SIFMA leveraged its strong partnership with NYCEM to develop a solid understanding of issues occurring within New York City, including matters surrounding the use of public transportation and what financial sector employees should do if employees are infected while in the office (i.e., immediately go to your local health care provider for diagnosis and on-going local government contact tracing). Given the emerging issues and the need to communicate, SIFMA initiated weekly COVID-19 forums for its members to share information, concerns and common practices they were developing to deal with the crisis. The forum brought together representatives from more than 100 organizations, including securities firms, banks, investment banks, asset managers and financial market infrastructure providers of all sizes.

Around the world, SIFMA took numerous actions to help its members manage the impact of the pandemic on operations and service delivery. In a detailed analysis of several Asia-Pacific countries, SIFMA identified the Philippines, Malaysia and India among key offshore operational hubs hosting call centers, IT services and back-office processing centers that were at risk of being significantly disrupted by the pandemic. This critical information was used to encourage governments in the respective countries to issue essential worker designations to cover in-country financial services workers, such as IT personnel managing data center operations and those responding to cyber events for critical infrastructure, third-parties supporting financial transactions and services, and workers supporting communications systems.

In furtherance of its response activities to the pandemic, SIFMA sought to serve as a reliable source of critical intelligence or "ground truth" for the industry. It organized COVID-19 surveys, which allowed institutions to share information on their business continuity and pandemic planning efforts and evaluate how effective these efforts were in managing the pandemic response.

These surveys posed key questions on response methods, staff relocation protocols and technological infrastructure utilized to support the industry's WFH practices and to assist firms as they planned return-to-office strategies. Firms shared key elements of their policies and incident response procedures that may be helpful within the industry, in cross-sectors and in future planning efforts to improve upon business continuity planning.

Regulatory Relief to Maintain Operations

At the peak of the COVID-19 pandemic, regulatory bodies around the world were quite flexible with providing temporary relief measures in the form of enforcement, extension of reporting time frames, and issuing updated regulatory guidance.

SIFMA worked closely with U.S. regulatory bodies to obtain relief from 55 different regulations.

The Future of Work

In early April 2020, some financial firms began to contemplate how they would return staff to the office to resume "normal operations." As these discussions progressed, it became increasingly clear that moving staff back to the office would be more complicated than maintaining WFH arrangements.

Even so, firms began to explore the many options involved with returning staff to the office, including safety, legal and liability considerations, employee sentiment and privacy, availability of health screening and testing kits, human resource policies, local government directives and health care advisories, as well as the practical and logistical issues surrounding maintaining social distancing within the office.[5] Today, as firms develop reemergence plans, now is the time to think critically about how the new normal will drive the future of work. The lessons learned in the past six months, discussed in greater detail below, should guide firms' assessment of which operational practices should remain in place going forward, what metrics best demonstrate their ability to respond to a crisis, and whether certain business continuity initiatives should be accelerated or disregarded. Leaders should consider the following insights:

- **New collaborative tools and other technologies:** The range of technologies, such as video-and text-based collaborative tools, that have been put in place during the massive shift to a remote working model have taken on newfound value, and their use may expand in the future to assist with other change-management efforts, as well as ongoing transformation and innovation initiatives.
- **New approaches to collaboration and innovation:** Organizations have deployed new design-thinking exercises and approaches – often in a virtual setting for the first time. Many of these approaches will be worth incorporating long-term into the organization and expanding in a post-crisis environment.
- **New leadership styles and communications:** Leaders have spent more time empathizing with employees and communicating in a clear and frank manner and less time deploying traditional motivational approaches and tactics often shared when performance is down. These new approaches toward communications and employee engagement will likely reshape future leadership and people-engagement strategies.
- **New candidates for leadership:** Across the industry, we have seen employees demonstrate an uncanny calmness under pressure and innovativeness when it comes to finding creative solutions to customers' complex needs. This level of resourcefulness shown during the challenging times should be leveraged and harnessed when things return to normal to help firms identify and encourage the next generation of leaders.

Survey Insights: Return-to-Office Approaches
(March, 2020)

- Most firms plan to send no more than 50% of employees in Phase I of their return to the office plans.
- Social distancing practices will limit the number of employees included in the returning phases.
- Firms are investigating both temperature taking at entry and at-home for returning employees.
- Public transportation and childcare availability are identified among the many return to office challenges.
- Most firms are unsure of plans to reengineer processes impacted by work from home on a longer-term basis.

[5] www.sifma.org/wp-content/uploads/2020/05/SIFMA-Considerations-for-Return-to-Office-COVID-19-May-2020.pdf

Initial Lessons Learned and Key Considerations

As the COVID-19 pandemic stretches on, financial institutions are being challenged to remain resilient while anticipating and preparing for the potential longer-term effects on business and strategies. While many institutions have adjusted to the pervasive uncertainties wrought around the economy, business response activities, customer retention and business continuity, there are many key lessons and related action plans that need to be considered going forward to strengthen their response capabilities.

Below we highlight some of the lessons learned and key considerations for institutions based on insights gathered from January to August 2020.

Go-Forward Operating Model: Building a Remote Workforce of the Future

Within the span of a month – and much more rapidly for some organizations – millions of workers transitioned from company offices to the home office. One of the clearest and most direct realizations across the sector was the ability of organizations to continue maintaining business services with a workforce that is heavily slanted toward working remotely and utilizing split-site operations given government lockdowns and restrictions.

Near term, many companies are taking a wait-and-see approach to returning employees to the office, with many extending timelines given the concerns about a potential resurgence in infections. Additionally, firms are reassessing their current physical footprint and long-term operating models to accommodate an increase in remote working. This shift has also put a strain on remote connectivity solutions, pushing more firms to adopt enabling technologies, such as the cloud, at an exponential rate. Closely related to this, business continuity management experts are evaluating how to enable firms to continue to build resilience or develop redundancies to sustain WFH arrangements in the event that major telecommunications services or power is knocked offline during the course of this pandemic. The U.S. Securities and Exchange Commission has warned firms to consider the possibility of widespread lack of telecommunications, transportation, electricity, office space, fuel and water in their business continuity plans.

Benefits

- A reduction in physical footprint provides an opportunity for firms to substantially reduce real estate and related capital expenditures.
- Accommodating remote working will allow flexibility in work schedules, particularly for working parents, thereby increasing overall employee morale and expanding the talent pool of accessible workers for employers.
- Firms that previously did not have standards or policies around home-office work can create ones that build on the lessons learned from this pandemic.

Survey Insights: Operational Issues
(March, 2020)

- As of early March, most firms were successfully managing remote or split-site operations with the exception of certain tasks that require specific physical devices.
- Firms identified essential workers with WFH limitations as traders, front office sales, operations and technology support staff, security professionals, and treasury action personnel.
- As of mid-March, firms successfully scaled technologies and infrastructure to meet increased volume due to remote work.
- Firms are determining ways to measure operational efficiency while working from home.

Back to Table of Contents

Challenges

- Some firms (including FMUs) will need to overcome certain regulatory obligations and expectations for remote work and may need to come up with alternative and potentially costly approaches to accommodate those regulations, such as new supervisory requirements.
- The impact on organizational culture and the long-term wellbeing of employees is unclear.
- More remote working and less physical office presence could also alter the risk profile of organizations. This means organizations need to re-prioritize their risks and reevaluate controls to mitigate those risks.
- Reduction in physical footprints could pose challenges for reverse disaster recovery plans that would bring staff currently working from home back into the office in the event of an emergency.
- Maintaining organizational culture, onboarding new employees, and mentoring and continuous training for all employees during the pandemic will require significant focus, resources and investment.
- Cross-departmental communications, which occurs organically in ordinary times, is a greater challenge in a remote working environment. Special effort is required to make connections, both professionally and personally, with colleagues (particularly for new hires) in other departments.

Key Considerations

- Depending on their business objectives, there may be an opportunity for some companies to adopt a hybrid approach that allows physical interaction for high-performing teams and at the same time provides flexibility for remote working and/or a WFH arrangement.
- Investing in collaborative technologies and skilled expertise to harness these tools will enhance operational efficiencies.

Leveraging Remote Trading Capabilities

Amid a massive increase in trading volumes and volatility, the technical, operational and security infrastructures underpinning market trading have held up under the weight of COVID-19.

Even when physical trading desks and floors were shut down and sales and trading teams, bankers and analysts, were forced to work remotely to contain the spread of COVID-19, firms were able to leverage collaboration and productivity tools (e.g., virtual trading desks and video conferencing) to execute trades, connect with clients and counterparties, and recreate the trading floor dynamic.

With over 90% of financial staff working from home, firms managed to overcome bandwidth constraints and other limiting technical concerns – all of this during incredibly volatile market conditions. Long thought of as a core physical need of many financial institutions, the efforts of the past several months may indicate an intriguing path forward to a virtual trading environment that offers considerable benefits.

Back to Table of Contents

Go-Forward Operating Model: Enhancing Resilience of Global Operations

The COVID-19 pandemic has highlighted the challenges of running a globalized operation, including centralized call centers or IT support hubs in various offshore jurisdictions. Although many financial services institutions had prepared for disruptions through their business continuity planning programs and exercises, many were not expecting scenarios or impacts associated with the initial disjointed government approaches, lockdowns, disruption to global supply chains, and the prolonged unavailability of services in places like India and the Philippines.

The pandemic also underscored many global firms' increased dependence on third parties and on foreign governments' crisis response and disaster recovery capabilities, efforts that previous incidents, such as the 2015 South India floods, also brought to light. The immediate reaction for some organizations following this pandemic may be toward rethinking global strategies or a retrenchment in their global footprint, a directional change which may come at a steeper cost and may not necessarily have the intended outcome.

Benefits

- Firms can invest in redundancy for critical operations, services or functions to ensure stability of global operations.
- There is greater incentive to strengthen global information-sharing networks to improve crisis management protocols for global operations.
- Increased awareness of global operational impacts can improve business continuity testing and exercises, as well as overall pandemic preparedness of organizations.

Challenges

- Firms may incur higher costs and a potential competition for talent to fill open positions if there is a transition to re-shoring, onshoring or nearshoring of operations.
- Increased risk and uncertainty associated with global locations may pose severe restrictions that could impact the supply chain or movement of people.

Key Considerations

- Continuing to build robustness and resilience into global operations will enable firms to better anticipate and respond rapidly to major future events, including pandemics.

Managing Third-Party Resilience Risks

Financial institutions should reassess their focus on and management of third-party service providers. COVID-19 exposed geographic and third-party concentration risks in the industry, particularly when global firms began to experience operational disruptions created by governmental lockdown restrictions. In select circumstances, firms had to invoke force majeure for vendors that could not meet their obligations.

Going forward, companies will be forced to look past cutting potential operational efficiencies and redundancy as the primary third-party drivers and consider robustness and resilience of individual vendors across the broader portfolio.

Starting with a clear understanding of the third parties that are part of the critical path to business services, firms should understand and continue to build resilience into their operations. Imminently, this involves a review of third-party operations and 'essential' workers who were impacted by COVID-19 as part of a broader industry-wide examination of concentration risks.

Go-Forward Operating Model: Optimizing Operations through Automation

The pandemic has highlighted how financial institution operations can be affected by increased absenteeism and a decline in employee health and safety. At the peak of the pandemic, this vulnerability was most apparent in offshore jurisdictions where many financial services firms maintain outsourced operations or third-party operations. In many of these jurisdictions, governments initially did not recognize financial services as essential and WFH infrastructure was not as developed to handle the increased workload, particularly call volumes. Many operational centers were either inoperable for a short time as quarantine rules were enforced or were unable to handle increased trading volumes because the home-based workers did not have the proper tools to access internal systems.

Going forward, firms need to identify near-term opportunities where automation can help reduce manual processes and inefficiencies in their operations. Although many firms were having conversations on enabling technology for key processes prior to COVID-19, these discussions have taken on new urgency during the pandemic, particularly within subsectors where processes have historically been manual and paper-intensive. By integrating automation, firms of all types and sizes can optimize processes, reduce manual intervention, and potentially address geographic concentration risks in the industry.

Benefits

- A relentless focus on automation can help reduce the impact of absenteeism on critical processes and functions going forward and in a future pandemic crisis.
- Automation can also lessen trading failures caused by breaks in settlements by shifting to automated clearing houses or optimized payment solutions.

Challenges

- The introduction of potential new third-parties or vendors to provide niche automation solutions will invariably create another level of risk that needs to be monitored and mitigated.
- Firms will need to manage the shift in skill sets required to fully realize the benefits of the optimized automated solutions.
- Some firms may need to invest in productivity tools to monitor and enable WFH resources, especially if productivity begins to wane.

Key Considerations

- Institutions are implementing intelligent process automation across all areas of their business (e.g., finance, accounting, human resources, supply chain, IT, compliance and legal) to increase efficiency, manage costs and increase resilience.
- The automation of transactional process execution (e.g., use of virtual robots) can provide immediate benefits (as listed above) while also preparing organizations if the recovery is slower than expected or if a second wave of the pandemic makes lockdowns necessary again.

Go-Forward Operating Model: Modernizing the Regulatory Landscape

One key takeaway from the 2007 pandemic exercise was the realization that due to the unprecedented scale and impact of pandemics, financial firms need various forms of regulatory relief to ease operational challenges created by high absenteeism, remote working, and other shifts in conducting business. Since the emergence of COVID-19, various forms of regulatory relief requested by the sector and granted by authorities have been an essential aspect of the collaborative public-private effort to fight the pandemic.

In the longer term, there is opportunity for some of the temporary relief measures granted to be reevaluated and maintained as the prevailing standards for the industry. Those measures may include the option to provide electronic documents to meet the Securities Confirmation Rule (SEC Rule 10b-10) and ability to provide an electronic signature to meet Reg S-T requirement (Rule 302(b)).

The pandemic has also spurred a rethinking of the industry's regulatory operating model, particularly as it relates to optimizing operations and accelerating digitization. Going forward, the industry will likely seek a more efficient way to clear relief items, which could be met by the development of playbooks to provide quick and timely relief. For instance, SIFMA continues to work with industry and regulatory bodies on dematerialization and digital transformation of outdated regulations, such as rules on handling physical securities that require wet signatures, Medallion stamps and vault counts. Additionally, SIFMA is advocating for regulators to allow default delivery of shareholder communications and other materials via e-delivery, as opposed to physical form, and for addressing any regulatory obstacles to permanent work-from-home arrangements for broker-dealer staff.

Benefits

- Current supervisory requirements are being reevaluated to accommodate current issues and practices, such as working from home, distributed operations, data privacy concerns, and regulatory filing obligations. This reevaluation could lead to a larger transformation of the supervisory model for financial services post-pandemic.
- Firms can enhance preparedness for any future events by creating playbooks for providing regulatory relief.

Challenges

- Some argue that making permanent certain forms of temporary regulatory relief granted to the industry would increase risk-taking behavior, given that certain rules (such as barring traders from using cell phones on trading floors) cannot be enforced in the confines of individual homes and other remote locations.
- There is also a potential lack of regulatory resources to rapidly implement changes in operating models to correspond with industry needs, given that regulatory authorities are having to deal with many pandemic-related issues.

Key Considerations

- Institutions should continue to pay close attention to forthcoming regulatory guidance to stay current on any new requirements, share how they are impacted and look to take advantage of any further relief that may be offered. Working with industry trade associations, institutions should continue to provide feedback to help facilitate discussions with regulators on modernization opportunities based on the pandemic experience.

A Timeline of Major Regulatory Events

The following is a chronological view of events where SIFMA worked closely with U.S. regulatory bodies to issue guidance or temporary relief in response to COVID-19.

MARCH	16	The SEC issues guidance that it will not consider the home locations of investment personnel among the top 25 office locations firms are required to list on Form AD.
	19	FINRA grants temporary relief related to the physical inspections of specific branch offices.
	24	FINRA grants institutions relief from submitting branch office applications on Form BR for temporary locations and temporarily suspends the requirement to maintain an updated Form U4 with information regarding employment address. In it FAQs, FINRA states: "While broker-dealers are not relieved of their best execution obligations in these circumstances, FINRA notes that the reasonable diligence required for best execution is assessed in the context of the characteristics of the security and market conditions, including price, volatility, relative liquidity, and pressure on available communications."
	25	SEC relaxes rule requiring board of directors to conduct in-person votes under the Investment Company Act. SEC also issues relief to allow registered investment advisers and exempt reporting advisers to file amendments to Form ADV or file reports on Form ADV part 1A, respectively, if impacted by coronavirus.
APRIL	3	SEC grants no-action relief from the manual signature requirements of Regulation S-T, as long as the signatory provides the manually signed signature page as promptly as possible.
	22	SEC eases enforcement action to broker-dealers who were unable to access their premises to allow additional time to transmit customer checks. The agency decides not to count physical securities in a quarterly securities count during April, May, and June of 2020, if the appropriate notifications were made to SEC, OCIR, FINRA and customers.

The New Risk Profile: Ensuring Employee Health and Wellness

Employees are the most important assets of any institution. Historically, the physical safety of employees has guided and shaped firms' business continuity plans. However, in the wake of the COVID-19 pandemic, the health and wellness of the workforce have become a top priority. The focus on a healthy workforce adds a new dimension that is likelier to increase as institutions return employees to the workplace during a pandemic.

Going forward, we expect the health and wellness of the workforce to become a prominent pillar in the formal risk management structure of organizations, considered alongside enterprise, operational, financial, and IT risks, as well as customer health and safety. In the near term, firms are discussing their role and responsibilities in managing health and wellness, such as determining the role of healthcare providers, implementing self-attestations of good health before entering an office, and developing contact tracing plans in the event that an employee becomes ill.

Benefits

- Re-focus employee wellbeing programs to encompass new, developing health and safety concerns. Corporate wellness programs will be critical in reducing healthcare costs.
- Develop operating models integrated with workforce health and safety concerns to prepare for future concerns and alleviate stress for employees about jeopardizing their health for their work.
- Accelerate digital solutions for customers to reduce health and safety risks from in-person retail brokerage visits.

Challenges

- Understanding the full breadth of health and safety risks associated with a dispersed workforce, individualized tolerances for risk, and global distinctions is difficult.
- Increased stress, reduced physical activity and poor ergonomics in WFH settings could be difficult to manage, exacerbating employee health and wellness risks and costs for employers.
- Maintaining firm culture is becoming an evolving concern amongst firms given employees will be working from home for an extended period.

Key Considerations

- Whether employees are at work or working from home, fear and anxiety related to COVID-19 remain high. Taking the lead on managing employee burnout begins with management proactively identifying stress and taking steps to ensure employees are taking time off to stay well-rested and to recuperate.

The New Risk Profile: Reassessing the Changing Security Landscape

The guardians of information security continue to face an array of additional challenges, from network capacity concerns to an escalation in cybersecurity incidents. As organizations alter their operating models to accommodate a remote workforce, chief information security officers (CISOs) should be reassessing their priorities related to cyber risks, data security and compliance.

CISOs will need to reevaluate their threat landscape and risk profile given the current and future changes to their operating model.

Benefits

- A reassessment should lead to firms adapting innovative security and control processes that are suitable for increased remote traffic.
- There is greater impetus to transition applications to cloud service providers to assist with network capacity issues and reduce employee health risks for those who manage company data centers.
- Having WFH flexibility means organizations can source top-level talent without geographical restrictions. This is of particular value in areas such as cybersecurity, where there is a shortage of capable practitioners.

Challenges

- Outside the safety and security perimeter of the workplace environment, firms are more exposed to malicious or phishing attacks, which means an increase in information security and data security risks.
- Another major concern is managing the physical security of employee home devices (routers, firewalls) to decrease susceptibility to attacks.
- The difficulties also underscore the need to manage surveillance and monitoring activities for employees under regulatory supervision requirements.
- There are 3.5 million more cybersecurity jobs than people to fill them, so firms must work harder to attract talent from other firms or consider interim professionals for roles they are unable to fill. Reducing this significant shortage requires investing in strategic hiring, training and mentoring.

Key Considerations

- While security personnel have shown incredible inventiveness, management should consider how crisis-driven operational decisions are changing the organization's risk profile. CISOs should work with boards and executive teams to ensure that creative solutions to new threats are implemented smoothly and without unmitigated security compromises.

Back to Table of Contents

Enhanced Response and Recovery: Enhancing Communication and Coordination

While the financial sector performed well in coordinating regional and country-based responses, there is an opportunity for global sector-wide communication and coordination to be improved by establishing a more formal information-sharing forum in response to large-scale events such as a pandemic. This forum can be leveraged to conduct exercises, manage potential sector-wide concentration risks, and enhance crisis management procedures. Additionally, it would serve as a model for other industries to replicate.

Benefits

- By collaborating and communicating across the sector, firms will be able to enhance crisis management procedures and conduct exercises that include global audiences to augment preparation efforts.
- They will also be able to properly assess concentration in supply chain risks for critical operations in the industry.

Challenges

- Additional efforts and scrutiny will be needed to ensure security risks associated with hosting this forum are addressed properly.
- Given the broad participation, gaining consensus among the forum audience and around key areas such as structure, procedures and commitment would require time and effort.

Key Considerations

- The industry should continue to pursue its goal of developing a global directory of critical stakeholders and key contacts who currently play a role in crisis management and global information sharing. This directory, which would list financial services firms, key trade organizations, regulatory bodies, central banks and government agencies that would respond to major disruptive events, would identify roles and responsibilities between the various entities and what information each group expects to receive and share at different stages of an unfolding crisis.

Quantum Dawn V Insights:
Sector-wide Communications
(November, 2019)

- Expand and formalize global information-sharing capabilities with regulatory authorities and trade associations
- Enhance and coordinate informal firm-to-firm communications.
- Develop a global directory of critical stakeholders and key contacts to manage cross-border cyber or other events.
- Develop a centralized golden source of information to assist firms in assessing impacts and managing global pandemics or other outage.

Source

Enhanced Response and Recovery: Building Operational Resilience

Unlike other operational resilience events, such as a major cyber event or IT-related outages, the COVID-19 pandemic was slow-moving, meaning the industry and individual firms had some advance notice. At the same time, it was symmetrical in its impact, meaning market participants were hit in the same manner, with the difference in severity being determined by an individual firm's degree of preparedness or ability to provide contingencies, such as WFH. Against this developing backdrop, the pandemic has taught the industry a few things about building resilience.

Benefits

- These characteristics of a resilient firm are more essential than ever before:
  - Ability to respond rapidly
  - Ability to bring third parties into the information-sharing network
  - Ability to learn from mistakes or failures.
- To build resilience in the post-pandemic period, the industry should learn from both the successes and failures of firms' pandemic crisis management planning.

Challenges

- Firms that fared particularly well during this pandemic may be driven towards complacency.
- While firms demonstrated their ability to act quickly and execute on pandemic preparedness plans, they need to continue to reevaluate their operational resilience capabilities in more extreme-but-plausible scenarios, where severe illness or fatality could incapacitate 50 percent or more of their workforce.

Key Considerations

- **Fortify important business processes:** Understand and map critical business functions internally and externally and formalize those that are important, including key operational processes, BCP, and recovery and resolution plans, third parties and systems that play a role in providing those services.
- **Enhance governance:** Enhance existing governance functions and implement a resilience program based upon the needs of the organization's important business processes.
- **Test and improve:** Test the extreme-but-plausible scenarios to better understand realistic recovery times versus established recovery time objectives. The nature of the testing should be proportionate to the size, complexity and importance of the organization or important business service. Testing will indicate where investment in technology or processes is needed to stay within tolerances.
- **Focus on underlying and existing programs:** Cybersecurity, disaster recovery and resolution and business continuity all play a role in continuing to build resilience throughout the enterprise.

Back to Table of Contents

What's Next

COVID-19 has changed the world as we know it. Rarely have corporations, government services and the public at large been affected by such a large-scale threat to society and general lifestyles. For financial institutions, now is the time to think critically about how the "new normal" will drive the future of workplace and operations.

Now is also the time for firms to assess which existing operational practices should remain in place, evaluate which metrics best demonstrate their ability to respond to a crisis, and determine which operational resilience initiatives to implement or accelerate to prepare for a future pandemic or any other major severe event. Prioritizing automation and digitization will rapidly modernize financial services operations, and there will be an increasing need for global coordination and partnership between the sector, regulatory bodies and critical third parties to adopt these changes.

As participating firms take these initial lessons learned and considerations from this report and apply them at their respective institutions, SIFMA and its partner organizations will continue to collaborate with the industry to enhance information-sharing and pandemic management practices on a global scale.

As the pandemic stretches on and more issues arise, we will continue to gather critical data and insights to inform and expand the initial lessons and considerations highlighted in this report. Visit www.sifma.org to learn about the organization's ongoing efforts to guide the industry and help it improve its resilience during this tumultuous period.

Contacts

Thomas Wagner

Managing Director

SIFMA

+1 212 313 1161

twagner@sifma.org

Tom Price

Managing Director

SIFMA

+1 212 313 1260

tprice@sifma.org

Ron Lefferts

Managing Director

Global Leader of
Technology Consulting

Protiviti

+1 212 603 8317

ron.lefferts@protiviti.com

Andrew Retrum

Managing Director

Technology Consulting
Security and Privacy

Protiviti

+1 312 476 6353

andrew.retrum@protiviti.com

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate for legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit www.sifma.org.

Face the Future with Confidence

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and our independent and locally owned Member Firms provide clients with consulting and managed solutions in finance, technology, operations, data, analytics, governance, risk and internal audit through our network of more than 85 offices in over 25 countries.

Named to the 2020 Fortune 100 Best Companies to Work For® list, Protiviti has served more than 60 percent of *Fortune* 1000 and 35 percent of *Fortune* Global 500 companies. The firm also works with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.