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Re-imagining network management

Perception survey

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Foreword
Re-imagining network management

For more than 30 years, the global securities services industry has endured long periods of transformational change, signposted by: an investment boom in the late 1980s that forced automation upon a paper-based settlement system; regulatory[1] and infrastructure[2] change that harmonised certain post-trade processes; and new technologies that then digitised them.

Covid-19 has accelerated this transformation. As a once in a century crisis that continues to upend nearly every area of financial services, it has precipitated large scale home working and the increased use of digital tools by institutions to facilitate engagement between buy side and sell side.

Network managers at global custodians, broker-dealers and financial market infrastructures (FMIs) have had to adapt to these changing and unprecedented circumstances. Since the Lehman collapse of 2008, post-crisis financial regulation has mandated responsibility beyond managing the entire information flow through an institution. Network managers are now also responsible for managing risks, including loss of client assets in the event of something going wrong or a default, and monitoring sub-custodians in their agent bank network. While the current crisis has brought lockdowns in many parts of the world, network managers have adapted by employing new tools to maintain control of these risks and monitor these relationships.

In this report, several network managers from global custodians and FMIs share how they have coped and how their roles could be transformed by the Covid-19 crisis.

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Green shoots of change in network management

Transformation continues to reverberate throughout the securities services industry. New technologies, combined with regulatory and infrastructure change, have given rise to more efficient and harmonised operating models, replacing legacy infrastructure and non-standardised processes.

Since the onset of Covid-19, the financial services industry has pivoted further towards getting the nuts and bolts right to ensure resilience and stability, while streamlining paper-based processes. With wide-scale homeworking, Deutsche Bank Securities Services has invoked digital tools such as electronic signatures, as well as those that help with transparency around flows, data reporting and lifecycle transparency. Such technological and operational enhancements mean that many traditional near and far shore locations have been replaced, almost overnight, with new ways to service clients remotely.

We now need to think about how to better serve our network management clients in the future – whether that be through home working, or via more sites consisting of smaller teams (satisfying some of the technical “new normal” requirements). We’ll naturally see a big uptick in the use of instant messaging (IM), video, audio and governed communication mediums.

In this report, we gathered insights from network managers on how these new engagement models have contributed to maintaining a “business as usual” operating environment. Despite some short-term logistical challenges in certain markets, they acknowledge that banks and FMIs are performing well from an operational resiliency perspective during the Covid-19 crisis. The main lesson, given the unpredictability, is that planning for the future should take account of not one but all eventualities.

This requires continuous evolution; it’s a very complex ecosystem, which will require detailed planning around technology, infrastructure, people and “scenario busting”. In assessing how network managers have adapted to the crisis, the report draws several important conclusions about the future of network management, as summarised in the accompanying infographic.

Rebekah Flohr
Global Head of Securities Services Sales

Stephen Wilkes
Head of EMEA Sales, Securities Services

RFPs

Most request for proposals (RFPs) are currently on hold, although network managers will conduct virtual due diligences as a last resort if the crisis is prolonged

Contingency

Contingency planning is likely to become even more important

Due Diligence

The due diligence process is expected to evolve, although there is disagreement on exactly how. If virtual due diligences are successful, then these will prevail if cost pressures continue

Real-time Risk

A greater emphasis on real-time risk monitoring is expected post-Covid-19

Questionnaire

There is clear disagreement on the future of the Association for Financial Markets in Europe (AFME) Due Diligence Questionnaire. While some network managers believe that the questions on business continuity plans (BCP) should be tightened, others feel they are not sufficiently proficient on the issue and would prefer other experts at their organisations to cover it

Market Visits

Conversely, if deficiencies are discovered in some markets post-Covid-19, then the pressure on network managers to increase individual market visits could grow

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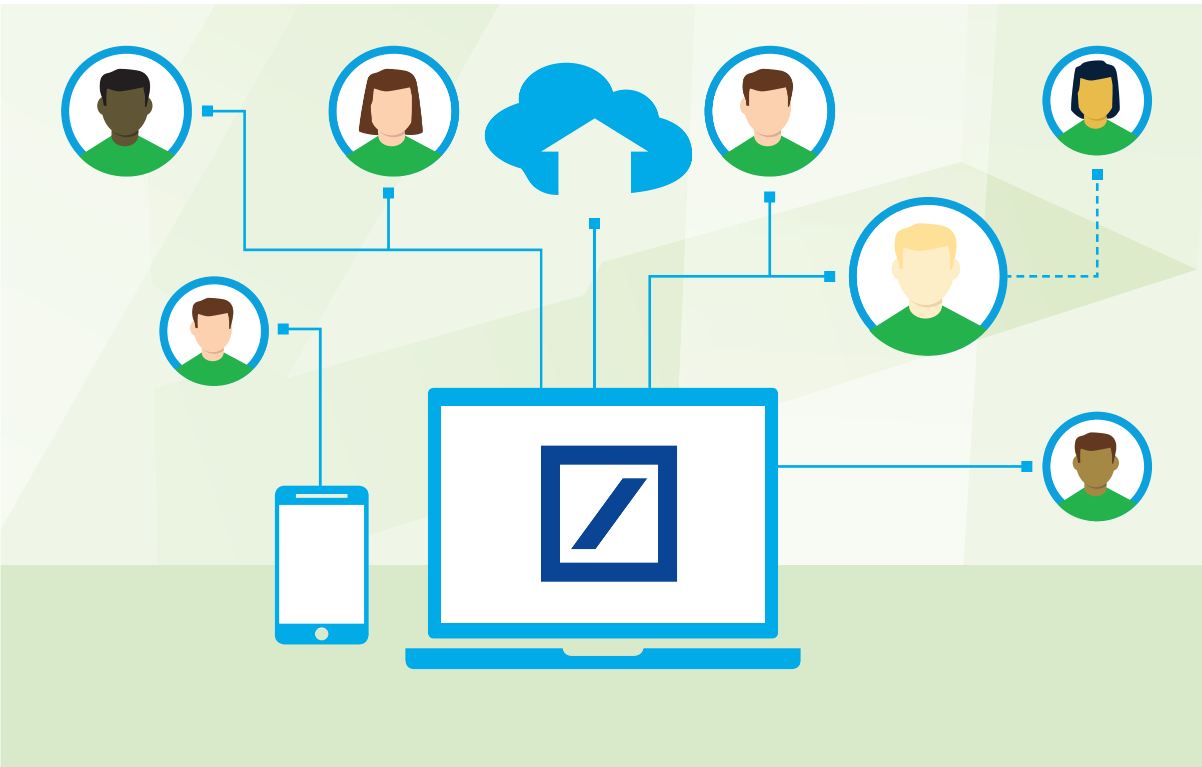
Adapting to lockdown

Covid-19 has unleashed disruption on financial services, with mandatory lockdowns and social distancing measures testing the operational resilience of many firms. What's more, lockdowns have coincided with some of the most stressed and volatile trading conditions ever recorded in modern times. According to data from trade body AFME, European equity trading volumes rose 94% year-on-year (YoY) in March 2020, corporate bond trading increased by 31% YoY in Q1 2020, while Foreign Exchange (FX) spot trading rose by 61% YoY in March 2020.[3] Elsewhere, AFME reported settled transactions at the European Central Bank's (ECB's) Target2Securities (T2S) platform increased to more than 1 million per day, beginning on 24 February 2020, versus the 600,000 daily average recorded in 2019.[4]

The majority of agent banks and FMIs appear to have implemented their BCPs successfully, with staff able to set up home working arrangements seamlessly without much disruption to trading and settlement.

> "All of the custodians in our network have held up so far to the extent that we would not have even known their staff were working from home if we had not been advised. Despite the disruption, we did not experience any major settlement issues whatsoever. That said, our business was dealing with its own issues during the initial stages of the crisis so it is entirely possible that some – perhaps minor – operational shortcomings could have occurred in our network that I was not fully aware of"
>
> *London-based network manager*



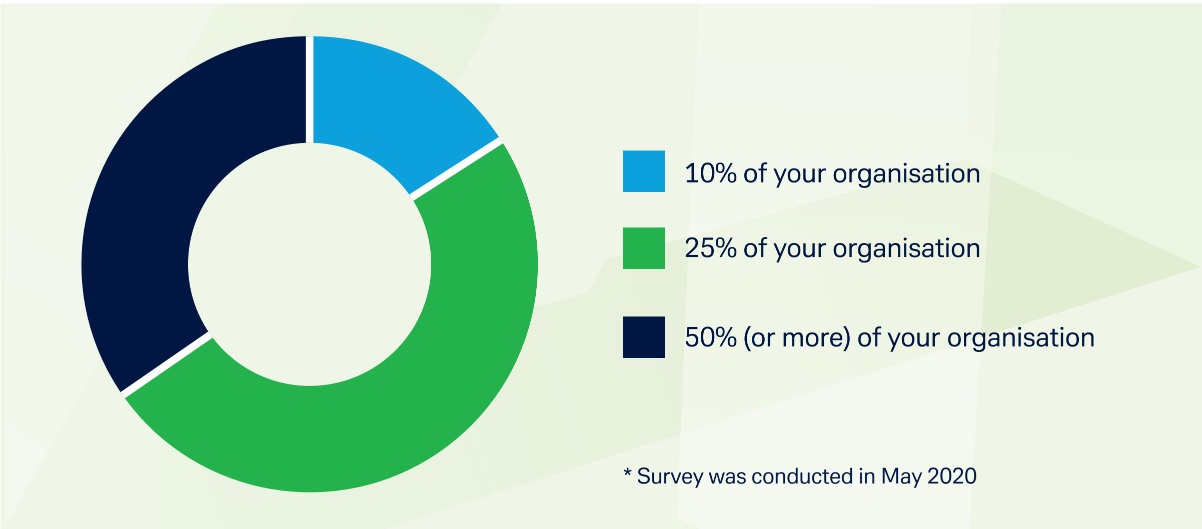
The evolution of the network manager post-Covid-19

The network managers interviewed all agreed that Covid-19 will have major implications on their role and duties even after the lockdowns end.

Previously, many of them employed a tactile approach with on-site visits to custodians to perform due diligence on them. Georgiana Bobe, First Vice President at Sumitomo Mitsui Trust Bank, explains: "We sat with operations, business continuity, anti-money laundering and legal personnel to see for ourselves that actual procedures existed and that what they were telling us in the AFME questionnaire we could see for ourselves. Meeting with people who dealt with our account was important too because once they meet you face to face then in times of a crisis when you have a situation or a problem, you can call up somebody to ask their help."

A survey conducted by The Network Forum found 48.9% of securities services professionals expect that 25% of their co-workers will be working from home permanently from now on (see Figure 1).

Figure 1: For what percentage of your organisation will working from home be the "new normal"?



Source: The Network Forum industry poll

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Monitoring agents and reassessing due diligences

While the ongoing risk monitoring of sub-custodians and FMIs has often been performed virtually by global custodians and broker-dealers, the inability to see them physically has prompted network managers to communicate more regularly with their providers. “I am speaking on the phone more frequently with my agent banks, mainly because I cannot see them in person,” says a London-based network manager. “We are now speaking to them on a weekly, bi-weekly or quarterly basis to make sure everything is still working as it should.”

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> *London-based network manager*

The issue is more complicated when conducting periodic market reviews or due diligences on providers following RFPs, which are traditionally nearly always carried out on-site and in-person by the network manager. With the current travel restrictions, physical on-site due diligences are obviously impossible. In response, this is prompting some network managers to reassess their existing due diligence practices and procedures with some resorting to virtual communication channels, such as Zoom or Microsoft Teams.

Derek Duggan, global head of sales at Thomas Murray, which benchmarks agent bank providers, says that virtual due diligences are a workable, albeit temporary, solution: “Thomas Murray suspended business travel from 9 March and from this date our on-sites have continued by using video and

telephone conferencing facilities," he reports. "The due diligence reviews so far have progressed well with all groups responding professionally and providing validated information and documentation to us as part of the process. While there are imperfections with this process – namely an inability to conduct operational tours and visibly confirm physical and system workflows – we are conducting video conferencing calls with the heads of securities services, corporate actions, settlements, tax and operations. As part of this, we demand evidence from them demonstrating what their settlement rates are along with their levels of STP."

While some custodians have temporarily suspended RFPs and due diligences, a number of network managers at leading providers concede they may have to resort to virtual due diligences if the Covid-19 disruption continues indefinitely. "Due to ongoing travel restrictions, we have postponed on-site due diligences until further notice. The current situation has no impact on our regular custodian review process, which we perform based on the AFME[5] questionnaire and additional SIX parameters," acknowledges Stephan Hänseler, global head relationship and network management at securities infrastructure provider SIX. "Should it become apparent that we will not be able to travel this year – which is how things are looking right now – we will reschedule our plans in order not to slow down the process, and we would consider conducting additional virtual due diligence activities via video or conference calls."

Are virtual due diligences sufficient?

Not all network managers are convinced by the merits of virtual due diligences and reviews. "Like many of our peers, we have suspended all on-site due diligence visits until the end of the year," says one network manager, who believes that virtual due diligences are an insufficient replacement for on-site visits. "It is essential we physically meet all of the relevant staff on-site and the market infrastructures (i.e. exchanges, CSDs, CCPs), regulators and the central bank."

While network managers have deferred on-site due diligences and market reviews, there are concerns that being unable to travel could impede their ability to deal with a potential crisis situation either at a local provider or in a particular market. In such challenging conditions, network managers would normally be on the ground working on their contingency plans, although some providers are confident they could switch banks remotely in an emergency. Whether or not virtual due diligences will suffice in such a crisis situation is yet to be tested.

Deutsche Bank's Research Team notes that most businesses have been forced to find alternative means of communication to face-to-face interactions, and this forced integration, further investment, or in some cases initial investment in virtual communication will likely better position many businesses post covid-19 to make more efficient use of travel-replacing technologies should they choose to.

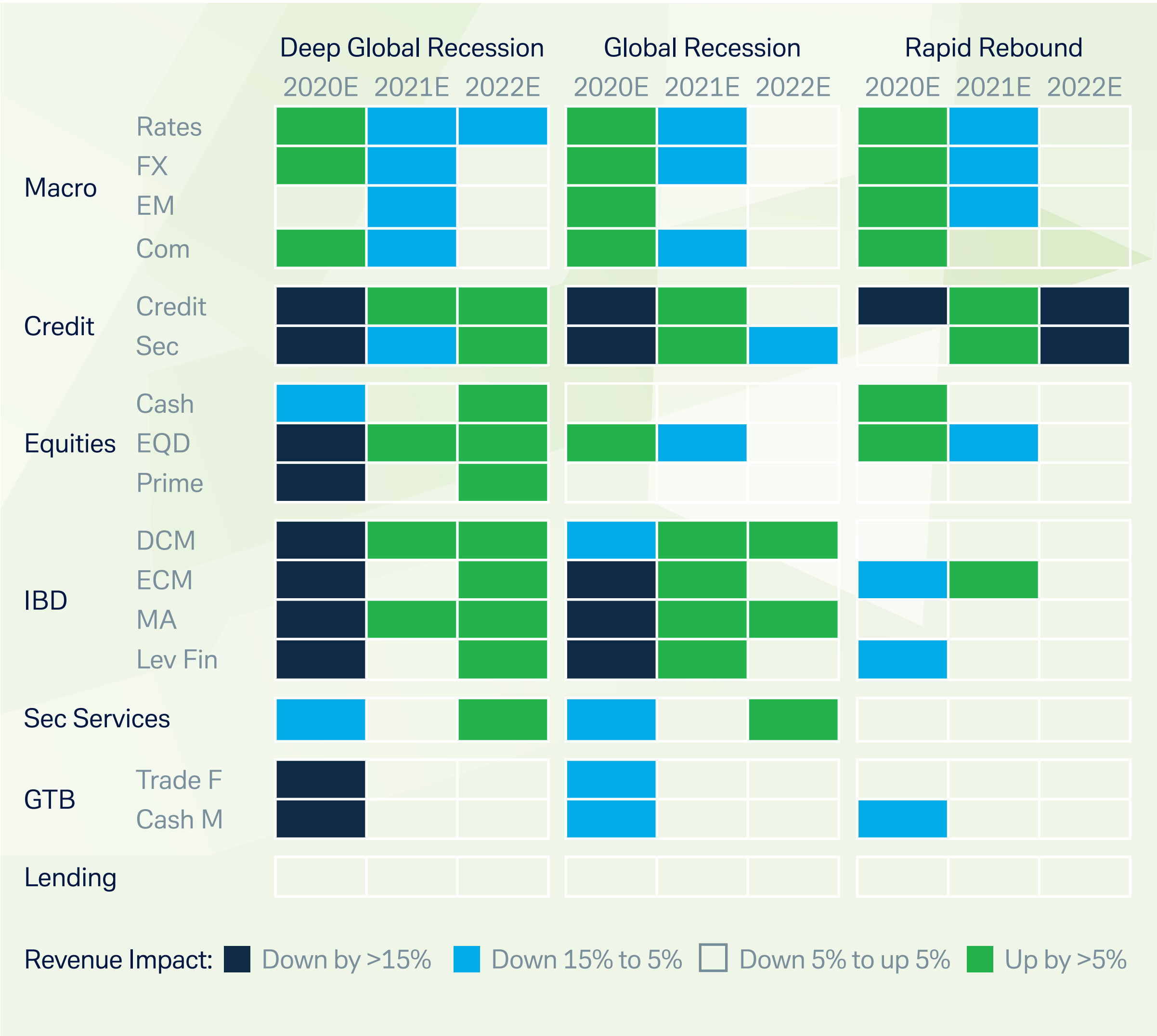
With business travel off the cards for the rest of 2020, most network managers interviewed agreed that they will have to learn to how to hold meetings and conferences via virtual means such as web links. "I don't think that it will totally replace an onsite due diligence visit," says Bobe.

> "But while nothing else prevails, I think we're going to have to learn how to hold one via a media link of some sort. The only way we can ensure our clients assets are safe is by getting into our sub-custodians offices and looking around. That means doing so via a web link that's going to allow us to sort of walk around their offices meet the ops people and see what they're doing."
>
> *Georgiana Bobe, First Vice President, Sumitomo Mitsui Trust Bank*

Due diligences in 2021 and beyond

An April 2020 joint report by Oliver Wyman and Morgan Stanley anticipates the securities services industry could see revenues squeezed by 10% to 15% in 2020, due to margin shrinkages, a sharp drop in assets under custody and the prolongation of historic low interest rates (see Figure 2). The expected cost-cutting measures from this means that while physical on-site due diligences are currently on hiatus, the Covid-19 fallout could lead to significant changes in the scope and nature of those visits.

Figure 2: Revenue impact on securities services



Source: Oliver Wyman analysis

This is nothing new. Network managers have faced serious cost pressures for many years, which has led to a degree of streamlining in the due diligence review process. This is evidenced by the growing number of mandates being awarded to sub-custodians on a regional, as opposed to an individual market, basis. For example, in recent years, many global custodians and broker dealers have consolidated their assets in geographic regions with a single regional agent bank provider.

The future of due diligences

Pre-Covid-19, it was becoming increasingly common for network managers to only visit sub-custodians at their main regional office for due diligences, as opposed to travelling to each and every market in the locality where they use them. “We get allocated a travel budget each year, and we have to prioritise our on-site visits accordingly,” says a London-based network manager. “Take a hypothetical sub-custodian called ‘X’. I am using them to cover four markets in the Middle East. If I get an opportunity to see X in their regional HQ in the UAE, then I will use my time in the UAE to conduct due diligences across all four markets.”

However, this method of due diligence exposes network managers and their businesses to increased market risk, especially during bouts of serious volatility. According to Duggan: “Growing numbers of network managers have stopped visiting individual markets altogether, and are instead focusing their resources on the regional hubs. However, a sub-custodian is only as strong as its weakest link. If there is a potentially systemic issue in a local market which a network manager has failed to visit, then it could have group-wide consequences.”

> “I certainly believe there will be wholesale changes to the BCP section in the AFME DDQ”
>
> *London-based network manager*

Other network managers are adamant that the current crisis will reinforce the importance of individual market visits. “We do due diligence visits for all markets where we have exposures to. As some local custodians have now offshored parts of their operations to lower cost jurisdictions such as Malaysia or the Philippines, we will visit those offshore centres too. If I am unable to visit a country for whatever reason, I will use the services of Thomas Murray,” says a network manager at a European global custodian bank.

Ascertaining whether individual market due diligence visits will increase over the coming years is difficult. If virtual due diligences are effective, then the answer is clearly not, especially if securities services budgets are dramatically curtailed. This depends on the functioning of BCPs, particularly in those markets that are used as outsourcing hubs. If more deficiencies are subsequently uncovered in certain markets, then the level and intensity of due diligences will likely be ramped up, irrespective of budgetary constraints.

Reforming the AFME DDQ

The AFME due diligence questionnaire (DDQ) brings about a degree of market-wide standardisation to the due diligence process; something which would be advantageous to both network managers and sub-custodians.

Covid-19 has changed the way the DDQ is compiled. “A number of network managers have since added Covid-19 related questions to the DDQ, which go into very granular details about disaster recovery,” says Duggan. Although Section 3.6 of the AFME DDQ does cover BCP extensively, numerous market participants accept that the template will need to undergo revisions as a result of the pandemic. “I certainly believe there will be wholesale changes to the BCP section in the AFME DDQ,” states the London-based network manager.

Some network managers now accept that questions on remote working need to be incorporated into the DDQ’s BCP section. “The DDQ should reflect and address the subject of remote working readiness at institutions to allow all employees to continue their jobs remotely as quickly as possible,” says Hänseler. "It is not just about changing the workplace environment but also about preparing for unexpected threats such as Covid-19. There are also market participants who may have a harder time implementing remote working, or whose employees may struggle with home working. This needs to be addressed."

Bobe concurs, and additionally calls for the questionnaire to reflect providers' processes and procedures for a pandemic, particularly in a work from home situation where the power is lost and there is no back-up generator or if a critical person cannot get to the disaster recovery site when the power is lost.

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Stephan Hänseler

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Cyber-risk: Is it within the network manager's mandate?

Covid-19 has created a cyber-security challenge for a number of financial institutions. Home broadband – irrespective of location – does not offer a comparable level of cyber-security protection or encryption that would normally be available in an office environment. As many custodians and FMIs will host sensitive data on their servers, effective cyber-security has been escalated to the top of the network manager's agenda. In the handful of markets with inadequate, or even non-existent, cyber-security regulations or standards, it is therefore essential that providers can demonstrate robust cyber security.

Network managers believe the issue of cyber-risk is most acute in emerging markets. "Local service providers in emerging markets do not always have the best technology infrastructure, which is one of the reasons why we always appoint large banking groups to act as our sub-custodian in these countries. The large banking groups have strict firewall policies in place and have instructed staff to use virtual private networks," continues one network manager.

If the cyber-security at local agent banks in emerging markets is found wanting, it could result in network managers transferring business to major international banking groups instead. Inevitably, there will be greater pressure on network managers to scale up their due diligences on sub-custodians' cyber-security provisions in light of Covid-19. Not all network managers, however, welcome this idea, mainly because cyber-security is a subject matter that is outside of their areas of expertise and it risks replicating some of the activities being done by other work streams inside their businesses. "I fully believe that cyber-security due diligence questions should be expunged from the AFME DDQ as it is not the network manager's role to perform. We already have a cyber team. Network managers should look to leverage from their processes and findings," says the London-based network manager.

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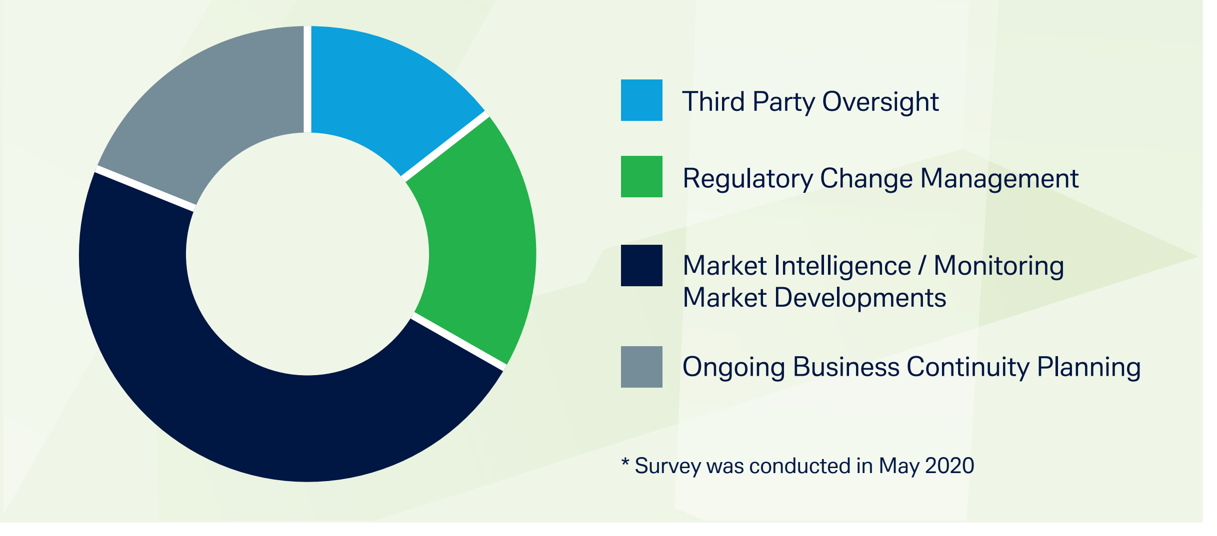
BCP: A new role for network managers

Although Covid-19 disruption to trading, clearing and settlement has been negligible so far, the transition to remote/split working was not straightforward in all markets. Nearly all BCP test cases have relied on the hypothesis that if staff cannot access their primary place of work for reasons such as flood, fire damage or terrorist attack, then the fall-back is to relocate to a far-removed disaster recovery (DR) site. However, not all providers' BCPs factored in the risk that both the main office and DR site would be off-limits to employees. While The Network Forum survey, naturally, highlighted monitoring market developments as the top priority for securities services professionals over the next 3-6 months, ongoing business continuity planning was high on the agenda (see Figure 3).

Figure 3: What will be your main focus going forward in the next 3-6 months?*



Source: The Network Forum industry poll

Not all network managers are keen to focus on BCP in too much detail. "Network managers are not BCP experts, which is why our bank has its own dedicated, centralised team of BCP specialists," acknowledges the network manager at the European global custodian bank. "One of their responsibilities is to assess the BCP responses we receive from agent banks. They will then conduct a review and share their analytics with us. I think we are quite unique in that way. Some of our peers do not have these capabilities, and they often struggle as a result, because their BCP reviews are nothing other than tick box exercises,"

Although network managers are reticent about asking questions covering cyber-security and BCP, their role is likely to become increasingly important during the service provider selection process. Hänseler says network managers are now being seen as coordinators within organisations, gathering and consolidating input from multiple work streams such as IT/cyber-security and BCP management. With all of the uncertainty, few expect the network management due diligence process to remain the same. "We have initiated our own internal due diligence exercise on our due diligence process," reveals a network manager.

Of equal importance to network managers, evidenced by the Network Forum poll was the focus on regulatory change management. Here Bobe hopes that as markets reopen, regulators will continue to keep special arrangements and postponed timelines in place, until all markets open. "One of the things I'm concerned about is that because we may not be rushing back, the United States might be back while others might not so we are hoping that special arrangements are not taken away before we get back."

5

The shift towards consolidation

While offshoring can have its cost advantages, certain markets faced significant challenges during the embryonic stages of Covid-19. Take one emerging market in Asia, for instance, that imposed a strict lockdown following a sharp rise in the number of Covid-19 infections. This at first barred people from leaving their homes altogether – even for essentials. A number of back office staff in this market did not have work laptops, while some lacked home broadband connectivity and phone lines. With staff in this emerging market offshore hub unable to access DR sites or their internal systems during this critical period, banks were forced to rapidly dispatch laptops, work SIM cards and emergency engineers to install internet so as to get local employees back online again.

Some believe such early-stage disruption in certain emerging markets could change the attitudes among network managers towards offshoring. This could result in clients downsizing the number of outsourced providers they use and pooling business to just a handful of sub-custodians. Others believe it could even lead to greater re-onshoring of operational activities such as trade settlements and reconciliations.

Equally, many businesses are reassessing how much work can be done from home and may look to downsize the amount of real estate they have. "They may move to a shared space or only allow critical staff to come back into the office. They would be saving in in real estate funds, especially in a BCP environment where they don't have to worry about having maintaining an expanded BCP space."

6

Transitioning to real-time risk monitoring

The volatility caused by Covid-19 has triggered a renewed emphasis on real- or near-real- time risk monitoring of service providers across the board. While network managers can monitor sub-custodians' credit default swap spreads as and when they choose, some industry figures believe that operational risks need to be scrutinised more regularly. "Although network managers do conduct on-site reviews of their sub-custodians, the timings of these assessments are prescriptive meaning global custodians and brokers do not always have up to date information about their service providers," comments Duggan.

Technology could potentially play a critical role in improving real-time risk management. "A greater focus on real-time risk monitoring would be an improvement. This could be facilitated through new technologies," says a network manager. A number of securities services institutions are embracing big data analytics, application programming interfaces (APIs), artificial intelligence (AI) and blockchain. Some of these digitalisation initiatives could have a meaningful impact by enabling network managers to perform more comprehensive, real-time risk monitoring.

"Although network managers do conduct on-site reviews of their sub-custodians, the timings of these assessments are prescriptive meaning global custodians and brokers do not always have up to date information about their service providers"

Derek Duggan

While real-time risk monitoring is the panacea for some, network managers point out that it is not practical for all aspects of their operational due diligence activities. Hänseler points out real-time risk monitoring, for instance, would not be worthwhile when scrutinising corporate action processing rates at their sub-custodians. "However, there are some areas where we do perform daily risk assessments from a liquidity perspective," he adds Hänseler.

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Adopting new technologies

With Covid-19 testing the resilience and adaptability of the securities industry, it has also accelerated its adoption of new technologies. "After the acclimatisation phase when people got set up, it was positive to see how quickly and effectively the whole industry was able to work in the new environment," notes Hänseler at SIX. "Overall, technologies such as Skype and Microsoft Teams are great tools and are working well. One challenge, however, is signing contracts and distributing and delivering physical documents. For this, we had to adapt our internal processes," he adds.

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Stephan Hänseler

Many within the industry concur that there needs to be an urgent transition away from wet signatures to an automated alternative. "One of the biggest issues has been signing documents. Some jurisdictions are still insisting on wet signed copies although many have implemented electronic signatures at short notice. As an industry, we should all be working towards electronic signatures and standardised account opening and KYC requests as soon as possible," asserts Sharon Hunt, global head of network management at Deutsche Bank.

Bobe concurs with the prevailing demand for wet signatures in many markets. "We've been fortunate to be able to work out agreements with some of our custodians. I've used some PDF e-signatures and we've been able to do account openings. Also physical documentation in the segregated markets was another big challenge, where we were able to get some work arounds in that area so that also got done," she says.

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The shift towards consolidation

The financial crisis of 2008 and subsequent default of Lehman Brothers in 2008 cemented the importance of effective contingency planning by global custodians and brokers (as well as institutional investors and asset managers). Regulations such as the EU's Alternative Investment Fund Managers Directive (AIFMD) and Undertakings in the Collective Investment in Transferable Securities (UCITS V) make clear that custodians should have robust contingency plans in place across their sub-custody and correspondent banking networks. Such measures are integral if global custodian banks are to adequately manage the risks, such as the loss of client assets, or a provider in their network suffering a default or credit event.

Aside from insulating custodians from the risk of a provider default, contingency plans are vital in ensuring business continuity if a sub-custodian chooses to exit a market or reduce its coverage. Without a clearly-defined contingency plan in place, clients of custodians might be forced to divest from certain markets in the event of a sub-custodian failure or exit. This could have an impact on the commercial relationship between the custodian and its clients. As a result, large institutional investors often take contingency planning very seriously.

In markets where Covid-19 is exposing acute structural vulnerabilities, the odds of local banks or FMIs running into difficulty are potentially quite high. The network manager at the European global custodian says his firm has utilised "hot" contingency planning – or employing two shadow providers in markets outside of their main network (in case one faces difficulty and the business can immediately be transferred to the other) – since 2015, a decision spurred on by the implementation of AIFMD. "By having two sub-custodians in any one market, there is an additional safety net for the bank and its clients," he continues.

> "By having two sub-custodians in any one market, there is an additional safety net for the bank and its clients"
>
> *The network manager at the European global custodian*

Duggan of Thomas Murray agrees. "Hot contingency plans provide genuine value-add during crises. There is very limited point in having a cold contingency back up during extreme market conditions. Given all of the volatility and complications, it would be very difficult for organisations to transfer their assets to a secondary provider if they were relying on a cold contingency plan," he says. Moreover, some have argued that by engaging with two sub-custodians, network managers can benchmark their providers and negotiate price discounts. It is entirely possible the hot contingency model could see renewed interest post Covid-19.

Warm contingency plans can suffice

Some believe that a "warm" contingency plan (having a sub-custody agreement with a secondary provider) in a given market will suffice. There are often barriers precluding network managers from running multiple providers in the same market. Some frontier economies, for instance, may only have one local bank, rendering hot contingency planning impossible. For other network managers, the costs of running two sub-custodians in one market are prohibitive. "Running hot contingency plans is very expensive, especially in markets with segregated account structures. Sub-custodians do not like having dormant or inactive accounts, and some providers have even asked clients to shut down their dormant accounts," says the London-based network manager.

He suggests warm contingency plans are perfectly adequate. "We have our own BCP resiliency map of what we would do if our primary provider went under, and who we would switch to. This has always been the case for our cash equity and fixed income businesses. If such a scenario occurred, we would simply port our business from the failing sub-custodian to a provider who we already have an existing commercial relationship with in another market," he says. With costs likely to come under intense pressure, there may be little appetite among network managers to replace their warm contingency plans with dual networks.

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