

The background image is a high-angle, aerial view of a city skyline, likely Dubai, with numerous skyscrapers. A thick layer of white fog or low clouds covers the lower half of the image, partially obscuring the buildings. The Burj Khalifa is visible in the upper left, rising above the fog. In the foreground, a curved road and a body of water with a few boats are visible. The overall color palette is dominated by the blues of the sky and water, the greys of the buildings, and the white of the fog.

DIGITISATION AND THE GLOBAL PANDEMIC

Think Ahead

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ACCA is the Association of Chartered Certified Accountants. We're a thriving global community of 227,000 members and 544,000 future members based in 176 countries that upholds the highest professional and ethical values.

We believe that accountancy is a cornerstone profession of society that supports both public and private sectors. That's why we're committed to the development of a strong global accountancy profession and the many benefits that this brings to society and individuals.

Since 1904 being a force for public good has been embedded in our purpose. And because we're a not-for-profit organisation, we build a sustainable global profession by re-investing our surplus to deliver member value and develop the profession for the next generation.

Through our world leading ACCA Qualification, we offer everyone everywhere the opportunity to experience a rewarding career in accountancy, finance and management. And using our respected research, we lead the profession by answering today's questions and preparing us for tomorrow.

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DIGITISATION AND THE GLOBAL PANDEMIC

This report examines the impact of COVID-19 in areas that relate to the digitisation agenda of organisations. This is an evolving picture and the perspectives draw upon first-hand accounts from professionals around the world, using ACCA's framework for recovery.

FOR FURTHER INFORMATION:

Narayanan Vaidyanathan

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Foreword



Sam Ellis
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The COVID-19 global pandemic has taken organisations into uncharted waters and has required courage, flexibility and high calibre professionalism from our members to steady the ship.

By facing these challenges head-on we are plotting new courses as we look towards a new horizon with glimpses of new adventure and opportunity.

Some are closer than others to this world of new opportunity, but we are all in this together and as a community of members we will not leave anyone behind. Successes and practical experiences will be shared through the ACCA forums, networks and Professional Insights teams to all members benefit.

Technology has featured prominently as being 'part of the solution' when trying to navigate through the challenges. This report provides a qualitative view of how the challenges of the pandemic, and the road to recovery, are playing out for stakeholders around the world. In doing so, it brings to life the nature of the considerations pertaining to digital, through the eyes of individuals experiencing these matters.

ACCA has brought the voice of accountancy and finance professionals to the discussion as the COVID-19 pandemic continues to unfold. Its recovery roadmap has emphasized a multi-dimensional approach and this report builds upon the thinking so far in its exploration of the digital related aspects.

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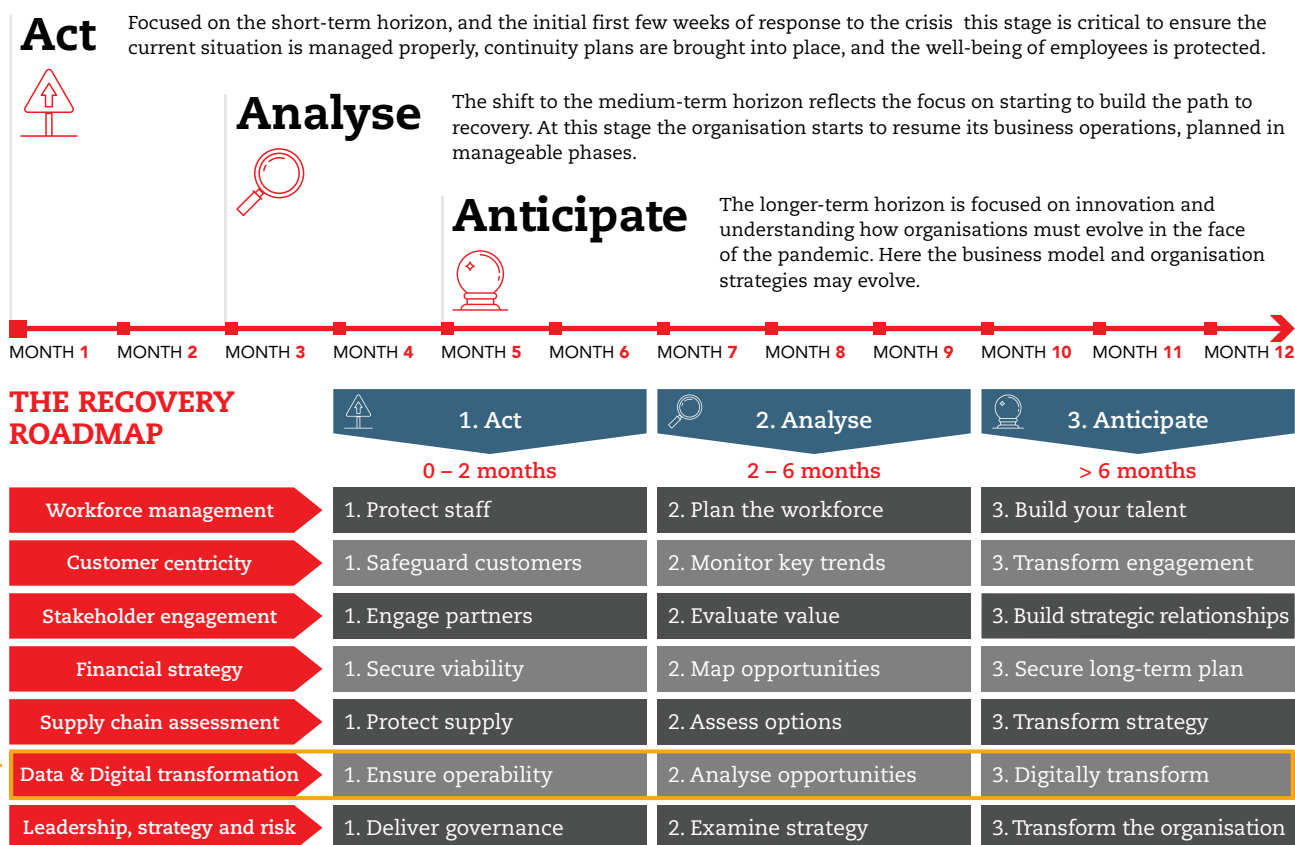
Background

ACCA's report, *COVID-19 Global Survey: The Road to Recovery?* (ACCA 2020a) sets out a three-stage framework for charting the path to recovery after the pandemic: **Act**, **Analyse** and **Anticipate** (Figure B1). This report explores the parts of this framework pertaining to the digital environment.

It is based on qualitative interviews¹ that capture individual experiences of how elements of the framework have worked in practice. In some instances, these have been supplemented with a desk-based literature review, but the emphasis is on reflecting anecdotal examples gathered to present a range of perspectives on the ACCA framework.

 The elements of the framework pertinent to data and digital transformation are shown in Figure B2.

FIGURE B1: The ACCA three-stage framework for organisation recovery



 **FIGURE B2:** ACCA's recovery roadmap checklist for data requirements and transformation

ACT	ANALYSE	ANTICIPATE
ENSURE OPERABILITY Customer insight Enact agile projects that produce high quality, up to date data Ensure data is protected and cyber security controls are operational Identify and communicate with key third party IT suppliers to understand levels of resilience and immediate risks Understand the organisation's immediate technology resilience capabilities and capacity management, eg remote access demands aligned to initial workforce plan	ANALYSE NEW OPPORTUNITIES Evaluate technology resilience plans for the coming months as well as the upgrades necessary to support employees, customers and other stakeholders Model expected employee usage and needs as a result of changing working practices Assess new risks and opportunities relating to IT hardware, software and cloud based solutions, and ensure appropriate control and mitigation strategies are in place Assess the new risks and opportunities relating to data: ensure cyber security measures remain robust and develop robust protocols for data extraction, preparation and analysis Understand the data architecture required to support future operations Examine how digital infrastructure, platforms and channels can be enhanced to support the organisation, and determine the nature and scope of a digital investment programme for the future	TRANSFORM THE ORGANISATION Establish a digital strategy to support the future business model, with data governance and digital core included Evaluate how technology can be used to support more effective stakeholder engagement as part of the organisation's strategy Understand how and where technology could support the organisation in managing emerging regulatory, compliance and legal risks Identify the role of technology in supporting the future strategic workforce plan virtually and physically and how its presence can be sustained in the longer term

¹ A list of the interviewees is given in the Acknowledgements at the end of this report.

Introduction

COVID-19 is often referred to as an unprecedented challenge to the existing order of things. True as this is, large-scale disease outbreaks are not a new phenomenon. From Spanish Flu to SARS² and Swine Flu,³ we have been here before. Yet two features of COVID-19 – its global nature and the role of digital in coping with it, have been striking.

The world wars of the twentieth century were devastating and fought with greatest intensity within Europe, the Far East and the US. Many combatants were drafted into war from across territories held around the world, but countries in South America, for example, were less directly involved at the front lines.

More recently, the Global Financial Crisis of 2008–9 was hugely destabilising but particularly hit countries such as the US and the UK, with their relatively light-touch regulations, and high levels of integration into the global financial system. Countries such as India were relatively little exposed to the global capital markets at the time and felt the impact less, while others, such as China, drove global growth in the following years.

As regards pandemics, many recent examples were thankfully restricted before they could go global, such as Ebola in West Africa and SARS in east and south-east Asia. This didn't make them any less tragic, but they were less visible in many in parts of the world that were not directly affected.

COVID-19, on the other hand, involves, as of July 2020, over 15m cases⁴ spread across 200+ countries – in other words, everywhere on the planet. And while levels of

prevalence vary, this is not solely a national or supra-national concern. It affects everyone in an intrusive way that shapes daily lives no matter where they are located.

The role of technology has been more significant in this pandemic than ever before. This has been the result of the maturing of digital applications to a level that has made them widely usable and relevant in the current situation.

A sudden system-wide shock like this might be expected to cause paralysis across most economic sectors. Certainly, economies have nose-dived globally, with 2020 set to be the worst, globally, since at least the Second World War (ACCA and IMA 2020). Unsurprisingly, a recent global survey of over 4,000 finance professionals suggested that 44% were scaling back planned technology projects (ACCA 2020b).

Despite this, the same survey also reports that over the longer term of five years, far fewer (17%) expect this scaling back to have remained among their top three challenges. In fact, for many, COVID-19 fast-tracked their digitisation in those high-priority areas involved on a day-to-day basis in interacting with staff and clients. The route to recovery passes through the staging post of greater engagement with digital technology.

2 Severe acute respiratory syndrome, the epidemic that affected many countries in 2003.

3 The H1N1 virus outbreak, 2009–10.

4 <<https://www.worldometers.info/coronavirus/>>, accessed 23 July 2020.





ACT: ensure operability

Breaking old habits

Levels of digitisation that were in place as the pandemic began have been a key factor influencing the ability to survive as it progressed. Those who were already thinking about digitisation adapted better, while those who had historically resisted it found their woes amplified.

A leading Canadian banking group with 80,000 employees explained how banking in Canada has been steadily shifting from a branch-based to a digital-based model. This had been a clear trend in the years leading up to the pandemic and the business had been proactively working on becoming digitised.

When COVID-19 erupted, the first three months saw the group expand exponentially, along a route that was already in progress. Now 80% of the bank operates remotely without disruption to services. And the bank is actively reconsidering its real estate strategy, given the lessons it has learnt from this.

For finance teams, two common challenges have arisen from the speed with which COVID-19 has required migration to fully digitised ways of working. Firstly, there is a continuing prevalence in many organisations of paper-based processes, whether for invoices, sales and purchase orders, or for expenses.

Secondly, even where digitisation is taking hold, there can be a 'key person dependency' on a few individuals who are 'tech-savvy'. In a remote working environment, it is not possible to walk across to the desk to one of these people to seek their help. Both reducing reliance on paper, and a self-serve mentality have emerged as important for carrying on with essential operations.

**'WE SIGNIFICANTLY IMPROVED ON DOCUMENT SHARING PRACTICES; CLIENTS WHO WERE SENDING EMAIL ATTACHMENTS STARTED USING DROPBOX AND THE IRIS⁵ PORTAL TO UPLOAD DOCUMENTS SECURELY. PRE-LOCKDOWN, 60% OF CLIENTS WERE PAPER BASED; NOW IT IS 30%'.
Gillian McCreadie, Global Council member, ACCA,
Robb Ferguson Chartered Accountants**

Migrating operations and resilience

The immediate need has been for the ability to service customers and manage staff as seamlessly as possible. A respondent at one accountancy practice explained that it has been adopting digital signature tools such as DocuSign or HelloSign in a bid to move away from needing hard copies for signatures.

For staff there has been a widespread shift to remote working. This involves several aspects such as the use of collaboration tools for virtual meetings, document sharing and simultaneous editing via Cloud platforms, and automation of workflows. This has been mirrored by revamping websites to become the primary shop window, alongside digital payments and fulfilment capabilities for online transactions.

The information technology trade body in India reports how it worked rapidly with the government to ensure that operations could continue for its members, which are organisations within the IT industry. This included aspects such as addressing archaic laws to place IT on a similar legal footing to some 'essential' services or organising rental waivers for micro and smaller-sized organisations.

The same trade body also gives an insight into what some members have faced when migrating operations

⁵ Infrastructure for Resilient Internet Systems.

in areas such as business continuity planning (BCP), and associated resilience in managing new challenges. Before the pandemic it would not have been uncommon for BCP to be configured for a proportion of the full workforce, allowing say one-quarter or one-third to work remotely. Now, with 100% of the workforce moving online, new questions have had to be answered, such as whether, and how, to obtain laptops for all or a majority of staff, or, in some cases, assessing the levels of internet access in the home environment. This also impacts how people access data and that is a key issue here, for example do they use a virtual private network (VPN)? Or two factor authentications to safeguard data?

The chief financial officer (CFO) of an international flooring manufacturing company that sells to residential and commercial customers globally saw the start of the pandemic in January in their Asian supply chain (they also source complementary products from factories in China and South Korea). Order entry dropped to 75% of normal and in two weeks 80% of the UK staff were furloughed, while home working was set up for all back-office staff. Since they make flooring from plastics, they moved to making visors (face covers) as a new line of business.

The operational response has varied widely, with both extremes in evidence. Some firms are buying more software licences and pushing their projects faster, while others are unable to renew licences because of business shut down.

A company in the logistics industry reported that its business continuity and contingency planning held up well for staff working from home. The company already had plans designed to cope with the loss of one site or one office due to natural disaster; the management had not thought specifically about a pandemic. But this approach has worked, and staff can access all their data through Citrix remotely, use Outlook email, archive on Cloud and use Voice over Internet Protocol (VOIP) so people can take laptops home and contact everyone in the company remotely.



ACCA's recovery roadmap checklist for data requirements and transformation:

Understand the organisation's immediate technological resilience capabilities and capacity management, eg remote access demands aligned to the initial workforce plan.

Identify and communicate with key third-party IT suppliers to understand levels of resilience and immediate risks.

Leading from the front

To be effective during COVID-19, leadership has needed a human touch. Remote working, while presenting a way out, has also highlighted concerns. Loneliness, motivation and engagement problems, or in some cases, mental health issues can become challenges. For others, lack of a suitable space or, for those with children, the responsibilities of home schooling, can make it difficult to work.

Effective leaders have used messaging and communication tools to keep employees aware of the organisation's thinking as it evolves. AMA ('ask me anything') sessions have been suggested to connect with staff in less formal ways and to share the latest developments in what is a fluid, evolving situation. The use of Slack as a tool and the many channels that have arisen from it are creating an organisational remote culture, emphasizing how this is as much a behavioural issue as a technology one. This also extends to communicating externally with tools such as Hootsuite for managing social media interactions in a scalable and rapidly responsive manner.

Related to project delivery itself is the key element of ability to operate quickly and innovate flexibly. The agile identification of problems and proposal of solutions in fast-moving, multi-disciplinary teams, has been very much needed. Effective change management is an essential component of success. And more specifically change management in a remote environment. Organisations are struggling to deal with this in that many of the change levers are harder to pull⁶.

THE AGILE
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AND PROPOSAL OF
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6 <<https://joshbersin.com/2020/06/the-new-covid-changed-world-of-employee-communications/>>

To take the example of digital signatures mentioned above, a staff member in that practice was very conservative and highly risk averse. There was therefore an additional element of work to convince this person that this was safe as a business practice and quickly on-board everyone to new ways of working.

Strong leadership has been needed to drive the digital agenda through the organisation's decision mechanisms. A paper on *Digital Leadership*⁷ jointly developed by ACCA and Alibaba Cloud explores these matters in detail. Multiple interviewees report that innovations have been pushed through much faster than would otherwise have happened, with some reflecting on whether in some cases, moving away from slow/bureaucratic decision-making processes that often didn't provide any additional insight had played a part.

ACCA's recovery roadmap checklist for data requirements and transformation:

Customer insight: Launch agile projects that produce high-quality, up-to-date data.

Dealing with increased cyber risk

With staff operating remotely, there has been heightened risk to the data, networks and systems used by organisations. ACCA's report *Cyber and the CFO*⁸ and the associated CPD course provide a full explanation of the risks.

Malware that takes advantage of people's anxieties ('Fearware') has grown in prevalence; an example is emails directing the recipients to fake sites that spread misinformation about coronavirus. This could seriously compromise a person's digital identity or passwords. Similarly, phishing emails and fake advice both spread misinformation and increase the risk of infecting systems.

A finance professional in the manufacturing sector pointed to the noticeable increase in cyberattacks in his environment, with 'lots of scam emails' flying about. He also noted that the IT staff were catching a lot more of these and, recognising the issue, the company had arranged additional training for staff on cybersecurity (including a dedicated space on its website where staff can get information on protecting themselves from cyber threats).

There was also a recognition of the benefits of a more strategic/policy-level view of this issue. A respondent working within the medical supplies industry noted how board accountability for cyber risk has really helped to raise the visibility and response profile of this issue. More generally regarding board accountability, what has not changed is the type of attack. What has changed is the volume (people playing to insecurities that are accentuated remotely) and the profile of the risk in board members' minds. IT teams need to continue to be robust in their defence, though the tools are still largely the same. And it is now more important than ever to make sure that cybercrimes are reported to the relevant authorities in a timely manner.

Another business leader noted how their company is the constant target of hackers and securing data when working from home has been critical. As a result, the firm's technology expenditure has seen a shift towards security-related matters.

Another finance professional, working in a policy role within a digital technology industry body in Europe, noted the great strides being made in tackling cyber fraud. There was, however, a note of caution about the risks of protectionism, and how shutting borders and not sharing data could make the problem worse.

ACCA's recovery roadmap checklist for data requirements and transformation:

Ensure that data is protected, and cybersecurity controls are operational.

WITH STAFF
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THERE HAS BEEN
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THE DATA, NETWORKS
AND SYSTEMS USED
BY ORGANISATIONS.

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7 <<https://www.accaglobal.com/uk/en/professional-insights/technology/digital-leadership.html>>

8 <<https://www.accaglobal.com/gb/en/professional-insights/technology/cyber-and-the-cfo.html>>

IT TEAMS NEED TO CONTINUE TO BE ROBUST IN THEIR DEFENCE... AND IT IS NOW MORE IMPORTANT THAN EVER TO MAKE SURE THAT CYBERCRIMES ARE REPORTED TO THE RELEVANT AUTHORITIES IN A TIMELY MANNER.

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ANALYSE: analyse opportunities

Analysing new opportunities/risks

Some have seen the proverbial silver lining in the COVID-19 cloud. One entrepreneurial accountancy practice had been wanting to do governmental audits, for which it typically needed to be based in the capital city of the country where it is located. But because of COVID-19, all audits for government departments were now being done remotely. And consequently, clients (government departments) realised that the auditors do not need to be based in that one city. This has created a business development opportunity where previously the firm's location would have been a limiting factor.

Those in another practice noted how they had lagged behind their peers before COVID-19, but the pandemic had, paradoxically, created a situation where they had caught up with many of them. They had always been good on client service and customer management but had neglected proper analysis of the digital opportunity. They have gained a lot of new clients in the first few months of the year, often from larger firms, as they have analysed and responded to gaps in their approach.

One privately owned group explained the journey they had been on to evaluate Cloud options, and how the security dimension was critical to their analysis. Shareholders were risk-averse, and there was a preference for sticking with on-premises IT. They started on-premises but realised there was value in opting for Cloud applications, including sophisticated protections against hacking (given that managing data in the Cloud is the core business of these providers). They eventually opted for a Cloud provider whose data centre was managed by the national telecommunications company in that country – the latter being a well-known fiduciary.

COVID-19 has also sometimes created the need for new/ adapted services to be offered for more unfortunate reasons. A senior leader overseeing the COVID-19 response for a devolved nation in the UK noted that before the pandemic most government services were available online, but the registration of deaths had to be done in person at the registry office. The pandemic necessitated a rapid move to change this and for first time it became possible to register deaths online during the pandemic. In the process, they created a new addition to their data architecture, with the supporting data management elements to include this in their operations.

Analysis of heightened levels of cyber risk and assessing response options is necessary. Password managers that create a master 'lock' guarding access to all passwords and storing them in encrypted form can provide added security. Also, two-factor or multi-factor authentication mechanisms can provide added layers of protection as explained in more detail in ACCA's report⁹.

**ANALYSIS OF
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AND ASSESSING
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⁹ <<https://www.accaglobal.com/gb/en/professional-insights/technology/cyber-and-the-cfo.html>>

Risks can also come from using home devices that may not have the latest anti-virus software or may run on a different version of certain applications, which creates loopholes in security or corrupts files. And, while sharing files, care may need to be taken that this is done within password-protected environments, such as behind a login-based software application. Without this, there could be the risk of data theft or regulatory breaches of the General Data Purpose Regulations (GDPR) or similar rules.



ACCA's recovery roadmap checklist for data requirements and transformation:

Assess new risks and opportunities relating to IT hardware, software and Cloud-based applications, and ensure that appropriate control and mitigation strategies are in place.

Understand the data architecture required to support future operations.

Assess the new risks and opportunities relating to data: ensure cybersecurity measures remain robust and develop robust protocols for data extraction, preparation and analysis.

Squeezing more from existing digital assets

The digitisation of priority items in tight timescales has forced a critical look at existing technological assets in which investment has already been made. This analysis has in some cases reinforced the value opportunities presented by existing assets.

The operations of a medical supplies company, for example, were disrupted very directly by the events of the health pandemic. And in trying to keep factories open amid a 47% decrease in revenues, it relied immensely on existing assets such as 'digital twins'¹⁰ and models to give much-needed supply-chain visibility and planning. On a simpler note, it also found itself focusing increasingly on extracting more value from analytics software it had already licensed, such as Microsoft's Power BI.



ACCA's recovery roadmap checklist for data requirements and transformation:

Examine how digital infrastructure, platforms and channels can be enhanced to support the organisation, and determine the nature and scope of a digital investment programme for the future.

No more endless pilots

Just as opportunities have changed, the process of analysing such opportunities has itself undergone some change. Pre-COVID-19 it was not unusual for a lot of discussion about digital adoption to rely on the idea of pilot studies. This is not a bad idea, and pilots can help to validate a business case. But the challenge for many organisations was that all too often they became experiments that didn't go anywhere beyond ticking the box for being innovative.

With COVID-19 there has not been the luxury, certainly in the near-term, of expending capital on experiments because they look interesting. The emphasis is now on picking use cases where there is reasonable confidence in being able to scale-up quickly, to create value across the organisation. There is a clear focus on operating in an agile manner with projects being broken down into manageable steps that require less formal processes. We started to see this before the pandemic, but it is even more true now. And with the need to reprioritise investments, there can be a realisation that in many cases digital has a greater payback.

This is, of course, an area where finance professionals will play a much-needed part: capital discipline, budgeting and forecasting, managing funding and its allocation are all part of the mix of considerations. So are the inevitable assessments of comparative value – do we want a smaller project with more realisable return on investment (RoI), or a larger project which could reshape us fundamentally, but equally may fail spectacularly?

Indeed, a public sector leader advises that this analysis of opportunities has led them to conclude, in some cases, that it is not feasible to absorb the costs of digitisation at this time. Legacy systems are not perfect, but are proving cheap and easy to run, whereas the cost of replacement is high. This is particularly the case in this public sector example, owing to the work that would be needed to manage large volumes of citizen data safely in the context of data protection and freedom of information regulations while transferring from old to new systems.

The medical supplies company had analysed large amounts of data while assessing demand for medical equipment. This involved analysing region by region, street by street and even address by address – so the firm had rich granular data. And the model and associated

¹⁰ Virtual replicas of planned systems that allow testing before purchasing new equipment, etc. For more details see ACCA's paper with Alibaba at <<https://www.accaglobal.com/uk/en/professional-insights/technology/digital-leadership.html>>.

demand-based scenario planning has been part of informing management's view about, for example, the implications of a second wave of the virus.



ACCA's recovery roadmap checklist for data requirements and transformation:

Evaluate technology resilience plans for the coming months as well as the upgrades necessary to support employees, customers and other stakeholder.

Analysing workforce models

Organisations that are winning the argument on long-term changes to more digital ways of working are recognising the importance of this. A well-known credit card provider has experimented with the idea of encouraging staff not to populate each other's calendars for Friday mornings, as a way of 'giving space'. They mention that while the realities of busy schedules mean it may not always be possible to adhere to this, just the fact that this norm exists reminds everyone about boundaries.

Such ideas are part of dealing with what has been called 'zoom burnout'. The continuous back-to-back meetings and inability of workers to set boundaries was pushing them to their limits, sometimes to the detriment of well-being.

Also, where previously people might have spent a few minutes speaking briefly to someone to clarify a point, in remote mode they were constantly booking 30-minute meetings. And once these were booked they felt obliged to fill the entire slot. Better use of messaging applications such as Slack, and the ability to pick up short messages when convenient rather than feeling obliged to respond immediately have proved helpful for many. It's taken the space for short sentences in-between an email (more like a 'document'); and a live discussion via phone/video.

On a more analytical level, organisations are conducting 'Future of Work' analyses to gauge employee preferences and tolerance for remote/flexible models. They can now start gathering and analysing data from employee surveys showing where the opportunities (and challenges) could lie, and how future business models would affect relationships with clients and partners.

More broadly, analysing workforce models will have to take into account a range of considerations in addition to what employees might be able to contribute through surveys. For example, risk impact of geographic concentration of workforce, appetite for radical shifts and a relationship to work based on constant upskilling rather than primarily as a source of security¹¹.

An example consideration could be the impact of remote working on the career experience. If someone is successful in meeting discrete, well-defined objectives, remote working may be very effective. This is great for someone who is happy doing the job they do. But for someone who wants to progress within the organisation, is remote working as effective? Are they able to drive awareness of their work or manage relationships with key stakeholders? The answer may well be yes, if handled well, but these are some of the questions that are bound to come up as talent models absorb new needs.

There is also the question of the merging of home and work cultures. While there is an initial charm and novelty for people sharing their lives outside the office (the three-year-old bombing the video meeting), it may also inadvertently, and unacceptably, place pressures on staff. How they live at home is not a relevant parameter for what they are evaluated on at work. There are a wide range of issues in this space, and ACCA explores some of these in its article on organisational culture in a remote world¹².



ACCA's recovery roadmap checklist for data requirements and transformation:

Model the expected employee IT use and needs as a result of changing working practices.

THE CONTINUOUS BACK-TO-BACK MEETINGS AND INABILITY OF WORKERS TO SET BOUNDARIES WAS PUSHING THEM TO THEIR LIMITS, SOMETIMES TO THE DETRIMENT OF WELL-BEING.

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11 <<https://www.accaglobal.com/my/en/professional-insights/pro-accountants-the-future/FinanceInsights-reimagined.html>>

12 <<https://www.accaglobal.com/uk/en/cam/coronavirus/remoteculture-covid19.html>>





ANTICIPATE: digitally transform

Transforming the workforce

Gig working could be one of the winners from the trend to more geographically dispersed workforces. Platforms such as Upwork, aimed at professionals rather than for taxis, can allow the individual to be based anywhere in the world.

This is an on-demand workforce and organisations may need to create teams with many gig workers (perhaps collaborating with full-time employees) who are hired on a project-by-project basis. Clearly, this presents a different cost structure, level of flexibility and contractual relationships, and has strategic workforce planning implications.

A large globally dispersed technology company is seriously exploring the notion of a distributed workforce, and of having a workforce model that is 'location-independent agile' (Subramanian and Ali 2018). This organisation has stated a target for 75% of its workforce to operate remotely¹³. This was echoed among our interviewees, among whom one, working at a large bank, expected that bank to move to a hybrid model. This would involve 60% of staff working remotely, with those working in offices focusing on certain infrastructure-critical roles or having some types of customer-facing responsibilities.

As a separate but interesting point, sometimes it may not be a straight question of reducing footprint but replacing it. In the retail industry, for example, this could mean reducing shop space but increasing warehouse space in the expectation of storing more goods for home delivery, rather than selling them in shops.

In the course of work on ACCA's report on digital and the future of work post COVID-19 (ACCA 2020b), one business leader observed that in the future instead of WFH ('work

from home') notifications on peoples' status or email, it may read WFO ('work from office'). The point being that only a minority would work from an office. Offices would still be there, but used for specific purposes as a hub, rather than as a default location for daily convergence.

An example of such a specific purpose may be training and development. There was a consistent appreciation in various discussions that at the early stages of their careers, accountants need guidance and oversight. One accountant, whose practice takes on three to five trainees every year, focused closely on creating effective mechanisms for 'buddying' employees with experienced staff and having a well-codified training plan. The role of training was highlighted by another interviewee, who observed that if it is neglected over time, there could be a perverse situation (particularly in the early years when businesses are trying to recover from the effects of COVID-19) in which both unemployment and open vacancies increase, owing to the absence of the right calibre of staff at certain levels.

Another more optimistic aspect of workforce impact suggested by a senior finance professional was the possibility for improvement in diversity in the workforce. This individual works in an emerging market with relatively low workforce penetration among women. He felt that post COVID-19, companies are going to rethink flexible working to get the benefit of a rich talent pool of women who need such flexibility owing to family commitments or expectations.

There were also some creative ideas being considered to maximise the use of commercial office space, such as time sharing alongside co-working. For example, staff from one company may use the office Monday and Tuesday,

13 <<https://www.moneycontrol.com/news/business/coronavirus-pandemic-75-of-tcs-employees-to-continue-working-from-home-after-lockdown-report-5189481.html>>

while staff from another use it on other days. This seems particularly relevant to smaller organisations/start-ups and was mentioned in the context of those living at the periphery of commuter belts. This approach provided an alternative way of working, eg walking to a time-shared hot desk nearby rather than taking public transport (a major concern for many) to access city centre offices.

Kelly Liao, Tax Partner, KPMG, China

We have invested a lot in IT, but we had never tried supporting more than 10,000 people working in Greater China simultaneously for longer hours than usual. So far, we have tried tools such as Tencent Meeting, Zoom, and some solutions from other IT facility providers. In the future, we'll set up more conference rooms in our company, which must be reserved like a hotel reservation, with employees no longer possessing fixed office space, and project teams booking conference rooms. This contactless/remote office model can greatly cut the company's operating costs and is likely to become the norm for most jobs.



ACCA's recovery roadmap checklist for data requirements and transformation:

Identify the role of technology in supporting the future strategic workforce plan virtually and physically and how its presence can be sustained in the longer term.

**ORGANISATIONS
ARE THINKING MORE
CRITICALLY ABOUT
WHAT THEIR DIGITAL
FOOTPRINT SAYS
ABOUT THEIR VALUES
AND RESPECT FOR
THE COMMUNITY.**



Transforming other stakeholder engagement

There is now a greater expectation that organisations will act with care and compassion. The idea of responsible business is not a new one. But COVID-19 has, at least for now, reduced the tolerance for traditional hard-charging ways of doing business.

Organisations are thinking more critically about what their digital footprint says about their values and respect for the community. Building trust along these dimensions can prove to be more effective than marketing based simply on product features.

An interviewee from a leading banking group in Asia was keen to emphasise that the bank had always been a community bank. And despite being a large systemically important institution it is passionate about remembering the needs of smaller customers.

While some will inevitably question whether such commitment can be proved, one way that bank is trying to put this into practice is by giving advice and support on its digital platforms. The bank sees its role as reaching out and provide a 'lending hand', recognising that many smaller business customers do not have sufficient funds to last beyond a few months. The ability to humanise product and service delivery while embracing digital transformation has been effective.

Each organisation must define what 'humanising' means for itself. For the above-mentioned bank, it meant the ability to make its financial products fair and equally accessible for all who transact with it.

Others in hard-hit areas such as hospitality have focused particularly on customer needs, including safety. One interviewee at a luxury hotel chain noted how the chain had dealt with the challenge of occupancy management in public areas such as lobbies, given social distancing constraints. A digital installation in public areas was used to provide a RAG (red–amber–green) traffic light system to warn if it sensed the room getting overcrowded. At its heart this system used relatively straightforward devices with sensors, which were not prohibitively expensive to acquire.

On the supplier side, there appears to be a recognition that traditional just-in-time models will need an additional contingency embedded into them, which some have called 'just-in-case'. If supply chains to China or elsewhere are disrupted, what is the back-up plan to continue sourcing?

Richard McLean, Chief Financial Officer, SAP Asia Pacific Japan

SAP is synonymous with mission-critical business operations – we firmly believe that securing our business allows us to better secure those of our customers. Remote delivery is a part of our standard methodology. Our project teams rely on remote delivery for implementation or training, including configuration and organising workshops and training sessions to ensure continuity of projects.

SAP infrastructure and Cloud operations teams have put the following measures in place for all SAP-owned and co-located data centres.

- **WORKING REMOTELY** For most teams, work can be conducted off-site through remote connections. Engineers are working separately and remotely where possible to mitigate the risk of infection. Employees who must be on-site are applying social distancing and hygiene protocols.
- **SAFETY ON-SITE** Where on-site work is required, staff are spending only the minimum time required. Additionally, rotating schedules have been implemented to reduce the number of people in a single location and to separate individuals in common teams where possible. In data centre locations, on-site technicians are required to wear gloves and masks for protection.
- **DISINFECTION PROTOCOLS** Trained teams are available to administer data-centre-specific disinfection protocols in SAP data centres. For co-location data centres, we are working with providers to ensure they apply the same standards and rigour to ensure all data centre sites are as sterile as possible.

As our customers and prospects navigate the COVID-19 pandemic, SAP offers solutions that can differentiate and support businesses and individuals.

Business and customer insights [Remote Work Pulse](#) helps organisations understand how their employees are doing and what support they need as they adapt to new work environments. No company can get through the crisis on operational data alone. Qualtrics Experience Management collates data on customers, partners and supplier sentiment.

Supply chain [SAP Ariba Discovery](#) is now free and open to everyone, allowing buyers to post their immediate sourcing needs, and suppliers to respond and deliver. This will help buyers and suppliers connect quickly and effectively, and minimise disruption caused by shipment delays, capacity issues, and increased consumer demand in times of crisis.

People To help support businesses that are working remotely, [SAP Litmos](#) has made Remote Readiness & Effectivity Academy free, with training content for everyone. The ready-to-watch video-based courses are designed to help establish best practices for remote work, maintain the highest levels of hygiene and mental wellness for workers, and develop leadership during times of change and challenge.

There's a huge opportunity for everyone in the business community to positively influence a mindset shift from the 'traditional' way we have done business. We live in a digital era with global customers, colleagues and communities – this is a time to embrace technology and get comfortable with working from anywhere.

WE LIVE IN A DIGITAL ERA WITH
GLOBAL CUSTOMERS, COLLEAGUES AND
COMMUNITIES – THIS IS A TIME TO EMBRACE
TECHNOLOGY AND GET COMFORTABLE
WITH WORKING FROM ANYWHERE.

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Roeland van der Stappen, Head of Regulatory Affairs, Europe, VISA

It is unquestionable that COVID-19 is having a profound impact on the way we live our lives. Consumer behaviour has changed markedly owing to COVID-19. We are seeing a strong consumer and merchant preference for digital payments over cash, in particular for contactless payments. Following the increase in contactless limits across 26 European countries, during each week which followed there have been an additional 29 million transactions across Europe that no longer require a PIN [personal identification number]. Across Europe, over 70% of Visa payments are now contactless. There is no indication that fraud levels have increased as a result of the contactless limit change. As consumers adapt to using contactless more often, we believe this change in behaviour will become permanent.

Demand for online shopping has also increased and consumers have found it to be a safe, secure and convenient experience. According to our data, 14 countries across Europe had a 25% or higher increase in e-commerce transactions in April 2020 compared to the year before. Many of Visa's markets, including Greece and Romania, have even experienced an increase in e-commerce transactions over the same time period.

Although consumers have embraced e-commerce, we know that many small businesses will find a 'digital-first' recovery challenging. Indeed, research by Visa found that less than one in two small businesses are enabled to accept payment online. It is crucial they get the support they need to adapt. Recognising this, we will be launching a Europe-wide small business initiative called 'Where You Shop Matters'.

Under this initiative, we are working with partners such as iZettle, Shopify and Deliveroo to compile a set of e-commerce tools and services for small businesses, which will help them move from offline to online commerce quickly and easily during this difficult time. To complement this, we are investing more to increase the number of digital payment acceptance devices within shops across European markets by more than 4 million to 12 million (an uplift of 50%).

While people and businesses may be using digital payments more than they usually would at this time and in the future, we remain absolutely confident in our ability to operate without interruption. Visa's infrastructure in Europe can route to multiple data centres around the world, while instant fail-over capabilities contribute to best-in-class operational resilience. To keep consumer data secure in a connected world, we deploy some of the industry's most sophisticated fraud and cybersecurity tools.

**14 COUNTRIES ACROSS
EUROPE HAD A 25%
OR HIGHER INCREASE
IN E-COMMERCE
TRANSACTIONS IN
APRIL 2020 COMPARED
TO THE YEAR BEFORE.**

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ACCA's recovery roadmap checklist for data requirements and transformation:

Evaluate how technology can be used to support more effective stakeholder engagement as part of the organisation's strategy.

Transforming the organisational model

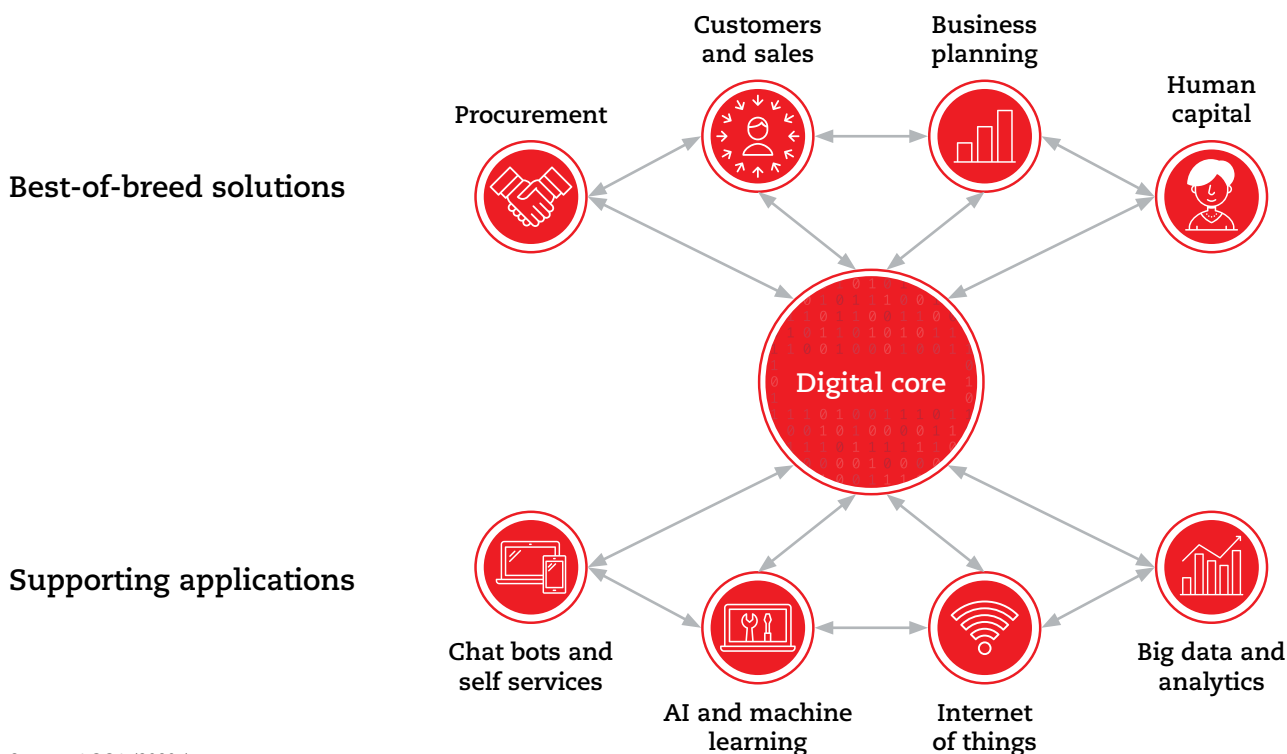
Fundamental to the entire digital agenda is the digital transformation within the organisation, including not only the processes and systems, but also wider aspects such as people and culture. ACCA's report *The Digital Accountant: Digital Skills in a Transformed World* (ACCA 2020c) articulates the idea of a digital core (Figure 3.1), a key underpinning aspect of which is the use data.

The report notes the continuing shift towards a slimmer enterprise resource planning (ERP) methodology, where the organisation relies on a central repository of data (the digital core), with Cloud-based applications to address the needs of specific components (eg human resources (HR), sales). This approach relies on the use of advanced analytical tools, data querying and near-real-time visualisation within a 'hub and spoke' model to enable the use of best-of-breed software and supporting applications. One consideration here is that the organisation's use of the cloud-based systems/processes has the implication of altering the basis of competition to data – since there is no longer a use of configured processes in the ERP¹⁴; which has implications for a transformed model for finance.

This removes the need for single ERP system to provide all services and enables the use of the best applications for specific areas, with different elements being connected with application program interfaces (APIs) as needed. As a related point, the use of microservices that address specific parts of a process are also easier to enable in a model such as this, where different services can be knitted together effectively. This is not just about ERP; it is also about SME based systems with for example, Xero as the core rather than SAP. As it is perfectly possible to develop an ERP solution using Xero marketplace apps.

While Figure 3.1 represents the wider picture, organisations interviewed for this report also referred to specific results of COVID. One noted, for example, that the ability to converge the cyber and physical worlds using digital twins was critical. It provided a way of testing and learning in an environment where physical mobility was severely restricted. For another interviewee, ramping up the firm's 3D printing capabilities and materials management was a key enabler to sustaining operations during COVID. All these, of course, rely crucially on data, and so the above-mentioned central repository of data is more relevant than ever.

FIGURE 3.1: Cloud-based applications: the digital core



14 <<https://www.accaglobal.com/my/en/professional-insights/pro-accountants-the-future/FinanceInsights-reimagined.html>>

Terence Mai, Co-founder and CFO of Black Unique

Black Unique is a membership-based e-commerce platform. People who register as members are offered discounts in two major segments: life services (supermarket shopping, gas and food) and our e-commerce service. Our company has developed more than 50 million members in less than two years since its inception.

A OneData system has been established to connect the accounting system and the business system. This OneData system is traceable, as it breaks down our income to finer granularities: to the orders, to the category to which an order belongs, or even to the customer making a single order (to judge whether it comes from a new customer or not). While the COVID-19 outbreak resulted in declined revenue, our integrated business-finance system can help us judge our product competitiveness, for example, by checking the repurchase rate, which, if above 60 per cent, indicates that our products and services are competitive. During this COVID-19 prevention period, we also strengthened digital marketing, changed product presentation forms, and gradually migrated to live broadcasts, short videos and other more interactive promotional modes.

COVID-19 has accelerated the move to the Cloud, and more specifically the increasing interest in 'hybrid clouds'. Cybersecurity, as noted in Chapter 1 of this report, has been a critical concern during COVID-19. A hybrid cloud approach allows sensitive data (eg payments-related) to be retained in a private cloud with servers controlled by the organisation. A public cloud (such as Amazon or Google) provides less expensive and massively scalable access, but with remote servers.

Within the organisational model mentioned earlier (Figure 3.1), greater use of analytics to act upon learnings from historic patterns and associated predictions is mentioned as a priority. The use of design thinking (experience led technology and process design) is seen as crucial.

So, it is not just a matter of adding the technology, but also of deeply reflecting, through an iterative test-and-learn process, on how it affects the end user. And if their needs change, how quickly can one plug it out and plug something else in? Processes such as purchase-to-pay (procurement) were mentioned, used where suppliers, often smaller companies, were fragile and where short delays could make a critical difference.

Consequently, there has been a recognised need for, and value from, company processes that adapt quickly and more responsively than traditional monolithic ERP mechanisms.

'THERE IS AN OPPORTUNITY FOR COST TAKE-OUT IN AREAS LIKE PROCUREMENT PRODUCTIVITY AND WORKFORCE PLANNING. IBM'S INTELLIGENT WORKFLOWS CAN EXAMINE WHERE AN ORGANISATION HAS PIECEMEAL IT PRODUCTS THAT DON'T TALK TO EACH OTHER. THIS CAN DEFER THE NEED FOR A SUBSTANTIAL OUTLAY ON AN ERP, ALLOWING THE ORGANISATION TO KNIT EXISTING TECHNOLOGIES TOGETHER TO ENHANCE USER EXPERIENCE AND END-TO-END VISIBILITY, WHILE PROVIDING A ROBUST PLATFORM FOR LATER ERP INVESTMENTS'.

**Noel Cullen, Associate Partner,
Finance Transformation, IBM, UK**

One cosmetics retailer observed that before COVID-19 digital had accounted for only about 10% of total sales. But during the pandemic the digital component of sales more than doubled, albeit from a small base. Looking ahead beyond COVID-19, their big priority is to maintain that engagement. The challenge in their industry is that the product is experiential in nature – in a shop one would smell or touch it before making a purchase decision. So, an area of emphasis for them is a strategy to find the right blend of sales channels. This may be a case where people try the product in shops but buy online. Or the firm may use the data aggregated through a version of the digital core to provide insight into what the shops should be stocking in the first place. Like many others, they have also seen, directly as a result of COVID-19, the need for monthly reforecasting (rather than quarterly as before). This relies heavily on having the right data at the core for quick analysis, and a good front-end for interrogation.

At a more strategic level, there was a reference from the Indian IT trade body of a growing role for the chief digital officer. While this is not a new idea, in the context of COVID-19 there appears to be a greater recognition of the need to think about next-generation applications that are driven by business needs. Some organisations with more mature teams have established central digital teams to drive this agenda. These specialists have their own budget and metrics, which are kept distinct from business-as-usual key performance indicators (KPIs). This contrasts with more traditional interpretations of the chief information officer (CIO) as someone focusing on day-to-day issues.

'WHEN CONSIDERING THE IMPACT OF DIGITAL TRANSFORMATION, HOW WELL THE PROCESSES REFLECT THE INTENT IS IMPORTANT. IN EDUCATION, REMOTE LEARNING IS A POWERFUL AND NECESSARY PART OF DEALING WITH THE EFFECTS OF COVID-19, AND LIKELY BEYOND THAT AS WELL. IT WILL THEREFORE BE CRITICAL TO UNDERSTAND THE LINK BETWEEN METRICS (SUCH AS ONLINE ATTENDANCE, WHICH CAN BE TRACKED) WITH HOW WELL LEARNING OUTCOMES ARE BEING ACHIEVED'.

Ronnie Patton, Global Council member, ACCA, Senior Lecturer in Professional Accounting Practice, Ulster University

At the futuristic end of this, it could involve implications from a whole range of areas such as quantum computing, 5G/6G, future of transport (eg hyperloop), 3D bio printing (ie of human organs), floating farms (often in urban areas to reduce transport); platformed robotics (for commoditised scalable functionality), nanotech and natural language generation (from data to commentary).

Feng Fang, General Manager of the Wuhan SF Data Service Co., Ltd.

SF Express Co., Ltd. is a Chinese delivery services company. It is the second largest courier in China and provides domestic and international express delivery.

Therefore, once the COVID-19 alarm is all clear, we will explore new business opportunities in mobile office and online learning platforms, including big data analysis, through SF's powerful technology platform and technical forces. That's my strategic thinking about the post-epidemic orientation of our company.

Christina Zhang, GM of Golden Arches (Guangzhou) Data Processing Service Co., Ltd.

McDonald's has more than 3,100 chain restaurants in Mainland China, where each and every slight change will affect hundreds of millions of consumers. For McDonald's China, speed and scale weigh equally to its upgrades towards intelligent operation.

The catering sector suffers the most during the epidemic. One of our countermeasures is a contactless take-out service. You can place your order online through a WeChat applet, and our offline restaurant will arrange an area for the meals ordered, where you can pick up your food without dine-in or contact with any of our staff.

Also, we have many 'courtesy' outlets near the highway for drive-through service. Besides, we also sell on delivery platforms, where your order placed via online APPs will be distributed to a designated site in your community, where you can get the meal. So you are free from contact with anybody in the whole delivery process.

 **ACCA's recovery roadmap checklist for data requirements and transformation:**

Establish a digital strategy to support the future business model, with data governance and digital core included.

FUNDAMENTAL TO THE ENTIRE DIGITAL AGENDA IS THE DIGITAL TRANSFORMATION WITHIN THE ORGANISATION, INCLUDING NOT ONLY THE PROCESSES AND SYSTEMS, BUT ALSO WIDER ASPECTS SUCH AS PEOPLE AND CULTURE.

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Transforming for a sustainable operating environment

The demands of dealing with COVID-19 have created a renewed appreciation of the role of effective regulation. One policy leader in Europe advised how, in the pharmaceutical sector, an aspect for consideration will be the ability to work across jurisdictional lines. For many such companies during the pandemic, their trials and associated work such as testing and gathering data were challenging, owing to the disparate systems in each member state.

GDPR is a robust data protection regime and it was noted that there may be a need to clarify (rather than question) certain aspects. There is a principle that data cannot be retained in a member state and can flow over borders. But if member states feel they should own citizens' health data and don't want it going over borders, there are provisions (article 89) to allow member states to create exceptions. This has stimulated a discussion of issues that may need to be addressed in future.

Currently, transferring health records across member states is very difficult. These issues can be problematic when trying to obtain a pool of data that can be accessed quickly during development of a vaccine. A diverse pool of individuals are needed for testing, and multiple tests must be performed on the same data; each such test is a secondary use of data and may need specific consent under GDPR. Technology is part of the solution, alongside reliable data sharing under protocols that are compliant with GDPR requirements.

Looking ahead, the ability to operate in environmentally sustainable ways is a key narrative. There is an aspiration for a 'green recovery', and ACCA has itself signed the Green Finance Education Charter to play its part (ACCA 2020d). The pandemic has seen dramatic reductions in greenhouse gas emissions, and the aspiration is to build on that rather than going back to old ways of living. This will, however, need some assessment so that unintended consequences can be managed. For example, one of the features of the vast increase of online purchases has been the use of enormous amounts of packaging materials. So responsible production, including exploring whether 3D printing techniques improve efficiency, and consideration for plastics use will be important.

Another aspect of challenging old ways of living will be a questioning of the need for large urban sprawls and whether it is possible for the workforce transformation described earlier (location-independent agile teams) to allow greater distribution of staff to the smaller cities. These are challenges not just for organisations, but for governments and possibly even supra-national organisations. They involve imagining what the future shape of cities/towns/regions might be and how the supporting infrastructure may need to evolve.

'FOR MOST INDUSTRIES, THIS PANDEMIC MEANS WE WOULD HAVE TO BEGIN AFRESH. IT WILL REQUIRE RETHINK OF CORPORATE STRATEGIES – APPLYING "INTEGRATED THINKING" – BY EXPLORING OPPORTUNITIES TO EMBED SUSTAINABLE PRACTICES IN BUSINESS OPERATIONS ACROSS ENTIRE VALUE CHAIN. THERE WILL BE TRADE-OFFS, THIS MAY BE OUR CHANCE TO BEGIN ANEW, FOR THE FUTURE, FOR OUR PLANET'.

Joseph Owolabi, Global Council member, ACCA, CEO, Rubicola Consulting, Australia

In all this a vital and in many ways all-encompassing aspect is that of purpose. At the headline level, having a clear sense of purpose in the organisation ensures a cascading of all relevant behaviours and processes to ensure a sustainable way of operating.



ACCA's recovery roadmap checklist for data requirements and transformation:

Understand how and where technology could support the organisation in managing emerging regulatory, compliance and legal risks.

HAVING A CLEAR SENSE OF PURPOSE IN THE ORGANISATION ENSURES A CASCADING OF ALL RELEVANT BEHAVIOURS AND PROCESSES TO ENSURE A SUSTAINABLE WAY OF OPERATING.



Conclusion

COVID-19 is a still-unfolding event, and the future direction remains uncertain. But as the examples across ACCA's stakeholder base demonstrate, the profession is mounting a robust response: one that is informed by pragmatic risk management as well as an opportunistic embrace of change to make things better.

The role of the profession is critical when looking at the road to recovery; and digital technology is a very important component of the path ahead. This has the potential to be a win-win situation, where an increased embrace of digital creates meaningful work for accountancy and finance professionals, while driving a sustainable recovery for organisations and economies.

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