

THE WORLD OF FREE ZONES

NEW WORLD MODEL
THE
FUTURE
OF
INDUSTRY

A PUBLICATION OF



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THE FUTURE OF INDUSTRY

New World Model

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NEW WORLD MODEL

WORLD FZO CHAIRMAN INTRODUCTION



Dr. Mohammed Alzarooni
Chairman
World Free Zones Organization
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NEW WORLD MODEL

The impact of this historic pandemic crisis continues to be global. Its consequences have been felt economically, socially, and psychologically. Annual GDP figures across the world have dropped. The EU economies have contracted, while the US GDP has shrunk in the second quarter of 2020. The contractions in commodity prices and international supply chains have also affected Latin American countries significantly. Though recovery in China slowly begins, India, Japan, and the rest of Asia remain severely impacted.

Socially, large scale unemployment has been mitigated by huge government support schemes. However, the long-term impact to taxpayers has yet to be determined. The dynamics between employer and employee have shifted, creating uncertainty that may be felt for years to come.

Here at the World Free Zones Organization, we brought together over 30 experts from around the world to share their insights on the pandemic impact over 10 industry sectors. These interviews are available to you online in their entirety, as well as in special video edits that offer complementary points of views from the speakers on each of the 10 sectors that we chose to examine. Together with the key takeaways and industry reports included in this package, we hope that you can find valuable, actionable intelligence to apply to your own sector.

The health and safety restrictions imposed by the pandemic have led to higher import-export costs in many regions, mainly due to longer inspections and administrative requirements at ports and airports. The main immediate impact of the crisis has been a severe cash shortage, in the form of drastically reduced business volume and delayed payments, for many SMEs. Larger multinationals with cash reserves have also seen their revenues plummet, but some chose to seize this opportunity and implement capital expenditures and upgrades that would have otherwise disrupted their day-to-day activities. Choosing to shift priorities has also led to new public-private partnerships, most notably in our quest to find a vaccine for the COVID-19 virus.

Regionally, the stress on infrastructure, particularly digital pipelines, and on crisis readiness to deal with the aftermath, have exacerbated differences between developed and developing countries. The pandemic has brought to light failings in government action in an unprecedented way. This provides a unique opportunity to learn valuable lessons and rethink our infrastructure and mindset for this new emerging era.

The most immediate business challenge is for companies to adapt and survive. They need to find funds to remain active, though not at the expense of their long-term existence. Debt will not be enough to steer them through this difficult period. Companies will also need to change the way they do business so they can continue to

function. This means thinking differently about employment with more flexible workforce management; about supply with more resilient pipelines and more diversified sources; about transactions with more digital, faster settlements. All those facets need to be addressed simultaneously and in conjunction with each other.

This will bring about transformational change inside companies, an acceleration of an already strong momentum to adapt to changing conditions. Business models will evolve, with more partnerships between public and private sectors, and more collaboration instead of competition. Most importantly, anonymized data will likely be shared on a massive scale, even more so than before, to help companies the world over channel their competences and pool resources towards success.

Accelerated adoption of digital tools will pave the way to a more inclusive economy. Workers in the informal sector will have more access to the formal sector through their mobile phones. SMEs in the tertiary sector will be able to function with only virtual premises and a globally scattered workforce, filling more niche markets across the world. Multinationals will build new partnerships with the public sector through digital platforms, ushering in a more efficient and effective age of collaboration for mutually beneficial outcomes.

This will affect the global supply chain in two broad ways. First, resilience will become essential as we emerge from the crisis. This will push firms towards the systematic diversification of their supply sources and channels. Second, agility will become key to commercial survival. This is where digitalization will have an important role to play, letting companies take control of their supply chains in unprecedented ways to manage supply circuits flexibly, adjusting to the needs of their customers and the demands of the market almost on a per-order basis. These two broad currents will nevertheless keep supply chains global, with more regional or local suppliers brought into the mix for flexibility.

Operational transparency will also grow as customers demand to know more about the origin of the goods they buy, seeking sustainable sources and socially-responsible manufacturing methods. Regulatory compliance will follow suit, imposing more stringent health and safety measures on all aspects of the global value chain. These were changes that were slowly implemented so far but have now accelerated, entering the new norm that will define our lives after this crisis.

This terrible pandemic has brought with it an opportunity to reset our standards and to improve our lives. As we work together, free zones and onshore businesses alike, we can rebuild a more inclusive, cleaner, and more sustainable business environment where everyone can thrive for generations to come.

The opportunity is hope.

NEW WORLD MODEL

KEY ACTIONABLE STRATEGIES TOWARDS A NEW WORLD MODEL



Dr. Samir Hamrouni
Chief Executive Officer
World Free Zones Organization

ABSTRACT

The new business environment brought on by COVID-19 requires new strategies. Key actionable takeaways from our New World Model expert discussions offer a path to emerge stronger from this crisis:

1. Invest in digital
2. Manage risk through data
3. Manage cash for uncertainty
4. Rebuild for disruption
5. Create hygiene value chains
6. Collaborate, don't compete
7. Add local value globally
8. Restructure for inclusivity
9. Focus on renewable energy and the UN's Sustainable Development Goals (SDGs)
10. Focus on Economic, Social, and Corporate Governance (ESG)
11. Communicate more often, widely, clearly, and transparently

KEY ACTIONABLE STRATEGIES TOWARDS A NEW WORLD MODEL

The COVID-19 pandemic is a health crisis with significant social and economic ramifications. Rapid border closures and grounded air traffic spread uncertainty and unpredictability around the world, crippling trade and travel. The first casualty of the pandemic crisis was cash. Lockdowns forced many businesses into limbo, with little to no revenues to rely on. For industries with high fixed costs, liquidity became an immediate concern, with bankruptcy a very real threat. The significant costs of emergency fiscal and monetary support measures are likely to have a long-lasting and complex effects on sovereign and corporate debt. Health authorities assumed a leading emergency role without consulting with impacted government services, such as customs, education, energy, and telecommunications. This had immediate and wide-ranging impacts. With these factors in mind, the World Free Zone Organization held conversations with global experts and specialists that allowed us to draw important conclusions on the way businesses can cope, and even thrive, in this disrupted economic environment.

1. INVEST IN DIGITAL

Across all industries, investment in digital transaction technology, digital communication systems, and digital tracking solutions is the recurring theme. Digital transaction technology makes contactless interaction efficient and easy. Digital communication platforms help connect staff together while working remotely. Digital tracking solutions help businesses manage their inventory, resources, and customers efficiently from anywhere in the world. Biometric information is another dimension of digital investment that offers more secure and more customised relationships with customers. With blockchain emerging as a solid technology to securely store and share sensitive information, all the elements are here for digital conversion to take place at entire industry levels. Companies already ahead in their digitally transformation have fared far better through this crisis than those with outdated systems or a lack of digital know-how. This has been particularly true in the energy and logistics sectors, but also in more forward-thinking industries like healthcare or aviation. Digital investments can also strengthen cybersecurity within a company's infrastructure while preserving, or even enhancing, access to the protected data. The rollout of digital payment systems for mobile platforms has also offered parallel ways to bank and do business. This has enabled many workers in the informal sector, which account for 60% of the global workforce, to join the formal economy. Converting operations to modern digital systems will enable companies to face change and disruption better, creating resilience and agility.

2. MANAGE RISK THROUGH DATA

Switching to digital provides the right environment to measure risk in real-time and fine, granular detail. Data metrics are now lighting the way towards efficiency, smart decision-making, and automated processes to move away from reliance on direct human labour. Detailed scenario modeling can offer reactive solutions to market

disruption, particularly when using rich, widely tracked data. This means generating your own data through proprietary digital systems, but also gathering public data for your industry, markets, and customers. By blending these sources together, a clearer picture of your business activity will emerge. Finance firms have been investing in data tracking for risk management for a long time, being in the front line of the metrics themselves. Other sectors like aviation and tech were already in that game, using data for forecasting demand. More conservative segments like automotive, healthcare, and logistics need to invest in risk management systems that incorporate more data from more sources. This will let them accurately model trends and provide valuable, early warning signs of problems in their operations.

3. MANAGE CASH FOR UNCERTAINTY

Liquidity meant the difference between survival and collapse during the early stages of the crisis. Cash-rich companies not only kept their employees on the payroll and their business running, they also had the opportunity to consolidate their market position by acquiring weaker peers. This was no accident. While some of those companies operate in a high-margin industry like consumer electronics, other were simply better at keeping cash reserves on hand for such perilous times. Since uncertainty is unlikely to decrease going forward, managing cash will require a new strategy. This may affect dividend policy and thus shareholder trust. However, a stronger balance sheet will compensate for thinner distributed cash flow. Liquidity needs to be generated by switching from overdrafts to low-interest loans where available, keeping cash balances invested in remunerated yet liquid assets like financial instruments, negotiating better payments terms from suppliers, and offering shorter payment horizons for customers. Managing inventory can also free up cash by reducing stock purchases. These can in turn be better managed with wider access to demand and supply data. With tighter reins on cash, a company can build resilience in the face of uncertainty.

4. REBUILD FOR DISRUPTION

Companies will transition from designing for efficiency to designing for resilience. New leadership must emerge from this crisis, prepared to manage constant change. This means regular training and reskilling for staff so they may stay abreast of the latest trends and tools. It requires building cash reserves to allow the business to seize opportunities as they present themselves or to entrench itself in the face of another crisis. It means threading agility in inventory management systems, in supply chains, and in distribution channels, using multiple procurement sources in both goods and personnel. Efficient transport networks, offering alternative transit lanes, will contribute to resilience in the face of disruption. Most of all, it means changing the culture of a business so that every layer of management and employees thinks and acts with disruption as its baseline. Companies that follow this strategy will thrive in an unstable environment as much as in a quiet one.

5. CREATE HYGIENE VALUE CHAINS

With protective measures and social distancing rapidly adopted around the world, hygiene has become an important value for companies to showcase to their customers, partners, and stakeholders. This concern for hygiene is likely to continue beyond the pandemic horizon. Contactless transactions will become essential for retail operations. Tracking hygiene measures from manufacturing to packaging, storage, then through to road/sea/air transport and delivery will also ensure customers identify products as reliably hygienic. Demonstrating compliance with new international hygiene standards and regulation will enable companies to differentiate themselves from peers. Using biometric data to identify customer preferences and prepare ahead for a frictionless, contactless transaction will let service companies stand out. Most of all, ensuring that all participants in an industry value chain, along the entire customer journey, adhere to the same hygiene standards (from taxi to airport check-in to customs to boarding to flying, for example) will create a feeling of safety and value for all stakeholders.

6. COLLABORATE, DON'T COMPETE

It became evident early on in this global emergency that working together was the way to survive. Partnerships between companies, either within the same industry (aviation, healthcare, finance, logistics and transport...) or across sectors (automotive + tech, manufacturing + shipping, logistics + healthcare...), propped up entire segments of the economy. Shared resources enabled many to survive, many more to even thrive, leading markets to consider partnerships, and the collaboration they breed, as the path to follow to rebuild the economy around shared ecosystems. Public-private partnerships also helped governments to incorporate skills and knowledge from the private sector into regulation and projects for the public good. Such partnerships between the public and private sector have also enabled progress towards more sustainable business solutions.

Partnerships, particularly in the pandemic environment, rely on two elements: transparency and trust. Transparency ensures that all parties involved provide and obtain the right kind of resources for the partnership to be mutually beneficial. Trust allows partners to act in good faith even beyond the limits of the partnership, knowing that their association will hold firm and support their needs. This was most noticeable in the healthcare sector, which displayed tremendous willingness to share data, knowledge, even assets to build and distribute emergency products like respirators and masks. Pharmaceutical companies showed equal openness to share resources in a race to build a vaccine, all while respecting each other's key value-added dimensions and intellectual property. This was necessary in the face of the daunting task ahead: the largest vaccination campaign ever conducted was for polio, with 450 million doses manufactured. For COVID-19, because we will need two doses for each person, the target is 12 to 15 billion doses to manufacture and

distribute worldwide. This will not be achieved without solid partnerships, modal cooperation in transport and logistics, and robust collaboration between public and private sectors globally.

7. ADD LOCAL VALUE GLOBALLY

Global supply chains were immediately impacted as lockdowns and closed borders obstructed international trade. Most companies sought to tighten their supply chains by onshoring some of their supply sources, often at great cost and with expedited urgency. What many did not consider was how such choices would impact local economies.

Global value chains will change but not disappear. What will evolve is the way local companies will be able to inject value back into their domestic economies by being part of larger international supply chains. This will also be enhanced by the disappearance of brokers and middlemen as digital platforms connect buyers to sellers directly across industries. Specifically, in free zones, many companies will be able to generate value for host economies through wider access to global value chains combined with business relationships with local companies. Agile logistics to connect zones and markets to each other, particularly in transport collaborations between road, sea and air, will deliver resilience across entire networks. Properly serving the first or last mile in a logistical transaction will become even more essential. Hyper-specialization within supply chains should be replaced with agile concentration, dominated by nimble SMEs that can quickly adapt to serve different needs from different international customers. This will increase the depth of local skillsets, the collaboration between suppliers across value chains, and the number of local companies serving similar sectors. In turn, the quality of the products and services procured will increase through deeper expertise and knowledge transfer. This can only happen as companies rebuild their global supply chains for resilience by casting a wider net of local suppliers and partners to support their operations.

8. RESTRUCTURE FOR INCLUSIVITY

We must take advantage of this pandemic disruption to restructure our industries to be more inclusive. This means enabling more businesses and individuals to enter the digital trading environment, to change informal conduits into formal channels, and to design regulation that does not exclude segments of its intended target population. This requires many different parties working in concert, across both public and private sectors and at local, national, and global levels. In fact, each contribution can yield advantages to all stakeholders. Spreading simple and affordable digital solutions requires investment but is likely to unlock a new layer of customers, partners, staff, or suppliers. Bringing informal businesses into the formal sector increases collaboration opportunities, raises quality, opens new markets, and creates a new layer of fiscal revenue for governments. Even developing markets

incorporated into an already dynamic sector will open access to new demand, new supply, and most of all, will raise the quality of life for all parties involved, monetarily or otherwise. Investing in inclusivity is a win-win proposition.

9. FOCUS ON RENEWABLE ENERGY AND THE UN'S SUSTAINABLE DEVELOPMENT GOALS (SDGS)

As OPEC+ slashed output to support falling oil prices in the face of streamlined energy demands, renewable energy filled the gap to support electricity grids. Regulation, policies, innovation, and lower marginal connection prices placed renewables at the front line of energy sources. This showed how renewables could become primary sources of power. The disruption driven by COVID-19 is the opportunity to restructure the energy sector and shift renewables to the top of strategic energy sources.

Over 600 million Africans lack basic access to electricity. Meanwhile, the collapsed oil prices affect 40% of African exports and 7.4% of GDP. New energy solutions must be unlocked for Africa, as well as other developing economies. Many developed countries already enjoy a large portion of renewable energy in their energy supply portfolio. Enhancing investment in renewable energy builds a more inclusive energy economy that will benefit developed economies as well as developing ones. Such investment will drive the adoption of novel solutions, expand the market, and nurture more innovation. The UN's Sustainable Development Goals provide a solid framework for this shift in focus, both for governments and companies stepping into that direction.

10. FOCUS ON ECONOMIC, SOCIAL, AND CORPORATE GOVERNANCE (ESG)

ESG is now an important variable for investors and customers globally. Greater focus on climate change and clean energy drove the downward trend in oil & gas stocks. Younger customers are now paying more attention to ESG metrics of companies that provide their products and services, such as banks and non-essential consumer goods manufacturers. Moreover, ESG metrics also capture inclusivity data, providing a clear window for management and stakeholders into a company's social impact on its markets. By embracing ESG as a key set of metrics to guide its commercial course, a company can demonstrate principles, purpose, and profits. ESGs can promote a company's transparency and accountability, driven by a strong corporate image of fairness and clean transactional intent, all while delivering solid returns to its shareholders.

11. COMMUNICATE MORE OFTEN, WIDELY, CLEARLY, AND TRANSPARENTLY

From collaboration to inclusivity, transparency to regulation, communication is the one tool that needs to remain sharp at all times. It is how collaborators will understand the benefits of a partnership. It is how customers will recognize a company's responsible

choices. It is also how governments will learn what rules work best and which frameworks are lacking. With more data available to support decisions and clarify strategies, communication becomes increasingly scientific. As markets become crowded, communicating will ensure that your brand stands out, particularly by demonstrating solid ESG credentials. Liaising regularly with suppliers will weigh more in pricing negotiations, while customers will appreciate a deeper level of engagement. Stakeholders will be more lenient with management that shares more details on operational decisions, and governments will reward transparency. As changes are required internally to adapt to shifting conditions, fluid communication will also help departments and staff understand what is required of them. Clear communication is essential to deliver proper training and reskilling. In short, adopting efficient and effective communication will help a company at every step on its path to success.

CONCLUSION

These takeaways are the main key actionable conclusions that emerged from the panel discussions, webinars, research, and interviews we conducted within the framework of the New World Model event. The 10 industry reports that we are also publishing provide more details and insights into different important sectors affected by the crisis. As we all begin to emerge from this pandemic context, we have the opportunity to rebuild a new economy, more inclusive, more resilient, fairer, and more efficient for all of us. Free zones in particular have an important role to play as enablers of new business models, as conduits to foreign investment, and as engines of innovation. The World Free Zones Organization is investing in sophisticated data analytics to help zones and their stakeholders predict and manage risk as they seize new opportunities. There is room for profit as well as collaboration. There are ways to transact ethically where all parties benefit. By applying the above takeaways, we believe all companies can contribute to a better global system and deliver a truly new world model for the future of industry.

Globally and locally thriving together.

LOGISTICS SECTOR PANEL



David Abney
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LOGISTICS SECTOR PANEL

INTRODUCTION

Trade amongst countries has been deeply affected by the COVID-19 crisis. Since it involves significant physical contact between parties, logistics have been particularly hit. That same impact has provided opportunities to change, to improve processes, and to pivot to a new industry 'normal'. While governments have placed restrictions on border channels, logistics companies working on land, sea, and air transport have been able to use specific exemptions to continue to trade. We examine the impact of the pandemic crisis on shipping lanes and transportation procedures, the ricochet effect of the slowdown in physical interactions on e-commerce, the challenges for logistics operations both large and small, as well as the internal transformation required to face these challenges and form new business models to seize transport opportunities across a disrupted value chain.

ABSTRACT

- *The global logistics ecosystem suffered concurrent demand and supply shocks, resulting in significant disruptions that forced governments to announce stimulus measures*
- *Industries that rely on the Chinese supply base for intermediate and finished products, with lean and just-in-time inventories, are expected to shift their production logistics*
- *We can observe the impacts on freight capacity in three key global transportation segments—ocean, land, and air. The degree to which each mode of transport and trade lane is affected depends on their particular commodity mix*
- *The Chinese economy is back to close to 10% of its full capacity and is likely to lead the recovery while the rest of the world is still reeling from the pandemic impacts*
- *Available transit lanes that open and close as the virus progresses would enable shipments to continue to flow, leaving logistics companies able to adapt to shifting conditions in real-time*
- *While COVID-19 may be the catalyst for companies to revisit their global supply chain strategy and accelerate the adoption of Digital Supply Network models and capabilities, many firms will need to completely upgrade their IT systems from scratch*
- *The granular level of detail required to compete in the new economy will demand strong digital infrastructure to track, measure, analyse, and forecast business data*
- *More governments should support the complete digitization of border crossing procedures, working in tandem with private sector and multinational bodies like the World Customs Organization to streamline and accelerate international trade flows*
- *Companies with robust digital capabilities that allow them to provide cargo visibility/traceability and do business online are at an advantage as many global supply chains may shorten or diversify, from first to last mile*

A fast and deep wave of changes causing hard losses as well as new transaction traffic

David Abney, Executive Chairman of UPS, states that as the crisis hit, what affected businesses “first is the speed of change.” The real turn occur in March 2020 when lockdowns started to come into effect around the world, driving transaction volumes down abruptly.

The global logistics ecosystem suffered concurrent demand and supply shocks, resulting in significant disruptions that forced governments to announce stimulus measures. The backlog of delayed orders, port calls, and blank sailings have escalated volume pressures on the containerized supply chain. Industries that rely on the Chinese supply base for intermediate and finished products, with lean and just-in-time inventory models, are expected to shift their production logistics using near-shoring by increasing inventories to warehouses in their domestic markets[1].

“We see that globally we are in the neighbourhood, very conservatively, of 500 billion Euros in loss, and that’s in freight,” claims Umberto De Pretto, Secretary General of the International Road Transport Union. This kind of scale has forced many logistics players to consider alternative platforms to maintain their business volume. An important source of new business has emerged in e-commerce, an immediate alternative to physical retail that many have been quick to seize. While this has initially been the realm of B2C commerce, these platforms are reaching into B2B sectors quickly. “We have expedited launching many digital platforms that will help us,” explains Sultan bin Sulayem, CEO of DP World, “so the big thing for me is, today, how much of our business is digital?”

However, e-commerce platforms also come with their own challenges. “Ride-sharing apps and e-commerce have really driven B2C customer expectations,” says Christopher Logan, Managing Director and Freight and Logistics Lead, Growth Markets, at Accenture, “but now, B2B customers [...] are expecting the same level of service.” The pandemic crisis has forced an acceleration of this increase in expectations from business customers, putting another layer of pressure on logistics companies serving that sector.

Pressure on SMEs needs government support, particularly in freight transport

Logan explains that “from a negative perspective, it’s truly the small and medium companies [that have been most affected]. The longer this economic crisis goes on,

[1] Research and Markets - Post-Pandemic Growth Opportunity Assessment Report 2020 – 29 June 2020

the harder it's going to be for small and medium companies.” As smaller firms have a shorter liquidity horizon, preserving business in these uncertain times can prove too large an obstacle. “If you're an SME,” says De Pretto, “the only relief you can have is really government stepping in and saying, ‘here, let us keep you alive’.” Other than that, and for companies of all sizes, Logan confirms that “Cashflow will remain a key obstacle to overcoming the pandemic.”

While “airlines, airports, and passengers have been affected,” states Bin Sulayem, however, he confirms that “cargo is still moving.” We can observe the impacts on freight capacity in three key global transportation segments—ocean, land, and air. As the IMF is predicting a 3% contraction for the global economy in 2020, the expected recession will deliver a second hit to demand and, thus, logistics companies, highlighting logistics' exposure to trade, manufacturing, and demand for goods. Operational constraints are expected to lead to delivery delays, congestion, and higher freight rates. However, not all segments will be impacted equally—companies that serve e-commerce are seeing increased activity as consumers opt for online shopping of essentials, while those that serve other sectors (such as auto and consumer goods) will see a downturn. One mitigant: record-low fuel prices should provide some relief to transport operators[2].

The degree to which each mode of transport and trade lane is affected depends on their particular commodity mix. When planning for the future, industry players should thus use insights from commodity-based modelling. In one scenario, global unconstrained demand for air cargo will fall by 14% of pre-crisis volumes in the second quarter of 2020 and will not rebound to 2019 levels until around mid-2022. The demand drop for ocean transport will be about the same size, though the recovery may take slightly longer. Within ocean transport, the drop will be smaller for dry bulk than for containerized cargo, as dry bulk carries commodities that are less affected by the current crisis, such as agricultural goods[3].

China will lead recovery as the rest of the world feels the full brunt of the pandemic

The effect of the crisis on individual trade lanes will vary significantly by country-specific COVID-19 development and by which commodities are transported on that trade lane. In containerized ocean trade, for example, the fall in demand in one scenario will vary from 6% on South American exports to Europe (which consist mostly of agricultural products) to 20% on some Asian exports (which predominately consist of machinery and equipment). If public-health responses allow for the rapid and effective

[2] IFC – *The Impact of COVID-19 on Logistics* – June 2020

[3] McKinsey & Company – *Global freight flows after COVID-19: What's next?* – 2 July 2020

control of the virus, then these declines may be limited to around 2 to 11%[4]. Abney believes that “this builds the case of the importance of inclusive, sustainable supply chains, [and] multi-lateral trade agreements.” Bin Sulayem observes that “countries that have tried to resolve and tackle the problem early will be faster to recover.” Logan confirms that regions have fared differently, noting that “you have the Chinese economy which is back to close to 10% of its full capacity and the rest of the world that is still reeling from these economic impacts.” De Pretto goes into more specific detail based on research conducted by his Union, pointing out that “in Europe, it’s minus 17% [...], here I’m talking only freight. North America, minus 12%, [...], in South America, minus 20%. [...] Nobody has come out of this unscathed.” However, the long-haul trucking sector that De Pretto represents—which carries more than 80% of the country’s goods—illustrates the effects of the lockdown on Chinese logistics. Between January 24 to February 26, 2020, the volume for long-haul trucking fell below 15% of 2019 levels before recovering to 50% by the end of February and 92% in March. The rapid recovery was driven by the ability to contain the virus quickly and the government’s policy towards trucking (such as waiving national highway tolls and quarantine requirements for trucks shipping essential goods)[5].

Similar observations can be made in shipping. While weekly container ship port calls in China and Hong Kong had climbed to 4.1% higher than the 2019 numbers by early August, calls in North America and Europe were still 16.3% and 13.2% below the levels registered one year earlier. The regional and country trends appear to follow the progress of the pandemic. Distinct port call patterns in South America and Africa can also be observed, probably reflecting the delayed onset of the COVID-19 outbreak and lockdowns[6].

Ship deployment strategies used by carriers as well as decisions by shipping alliances can influence port call choices as well. “That’s why it’s also interesting to look at other indicators, such as container shipping timetables,” says Jan Hoffmann, chief of UNCTAD’s trade logistics branch. The timetables, which show the deployment of cargo carrying capacity measured in Twenty-foot Equivalent Units (TEU), reflect shipping lines’ expectations for near future demand. While container shipments to and from China and the United States have resumed in the third quarter, timetables show a continued decline for many European countries[6]. This is why Logan believes that, though it was the origin of the pandemic, “China will probably lead the recovery for the rest of the world out of this crisis.”

[4] McKinsey & Company – *Global freight flows after COVID-19: What’s next?* – 2 July 2020

[5] IFC – *The Impact of COVID-19 on Logistics* – June 2020

[6] UNCTAD – *COVID-19: Shipping data hints to some recovery in global trade* – 9 September 2020

Agile transit lanes and fluid borders are essential to companies' economic recovery

Logan is direct about short term priorities: "You need to conserve your cash and you need to stay alive." With government furlough schemes shortly coming to an end, economies expect a wave of bankruptcies to hit the most vulnerable sectors. Fortune magazine published on 29 June a list of the largest US bankruptcies so far, topped by the Hertz Corporation and featuring large players in the aviation, telecom, and the oil and gas sector. J.C. Penney and Neiman Marcus Group are far the largest retail firms to file for bankruptcy, with others expected to follow. Bin Sulayem points out that "retail is hurt today, and many items can go through [...] the online e-commerce platforms." The lack of foot traffic due to social distancing measures plays a large role in this result.

In the short term, the consumer sector, which contributes the most to economic growth, will be the one that hurts the most. In the first half of this year, catering, retail, and travel services will all experience tremendous cash flow pressure due to declining sales and high fixed costs, and the shortfall in cyclical consumption will not be made up after the epidemic. In contrast, the impact on manufacturing so far has been relatively limited. In the short term, influence lies mainly in supply chain obstructions and difficulty in recovering production due to the delayed return of workforces, lack of personnel mobility, and traffic restrictions[7].

The impact is severe for small players: Small trucking businesses are being severely hit because they tend not to have any backup, recovery plan, or intermittent operation plan. Lack of technology, as well as tools to follow health guidelines (for example, disinfecting deliveries), further complicate their response. Top players are also experiencing a strong impact: In April, both DHL and CEVA Logistics declared Force Majeure—a clause that allows contracts to be declared null and void due to acts of God or other unexpected circumstances—on all their contracts due to COVID-19. Other companies' credit metrics are likely to deteriorate, triggering downgrades, as has already been seen in the sector. Abney therefore defines short term priorities to be "available transit lanes that open and close as the virus progresses[8]." This would enable shipments to continue to flow, leaving logistics companies able to adapt to shifting conditions in real-time. De Pretto also urges governments to support road transport companies. "If you don't help the industry that drives all the rest of the trade," he explains, "you're missing out. [...] Start with the industry that will drive trade, that will drive the economic recovery."

Leveraging digital technology to upgrade customer experience and access detailed data

Bin Sulayem is certain that "everybody today will have to realise they have to change the

[7] Deloitte - Covid-19 Managing supply chain risk and disruption - Q2 2020

[8] IFC - The Impact of COVID-19 on Logistics - June 2020

way they do business using digital technology.” While COVID-19 may be the catalyst for companies to revisit their global supply chain strategy and accelerate the adoption of Digital Supply Network models and capabilities, short-term actions need to be made to respond to the immediate challenge[9]. De Pretto’s view is simple: “Everything is digital, but you still have to carry the paper because the law says you have to carry the paper. [...] We need to just get rid of the paper.” However, Logan is quick to point out that “the logistics business is notorious for using very old IT systems. [...] The vast majority of companies will have to completely rebuild their operating systems.” This must happen in concert with updated government procedures at borders to support compatible systems at customs.

Using digital technology opens up many avenues for positive transformation. Abney explains that “the more information you have about what’s going on, the more you can make those changes.” For selected impact scenarios, a port operator could for example model the projected impact of the crisis for both the top ten countries of origin for trade imports and the top commodity groups for trade exports and use this data to formulate its commercial and operational strategy. It may decide, for example, to manage capacity and introduce flexible workforce planning until demand recovers—or to use the slow periods for capital expenditure or maintenance projects. Alternatively, it could reach out to liners that offer a superior commodity or origin mix and offer attractive pricing to increase throughput. Similarly, an air or ocean freight forwarder that wants to position itself as strongly as possible for the recovery will need to know its own market share and performance against the market for each trade lane and the shift in trade demand. Where appropriate, it should scale back capacity commitments in hard-hit trade lanes in which it has a large market share but redeploy sales teams to grow market share in resilient trade lanes where its presence is currently small[10]. This granular level of detail requires strong digital infrastructure to track, measure, and analyze data for business forecasting purposes.

Trading through digital platforms will improve efficiency and risk management

Abney projects that “companies are going to be much more focused on digital commerce and multi-modal supply chains.” E-commerce is sure to transform B2B transactions, including logistics to deliver products purchased this way. De Pretto also offers a glimpse forward when he says that “in digitalization, what you will start seeing more is a move towards blockchain.” Such effective tracking solutions and secure transaction audit

[9] Deloitte – Covid-19 Managing supply chain risk and disruption – Q2 2020

[10] McKinsey & Company – Global freight flows after COVID-19: What’s next? – 2 July 2020

methods will become more prevalent as the logistics industry modernizes its digital infrastructure. However, to be truly effective, Logan explains that companies “are going to need to adapt their business models to incorporate the best of the e-commerce business models and the best of the new digitally-oriented logistics company business models.” As this integration takes place, Bin Sulayem declares that “the change will be efficient, will remove a lot of the waste of time and overheads that we now have, and we will be more lean.”

In the long term, robotics systems for warehouse operations, SaaS platforms for transportation management and control tower operations, and artificial intelligence-powered technology platforms for customer management will allow logistics companies to anticipate supply chain risk and promote sustainability goals with enhanced operational efficiency[11]. Bin Sulayem believes that “this adoption of digital technology in our everyday business is going to give us very precise information. It will enable us to budget, forecast, and manage the supply chain more efficiently.”

Governments are in prime position to digitize border procedures for increased fluidity

There are encouraging signs that recovery might happen sooner rather than later in the logistics sector. Maritime shipping saw a dramatic slowdown earlier this year as government measures used to curb the COVID-19 pandemic restricted economic activities and travel. By mid-June, the average number of container vessels arriving weekly at ports worldwide had sunk to 8,722, an 8.5% year-on-year drop. But new data show that, globally, the average weekly calls have started to recover, rising to 9,265 by early August, just 3% below the levels of one year earlier[12]. Though still filled with uncertainty, these times of change always offer opportunities to those willing to seize them. In such times, “the mentality of the leadership of a company can have a big effect,” says Abney, “Sometimes when it’s truly risky to step forward is when true leaders need to step forward.”

Logan feels that “there is lots of work to do to speed and ease the flow of goods across borders. [...] Public sector has a big role to play in the economic recovery.” A productive step forward would be for more governments to support the complete digitization of border crossing procedures, working in tandem with the private sector and multilateral organizations like the World Customs Organization to streamline and accelerate international trade flows. De Pretto is convinced that the industry is ready as he points out that, by using digital technology like biometric information for drivers and electronic

[11] Research and Markets - Post-Pandemic Growth Opportunity Assessment Report 2020 - 29 June 2020

[12] UNCTAD - COVID-19: Shipping data hints to some recovery in global trade - 9 September 2020

scanning and filing to clear customs ahead of time, trucks could potentially go through borders without stopping. This kind of upgrade applied to air and sea transport would have a major positive impact of logistics across the world.

Regardless of the kind of upgrade that takes place, the one opportunity that will disappear is the human brokerage service. As digital platforms become the preferred transaction method for most professional services in the logistics sector, Bin Sulayem is certain that “people who need a service will be able to get it directly from the people providing it. There will be no room for middlemen.”

The global value chain will transform to become more resilient for everyone

As logistics is a diverse sector, recovery prospects will vary depending on the length of lockdowns and the duration of the subsequent economic crisis. Large companies with a diversified business (such as multiple clients, serving different sectors in various countries/states) will be better placed to weather the storm[13]. “We see companies more focused on building redundancy,” confirms Abney, “we see companies that are much more open to outsourcing their logistics and concentrating on their core business.” Logan adds that “all of these changes are improving the experience for consumers, and improving the efficiency and flexibility for companies that make and ship goods.”

In the longer term, logistics costs may increase due to tighter cross-border processes and controls fueled by concerns regarding the transmission of diseases. The airline industry is already reallocating fleet to exclusively serve air cargo demand. In the long term, robotics, drones, and autonomous vehicles might reduce logistics services providers’ exposure to labour shortages. Companies with robust digital capabilities that allow them to provide cargo visibility/traceability and do business online are at an advantage. This would entail investments in technology, such as the Internet of Things (IoT), cloud computing, automation, and data analytics. The pandemic has exposed the vulnerability of extended and complex value chains to production disruptions, particularly in the East Asia Pacific region. As a reaction, many of these supply chains may shorten or diversify through reliance on alternative partners or intensified efforts to bring home strategic value chains[13]. “In our experience,” says Bin Sulayem, “it’s the first mile and last mile” that matters most.

Regardless of where on the supply chain logistics companies choose to focus, transformation led by digital technology will lead the way and, as De Pretto predicts, “The transformation that will take place will affect all stakeholders.”

[13] IFC – *The Impact of COVID-19 on Logistics* – June 2020

AVIATION SECTOR PANEL



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President AME
Airbus



Sebastian Mikosz
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John Selden
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AVIATION SECTOR PANEL

INTRODUCTION

The air transport sector is key to global economic development as it connects flows of goods and people. The COVID-19 pandemic therefore had a striking impact across multiple sectors at once, as well as across borders. When traffic stopped, it had a human, logistical, financial, and social effect. We examine the multiple impacts of the pandemic crisis on the industry, the cross-sector effect of the slowdown beyond the aviation sector, the challenges for airlines, airports, and service providers both large and small, as well as the internal transformation required to face these challenges and form new business models to seize new opportunities across the entire value chain.

ABSTRACT

- *The pandemic impact is global and deep – Passenger departures are expected to drop 50%, while cargo and mail shipments will fall 17%, causing a net loss for the airline industry of over US\$84 billion[1] for 2020*
- *The indirect impact across the airline industry supply chain is immense - Over 22 million jobs supported directly and indirectly by the air transport sector are expected to vanish this year¹*
- *IATA estimates the industry will experience negative net margins of 15% in the Middle East, 17% in the US, 22% in the EU, 23% in Asia Pacific and Latin America, and a significant 31% in Africa [1]*
- *By using more sensors to track both hygienic variable and other resources across the industry value chain, the aviation industry can better adjust its activities and model its customer's behaviours to better satisfy their needs*
- *Biometric technology will open the way to new contactless transaction models in the airline industry, both on the ground and on-board*
- *On a wider industry scale, changes in demand across short-haul and long-haul segments will create opportunities for airlines to rethink their fleets*
- *Recovery will come in phases across both passenger and cargo traffic*

[1] IATA – Airline industry economic performance report – June 2020

An unprecedented drop in global traffic

Sebastian Mikosz, Senior Vice President of Member and External Relations at the International Air Transport Association (IATA), states that “we never saw a crisis which practically grounds 98% of our capacity and which touches all the continents in the same degree, at the same time.” Passenger departures are expected to drop 50%, while cargo and mail shipments will fall 17%, causing a net loss for the airline industry of over U\$84 billion[2] for 2020. As Mikail Houari, President for Africa and the Middle East at Airbus, confirms, “98% of traffic dropped in April,” bringing the pandemic crisis to the forefront of industry concerns.

While this precipitated drop in traffic was the most noticeable change in the industry, it had a deeper ripple effect than initially anticipated. First, the rapid closure of country borders created uncertainty and unpredictability in an industry that prides itself on long term projections of business volume. Next, it placed immediate pressure on airlines to reduce operating costs while also asking them to provide discounted ticket prices to encourage passengers to keep flying, where possible. The industry unfortunately suffers from high cash burn rates due to high fixed and semi-fixed costs, such as employment costs and debt financing expenses for its fleets regardless of their use[2]. Direct airline jobs are expected to fall 36% to 1.9 million jobs by the end of 2020 as airlines are forced to downsize in response to the downturn³. Most of all, the pandemic created logistical hurdles for cargo flows since 45% to 50% of air cargo travels in the belly holds of passenger aircraft, most of which were now parked in hangars or on unused runways. IATA estimates that international trade shipped by air will total U\$5.5 trillion in 2020, 15% less than the previous year[2].

While governments stepped in to support the industry, it could only do so with limited means. IATA estimates that public sector tax revenues from the airline industry totaled U\$111 billion over the last decade. By comparison, between January and May 2020, government aid packages to airlines totaled U\$123 billion. This aid is largely meant to bridge the gap between current shutdowns and the return to more manageable passenger volume. However, a recent survey published in Forbes magazine[3] showed that 63% of aviation professionals expect the recovery of passenger traffic to pre-COVID-19 levels to take up to 3 years. This will likely require new measures and procedures across the passenger journey to meet new hygiene standards. John Selden, General Manager of Atlanta’s Hartsfield Jackson International Airport, claims that “our infrastructure is

[2] IATA – *Airline industry economic performance report* – June 2020

[3] Forbes – *How Top Aviation Leaders See The Future Of The Airline Industry* – July 14, 2020

not built for [social distancing], nor are aircraft.” Significant investment may still be required to adjust to our new demands for hygiene, health, and safety.

An entire ecosystem of companies impacted

Mikosz acknowledges that “we in the airline industry are not alone, we know that we are part of an ecosystem. Together with us in the same boat, we have the companies of the broader travel and tourism industry.” Consequently, as airlines cease to take off, a long chain of travel and tourism players become impacted by a domino effect. Hotels, convention centers, airline partners, and even car rental companies based in airports become negatively affected as business travel for meetings, incentives, conferences, and events (MICE) disappears.

Over 22 million jobs supported directly and indirectly by the air transport sector are expected to vanish this year[4]. Selden declares that “things that have been most affected in the airport world are concessionaires and airline partners.” He explains that concessionaires are severely affected by the steep decline in foot traffic within airports and the stricter hygiene measures that further restrict existing traffic within concession locations. In Atlanta, the world busiest airport, over 330 out of 380 concessionaires were closed after 97% of traffic stopped.

Naturally, airlines have also slowed or ceased to take delivery of new aircrafts, hitting Original Equipment Manufacturers (OEMs) like Airbus hard. IATA project 40% lower aircraft deliveries in 2020, with similar lower appetite reaching into 2021[4]. The entire manufacturing chain behind such OEMs has also suffered as a result. According to Robert Stallard of Vertical Research Partners, it could be almost five years before the active aircraft fleet returns to where it was at the end of 2019. The far-reaching repercussions of a disintegrating airline business is why Houari explains that Airbus “suggested more to have the government supporting airlines, so they can go on purchasing aircrafts, which will make the industry survive.”

Domestic, regional, and international travel affected in different ways

As Mikosz states, “this crisis is hitting continents with different timelines.” While COVID-19’s impact is felt in every country around the world, some like China have already returned to almost 80% of pre-crisis volumes, while others are still deep in the midst of the pandemic. Houari estimates overall that “the Asian market will be

[4] IATA – Airline industry economic performance report – June 2020

the first to recover, then the Middle East.” This is partly due to some governments like Malaysia and Singapore exploring the creation of business-travel corridors under strict protocols that allow exceptions to quarantine measures[5].

Regionally in the US, Selden explains that airports in key international hubs in New York, Los Angeles, and San Francisco “have seen tremendous drops in international travel [...] and that travel is not coming back as fast as our domestic travel within the US.” This is mainly due to strict border quarantine measures between countries affecting international travel globally. Overall, IATA estimates that the industry will experience negative net margins of 15% in the Middle East, 17% in the US, 22% in the EU, 23% in Asia Pacific and Latin America, and a significant 31% in Africa[6].

Re-establishing visibility while promoting safe travel conditions is a priority

Air travel was, until recently, a business that relied on forward planning. COVID-19 has decimated this model, forcing airlines to react overnight to ever changing conditions, most notably on hygiene measures and border procedures. Mikosz points out that “we need to establish a situation in which we can really predict our next 12 months [...] to re-establish the trust.” This will affect how airlines approach their booking process as well as their predictive modelling for fuel needs, aircraft capacity, and other related variables. For this predictability to return, another hurdle looms – short term agility. The key is for airlines to be able to book seats for 9 to 12 months in advance while knowing that they can change their boarding process or their check-in procedures at a moment’s notice. This agility will ensure that they can uphold reservation commitments despite sudden changes in country-by-country rules on visas, disease testing, hygiene standards, and similar elements of air travel.

Selden also points out that “we have to instill that travel is safe.” Passengers, either business or leisure, will not commit fully to flying again until they feel that they are travelling in safe, hygienic conditions. Selden explains that Atlanta airport, along with many others, has implemented thorough cleaning and disinfecting procedures across the entire passenger journey, including at check-in counters, safety checks, boarding, and in lounge facilities. Houari also explains that cabin air on board has always been very clean. Indeed, aircrafts renew the entire cabin’s air supply in flight with fresh outside air every 2 to 3 minutes, pushing air through HEPA filters 30 to 40 times per hour on average during a flight. This effectively

[5] McKinsey & Company – *For corporate travel, a long recovery ahead* – August 13, 2020

[6] IATA – *Airline industry economic performance report* – June 2020

makes the air inside an aircraft at cruising altitude comparable in purity to that of many hospital operating rooms. However, to fully convince passengers to take to the skies again, Houari maintains that “it is the complete system which has to find an answer, [...] the airports, the airlines, and the manufacturers.” The last 20 years of data show that it can take up to 5 years for business volume to return to pre-crisis levels, though this return has historically always led to increased passenger travel overall[7]. Only by working together to provide a comprehensive hygiene chain throughout the air travel experience can these industry players attract passengers in large volumes once more.

Data-centric transformation focused on eco-friendliness is needed

It is clear that digital technology will lead the transformation process that airlines need to adopt. Mikosz explains that “technology allows you to be more efficient in your usage of resources, and more conscious of what you do.” By using more sensors to track both hygienic variables and other resources across the industry value chain, the aviation industry can better adjust its activities and model its customer’s behaviours to better satisfy their needs. More data will also help aviation companies, from airlines to airports and OEMs, develop the agility they need to react and adapt promptly when rules change. Predicting demand over future months will also become easier with more data on hand.

Beyond future projections, technology can also help airlines become more environmentally friendly. Houari confirms that, in the wake of increased demand for hygienic conditions, “something that is taken very seriously by everybody is the eco-friendly aspect.” To that end, he goes on to explain that Airbus “created a new way of transfer of title, E-TOT, [...] a kind of electronic transfer of title” to adapt to demand for contactless transactions. More broadly, aviation professionals all agree that more eco-friendly fleets can become a selling point for airlines. This is an acceleration of an existing trend for reduced carbon-footprint travel, one that recently led Airbus to announce a fleet of zero-emission, hydrogen-powered aircrafts due to go into service in 2035[8].

Biometrics will drive new forms of passenger transactions

Biometric technology will open the way to new contactless transaction models in the airline industry. Using biometric technology in airports is likely to help reduce friction along the passenger experience from check-in to boarding, while also improving safety

[7] World Economic Forum - Global business travel will survive COVID-19 - August 14, 2020

[8] Airbus.com - Airbus reveals new zero-emission concept aircraft - September 21, 2020

and security. Selden believes that in the very near future, “everything will be biometric. Your ticket, your bag will be checked, you will be able to walk through a security system, get on your plane and be on your way.” This will require more elaborate protocols for data sharing between parties involved, including customs, transit police, booking partners, airlines, and more. Each of these steps opens up new commercial applications and fresh collaborative opportunities.

Passengers are also likely to become ready to pay for premium services that guarantee a certain ‘peace of mind’ factor when travelling – blocking a middle seat from being booked, gaining access to stricter hygienic facilities on board like dedicated restrooms, or more contactless services using automation or wireless connected technology. Since these choices will most likely be tracked in a more granular fashion by the industry, this will lead to more precise modelling of demand and more customized services for each passenger. Though challenging, this will be in line with airlines needing to adapt more regularly and more strictly to changes in travel conditions, whether imposed by outside parties like governments at borders, or by organic demand from business and leisure travelers. Houari summarises the situation well by stating that “the industry will be resilient and we will find ways, because the passengers will be here.”

Transparency, restructured fleets, and new partnerships will take center stage

As the industry welcomes biometric technology into its transaction processes, there will be opportunities for airlines to communicate more widely with its customer base. The main goal will be to reinforce the notion of safety in air travel, not just from a mechanical point of view, but most importantly from a hygiene and health point of view. “Eco-friendly is a fact, health is a perception,” explains Houari, “you either feel safe or you don’t.” The aviation industry will be able to demonstrate, by its complete visibility and transparency over its passenger base, that it provides safe travel conditions for you and your neighbor on board. “Biometrics will take us to a place where we will already know before you get here what you’re carrying, where you’re going,” says Selden, “it should really be the opportunity we exploit going forward.” By being able to guarantee that you are traveling amongst a healthy crowd, airlines will be able to instill a feeling of safety into each of its passengers.

On a wider industry scale, changes in demand across short-haul and long-haul segments will create opportunities for airlines to rethink their fleets and to partner with different companies. IATA estimates that the global in-service fleet will decrease to 20,261 aircraft in 2020, down from 29,697 in the previous year, a 32% decline. Courtney Miller, managing director of analysis for The Air Current, believes

that, as demand returns and possibly increases for domestic flights and shorter international hops, more regional aircrafts with smaller capacity will be more in demand[9]. Regional airlines flying on behalf of major companies have been more protected from the downturn due to tight contract clauses with international airlines. This short haul recovery will open up opportunities for more of these regional airlines to fly on behalf of major companies, using their nimbler fleet to fulfill this demand.

As airlines look to retire some of their older and larger planes to follow this strategy, Jon Ostrower, editor-in-chief of The Air Current, estimates that opportunities will arise for a different type of company[9]. E-commerce giants like Amazon, along with large cargo networks like the Chinese postal service, are very likely to seize this opportunity to acquire their own fleet of large capacity aircraft. This may have an impact on cargo flows as these large companies internalize their freight routes, though the extent of such impact is hard to quantify at this stage.

Recovery will come in phases across both passenger and cargo traffic

“The macroeconomic impact on our industry has two legs,” explains Mikosz, “the passengers traveling on the aircraft, and cargo.” While cargo tonne-kilometres (CTKs) remain around 22% below their December 2019 levels, the beginning of a rebound is emerging. This is partly due to stabilizing manufacturing output and new export orders as economies start to come out of lockdowns[10]. Mikosz estimates that cargo represents about a quarter of total industry revenue. On the passenger side, “the leisure travel aspect is not going to change very much,” according to Selden, who goes on to state that “the real change in the future will be our business travelers.” This is largely due to the significant impact that digital communication tools like Zoom, Webex, and Microsoft Teams have had on business communications across borders. As meetings are conducted online, the need for business travel is seriously reconsidered. However, there is discord over how long this might last.

Business travelers account for 12% of travelers but contribute up to 75% of airline profits[11]. This makes them essential to the economic recovery of airlines globally. More than half of business travel is in China and the US[12]. With China emerging first from the pandemic crisis, this could be good news for business class on board. Indeed, 69% of aviation professionals believe business travel will recover faster than leisure[13]. However, a recent analysis by consulting firm McKinsey & Company

[9] Harvard Business Review – Looking to the Future of Air Travel – May 4, 2020

[10] IATA – Air Cargo Market Analysis – May 2020

[11] New York Times, “Best guess on when business travel will recover? It could be years,” Jane L. Levere, July 13, 2020

[12] McKinsey & Company – For corporate travel, a long recovery ahead – August 13, 2020

[13] Forbes – How Top Aviation Leaders See The Future Of The Airline Industry – July 14, 2020

prefers to say that business travel will return in phases, spurred by proximity, reason for travel, and sector[14]. Regional travel for sales meetings and essential business operations, mostly in manufacturing, pharmaceuticals, and construction, will recover first. This is because physical presence and reaction time is essential to the success of these activities. Domestic travel for training or small group gatherings, notably in the technology, real estate, finance, and energy sectors, will return soon thereafter. This is due to digital communication tools bridging the gap so far, but also creating digital fatigue over time, spurring demand for in-person activity. Lastly, international travel for conferences and business events will be at the tail end of recovery, most likely in smaller numbers than before due to more hybrid event structures with efficient digital components, prompting only essential members to travel for networking purposes.

As Houari states in the plainest of terms, “we have to be optimistic.”

[14] Forbes - How Top Aviation Leaders See The Future Of The Airline Industry – July 14, 2020

NEW WORLD MODEL

CROSS-BORDER TRADE SECTOR PANEL



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CROSS-BORDER TRADE SECTOR PANEL

INTRODUCTION

When the global economy all but shut down due to COVID-19, cross-border trade suddenly came to an abrupt standstill. Managed in a state of urgency, borders were slow to implement new procedures and lacked clarity for new regulations. However, the disruption brought with it a re-examination of our trade dynamics, exposing opportunities in different corners of the world and across several industries. We examine the impact of the pandemic crisis on trade flows between and within continents, the impact of rapid digital technology rollouts, the challenges brought about by data transparency issues, as well as the internal transformation required to face these challenges and form new business models to seize financial revenue opportunities across a disrupted value chain.

ABSTRACT

- *Projections suggest that there would be a 13% to 30% drop off in trade in 2020. The lack of government coordination on a global basis has exacerbated the crisis, with deep repercussions for SMEs and Micro-SMEs across sectors, particularly in the Blue economy*
- *While China recovered first, Africa was the last region to register COVID-19 cases but was already affected through its trade links to hard hit regions like the EU, the US and China, with total African merchandise exports expected to contract by about 17%*
- *The OECD believes there are several avenues governments can pursue to improve border efficiency amidst pandemic conditions, pointing out that keeping trade flowing requires co-operation and trust*
- *Digitisation will affect access to new trading tools, to strategic data that can help develop more efficient business planning, and to a wider pool of customers through B2B platforms*
- *On a macro level, more diversified supply chains will likely make customs management more complex*
- *The idea of a smarter border, which hinges around minimising physical customs and other border formalities, doing more electronically before and after goods cross a border, is already being touted by many governments and may be more relevant and prevalent than ever*
- *Trade facilitation through digital technology can be more inclusive for smaller, more informal companies currently operating outside the digital realm*
- *As enclaves in national territories using streamlined trade rules and procedures, free zones can help maintain FDI flows into countries amidst responses to borders restrictions*
- *Transparency and trust will be precious assets in the new global digital value chain*

Trade disruption met with global mismanagement

As the pandemic crisis grounded planes and forced the closure of borders around the world, projections suggested “that there would be a 13% to 30% drop off in trade in 2020,” explains Alan Wolff, Deputy Director General of the World Trade Organization. This drop in volume had several important repercussions.

Dr. Liam Fox, member of the UK Parliament and former UK Secretary of State for International Trade, points out that “we have 30 countries across the world who are utterly dependent upon an open trading system to avoid starvation, particularly in North Africa, the Middle East, and in Central America,” adding that “we have to be careful not to turn a COVID crisis into a food crisis.” By restricting shipments between states, the crisis impacts multiple crucial industries across the world.

Since the COVID-19 pandemic is primarily a health crisis with economic ramifications, “the health authorities have assumed a larger role, many times without consultation with customs, and that has provided a lack of fluidity,” explains John Mein, Executive Coordinator of Brazil’s Instituto Aliança Procomex. This has detrimentally affected the economic repercussions of the pandemic. John W.H. Denton AO, Secretary General of the International Chamber of Commerce, states that “the lack of government coordination on a global basis has exacerbated the crisis,” adding that “the consequences have been devastating for SMEs and micro-SMEs.”

The public sector has tried to help businesses facing liquidity issues due to a sheer drop in sales combined with high overheads. Customs duties and import taxes, though variable costs, also affected the liquidity of companies struggling to recapture customers for imported goods. Government schemes offered these business relief on VAT payments, as well as the possibility to make periodic rather than immediate payments on customs duties^[1]. However, such measures only provided short-term relief for what turned out to be a protracted disruption to the global trade economy.

SMEs and Micro-SMEs hit hardest across sectors

Any company dependent upon international trade movements has felt the impact of this crisis. As passenger flights were grounded, transport of goods became severely affected as the holds in passenger aircrafts are often used to transport cargo. Those same grounded flights hit the tourism sector hard, preventing many destinations from welcoming the flow of tourists that their business depends on. UN World Tourism Organization forecasts international tourist arrivals will decline 20 to 30% in 2020, causing an estimated loss of U\$300-400 billion in international tourism receipts. Since

[1] PwC - Responding to COVID-19: Cross-border trade measures and Insights - April 2020

80% of the tourism sector is composed of SMEs and autonomous workers, millions of livelihoods are at stake[2].

The wider Blue economy, comprised of travel, tourism, maritime transport, fisheries and seafood production was also hit hard. Maritime transport makes up over 80% of global trade by volume and more than 70% by value, carried by over 50,000 commercial vessels worldwide[3]. The crisis is not only limiting global fishing efforts but also hampering production of other maritime goods and services, affecting dependent value chains globally[2]. Slowdown in output in most value chains will reduce demand for maritime transport services and may shift maritime trade patterns by changing suppliers and manufacturers. This will impact ports as much as shipping companies. The International Chamber of Shipping has called on governments and UN agencies to continue to allow commercial ships access to ports worldwide and to facilitate rapid changeover of crews[2]. However, like the cruise economy, commercial ships have been treated with concern at every port due to contamination issues in contained environments.

Border measures and travel restrictions have had a particularly heavy impact on sectors such as tourism and education services, which require physical proximity between producers and consumers for most of their transactions. In higher education, some institutions are facing a potential drop in international student enrollment of 50 to 75 per cent[4].

Trade facilitation is particularly important for the Micro SMEs hit hardest by the crisis, in sectors like textile and agriculture. Denton points to the US where “the inability to provide presence in shops saw the immediate cascading of that through the whole garment industry supply chain.” Reforms to automate and streamline border procedures, simplify fees and foster inclusion of MSMEs in consultation processes matter most. With keeping the flow of goods moving quickly across borders being critical to many countries’ food supply, to the global economy, and most importantly to the supply of pharmaceutical and sanitation products essential for facing the pandemic, there is a need to find solutions fast[5].

Early Chinese recovery leaves developed countries behind and Africa last in line

Wolff believes that “the Northern hemisphere is better positioned for most things, including economic shocks and shortages of equipment and supplies.” The most recent estimates in the June 10 OECD Economic Outlook suggest an unprecedented

[2] UNCTAD – *The COVID-19 Pandemic and the Blue Economy* – April 2020

[3] UNCTAD – *Maritime Transport Review* – 2019

[4] World Trade Organization – *Cross-Border Mobility, COVID-19 and Global Trade* – 25 August 2020

[5] OECD – *Trade Facilitation and the COVID-19 pandemic* – 22 April 2020

collapse in the first half of 2020 – an almost 13% decline in global GDP. Moreover, the costs to the global economy from support packages, through central banks and fiscal actions, are very significant and likely to have long-lasting and complex effects on management of sovereign and corporate debt[6]. However, China has been the first to experience a recovery, mostly due to its tight handling of the crisis domestically.

Despite this initial Chinese recovery, the rise of protectionism as governments seek to tighten global supply chains through increases in domestic production is likely to affect vulnerable economies. Dr. Fox points out that, “with 28% tariffs applied bilaterally, that’s how there is a drag on both China GDP and US GDP.” The resulting dynamic is that, according to Dr. Fox, “trade within trading blocks is less likely to be disrupted than trade between trading blocks.” This is likely why UNCTAD’s assessment is that the implementation of the African Continental Free Trade Area (AfCFTA) will play a crucial role in diversifying African economies and helping to shield them from global commodity price volatilities that have continued to dictate the direction of the continent’s trade and economic progress[7].

Some countries have fared somewhat well through the crisis. Mein mentions that “Brazil exports agricultural goods and mineral goods as well as fuel. The market for all of those three major items has already recovered and the demand continues.” However, Wolff states that “developing countries are short of foreign exchange funds, and much shorter now than they were.” Denton goes on to estimate that, “in terms of most dramatic impact, I think it’s coming towards sub-Saharan Africa. [...] In the Middle East and Northern Africa, we’re also going to see some pretty dramatic challenges.”

While the crisis is having staggered effects globally, Africa is likely to be both the last to experience the full blow of the pandemic and also the least equipped to do so[6]. Africa was indeed the last region to register COVID-19 cases but was already affected through its trade links to hard hit regions like the EU, the US and China. Total merchandise exports in Africa are expected to contract by about 17%. UNCTAD estimates that COVID-19 will drag African economies into a fall of about 1.4% in GDP, with smaller economies facing contraction of up to 7.8%. The contraction is mainly a result of export adjustments affecting primary commodity exporters, and the attendant losses to tax revenue which reduce the capacity of government to extend public services necessary to respond to the crisis[7].

A private sector challenge that requires public sector support

“We have learned that there is a challenge of communication between the private sector

[6] OECD – COVID-19 and international trade: Issues and actions – 12 June 2020

[7] UNCTAD – Assessing the Impact of COVID-19 on Africa’s Economic Development – July 2020

and governments,” claims Mein. While the public and private sector goals may not always align in their approach to COVID-19, the crisis has exacerbated some misalignment of goals within this dynamic, particularly at the borders. For example, in currently impacted economic conditions, reduced demand quickly renders some stock obsolete and reduces its value, causing challenges from custom authorities when this revaluation is filed for duties payments[8]. The OECD pointed out in a recent report that keeping trade flowing requires co-operation and trust – for example, that the market will supply essentials, that countries will not impose export restrictions, and that imports do not pose health risks[9].

The OECD believes there are several avenues governments can pursue to improve border efficiency amidst pandemic conditions. First, they can ensure that all formalities are transparent and accessible to all traders, especially Micro, Small and Medium-sized Enterprises; Second, they can expedite standard formalities to leave room for necessary additional COVID-19 related controls; Third, they can digitise all possible processes as much as their infrastructure allows to speed up processing and reduce the need for physical contact between border agencies and traders[10].

Wolf also believes “there needs to be work with respect to trade finance [and to] how agriculture is dealt with because food supplies have to be adequate to avoid major problems.” This affects some territories more than others, most notably Africa and Latin America where food and agriculture account for large portions of trade flows. Most countries are trying to find ways to build resilience into their supply chains, for food products as well as other essential goods. Dr. Fox points out that “the more we are able to diversify our sources of supply, the more resilient we get.” But when this is combined with digitization in a bid to use data to fine-tune economic models, some countries find themselves out of the equation. For example, Denton explains that only a fraction of a percent of commercial entities in sub-Saharan African have an online presence. He goes on to state that “there is a huge challenge to enable these entities to go online.”

The short-term challenge is therefore to keep trade flowing, particularly for SMEs and Micro-SMEs who are prevalent in both developed and developing economies, but also to ensure that our efforts to build resilience remain inclusive at the macro level.

Digitisation is needed to streamline and clarify trade procedures

Denton recommends that “part of having a business continuity plan in the new paradigm is going to be: how do you digitize? [...] Helping companies develop business models to support that is really important.” Digitisation will affect access to new trading tools, to

[8] PwC - *Responding to COVID-19: Cross-border trade measures and Insights* - April 2020

[9] OECD - *COVID-19 and international trade: Issues and actions* - 12 June 2020

[10] OECD - *Trade Facilitation and the COVID-19 pandemic* - 22 April 2020

strategic data that can help develop more efficient business planning, and to a wider pool of customers through B2B platforms. Digital instruments can also allow companies to tap into internal efficiencies, helping them to control costs. Dr. Fox believes that this applies as much to developing nations as to developed ones. “If there is onshoring,” he explains, “companies can work with higher labour costs and still make their business profitable. A range of skills and efficiency will be key to all of this.” Digitisation brings that efficiency to light more readily.

“If they haven’t done it before,” states Mein, “[companies] need to build into their organization planning for crisis management.” This includes some liquidity and treasury management strategies, but also the resilience angle that has caused much rethinking of global supply chains already. This requires dialogue with border management agencies to ensure that new procurement choices do not backfire. While customs regulations often follow the principles of global frameworks, local interpretations and practices from Customs will still lead to different requirements for different markets. Hence companies should revisit and adapt their customs compliance processes before any new supply chains are established[11].

Moreover, on a macro level, more diversified supply chains will likely make customs management more complex. There will be additional pressure on import price comparisons, more complicated preferential origin management, more likelihood of inconsistent use of tariff classification and widely differentiating labelling requirements, to name but a few. Maintaining compliance and obtaining a “trusted trader” status, or its equivalent, may become imperative to make international supply chains and cross border trade activities possible, let alone secure and efficient[11].

On a global scale, Wolff also thinks one approach could be to “make [tariff suspensions] a commonplace response instead of an individual one.” When individual countries can easily follow suit when others lower their tariffs temporarily in response to a crisis, a more agile and fluid cross-border trade environment can emerge.

Diversified supply chains need careful domestic assessment

“The COVID-19 pandemic has shown us [...] that we live in an inter-connected and inter-dependent world in a way that we never have done before,” says Dr. Fox. Trade facilitation measures – such as digitizing and streamlining border processes – speed up processing while reducing person-to-person interactions[12]. In a pandemic context, they not only provide an important solution to the social distancing required of all workers, but they also open the door to digitisation across trade nodes. The idea of a

[11] PwC - *Responding to COVID-19: Cross-border trade measures and Insights* - April 2020

[12] OECD - *Trade Facilitation and the COVID-19 pandemic* - 22 April 2020

smarter border, which hinges around minimising physical customs and other border formalities, doing more electronically before and after goods cross a border, is already being touted by many governments and may be more relevant and prevalent than ever. Practical implications for a more digitalised border and customs compliance supervision will for example include the use of digital signatures, electronic submission and endorsement of customs declarations, e-certificate of origins, digital letters of undertaking or bank guarantees, and more[13].

As governments review what kind of production to keep within their borders instead of sourcing them on foreign soil, Wolff believes “countries are going to analyze their domestic stocks and domestic production capability” to best determine how much diversifying is actually required. Other factors will come into play here, namely those related to sustainability of the components used in the manufacture of a product. Since the source of products will also become more important and strategic to both individual and corporate customers, “having a business model that is able to authenticate and show traceability of the sustainability of your products will be very important,” explains Denton. There again, digital tools will enable this to happen much more fluidly than with analogue means.

A chance to build a more inclusive, more adaptable trade framework with fluid borders

We need to recommit ourselves to an open liberalizing global environment,” offers Dr. Fox, “[taking into account] the huge increase in the services industry and the increase in technology.” Both these areas are fertile breeding grounds for SMEs and Micro-SMEs developing products and services with small, nimble teams but high cash-burning ratios and low liquidity. Trade facilitation helps these Micro-SMEs become integrated into Global Value Chains more readily. Trade facilitation reforms reduce fixed and variable trade costs, helping Micro-SMEs not only become importers and exporters, but also helping those that already export and import increase their volumes[14].

The consistent rise of digital technology in trade environment also brings with it an interesting by-product. “One of the benefits of digital.” Explains Denton, “is that we’ve been able to reach [...] the informal sector, and some of the aspects of the informal sector are now becoming formal.” This not only helps government integrate these informal sector actors into the formal economy by providing them with support structure and funding, it also creates a new layer of fiscal revenue for the same government.

[13] PwC - *Responding to COVID-19: Cross-border trade measures and Insights* - April 2020

[14] OECD - *Trade Facilitation and the COVID-19 pandemic* - 22 April 2020

Mein also believes that as trade flows adapt, “there is an opportunity for customs around the world to assume a leadership in terms of border management.” Enhancing risk management tools with the improved use of pre-arrival processing and post-clearance audit methods can achieve higher level of release for low risk consignments. Accreditation such as Authorized Economic Operator status could also allow compliant exporters and importers to expedite critical products through customs[15]. Such procedures can be implemented with the concerted support of customs organizations around the world.

As foreign direct investment (FDI) flows also become affected by pandemic-induced restrictions, a new window of opportunity has opened up for free zones. As enclaves in national territories using streamlined trade rules and procedures, free zones can help maintain FDI flows into countries amidst responses to borders restrictions imposed by COVID-19[16]. Moreover, as free zone companies continue to conduct business less encumbered by restrictions than their onshore counterparts, they can provide valuable feedback to the public sector on ways to support trade in disrupted conditions. “Those in free zones have very close experience with companies that are their residents,” confirms Wolff, “they can be a channel of major communication to their government.” And since free zones enjoy a close relationship with customs and border management agencies, this dialogue can help usher in streamlined procedures across entire territories.

The death of analog paper ushers in the rise of digital data

Firms may need to re-think sourcing decisions, resulting in re-ordering of global production, with potentially far-reaching implications especially for developing countries. Equally, it is argued that governments will need to reconsider the list of strategic goods for which there is a requirement for domestic production, or impose new sourcing constraints on businesses. Given the cross-border spill-overs resulting from measures affecting transnational mobility, a case can still be made for supplementing domestic action with international cooperative efforts[18]. Government procurement practices may also be revisited[19]. “We’re likely to see that comparative advantage in a large part of those global supply chains move to where cost is lower,” believes Dr. Fox.

At the same time, we are also seeing increasing internal and external border agency collaboration, particularly to expedite clearance of critical commodities through special regimes. On 16 March 2020, The European Commission approved the ‘Guidelines for border management measures to protect health and ensure the availability of goods

[18] World Trade Organization – Cross-Border Mobility, COVID-19 and Global Trade – 25 August 2020

[19] OECD – COVID-19 and international trade: Issues and actions – 12 June 2020

and essential services. Through this, member states should guarantee the supply chain of essential products and not apply any additional certifications on goods circulating within the EU single market[20].

Mein explains that “organizations, institutions, agencies, governments will move from managing documents to managing data.” The World Customs Organisation, for example, has recently put a team of data analytics experts together to develop an open-source A.I. model to help facilitate how customs authorities can screen large amounts of transaction level import data to better manage compliance[21].

Wolff also adds that “technology is going to be of enormous assistance to developing countries and some of it is developed in developing countries.” He describes the example of Kenya, where crop insurance payments are disbursed based on software analysis of drone and satellite imagery by government bodies, without the need for farmers to file any application.

Ports, airports and land borders across Europe, Asia-Pacific and the Americas already have the tools in place to keep goods flowing. Mechanisms limiting physical interaction – such as electronically lodging documents in advance, electronic payment of all trade-related taxes, digital certificates and signatures, or 24/7 automated processing of trade declarations – are already available. The Middle East and Africa can leverage cross-border cooperation on risk management and interconnected systems to improve trade transparency[22]. The increase in transparency that such large amounts of data provides can help change trade ethics for the better. “Transparency is a value,” states Mein, “and technology can assist to strengthen that value.”

Globally, new trade dynamics will be built around a search for resilient supply chains, leveraging technology for everyone’s benefit. As Denton offers, “any forward-looking plan for resilience has to have a way of talking about social inclusion and economic opportunity for all.” The new world model that will emerge in cross-border trade may thus bring more opportunities through digital tools made more accessible to build trust and transparency.

[20] World Bank Group – *Managing Risk and Facilitating Trade in the COVID-19 Pandemic* – 30 March 2020

[21] PwC – *Responding to COVID-19: Cross-border trade measures and Insights* – April 2020

[22] OECD – *Trade Facilitation and the COVID-19 pandemic* – 22 April 2020

NEW WORLD MODEL

DIGITAL COMMUNICATIONS SECTOR PANEL



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DIGITAL COMMUNICATIONS SECTOR PANEL

INTRODUCTION

Digital communications formed one of the few industries along with healthcare that saw a steep increase in demand for their services during the COVID-19 crisis. As digital services provided a lifeline for many individuals and businesses, the sudden rush for digital communication strained networks and stretched digital resources dangerously thin. The same rush also left many behind, pointing to wide global inequalities in access to digital services. We examine the impact of the crisis on digital communication vectors and telco infrastructure, the pressure on both public and private sector players to fulfill a sudden spike in demand, the challenges for telcos and communication services providers both large and small, as well as the internal transformation required to face these challenges and form new sales and business models to build resilience and value across a disrupted worker supply chain.

ABSTRACT

- *Consumers are resorting to all types of digital communication to compensate for the lack of in-person communication. 74% of them want to continue to do so, thereby generating unprecedented levels of traffic for operator and OTT communication services*
- *The biggest disruption for OTT communications service providers was caused by group and video calling because these services went from being niche features to mainstream services in a matter of weeks, causing significant security concerns*
- *The gap in digital capabilities between large companies and SMEs is likely to widen as very few SMEs have digital transformation plans where almost all of large firms do*
- *Today's connectivity levels have saved from 150 million to 300 million jobs, safeguarding \$8 trillion in global GDP—around twice the size of Germany's economy in 2019*
- *Countries with low access to online and cloud services have suffered more starkly than more digitally committed economies. That digital divide is likely to widen after the crisis*
- *75% of consumers expect consistent interactions across all departments, but 58% say they feel like they're communicating with separate departments and not one company*
- *Voice services revenue will most likely decrease, as most operators will continue to provide voice services for free or at a capped rate. Roaming revenue will be negligible until travel restrictions are lifted, but even then it will be far from pre-crisis levels*
- *Most companies need to stabilize during rapid unexpected change, then shift to reopen in their new environment, and finally emerge and grow to become more digital and agile*
- *Native voice to OTT VoIP substitution will accelerate and all OTT communications service providers will rush to launch in-call entertainment features*
- *We will see more shared economy models that can enable the public sector and private sector to work together in areas like healthcare and education*
- *A collaborative public-private strategy to spread connectivity serves all stakeholders*

A surge in volume that tested network resilience and agility

It all began in the air. “Once the airlines have shutdown, countries have closed the borders and naturally everything close to the borders also closed down,” explains Bishar Hussein, Director General of the Universal Postal Union. From that point on, lockdowns followed and people switched from the physical to the digital world, almost overnight. Xavier Anglada, Managing Director, Strategy and Consulting Lead, Middle East at Accenture, notes that “people are virtually connecting more, socializing more, and [...] 74% of people [recently surveyed] said they want to continue to do this, so there is material change in user behavior.” Consumers are resorting to all types of digital communication to compensate for the lack of in person communication, thereby generating unprecedented levels of traffic for operator and OTT communication services[1]. This comes with consequences.

“What has changed the most is the understanding that networks need to be resilient,” declares Mats Granryd, Director General of the GSMA. Mobile voice traffic has grown strongly in affected countries, driven by an increase in both the number of calls and their duration. Operators were caught out by this surge in voice traffic because many had reallocated spectrum resources from voice to data. Indeed, some operators’ voice services experienced disruption in the initial stages of lockdown. However, consumers are at home, so operators and regulators have encouraged them to enable Wi-Fi calling on their devices in order to minimise the traffic on cellular networks and reduce the magnitude of the potential disruptions. Some operators have also opened up their public Wi-Fi hotspots to all of their customers¹. As people and businesses relied more and more heavily on their telecom providers, Vinod Kumar, CEO of Vodafone Business, muses that “COVID has, in an odd way, highlighted the value of telcos to both users and policy makers.”

A payoff for small firms that were already committed to a digital model

Today we can see companies splitting in two groups: either overwhelmed with orders (groceries, household goods, pet supplies, pharmacy, and general merchandise) or lacking orders and interactions (automotive, furniture, luxury, appliances, and hospitality)[2]. The former has largely been behind the upsurge in ecommerce traffic, something that Hussein credits with driving strong consequential volume in postal logistics. Anglada comments further, saying the recent Accenture survey showed “broadband services exploding. Cloud services, the remote workplace management,

[1] Analysys Mason - COVID-19 is revolutionising digital communications and testing providers’ reliability and ability to innovate - 16 April 2020

[2] Deloitte - Changing consumer, digital marketing and impact of Covid-19 - 14 May 2020

has been very relevant across all the countries we have surveyed. Security has become as well a mainstay of all these efforts.” The biggest disruption for OTT communications service providers was caused by group and video calling because these services went from being niche features to mainstream services in a matter of weeks. Service providers such as Zoom experienced localised service interruptions while they were rushing to scale up capacity[3]. Kumar confirms that “all our SaaS offerings that we have in our marketplace have seen a pickup in demand.”

Technology can offer many solutions in times of social distancing, including virtual doctors and access to information regarding the latest policies and economic and social support. The COVID-19 pandemic is forcing governments to be more creative in how they respond to their citizens’ needs. The UN stressed that while harnessing technology is beneficial overall, countries should be mindful of the risk of misuse, data privacy concerns, and ensuring citizens without internet access are not left behind[4]. Only a few SMEs have managed to operate remotely during the COVID-19 crisis. As a result, the coronavirus has had a disproportionately negative impact on SMEs overall. In Japan, for instance, just 10% to 20% of employees in SMEs have been able to work virtually during the pandemic compared to more than 50% of those who work for large companies. Early evidence from Hubei province in China suggests that SMEs have also been slower than large companies to reopen after the lockdown; and in France, SMEs are about 2.5 times more vulnerable to job losses and closure than larger counterparts[5].

SMEs play a critical role in the global economy, accounting for over 90% of businesses worldwide and half of global employment. The latter proportion is even higher in emerging markets, where they are the source of over 70% of jobs and generate more than half of national GDP. Unfortunately, the gap in digital capabilities between large companies and SMEs is likely to widen. A survey of businesses in Singapore revealed that only 50% of SMEs had plans for digital transformation, compared to over 98% of larger companies[5]. Granryd is keen to mention that only “those with a keen interest in digital services will flourish in this new digital world.”

Developing economies with poor cloud and online access have suffered most

Today’s connectivity levels have saved from 150 million to 300 million jobs, safeguarding \$8 trillion in global GDP—around twice the size of Germany’s economy in 2019. In the US, current connectivity levels have enabled online retailing to grow by 15% to 30%, food deliveries to rise by 90%, and online grocery shopping to skyrocket

[3]Analysys Mason - COVID-19 is revolutionising digital communications and testing providers’ reliability and ability to innovate - 16 April 2020

[4]World Economic Forum-How governments are communicating online during the COVID-19 crisis-5 May2020

[5]BCG - A \$2 Trillion Plan to Bring Two Billion More People into the Digital Age - 11 September 2020

by 140% during the crisis. Crucially, because of connectivity, at least 100 million school children and 200 million university students worldwide were able to continue their education online despite the pandemic. In low-income countries (LICs), 70% of households aren't yet covered by fixed broadband networks—and despite the enormous progress in coverage that has occurred in recent years, 33% are still out of reach of a 4G mobile network. In middle-income countries (MICs), the corresponding numbers can be as high as 24% and 9%, respectively[6]. This is why Hussein points out that “the developing countries feel the brunt of this crisis even more so than developed countries.”

Anglada has notes that “where access to cloud has been more pervasive, [...] these [countries] have proven to be more resilient in the digital workplace management, the business continuity. [...] These are the countries where we have seen the most agility.” This situation points to a greater problem that Granryd is quick to mention, explaining that “digital inclusion is critical here. If we're not careful, we will actually realize that the world will become completely bifurcated between the ones who are fluent in technology and the ones who are not.”

An opportunity to provide seamless quality across customer channels

A large portion of digital communications goes through mobile networks, but the handsets used for these interactions are not faring as well as the networks they connect to. Granryd says the GSMA members “forecast 60% down on [handset] sales for 2020. [...] For 2021 we are forecasting 11% up.” Kumar notes that “today we are seeing a contraction in demand because the businesses have been paralyzed and they actually can't function.” OTT application-to-person (A2P) communications services will benefit from the suspension of in-person business-to-consumer (B2C) interactions because this will lead to a significant increase in demand for A2P (and P2A) direct-to-consumer communication channels. It will also teach consumers that have never engaged with a chatbot to interact with brands and organisations through their OTT communications services and social media apps[7]. That is why Kumar also feels that “there will be a bounce back in the next 6 to 12 months,” in line with the GSMA handset sales forecasted rebound in 2021.

Anglada states that “people are starting to look for resilience in connectivity, and consistency in services.” The general shopping landscape is changing like never before. Customers are accessing multiple touchpoints during a purchase but there is a significant disconnect within companies. 75% of consumers expect consistent

[6] BCG – A \$2 Trillion Plan to Bring Two Billion More People into the Digital Age – 11 September 2020

[7] Analysys Mason – COVID-19 is revolutionising digital communications and testing providers' reliability and ability to innovate – 16 April 2020

interactions across all departments, but 58% say they feel like they're communicating with separate departments and not one company[8]. Anglada confirms that "we are seeing now more need from the customer to have an omnichannel consistent experience across [physical and digital] channels."

Telcos must think beyond voice and data and turn towards entertainment services

As the impact of the pandemic on business increases, companies in the Telecom sector must adapt in order to emerge from the crisis ready for the new reality. That means focusing on five areas that are going to be critical for the future: Rethinking the omnichannel approach and the digital experience of the customer; Preparing for potential government interventions in the economy, such as asymmetric taxation targeting high-growth sectors, or restricting dunning measures to protect vulnerable consumers; To manage liquidity carefully and prepare for a potential surge in bad debt; To assess acquisition opportunities; To consider entering new high-potential market segments, such as online education or telemedicine[9]. The revenue associated with voice services will most likely decrease, as most operators will continue to provide voice services for free or at a capped rate. Roaming revenue will be negligible until travel restrictions are lifted, but even then it will be far from pre-crisis levels[10]. "Planning our infrastructure and our capabilities for a volatile environment that can potentially require significant scaling is a capital allocation challenge," echoes Kumar.

"It's important to leverage this situation to expand into new kinds of products, into new partnerships that brings [telcos] beyond the traditional voice and data services," says Anglada, "they go into value-added services." Granryd concurs, adding that "we will see more entertainment applications, more mobile money types of applications, becoming more of a touchless society. Cloud is increasing as well, particularly when the connection to the cloud is done through mobile." For most companies, they need to stabilize during rapid unexpected change - focusing on employee health and safety, financial stability, and operational decisions. It's all about managing the crisis as quickly as you can. Once a business has made rapid stabilizing decisions, they shift to reopen in their new environment. In this second phase, companies focused on enabling remote work for employees, reopening businesses and communities, and finding new ways of communicating with customers, at a massive scale in some cases. And finally, companies that have successfully stabilized and normalized, emerge and grow to become a more digital, agile company - and begin prepping the 'Next Normal' post-crisis[11].

[8] Deloitte - Changing consumer, digital marketing and impact of Covid-19 - 14 May 2020

[9] PwC - The COVID-19 crisis has accelerated the Digital Transformation across industries and can lead to a wave of consolidation in the TMT sector - 23 June 2020

[10] Analysys Mason - COVID-19 is revolutionising digital communications and testing providers' reliability and ability to innovate - 16 April 2020

[11] Deloitte - Changing consumer, digital marketing and impact of Covid-19 - 14 May 2020

The emergence of collaborative strategies in public and private sectors

“What I imagine for the future is more collaboration,” Hussein suggest, “more involvement with the private sector.” Even within the private sector, there is a growing collaborative current that is sweeping the industry. Anglada identifies it as “an ecosystem: I am really good at this space but I share the pie with other players that will help us expand and go into new types of services to thrive.” This will be true across broadband and mobile products, as Granryd explains that “with the introduction of 5G, we’re going to get ultra low latency and very high speed. [...] Entertainment is really going to be one of the key winners in 5G.” This was seen early on: with people stuck inside and not on the move, there’s a pronounced switch to desktop traffic and purchases, while social media has grown quickly. In Q1 2019, the share of traffic coming from social media was 6%. This jumped to 8% for Q1 2020[12]. “Future-ready businesses are more adaptable at their core, they have a culture that embraces change,” Kumar points out, “they have a culture where resource reallocation is done more easily than businesses that may be used to a more predictable environment.” Social media companies, built entirely around digital platforms, are at the forefront of this future.

Meanwhile, for telcos, native voice to OTT VoIP substitution will accelerate. Consumers are using voice interfaces on OTT apps more frequently and in contexts that were previously offline (such as for schooling and access to health services). This habit will be hard to break. All OTT communications service providers will rush to launch in-call entertainment features such as gaming, video co-watching and other collaborative functions to close the gap with services that have become popular recently. This will strengthen the stickiness of such features and likely make them core strategic elements after the crisis is over[13].

Innovation must remain inclusive as the sector consolidates

COVID is helping to push 5G faster, increase use of analytics, grow the use of A.I. and machine learning to analyze the explosive volume of data, support rollouts of blockchain which can fix damaged supply chains by processing and verifying transactions quickly, enhance focus on always-connected PCs, promote connected vehicles and drones, all while stirring the debate on digital privacy that accompanies such progress[14].

Granryd believes that “the world will become much more digital and we need to keep up with digital capabilities. That is why inclusion is so important.” Anglada points to the

[12] Deloitte - Changing consumer, digital marketing and impact of Covid-19 - 14 May 2020

[13] Analysys Mason - COVID-19 is revolutionising digital communications and testing providers' reliability and ability to innovate - 16 April 2020

[14] Forbes-The Top 10 Digital Transformation Trends Of 2020:A Post Covid-19 Assessment-11 August 2020

specific issue of territoriality, saying that “data residency is going to be more challenging become if I want to innovate, I need to share.” Kumar thinks that, to do this, “we will see more shared economy models that can enable the public sector and private sector to work together in areas like healthcare and education.” However, Hussein points out “this requires resources, it requires planning, strategy, and sometimes we don’t get these resources as fast as we need them. We need to privatize some of these public resources if they are not able to be sustainable and if the government is not able to provide them with the resources that they need. This will lead to mergers and collaborations.” The opportunities are therefore diverse and plentiful.

Public-private efforts can make more people connected for better global interactions

On the private sector side, “You’re seeing many of the global telcos discussing how they can create this layer of digital services that trade at much higher multiples because they have a multiplier effect in reaching the customers,” Anglada points out. But that can only be done in concert with the resources that the public sector is willing to provide for customers to access such connected services.

Many governments have supported the short-run provision of connectivity in their COVID-19-related relief measures, but most haven’t earmarked funds for digitization in their long-term recovery plans. Fewer than half of the 18 High Income Countries (HICs) and Middle Income Countries (MICs) studied by BCG15 plan to invest in expanding or improving the connectivity infrastructure for rural users; just five have designated funding for SME digitization; and only two nations have announced measures to upgrade people’s digital skills. Only a quarter of them have set aside funds to digitize industries such as health care, education, and government. In the face of such limited government support, telcos won’t be able to bridge the digital divide by themselves. That’s a crying need for a new social contract between telcos and society to ensure that providing connectivity is financially sustainable[15]. “If you want to build resilience,” offers Kumar, “you have to look into competitors using each other’s supply chains in a time of crisis.”

As the pandemic keeps the spotlight on the critical role of connectivity, we see unprecedented momentum to accelerate efforts to bridge the digital divide. “We’ve actually developed the Digital Declaration within GSMA,” explains Granryd, “and we now have more than 100 CEOs of big corporations that have signed up. It’s an aspirational goal, but it’s a way of taking responsibility.” Governments, business -

[15] BCG – A \$2 Trillion Plan to Bring Two Billion More People into the Digital Age – 11 September 2020

including telecommunications companies—and society must seize this watershed moment to close the gap between the digital haves and have-nots, once and for all. Reducing the digital divide by half over the next five years will require a \$2.1 trillion investment. If the public and private sectors collaborate and act quickly, they can provide high-speed internet access to around 80% of the world's population by 2025, compared to just 53% today[16].

This collaborative approach to spreading connectivity would serve all stakeholders, tightening the digital divide while generating operating revenues for telcos and fiscal revenues for governments involved in the value chain. The future will be digital, inclusive, connected, and shared for comprehensively mutual benefit.

[16] BCG – A \$2 Trillion Plan to Bring Two Billion More People into the Digital Age – 11 September 2020

WORKFORCE SECTOR PANEL



Sharan Burrow
General Secretary
**International Trade
Union**



Moussa Oumarou
Deputy Director-General for
Field Operations & Partnerships
**International Labour
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Roberto Suarez-Santos
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WORKFORCE TRADE SECTOR PANEL

INTRODUCTION

The pandemic crisis had an immediate impact on employment. Some workers were told to stay home and make do with reduced salaries. Others were forced to continue to work from home, which brought a whole set of new challenges. Others still, lost their jobs altogether. Companies too were forced to rethink their employment strategies, often at breakneck pace. The gig economy provided some flexibility but didn't solve the broader problem. We examine the impact of the crisis on employment dynamics and management relationships, the spillover effect of the slowdown across employees and employers, the challenges for corporate employers both large and small, as well as the internal transformation required to face these challenges and form new employment models to build resilience and value across a disrupted worker supply chain.

ABSTRACT

- *Companies are digitizing the relationship between employer and employee, shifting focus towards productivity rather than presence*
- *The informal sector will be hardest hit, along with gig economy workers affected in the wake of large job losses in non-essential industries.*
- *Parts of the world where people have poor financial resources, which naturally leads to poor access to health and education, are really feeling the impact*
- *Human concerns are not separate from technological advances at all, but integral for organizations looking to capture the full value of the technologies they put in place*
- *Our ability to proactively equip our teams with not just physical resources, but skills, mindsets, behaviors and values, will be critical in ensuring that we build back better*
- *Companies need to design roles and structures around outcomes to increase agility and flexibility, and formalize how processes can flex, thus leading to resilience*
- *The best approach is to build a tool kit that will be useful no matter how an employee's specific role may evolve. Focus investments on four kinds of skills: digital, higher cognitive, social and emotional, and adaptability and resilience*
- *In tandem with honing digital skills and an improved infrastructure, corporate culture and leadership skills must focus on empathy. Control has to some extent give way to trust*
- *Employers will streamline their workforce, using a base of highly trained full-time staff then leveraging additional flexible workers in times of higher business volume, creating just-in-time employment*
- *The darker side of this technological new age is an enabled form of surveillance with new monitoring of remote workers and the collection of employee health and safety data, which require discipline and transparency with regulator to avoid oppressive misuse*
- *Reskilling and upskilling will now be as much the responsibility of the employer as of the employee, particularly in an employment landscape with shorter horizons*

An employment crisis that shifts power to employers

Companies have gone from digitizing the relationship between firm and customer to digitizing the relationship between employer and employee[1]. With more data available to track worker deliverables, companies are gaining power over their staff. This can leave a responsibility gap waiting to be filled. 32% of organizations are replacing full-time employees with contingent workers as a cost-saving measure[2]. As a result, “what stands out most is [...] the uncertainty around people’s health, and the uncertainty around their financials. [...] Life and your livelihood,” explains Johnny C. Taylor, Jr, CEO of the Society for Human Resource Management.

The COVID crisis has also changed the expectations of employers with regards to how their staff deliver value. “I am not paying you just to be in the office, [...] I want objectives,” says Roberto Suarez-Santos, Secretary General of the International Organization of Employers, “I want your autonomy, I want your motivation.” Rather than focusing on presence, the emphasis has shifted to productivity. However, this might not be sustainable as signs of burnout are already starting to show.

While demands on workers rise, particularly with shifts to remote working, governments have been slow to impose new rules due to a lack of detailed information and a fear of losing their competitive edge. “You have a growing authoritarianism in governments,” declares Sharan Burrow, General Secretary of the International Trade Union Confederation, “which means a tax on rights is increasing.” Forecasts point to 12.6% unemployment in OECD and Euro area countries, and up to almost 17% in US, by Q4 2020[3]. As uncertainty spreads with the prolonged duration of this crisis, job security continues to erode, proving to be the most noticeable change in this new reality.

Workers affected globally, particularly in the informal sector

Unemployment has had detrimental impact in sectors dealing in non-essential consumer goods, like the garment industry, or durable goods like the automotive industry. Moussa Oumarou, Deputy Director General of Field Operations and Partnerships at the International Labour Organization, says this is “because such investments are no longer in reach for many families and others who fear the future and prefer to hold on to their savings.” He goes on to say that, because governments in more fragile countries either can’t or won’t help, “companies operating in the informal sector are all the more likely to be wiped out during the pandemic.”

[1] World Economic Forum - 5 ways COVID-19 has changed workforce management - 2 June 2020

[2] Gartner Research - 9 Future of Work Trends Post-COVID-19 - 8 June 2020

[3] OECD (2020), Unemployment rate forecast (indicator). doi: 10.1787/b487f2cf-en (Accessed on 29 September 2020)

Suarez-Santos provides scale to this argument by stating that “60% of the occupied population has no decent job, no labour conditions, because they are in the informal sector.” The little aid that is being made available, like mortgage payments moratoria or unemployment benefits implemented in Western economies, is not available to informal workers, who already operate in precarious conditions. Companies that typically rely on informal workers are meant to take on more responsibility for them in these difficult times. Not all of them do.

“In the white collar sector,” explains Burrow, “remote work has become much more prevalent.” While this might be hailed as a solution to the crisis, it also brings with it wider questions on worker rights with regards to work-life balance, definition of working hours, as well as health and safety issues in environments that the employer cannot directly influence (ie. employee homes).

Overall, Taylor, Jr believes that “hospitality, and travel and tourism related businesses are the ones that have been the most negatively impacted.” While these sectors also rely on informal workers, Taylor, Jr goes on to say that rising unemployment in these industries has a wake effect on the gig economy, where many more workers are also active. This effect has diminished opportunities in gig contracts and seasonal work, further impacting the global workforce.

A crisis impacting developing countries hardest

Taylor, Jr points out that, though the crisis remains global, “those parts of the world where those human beings are beset with poor financial resources, which naturally leads to poor access to health and education, those areas are really feeling the impact [...] potentially for generations.” These populations cannot receive adequate health treatment, which means they cannot keep working. Since they are usually unskilled too, their jobs are easily replaceable, putting them further at risk. And when layoffs come with little to no compensation, they end up in the worst possible situation, often with families to feed. Burrow confirms that “it’s the countries that are not as wealthy that will have a long-term impact if there is no global solidarity.”

A challenge to build resilience at the company and the employee level

Taylor, Jr explains that “there is a unique opportunity to upskill employees,” to ensure they have the right resources to survive in the workplace beyond the crisis. COVID-19 has reinforced our conviction that human concerns are not separate from technological advances at all, but integral for organizations looking to capture the full value of the technologies they’ve put in place. In those parts of the world where the technology has been available, one of the biggest barriers was the difficulty

of building models to integrate humans with those technologies[4]. Burrow concedes that “we need to manage reshoring with technology but we also want to see jobs in those supply chains.” In poorer countries where access to technology is scarce, support is needed to help businesses digitize to stay ahead of the pandemic curve. “This downward spiral must be stopped with appropriate measures for enterprises and workers,” adds Oumarou, pointing to the need for business continuity support and employer income support measures.

Our ability to recognize and proactively equip our teams with not just physical resources, but skills, mindsets, behaviors and values, will be critical in ensuring that we build back better[5]. “This is where tripartite social dialogue [between governments, employers, and unions] and strong social protections became vitally important to avoid a continuous downward spiral,” confirms Oumarou. Suarez Santos mentions the need to set clear priorities, namely as “health and safety is a key element to assure business continuity.” As we strive to ensure resilience for businesses, we must keep in mind that, as Burrow declares, “we cannot have a future based on denial of rights, and therefore exploitation.” The biggest challenge is for employers to continue to train their employees to prepare them for the world after COVID-19, while building resilience within their organization that doesn't compromise worker health, rights, or well-being.

Transforming employment to focus on adaptability and embrace constant change

In its 2019 centennial declaration, the International Labour Organization “already highlighted the essential role of skills development to prepare workers for the future of work, characterized by robotics, artificial intelligence, and digital operations of enterprises,” explains Oumarou. With this in mind, companies need to design roles and structures around outcomes to increase agility and flexibility and formalize how processes can flex. Companies will thus transition from designing for efficiency to designing for resilience[6]. Indeed, if employees are taught how to build a learning mindset, it will prepare them well for dealing with a constantly, even sometimes abruptly, changing environment. Thus, resilience considerations will rebalance a company's priorities and become just as important to strategic thinking as cost and efficiency[5].

Such changes require strong leadership. Rather than trying to stop an inevitable storm of change, New York Times columnist Thomas Friedman encourages leaders to “build an eye that moves with the storm, draws energy from it, but creates a platform

[4] Deloitte Insights - *Returning to work in the future of work* - 15 May 2020

[5] World Economic Forum - *5 ways COVID-19 has changed workforce management* - 2 June 2020

[6] Gartner Research - *9 Future of Work Trends Post-COVID-19* - 8 June 2020

of dynamic stability within it.[7]” This feeds directly into a company’s culture, and how it must adapt too. Taylor, Jr feels that companies need to ask “why do we exist and how to we want to experience this existence? [...] That is what culture is all about.”

Reskilling programs at small organizations (fewer than 1,000 employees) are often more successful than those at large ones. Smaller companies are better at following agile principles—making bold moves more quickly because they don’t have to shift around large groups of people to try something new. They also may be more willing to fail, because they have fewer layers of approval to go through. At the same time, smaller companies tend to have a clearer view of their skill deficiencies, so they’re better at prioritizing the gaps they need to address. The best approach is to build a no-regrets skill set—a tool kit that will be useful no matter how an employee’s specific role may evolve. It pays to focus investments on four kinds of skills: digital, higher cognitive, social and emotional, and adaptability and resilience[8]. This applies to both large and small firms seeking to support their staff’s evolution and growth.

More broadly, Burrow explains that “there are commitments from the European Union to mandate due diligence,” following “the UN Business and Human Rights Principles: companies taking responsibility for risk assessment, not just for financial risk but for human rights risk and environmental risk.” This wider definition of responsible business practice means that “we are talking about mentality and attitude,” says Suarez-Santos, prompting firms to ask “How do I integrate a new health and safety culture that will remain?”

The rise of just-in-time employment and digital tethers

Burrow suggests that companies “need to look at how you map the need for industry policy to drive a transformation.” Oumarou goes further, saying “it is not enough to return to the status quo before the pandemic started.” In tandem with honing digital skills and an improved infrastructure, it is necessary for corporate culture and leadership skills to focus on empathy. Control has to some extent give way to trust. People are learning how to do work disparately and with far less oversight. Firms are building more adaptive teams, are more consistently in touch with each other and connection has become a priority in the name of working remotely[9].

Ultimately, however, Taylor, Jr believes that “the mix is increasingly going to be, as employers think about it, almost just-in-time employment.” Employers will streamline

[7] Aspen Institute - Thomas Friedman on human interaction in the digital age - 10 January 2017

[8] McKinsey - To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now - 7 May 2020

[9] World Economic Forum - 5 ways COVID-19 has changed workforce management - 2 June 2020

their workforce, using a base of highly trained full-time staff as they leverage additional flexible workers in times of higher business volume. “In 2019,” Oumarou explains, “the [ILO] declaration for the future of work set out a roadmap for actions to meet the challenges of globalization.” These are intended to promote sustainable and inclusive economic growth through decent work principles for all.

A lot of digital tools are already helping businesses push through the pressures of the COVID crisis. For example, the UK healthcare system has seen years of digital evolution take place within weeks. In 2019, less than 1 percent of appointments took place via video link, with the vast majority in person. Now, doctors assess 100 percent of patients by phone, with only about 7 percent proceeding to face-to-face consultations. This shift has meant that clinicians must learn how to do effective and safe remote diagnoses[10]. And while this kind of upskilling will make a difference in advanced sectors like healthcare, Suarez-Santos also notes that “these new realities are bringing incredible opportunities for people who did not have any possibility of income before.”

The darker side of this technological new age is an enabled form of surveillance. Even before the pandemic, organizations were increasingly using non-traditional employee monitoring tools, but that trend will be accelerated by new monitoring of remote workers and the collection of employee health and safety data[11]. While this kind of data can be used for constructive means, it requires discipline and transparency with regulators to ensure that it does not become an oppressive employment practice.

The public sector, private enterprise, and employees can find balance

Oumarou proposes that “through social dialogue, government, workers, and employer organizations can forge a strong consensus for a sustainable recovery.” Business leaders now have, in some sense, been gifted with a better idea of what can and cannot be done outside their companies’ traditional processes. The events as they have unfolded have shown how fast we can adapt and have demonstrated that we can move faster and act in more agile ways than we thought[12]. Nevertheless, Suarez-Santos is quick to point out that “we have global phenomena and we don’t have global solutions.”

Burrow suggests that “economic and Social Governance, ESG, has to become the framework but in much more robust terms.” By bringing ESG to the foreground of

[10] McKinsey - To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now - 7 May 2020

[11] Gartner Research - 9 Future of Work Trends Post-COVID-19 - 8 June 2020

[12] World Economic Forum - 5 ways COVID-19 has changed workforce management - 2 June 2020

business concerns, a new employment model could emerge that would meet the needs of both employers and employees. Suarez-Santos points out that “there are important opportunities for employers to work with digital tools improving productivity and the satisfaction of your own employees.” Taylor, Jr concurs, saying that “transformation is a focus on cultural alignment, but from both sides.”

With new ways of working forced upon us, and with large numbers of workers seeking new sources of income, a gap has emerged. Digital talent-marketplace platforms are allowing companies to bridge the supply–demand mismatch, serving as the connection between companies that are hiring and workers who will need some degree of reskilling[13]. Organizations should evolve their thinking about technology from taking a purely substitution view (replacing humans with technology) to using technology as an augmentation or collaboration strategy. Now is not the time to pull back on workforce development efforts, but instead to double down on commitments to building a resilient workforce that can adapt in the face of constant change[14].

Tying together worker rights, sustainability, and inclusivity for a better economy

Burrow believes that “we’re headed to a world that has to be employment proof and it has to be climate proof. [This] requires both responsibility, that means transparency, and the base of resilience you can build against future global shocks.” But that responsibility falls both on the employer and the employee, particularly amidst the rise of the gig economy and just-in-time employment strategies. Taylor, Jr thinks that “employees will find out that skilling, upskilling, is now my personal responsibility.” A recent Gartner poll showed that 48% of employees will likely work remotely at least part of the time after COVID-19 versus 30% before the pandemic[5]. When faced with competition from remote workers in lower income countries, personal upskilling becomes particularly relevant. Suarez-Santos confirms “that this trend of global talent competition is there.”

49.3% of senior risk experts believe high levels of structural unemployment, particularly among the young, is a likely consequence of the pandemic[1]. We have the opportunity to help this generation reintegrate the workforce using technology they are comfortable with. By working together and aiming for mutual benefit, we can build a more inclusive, fairer, and more resilient economy where everyone can bring value to their employer in new and exciting ways.

[13] McKinsey - To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now - 7 May 2020

[14] Deloitte Insights - Returning to work in the future of work - 15 May 2020

[15] Gartner Research - 9 Future of Work Trends Post-COVID-19 - 8 June 2020

[16] World Economic Forum - 5 ways COVID-19 has changed workforce management - 2 June 2020

FINANCE SECTOR PANEL



Cheryl Buss

Chief Executive:
Absa International
Absa



Tim Fox

former Chief
Economist at
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Ayman Amin Sejiny
CEO

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FINANCE TRADE SECTOR PANEL

INTRODUCTION

As the COVID-19 crisis took its toll on the global economy, treasury became an urgent concern for businesses of every size. Banks and financial institutions came under immediate pressure to help individuals and businesses access cash through any available means. Government support schemes were put in place, forcing banks to re-evaluate their risk weightings. With the crisis still underway, the finance sector has accelerated a transformation that had slowly begun over the last decade. We examine the impact of the pandemic crisis on capital requirements and transaction flows, the spillover effect of the slowdown between private and public sector financing, the challenges for financial institutions both large and small, as well as the internal transformation required to face these challenges and form new business models to seize financial revenue opportunities across a disrupted value chain.

ABSTRACT

- *Bank stocks* have not recovered as much as other indices in the second and third quarter, recording double-digit negative performance year to date due to concerns over exposure to non-performing loans and capital ratio adequacy
- As business dried up, the most vulnerable firms across industries were those with short cashflow horizons and low treasury, two attributes of small and medium sized operations
- Companies in fragile states are likely to be the most challenged, along with those in countries dependent upon the tourism and travel sector
- Any exposure to customers drawing down on open credit facilities will increase the risk profile of banks and affect their perceived value due to the higher chance of more bad loan provisions. This will be compounded by any liquidity weaknesses and any exposure to the oil & gas sector, both attributes that detrimentally affected bank stock prices
- Capital-to-asset can only be improved by reducing dividend payouts and stock buybacks, introducing compensation caps, and tightening credit policies, difficult to implement as the business landscape seeks more liquidity in the form of loans
- Fintechs are better positioned to leverage data and technology to analyze and mitigate risk. They have more cloud-based presence and leaner physical presence, and they are built for collaboration and partnerships – perfect models to take advantage of the current disrupted market landscape
- With interest rates likely to remain low, there may be revenue diversification away from interest-rate products towards fee incomes. Both banks and governments could benefit from tighter integration, particularly to deal with the problems of lending in a pandemic
- Collaboration between private banks and Fintechs, as well as with government bodies, will likely increase, enhancing data-driven risk management through digital tools

Liquidity and bad debts at the heart of business concerns

Ayman Amin Sejiny, CEO of the Islamic Corporation for the Development of the Private Sector (ICD), put things bluntly: “The finance sector went, at first, into shock.” Illustrated by a steep decline in stockmarket prices in March 2020, the COVID-19 pandemic crisis hit the banking and finance industry more than other sectors. Indeed, bank stocks have not recovered as much as other indices in the second and third quarter, recording double-digit negative performance year to date. Only the energy sector has performed worse, with almost all other sectors showing positive returns over the same period.

Lockdowns, border closures, and strict hygiene procedures forced many businesses to shut down. This triggered immediate liquidity concerns with banks and wider financial firms pressured to provide solutions. Absorbing this liquidity shock meant supplying vital credit to the corporate sector and to households. To facilitate this, central banks and governments worldwide enacted policy measures to provide greater liquidity and support the flow of credit. The potential impact of these counter-cyclical lending policies on the future stability of banking systems is unclear. It is hoped that the strengthened capital positions of banking since the global financial crisis of 2008 could allow them to absorb this shock without undermining their resilience[1].

Tim Fox, former Chief Economist at UAE banking group Emirates NBD, explains that “banks have already begun taking provisions in [the second quarter of 2020] for bad debts that are likely to materialise later this year.” Though Non-Performing Loans (NPLs) have been contained until the second quarter of 2020, Fox expects more NPLs to be declared in the second half of the year. This has led many institutions to review their risk positions, particularly in light of a possibly longer pandemic impact over the medium to long term. Cheryl Buss, CEO of pan-African banking group Absa International, states that protecting employees and helping clients survive the liquidity hurdle are priorities, though another critical facet is “how we preserve capital and how we manage risk.”

Small and medium sized banks detrimentally affected

In terms of companies suffering the most amidst this crisis, Sejiny believes “the most affected ones were SMEs, just because they are already operating on very small margins, it’s very competitive, and they already have to deal with a lot of challenges.” As business dried up, the most vulnerable firms were those with short cashflow horizons and low treasury, two attributes of small and medium sized

[1] World Bank – Banking Sector Performance During the COVID-19 Crisis – August 21, 2020

operations. This is most likely to be where NPLs materialize first, as those small businesses find themselves unable to meet monthly debt obligations.

The same applies in the banking sector, where “many smaller or mid-sized regional banks are not well diversified,” explains Fox, adding that “the crisis could become more challenging for them.” Larger financial institutions can offset their weaker lending operations with stronger fee-based business arms. As some companies become vulnerable in the downturn, well-funded rivals are likely to swoop in to buy out their competition, prompting a wave of mergers and acquisitions that can serve larger banks with investment banking services. Buss confirms that “we see a lot of discussions around possible mergers and acquisitions as clients with deeper pockets are able to seize opportunities.” Fluctuating currency exchange rates also provide more accessible acquisition prices for companies seeking to expand into new territories from another foreign currency-driven territory.

Weaker states and tourist spots more deeply impacted

While the crisis had a truly global impact, some regions and countries fared better than others. For Sejiny, “companies in fragile states, or states with low [per capita] income, are likely to be the most challenged.” This is because fiscal flexibility is narrower in such countries, which restricts the amount of aid that governments can provide to the finance sector and other facets of the local economy.

Fox also adds that “countries that are dependent on tourism and travel will be disproportionately affected [...] which will also have repercussions on the retail and hospitality sectors of those regions.” This is also where governments will need to step in more deeply to help steer their economies through this crisis. Buss points out that “the emergence of collaboration is going to be key. [...] What has often been a negative sentiment in terms of how government and private sector come together, I don’t think is a choice anymore.”

Aid packages ranging from subsidized loans to furlough schemes have been used around the world to alleviate short term pressures on individuals and businesses. However, as the crisis continues, these measures will no longer be sustainable and new solutions will need to be found to preserve liquidity.

Exposure to non-performing loans likely to cause increasing pressure throughout 2020

On the surface, says Buss, “clearly there is a big psychological impact, not only on our staff but also on our clients and within the communities.” One aspect that is hurting business across all sectors is, according to Sejiny, the lack of predictability.

With no clear visibility over customer demand, combined with shifting rules and regulations on how to conduct business, companies are struggling to plan ahead and stay afloat. Buss explains that, for banks, “what we have to overcome is how we build resilience, how we reach out and assist clients.”

This will only become harder as the crisis continues. Fox believes “it will be in the next six months that the true extent of the pressure on the banking sector will be revealed, as NPLs start to rise.” Consequently, any exposure to customers drawing down on credit facilities will increase the risk profile of banks and affect their perceived value[2]. On global markets, borrower assistance provided by governments appeared to have a strong immediate impact on bank stock prices. Such policies, which typically include the introduction of government guarantees, automatically transfer risks from banks’ balance sheets to the sovereign. In turn, borrower assistance requires significant fiscal commitments. In developing countries, where there is less room for fiscal expansion, announcements of borrower support had a neutral or even negative effect on stock[3].

Fox goes on to say that “banks and financial institutions will still be facing cost pressures well into the rest of 2020, resulting in more layoffs with negative consequences on demand for their services.” This will be compounded by any liquidity weaknesses and any exposure to the oil & gas sector, both attributes that detrimentally affected bank stock prices on global exchanges[3]. After all indices dropped sharply in March then recovered, the banking and oil sectors were the only ones continuing to show negative returns on a year-to-date timeline.

Balance sheet rebalancing needed to replenish provisions and capital ratios

Substantial transformation is likely to occur in the banking sector. Fox explains that restructuring balance sheets to ease pressure on cash flows will require “better risk management, stronger operational resilience and continuity planning, less reliance on physical space, redesigning branches and offices, leaner employment strategies, but mostly more focus on quality over quantity.” This will require investment in technology and provisions for negative performance, both of which will be challenging in a crisis environment with lower profitability. Capital-to-asset ratios like Common Equity Tier 1 ratios, which measure a bank’s capital relative to its risk-weighted assets, can only be improved by reducing dividend payouts and stock buybacks, introducing compensation caps, and tightening credit policies[4]. The latter in particular will be difficult to implement as the business landscape seeks more liquidity in the form of loans. Only with government support to fill that

[2] Deloitte - Impact of COVID-19 to the Banking Sector - August 2020

[3] World Bank - Banking Sector Performance During the COVID-19 Crisis - August 21, 2020

[4] McKinsey & Company - Banking system resilience in the time of COVID-19 - July 28, 2020

resulting lending gap can this transformation take place, keeping banks well capitalized as they continue to support their customers.

Another issue that needs to be addressed within financial institutions is the notion of infrastructure financing gap. Buss explains that “The infrastructure gap going into the crisis was about U\$15 trillion” spread across 56 countries[5]. Large portions of infrastructure funds were diverted into healthcare and pandemic support packages as COVID-19 cases surged. To properly restore this missing infrastructure funding, Buss urges more collaborations between the private and public sector, particularly in more developing regions like Africa. Such collaborations will drive more banks towards project financing instruments, a possible source of profitability in a distressed business landscape.

More digital transaction models will emerge, steering the sector towards Fintechs

While most banks have already run substantial cost-cutting programs, some may look to achieve further cost efficiencies by, for example, shutting brick-and-mortar branches and migrating customers to other service channels[6]. Sejiny agrees, adding that more business “is going to be online, [...] you need to have biometric capabilities to onboard clients.” He also believes that technology will be used more widely for background checks and Know Your Client verifications. This renewed appetite for technology in the banking business model calls for smart partnerships to adapt quickly in ever-shifting market conditions.

“Fintechs are clearly well placed to weather this storm due to their leaner operating models and structures,” explains Fox. This is largely because they are better positioned to leverage data and technology to analyze and mitigate risk. They have more cloud-based presence and leaner physical footprints, and they are built for collaboration and partnerships – perfect models to take advantage of the current disrupted market landscape[7]. Buss confirms that “when you look at what clients will be wanting, digital is key,” which will make it critical to partner “with Fintechs, understanding what is coming out and really being fluid and agile to meet those demands.”

Much like their larger competitors, Fintechs are shifting expenses towards variable costs to match the transaction-based nature of their business. More broadly, payment and wealth-focused fintechs are investing in additional digital infrastructure to withstand stress to their systems from higher transaction volumes[7]. This bolstered

[5] *Global Infrastructure Hub – Outlook – outlook.gihub.org*

[6] *McKinsey & Company – Banking system resilience in the time of COVID-19 – July 28, 2020*

[7] *Deloitte – Beyond Covid-19: New Opportunities for fintech companies – Q2 2020*

strength can only serve to expand their reach and strengthen partnerships with more traditional banks seeking technological agility and new revenue streams.

Diversification towards fee-based revenue streams and public-private partnerships

As these new partnerships and business models roll out during and after the crisis, Fox believes “there may be diversification of revenues away from interest-rate products towards fee incomes, with interest rates now likely to remain low for years to come.” Sejny concurs, pointing out that “lots of opportunities created in this sector will be in cash management products. [...] You’ll do inventory financing, receivables financing, payables financing.” The range of fee-based products and services can help banks differentiate themselves in what promises to remain a crowded market.

Other unique features banks can use to position themselves beyond COVID-19 bear a direct relation to the pandemic itself, namely on the environmental front. “Younger generation customers are likely to be choosing banks on their Environmental, Social and Governance (ESG) credentials,” explains Fox. To reach this younger customer segment, banks should therefore showcase their ESG competences as they tackle the disruptions from this crisis.

Other sectors can also benefit from the less detrimental impact COVID-19 has had on them. Buss points out for example that “commodities trading has not been overtly negatively impacted, [so] we see an opportunity for Africa to develop its agricultural sector.” Similar observations have been made in Latin America where 16% of the world’s food and agriculture production takes place, and where large portions of countries’ exported goods are food and vegetable based.

Another opportunity lies in public-private partnerships between governments and financial institutions as the crisis creates demand for new transactions. Banks and governments have already come together in certain ways; for example, US banks are delivering government relief funds through the Paycheck Protection Program. But both banks and governments could benefit by becoming more tightly integrated, particularly to deal with the problems of lending in a pandemic[8]. To that end, private sector banks can help central banks intervene to support the economy. This can happen on two fronts. To mitigate funding liquidity risk, central banks can deploy lending operations or changes to bank reserve requirements, both of which can be managed in partnership with the private sector. To mitigate market liquidity risk, central banks can also use private financial institutions to help with market

[8] McKinsey & Company - Banking system resilience in the time of COVID-19 - July 28, 2020

instrument purchase programs that reduce spreads and increase market transaction flows. However, central banks need to manage this new credit risk, another area where specific instruments can be developed to reduce or swap this risk with the private sector[9].

More presence at every stage of global supply chain transactions as the sector recovers

In a recent study, McKinsey & Company finds that in two milder scenarios, in which GDP does not recover to its pre-COVID-19 level until 2021 or 2023, U\$100 billion to U\$400 billion in common equity tier-1 (CET1) capital would be wiped out in Europe, the United Kingdom, and the United States. The good news is that the European and US banking systems in aggregate can withstand damage on that scale, though individual banks may not fare so well[10].

European, UK, and US financial systems differ in critical ways, which makes comparing their capitalization levels difficult. Their social-safety nets and accounting practices differ significantly as well; many EU countries have more comprehensive systems, while US banks tend to reserve for losses faster than their European peers do. This leads to the conclusion that US banks' capital will be hit sooner but will recover faster[10].

On a more regional level, “what we need to ensure gets enhanced is that industry supply chain intra-Africa,” says Buss. This can be supported by banks looking to finance new supply route transactions since, as Sejny points out, “in any industry value chain, financial institutions will be much closer to every step.” Fox goes on to confirm that “supply chains may be re-routed around the world, which may complicate the resumption of normal trading patterns.” Whatever the impact of the crisis on global value chains, banks and financial services firms can benefit by deploying more agile, digital business models, using more collaborative partnerships with Fintechs, and focusing on more data-driven risk management strategies to fulfil market demands for sophisticated financial products.

[9] International Monetary Fund – Central Bank Support to Financial Markets in the Coronavirus Pandemic- May 6, 2020

[10] McKinsey & Company - Banking system resilience in the time of COVID-19 – July 28, 2020

ENERGY SECTOR PANEL



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ENERGY SECTOR PANEL

INTRODUCTION

The crisis completely pivoted demand for energy, most notably in electrical power and in oil derivatives. Between lockdowns putting stress on electricity grids with a latter demand curve and a grounded airline industry causing an abrupt drop in jet fuel demand, the industry was hit hard. Since the beginning of the year, energy is the single worst performing sector on the US stockmarket. However, this has made fertile ground for renewable energy sources and solutions, though not evenly so. We examine the impact of the crisis on the different segments of the energy sector, the spillover effect of the slowdown across fossil fuel and renewable energy companies, the challenges to harness hydrocarbons and clean energy sources, as well as the internal transformation required to face these challenges and form new production and distribution models to build resilience and value across a disrupted supply chain.

ABSTRACT

- *The drastic curtailment of global economic activity and mobility during the first quarter of 2020 pushed down global energy demand by 3.8% relative to the first quarter of 2019 and may drop over 6% in 2020, wiping out 5 years of demand growth*
- *Electricity demand dropped quickly with confinement measures but steadily recovered as measures were gradually softened. In less than 10 weeks, the USA increased its renewable energy consumption by nearly 40% and India by 45%, showing*
- *Across all major regions, the power mix has shifted towards renewables following lockdown measures due to depressed electricity demand, low operating costs and priority access to the grid through regulations. This can point the way to a new energy mix*
- *The collapse in the price of oil, which accounts for 40 percent of Africa's exports and 7.4% of GDP, has hit the economies of the oil exporting African countries*
- *Negative oil & gas stock performance points to need for better ESG performance*
- *Along with depressed electricity demand, power grids have managed heightened shares of wind and solar PV, while it will be two years at least before demand for refined oil products recovers from its 20% drop, with the outlook for jet fuel particularly bleak*
- *Hydropower output remains the largest uncertainty in 2020, as it accounts for almost 60% of all renewable generation globally but its seasonality makes it unpredictable*
- *Of more than 200 oil and gas companies surveyed in a recent PwC report, only 7% identified themselves as Digital Champions while 70% identified as Digital Novices*
- *Each million dollars invested in renewables or energy flexibility would create at least 25 jobs, while each million invested in efficiency would create about 10 jobs. Compared to current plans, an accelerated energy transition could add 5.5 million more jobs by 2023*
- *IRENA recently reported that the cost of solar had fallen by 82% over the last 10 years, while BloombergNEF states that renewable energy is now the cheapest energy source in two-thirds of the world. Investing in renewables will provide higher returns going forward*

The rise of renewables within the energy mix

With electricity more essential than ever to power the resilience of businesses worldwide, energy has never been more important to survive. However, access is not equally prevalent across geographies. “We have seen fragility around access for businesses, particularly SMEs and Micro-SMEs,” observes Sanda Ojiambo, Executive Director of the UN Global Compact, “those relying on income for business and jobs that don’t necessarily translate immediately into digital or virtual opportunities, and also fundamentally, access to key resources needed to drive business forward including energy and green energy supplies.”

Electricity demand dropped quickly with confinement measures but steadily recovered as measures were gradually softened. When confinement was eased in Italy and Germany in April, electricity demand showed the first signs of recovering. This trend was confirmed in May, as more countries (India, France, Spain, Great Britain) softened lockdown measures. In India, recovery seemed faster but was interrupted in the last two weeks of August, while EU countries are now closing in with 2019 levels. Electricity demand in China dropped quickly with confinement measures but by June demand had recovered and was close to 6% higher than 2019 levels (weather corrected). July data confirms the recovery^[1]. However, Dietmar Siersdorfer, Managing Director Middle East and UAE of Siemens Energy, points out that operations at energy companies have been heavily impacted by social distancing. It is unclear at this stage if this recovery is sustainable in current working conditions.

In the oil and gas sector, “we saw in April the unprecedented OPEC + record number of cuts in oil production,” explains Joseph McMonigle, Secretary General of the International Energy Forum. These cuts unfortunately did not ease the market into recovery, though McMonigle points out that G20 countries were working together to help the wider energy sector recover.

Previous energy crises provide insight into what happens when the oil price crashes and how the use of fossil fuels has subsequently rebounded. But this crisis is different, because it is demand-led. The scale of the fall in demand, the speed of change, and how widespread it has been have generated a radical shift that seems to be more than a temporary short-term drop in demand for fossil fuels, at least in the power sector. With the fall in demand, renewable sources (mainly wind and solar) saw their share in electricity substantially increase at record levels in many countries. In less than 10 weeks, the USA increased its renewable energy consumption by nearly 40% and India by 45%. Italy, Germany,

[1] International Energy Agency – Covid-19 impact on electricity – 15 October 2020

and Spain all set new records for variable renewable energy integration to the grid. The ongoing increase in renewable energy into the grid results from a mixture of past policies, regulations, incentives and innovations embedded in the power sectors of many forward-thinking countries[2].

Reduced demand caused less disruption for lower cost providers

The latest data show that the drastic curtailment of global economic activity and mobility during the first quarter of 2020 pushed down global energy demand by 3.8% relative to the first quarter of 2019. McMonigle mentions travel restrictions imposed by strict lockdowns as having impacted demand for energy, particularly gasoline and jet fuel. If lockdowns last for many months and recoveries are slow across much of the world, as is increasingly likely, annual energy demand will drop by 6% in 2020, wiping off the last five years of demand growth. Such a decline has not been seen for the past 70 years. Renewables demand is expected to increase because of low operating costs and preferential access to many power systems. Recent growth in capacity, with some new projects coming online in 2020, will also boost output. Biofuels however, are likely to see demand decline, directly impacted by lower transport activity[3].

Though power grids have been tested as demand for electricity evened out consistently across the globe, Siersdorfer is quick to point out that “the energy systems are today, within the countries but also between the countries, very much connected.” He points to the GCC and the EU as examples of well-connected grids with strong resilience inherently built into their infrastructure.

Governments reacted to the pandemic crisis by implementing large stimulus programs designed to help the most vulnerable individuals and companies. As these programs are rolled out, Ojiambo believes that “what is really important is that these funds are distributed in an inclusive, forward-looking, and sustainable approach.” While the physical health of many may depend on healthcare infrastructure, the financial health of many more depends on access to energy and funds to keep their businesses running and their employees paid.

Billions still lacking basic energy access while renewables drive growth

There are 1.3 billion people around the world without access to modern energy,” states McMonigle, adding that “2.5 billion without clean water, and 800 million are in extreme poverty, [...] and I’m worried that COVID is widening the divide.” Ojiambo prefers to adopt a more positive view of regional progress, believing that

[2] World Economic Forum – COVID-19 is a game-changer for renewable energy. Here’s why – 16 June 2020

[3] International Energy Agency – Global Energy Review 2020 – April 2020

“what is more important is to look at what area has the greatest potential to build forward in a way that makes more sustainable use of our energy resources. [...] I think the issue is, how to you move from generation to distribution and then to sustainable use within businesses?”

Across all major regions, the power mix has shifted towards renewables following lockdown measures due to depressed electricity demand, low operating costs and priority access to the grid through regulations. In India, the gap between coal and renewables significantly narrowed after the first lockdown measures were taken. The share of coal in the electricity mix has consistently stayed under 70% since then, which is aligned with India's long-term ambitions to increase the share of non-fossil based electricity. With progressive release of lockdown measures in China starting in the second half of March, the coal share recovered slightly, while renewables maintained a high share in the mix. In several EU countries, most notably in Italy, Spain, and Germany, lockdown periods have seen new highs in variable renewables contribution as a share of electricity demand. The share of variable renewables remained high as lockdown measures were softened. Throughout summer several factors affected the variable renewables share. Demand patterns were impacted due to economic activity and residential cooling. Solar photovoltaic infeed in general ramped up. Wind production, which generally declines during summer, experienced some volatility in weekly output[4].

Building a more inclusive industry as Africa and others embrace renewable opportunities

For Siersdorfer, “the challenge for all of us in the industry is to maintain our capabilities and maintain the electricity systems of the future.” He believes that all stakeholders need to work together to implement modern electricity systems. Ojiambo states that “it’s about re-examining how we do business, taking a more inclusive approach to energy.” This is particularly evident in Africa. Every vaccine needs a fridge and every fridge needs electricity. Today, more than 600 million Africans lack even the most basic access to electricity. Millions more lack clean cooking facilities or access to proper sanitation, all of which lead to high mortality especially among women and children. Another billion Africans in the next 30 years will need clean, affordable and reliable energy for livelihoods and lifestyles. That’s a large chunk of humanity for which this crisis has exposed the quality energy access challenge. The collapse in the price of oil, which accounts for 40 percent of Africa’s exports and 7.4% of GDP, has hit the economies of the oil exporting African countries. The “perfect storm” of sharply lower oil prices and demand destruction is proving devastating for the economies of Nigeria and Angola, which,

[4] International Energy Agency – Covid-19 impact on electricity – 15 October 2020

along with South Africa, Egypt and Algeria are the largest economies in Africa[5].

“Spending in the energy sector in 2020 is down about 20%,” comments McMonigle, while “investment in the upstream oil & gas sector is down 35%, and even in the clean energy sector, we’ve seen a dip of about 10%” Renewable energy has so far been the energy source most resilient to Covid-19 lockdown measures. Renewable electricity has been largely unaffected while demand has fallen for other uses of renewable energy. In Q1 2020, global use of renewable energy in all sectors increased by about 1.5% relative to Q1 2019. Renewable electricity generation increased by almost 3%, mainly because of new wind and solar PV projects completed over the past year and because renewables are generally dispatched before other sources of electricity. Along with depressed electricity demand, power grids have managed heightened shares of wind and solar PV. The use of renewable energy in the form of biofuels declined in Q1 2020 as consumption of blended fuels for road transport fell[6]. As governments support more public-private partnerships to develop renewable energy sources, Ojiambo believes that “the Sustainable Development Goals as well as the 10 principles of the UN Global Compact are really a key guiding path that can help drive more of these inclusive and equitable partnerships.”

The crisis is impacting oil & gas companies in a different way. Demand for refined products is down at least 20%, and has plunged refining into crisis. We think it will be two years at least before demand recovers, with the outlook for jet fuel particularly bleak. The immediate effects are already staggering: companies must figure out how to operate safely as infection spreads and how to deal with full storage, prices falling below cash costs for some operators, and capital markets closing for all but the largest players[7].

Ushering in Economic, Social, and Corporate Governance through digital transformation

“The reason for the downward trend in energy sector stocks and equities is this greater focus on climate and clean energy,” comments McMonigle. “The sector really needs to do a better job on Economic, Social and Corporate Governance (ESG) investing and ESG metrics.” This implies a growing use of data measurement tools and digital technology. “We have to bring down costs,” says Siersdorder, explaining that “we have learned in the last few months that we can do a lot of things in digital communications, we can collaborate differently. This will

[5] World Energy Council–COVID-19: Exposing The Perils Of Energy Poverty & Hunger In Africa–17 June 2020

[6] International Energy Agency – Global Energy Review 2020 – April 2020

[7] McKinsey & Company –Oil and gas after COVID-19: The day of reckoning or a new age of opportunity?
– 15 May 2020

lead to less office space, less inventory, and that also helps us at the end of the day to get our costs down.”

Of more than 200 oil and gas companies surveyed in a recent PwC report[8], only 7% identified themselves as Digital Champions. Among the other 93%, the top five technologies or planned technologies that oil and gas executives identified for their digital transformation include: Manufacturing execution systems (MES) that link individual pieces of equipment to the company’s enterprise resource planning (ERP) system, facilitating coordination of operations; Cloud computing that allows the company to manage large volumes of data generated in operations and improves data quality, data availability and single-source transparency across complex value chains; Energy analytics that support optimization of energy use and costs across company operations; Connectivity and Internet of Things (IoT) in which machines carry sensors that support remote performance monitoring and efficient equipment integration; and Machine learning to analyze data and identify operational patterns and shortcomings that can be used to improve efficiency, for example, in predictive maintenance. The Digital Operations Study found that two issues stood in the way of the companies surveyed making digital transformation a business priority. The first was a lack of focus or insufficient understanding of customer and user requirements to sufficiently define the business issue that needs to be addressed. The other was uncertainty about the financial returns from digital investments. This made top executives more reluctant to approve big digital projects[8].

Ojiambo feels that a more pressing question is, “how do we really address now the sustainability of our energy sources and what we do? How can we then look at systems that make our product, the output of our work, more inclusive and sustainable? As the global production sector looks to grow back, hopefully in a more green and sustainable manner, one would then ask, can we effectively and efficiently meet this new global demand?” As the crisis hit, grid operators, sought the cheapest (and cleanest) supply source to balance the lower demand. Therefore, weaker electricity demand increased the share of renewables in the system while sending the more polluting and costly carbon fuels to the back of the queue. This effect happened even at a time of historically low fossil fuel prices, making carbon the biggest loser in the pandemic. The interplay of technology development, regulations and market conditions during COVID-19 has triggered a faster paradigm shift for the power sector. But the longer-term effect of the crisis is yet to be seen, as softer lockdown measures have shown a recovery of demand[9].

[8] PwC – 2020 Digital Operations study for oil and gas

[9] World Economic Forum – COVID-19 is a game-changer for renewable energy. Here’s why – 16 June 2020

Investing in more efficient and profitable business models with purpose

Siersdorfer believes that, when it comes to critical infrastructure, it's important that "you unman that operation so that you can operate it from a remote site where you are secure. This is something that we as an industry and the customers have to work on." This shift to unmanned or remote operation structures requires significant investment. To attract the kind of funds required for such a transition, the value procured must be clearly identified.

Energy transition investment can boost GDP and create jobs in the 2021-23 recovery phase. Green investment will be vital to mobilise upfront finance for the transition. Each million dollars invested in renewables or energy flexibility would create at least 25 jobs, while each million invested in efficiency would create about 10 jobs. Compared to current plans, an accelerated energy transition could add 5.5 million more jobs by 2023[10]. McMonigle adds that, "to the extent that we can extend ESG metrics and have more transparency, I think that will help investment in the long term."

"It's time to really examine how the whole sector can demonstrate principles, purpose, and profit," states Ojiambo, "because it's very important to drive forward the sector in a sustainable way that continues to deliver long-term profit for all the actors engaged." Africa again provides a template to move forward. Net zero carbon pathways are not all or only about accelerating the clean power revolution and uptake of decentralised and renewable electrification across Africa. For its industrial development, for jobs and lifestyles, Africans will also benefit from the development of the global clean hydrogen vector and the roll-out of its huge gas reserves. The disruption of energy systems as a consequence of COVID-19 provides an opportunity to diversify the energy mix in Africa and decouple economic growth and CO2 emissions by hastening the deployment of hybrid clean power, clean fuels and flexible storage pathways. The falling cost of micro and utility scale wind and solar energy provides an affordable solution to energy poverty while off grid systems can provide access to areas not covered by national grids. Engaging in both clean power and clean liquids pathways and realising co-benefits of clean, affordable and reliable energy options for meeting new demand for energy for lives, livelihoods and lifestyles in Africa is shaping a new era of energy for humanity and the need to humanise the energy transition process[11]. "It provides the opportunity [...] for customers to be willing to pay a premium for sustainably made products and services," concludes Ojiambo.

[10] International Renewable Energy Agency – *The Post-COVID recovery: An agenda for resilience, development, and equality* – June 2020

[11] World Energy Council – *COVID-19: Exposing The Perils Of Energy Poverty And Hunger In Africa* – 17 June 2020

Consolidation to drive the robustness of the renewables sector

“Hydrocarbons are here to stay for the next several decades,” declares McMonigle. “Certainly, we need to be doing more on clean energy and expanding that but I think we have to be realistic about that part.” In the oil sector, the upstream cost curve will likely stay flat. While geopolitical risks will continue to be a major factor affecting supply, new sources of low-cost, short-cycle supply will reduce the amplitude and duration of price fly-ups. The battered shale oil and gas subsector will nonetheless continue to provide supply that can be rapidly brought onstream. Its resilience might even improve as larger, stronger players consolidate the sector. Declining demand, driven by the energy transition, and global oversupply will make the task of OPEC and OPEC+ harder rather than easier. Global gas and LNG will have a favorable role in the energy transition, ensuring a place in the future energy mix, supported by the continual demand growth in the coming decade. At the same time, the opportunity to lead has never been better—separation between market leaders and laggards will be increasingly sharp. Shaping regulation will matter, and enforcing operating standards will benefit industry and market leaders. Similarly, resilience and balance-sheet strength are non-negotiable. A new, strategic view on what the capital structure should look like, and the resultant dividend policy, is needed. The challenge of the energy transition will continue[12].

“We are at the beginning of a revolution in that area,” says Siersdorfer. “Our energy industry has been historically a very traditional industry and COVID showed that we have to change rapidly in order to deal with such a situation. Now we have to make it robust.” There are three key factors behind the increase in renewable energy during this crisis: Renewables have been supported by favourable policies. In many countries, renewables receive priority through market regulation. The priority for the first batch of energy to the network is given to the less expensive source, favouring cheaper and cleaner sources; Continuous innovation – Renewable energy has become the cheapest source of energy. IRENA recently reported that the cost of solar had fallen by 82% over the last 10 years, while BloombergNEF states that renewable energy is now the cheapest energy source in two-thirds of the world; Preferred investment – Renewable energy has become investors' preferred choice for new power plants. For nearly two decades, renewable energy capacity has grown steadily, and now 72% of all new power capacity is a renewable plant[13]. “Regulation has to be one that provides an even more enabling environment for the energy sector to prosper,” comments Ojiambo, “that will allow stable and sustainable pricing to allow more access to green and renewable energy sources for consumers, but also provide incentives for more people to enter the renewable energy sector.”

[12] McKinsey & Company –Oil and gas after COVID-19:The day of reckoning or a new age of opportunity? – 15 May 2020

[13] World Economic Forum – COVID-19 is a game-changer for renewable energy. Here's why –16 June 2020

Simplify, accelerate, improve, and streamline to emerge ahead

“The opportunity is that we develop new supply chains, with more local value add,” offers Siersdorfer. Leading oil and gas operators will act now to ensure resilience, in large part by promoting new commercial and collaborative models with an ecosystem of suppliers to radically simplify standards, processes, and interfaces; lower costs; and increase the speed and quality of the entire system. Deep strategic integration into the supply chain will be critical. Companies with scale, strong balance sheets, best-in-class integrated portfolios, advantaged assets, and superior operational abilities should create value even in a challenged future. Basin leadership has also long been a source of distinctiveness and value creation in oil and gas. Similarly, low-cost commodity suppliers with first-quartile assets have also thrived. Finally, the industry features some focused business models that create value through scale, capability and operational efficiency in specific segments[14]. “Particularly in the energy sector, everybody is paying much greater attention to the resilience of their supply chain and of their value chain,” Ojiambo confirms.

In the International Energy Agency’s estimate for 2020, renewable energy demand increases by about 1% from 2019 levels, in contrast to all other energy sources. Renewable electricity generation grows by nearly 5% despite the supply chain and construction delays caused by the Covid-19 crisis. In doing so, renewables almost reach 30% of electricity supply globally, halving the gap with coal (from 10 percentage points in 2019). Overall, renewables growth is more sluggish than last year but in line with the general slowing trend since 2016. The output of hydropower remains the largest uncertainty in 2020, as it accounts for almost 60% of all renewable generation globally and is dependent on rainfall and temperature patterns. Solar PV is set to increase the fastest of all renewable energy sources in 2020. However, uncertainty remains over capacity growth in 2020, especially for distributed solar PV applications. Wind power is expected to increase the most in absolute generation terms among all renewables[15]. McMonigle explains that stimulus packages are benefiting the energy industry, particularly the green energy sector as EU countries consolidate progress in this sector going forward.

Businesses and investors can play a role in boosting clean investment, both by promoting low-carbon supply chains and by grasping the opportunities of clean energy markets. Imperial College reported recently[16] that renewable power shares offer investors not only higher total returns relative to fossil fuels but also lower

[14] McKinsey & Company – *Oil and gas after COVID-19: The day of reckoning or a new age of opportunity?* – 15 May 2020

[15] International Energy Agency – *Global Energy Review 2020* – April 2020

[16] Imperial College Business School – *Energy Investing: Exploring Risk and Return in the Capital Markets* – May 2020

annualized volatility. As governments begin to shape new regulations and support businesses for the post-COVID-19 world, their focus should be first on taking stock from the lockdown and promoting green conditions to sustain and effectively manage a higher share of renewables. Another priority should also be redirecting investment and increasing innovation for improvements in batteries, storage, digital markets, blockchain and smarter grids[17].

As the world emerges from the clutches of this pandemic crisis, it has shown that governments, industry, and consumers are ready to move to a more inclusive and more sustainable energy ecosystem built on a resilient value chain that combines local and global players for mutual benefit.

[17] World Economic Forum –COVID-19 is a game-changer for renewable energy. Here's why – 16 June 2020

HEALTHCARE SECTOR PANEL



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HEALTHCARE SECTOR PANEL

INTRODUCTION

The pandemic crisis thrust healthcare companies into the spotlight, from medical equipment providers manufacturing face masks to pharmaceutical companies rushing into vaccine research on an accelerated timeline. While some aspects of the crisis have served the interest of the healthcare industry, other angles require careful examination to grow from this experience into a better, leaner, and more effective healthcare sector. We examine the impact of the crisis on healthcare practitioners and patient dynamics, the disjointed effect of the crisis on pharmaceutical companies and hospitals, the challenges for healthcare companies both large and small, as well as the internal transformation required to face these challenges and form new care models to build resilience and value across a disrupted value chain.

ABSTRACT

- *COVID-19 infections have* hit every pressure point of the health care delivery system— access, safety, infrastructure, affordability, and more
- The largest undertaking that the crisis pushed onto the pharmaceutical industry remains the accelerated production pipeline for a vaccine
- The use of telehealth has accelerated, with providers seeing between 50 and 175 times the number of patients via telehealth as before the pandemic in the US
- Covid-19 is likely to prompt long-term shifts in patient behaviour, hospital workflows, pharma sales models and supply-chain tracking on European healthcare
- The biggest volume vaccine ever manufactured was against polio, 450 million doses. For COVID-19, the potential need is for 12 to 15 billion doses
- All operations executives will need to strengthen their internal ability to plan for future dramatic changes in the market. One option is to use zero-based budgeting
- With the acceleration of consumer and provider adoption of telehealth and extension of telehealth beyond virtual urgent care, up to \$250 billion, or 20%, of current US healthcare spend could potentially be virtualized
- Real opportunities lie in changing and redesigning patient pathways to include virtual technologies so that hospitals only need to treat the patient episode itself
- Companies should invest in diversifying their supply chains and also include a surge component in their procurement planning
- Pressures on funding are leading to greater scrutiny of spending and its impact. It is likely that the issues and developments arising from responses to COVID-19 could act as a catalyst for wider adoption of Value-Based Healthcare (VBHC)

Pressure to react quickly and accurately to a constantly moving target

Carlos Nueno, President of Teladoc Health International, points out that “speed of decision-making is really what is shaping the industry today, adapting to a very unstable environment.” COVID-19 infections have hit every pressure point of the health care delivery system— access, safety, infrastructure, affordability. There is a reset going on as we emerge from the initial dramatic impacts of coronavirus and the COVID-19 infections that followed. We have to be cognizant of not only the lack of funds that payers have, but also understand the very unstable footing of providers and health care systems. It’s important to align incentives for all involved, to make sure the money flows into those things that will improve the health of individuals[1].

As the virus took hold, it became urgent to adapt the healthcare transaction process, particularly in hospitals where the risk of infection was high. “One of the things that will stay with us going forward is the actual design of the patient pathways,” believes Majid Kaddoumi, President for Central & Eastern Europe, Middle East and Africa at Medtronic. “How we design hospitals,” he explains, “how hospitals interact with patients has to be designed in a way that requires minimal interaction.”

The largest undertaking that the crisis pushed onto the pharmaceutical industry remains the production of a vaccine. Thomas Cueni, Director General of the International Federation of Pharmaceutical Manufacturers & Associations, states that “normally it takes 10 to 15 years to develop a new vaccine and here we are talking about maybe first COVID-19 vaccines coming up for approval at the end of this year. [...] This is so fast.” The pace of change that swept the industry has been unprecedented, and has forced unprecedented reactions from every player in the sector.

A need to redesign the patient transaction process

“There are businesses that are relying more on face-to-face,” says Nueno, “and clearly those have suffered. Even hospitals have suffered through this COVID-19.” Kaddoumi goes further, stating that “any company that does business within the hospital setting is impacted.” As a result, the use of telehealth has accelerated, with providers seeing between 50 and 175 times the number of patients via telehealth as before the pandemic[2]. However, Cueni notes that “The pharma industry was much better prepared than many governments were for a pandemic. One of the reasons was contingency planning.” Companies with the resources to develop such planning came out ahead, but many smaller firms were taken by surprised and struggled to keep up with a rapidly spreading virus.

[1] *American Journal of Managed Care - How Can the COVID-19 Pandemic Enhance Value-Based Health Care Delivery? - 12 August 2020*

[2] *McKinsey & Company - Zero-based budgeting for health plans: Dealing with uncertainty ahead - 24 September 2020*

Impact is driven by the strength and modernity of local healthcare systems

Kaddoumi feels that “regions that have put laws and strictly monitored social distancing and other recommended behaviours are the regions that will have the least impact.” However, research shows Covid-19 is likely to prompt long-term shifts in patient behaviour, hospital workflows, pharma sales models and supply-chain tracking on European healthcare. The pandemic already has sharply increased the number of first-time users of telehealth and accelerated the growth of online pharmacy channels. Hospitals are implementing new triage methods for diagnosis and treatment and seeking to ensure local sources for vital items to back up the existing supply chain. As the healthcare landscape evolves, pharma companies plan to change their go-to-market models and reconfigure supply chains to improve product tracking. To adapt to the speed and breadth of change, leaders are increasing investment in digital capabilities. As the healthcare industry evolves, healthcare profit pools will shift, creating new winners and losers[3]. “My biggest concern,” offers Cueni, “is low and middle income countries where you have health systems which are inherently weak.”

The race to develop a global vaccine

For Cueni, there is no question of what the real challenge will be. “The biggest volume vaccine ever manufactured is against polio, 450 million doses,” he explains. “Here we talk about a potential need for 12 to 15 billion doses to get herd immunity against COVID-19 because the expectation is that you will need two doses per person.” For this production and distribution project to succeed, Nueno says “we need a solid action plan on two fronts: safety, we need to feel safe, and economic, we need strong economical measures.” Kaddoumi adds that such plans will help many cope, since “there is a huge amount of pressure on most healthcare practitioners around the world, trying to firefight in many ways, and this system depends on these healthcare practitioners.” COVID-19 has been linked to dramatic shifts in demand and extreme uncertainty within payer functions, which in turn could lead to bloated administrative spending in 2021. Executives seeking to right size and create variability in their budgets may want to consider a tried-and-true formula that has not gained traction in the healthcare world: zero-based budgeting[4].

Planning for financial and logistical disruption as the new normal

“A lot of people are saying that this crisis is the end of globalization. I think it’s the opposite,” says Nueno. “We need to take advantage of the situation to accelerate transformation of our businesses.”

[3] Bain & Company – Covid-19 Will Have Long-Lasting Effects on European Healthcare – 2 July 2020

[4] McKinsey & Company -Zero-based budgeting for health plans: Dealing with uncertainty ahead – 24 September 2020

Acceleration has indeed marked the industry, creating uncertainty in forecasts and expectations. All this uncertainty may result in budget “buffering”: increasing budgets to be able to respond to any potential scenario. Claims shops, member enrollment or service centers, call centers, and corporate functions may add significant padding to budgets to deal with the possibility of further membership shifts and utilization swings. Buffering may lead to oversized 2021 budgets. The zero-based budgeting process encourages budget owners to ground their projection in “drivers” of work. An example of a driver might be the number of claims likely to be processed next year—itsself driven by membership and utilization shifts. One of the potential benefits of a budget that links its funding needs to membership-shift assumptions or claims-volume assumptions is that those assumptions can be challenged, or refined, as the year progresses. Considering strategies to control administrative costs, while allowing for variability to deal with uncertainty in the months ahead, is likely to be one of the key ways payers can prepare. That refinement may be particularly helpful in the volatile COVID-19 era[5].

Cueni believes that, to grow stronger as an industry, “we need to reach out, we need to develop partnerships, public-private partnerships.” He also notes that “the normal business model will continue to be the mainstream.” However, even within this framework, Kaddoumi believes that we must build “trust within the organization, dropping down the walls, making sure that collaboration truly is something that is promoted but also made easy.” Only by collaborating like companies have done so far in facing this crisis can we develop resilience when the next pandemic hits.

All operations executives will need to strengthen their internal ability to plan for future dramatic changes in the market. A best practice is to begin the process of “black swan planning” at regular intervals (typically quarterly). As we move into the “Fight” phase, the uncertainties of the post-COVID world will persist, requiring greater supply chain resilience, responsiveness, and efficiency. Accordingly, medtech and biopharma companies should accelerate their investments in digital and supply chain capabilities, most notable in end-to-end visibility. Beyond this, they will need to evaluate the impact of emerging disruptions and the potential benefits of mitigating actions in near real-time, adjusting inventory and production processes. Companies will also need to update their supply network strategy to ensure they are appropriately considering multiple dimensions of risks, most importantly of crisis-related disruptions. Organizations must start preparing for an environment in which disruptions are the norm and not the exception—and develop flexible and resilient ways of working that position the organization to thrive regardless. This means embracing digital records, remote working, and digital collaboration for nonessential personnel. Whether permanent or event-driven, these types of changes will require

[5] McKinsey & Company - *Zero-based budgeting for health plans: Dealing with uncertainty ahead* - 24 September 2020

careful planning and execution to implement, both to generate value in the medium term and to help the organization prepare for the next disruption[6].

A move towards collaboration and telemedicine

“What we see now in pandemic preparedness is truly an open collaborative effort,” describes Cueni, “fully respecting that, when it comes to the product, you still have IP rights.” Kaddoumi adds that “bringing together companies that work in the same field is actually very beneficial, it provides a much stronger platform for accessibility.” He defines possible ways to differentiate the resulting output through types of technology used, build method, or quality level.

Nueno focuses on a more specific avenue to explore: “Virtual care, or telemedicine, is a perfect example of how patients and healthcare professionals are using technology to communicate.” With the acceleration of consumer and provider adoption of telehealth and extension of telehealth beyond virtual urgent care, up to \$250 billion, or 20%, of current US healthcare spend could potentially be virtualized. The potential impact is improved convenience and access to care, better patient outcomes, and a more efficient healthcare system. However, there is a gap between consumers’ interest in telehealth (76% in the US) and actual usage (46% in the US). Five models for virtual or virtually enabled non-acute care appear immediately viable: On-demand virtual urgent care as alternatives to ER visits; Virtual office visits where no physical exam or procedure is required; Near-virtual office visits combining virtual access to physician consults with “near home” sites for testing and immunizations; Virtual home health services to leverage virtual visits, remote monitoring, and digital patient engagement tools; and Tech-enabled home medication administration[7]. “What is really going to transform healthcare is the integration of technology within the healthcare ecosystem,” confirms Nueno.

Of course, technology comes at a cost and the investment needs to be measured against the value it unlocks. Value in general will reign supreme as we talk about the new normal, and hopefully value-based insurance design will help align providers through alternative payment models, enhance technologies and electronic medical records, and importantly, engage patients along the way to make sure that all stakeholders are on the same path to improve health but understanding that we need to be fiscally responsible, even more than ever, given the constraints that have emerged post-COVID-19[8].

[6] BCG – *Health Care Operations in the Postpandemic World* – 7 July 2020

[7] McKinsey & Company – *Telehealth: A quarter-trillion-dollar post-COVID-19 reality?* – 29 May 2020

[8] American Journal of Managed Care – *How Can the COVID-19 Pandemic Enhance Value-Based Health Care Delivery?* – 12 August 2020

Achieving agility through connected systems that reach out to patients directly.

Kaddoumi considers the broad question of access by asking “how do you expand and continue to provide access with the patient staying outside the hospital, connecting with their healthcare practitioners?” Nuño provides a response by pointing to the wide emergence of connected health to cope with new constraints imposed by the virus. These connected technologies include robotic surgery equipment and telemedicine solutions to track data and treat patients within a connected ecosystem. Kaddoumi believes that the real opportunity lies in “changing and redesigning the patient pathways to include a lot of these virtual technologies so that the hospital is only needed to treat the episode.”

More broadly, healthcare systems should use the recovery as an opportunity to transform. This can mean moving closer to public sector players. “The private sector was normally not allowed in,” notes Cueni, “it was told it had a conflict of interest, but then you miss out on a lot of expertise.” He also points out that the private sector came through in this crisis, earning positive praise for its effective collaboration in searching for a vaccine.

Such promising results show that there are opportunities to accelerate additional changes at multiple levels: National and Regional, for example, taking a systematic approach to locating specialist services; System, for example, driving the formation of integrated care systems and partnerships between hospitals; Organization, for example, implementing new workforce models that encourage cross-training of staff. As they embed these improvements, however, health systems must mitigate the negative impacts of changes necessitated by the pandemic. To ensure that the best changes are retained, health systems must take steps to lock in these improvements. To strike a balance among these priorities, organizations must answer a fundamental question: How do we want to use recovery planning to reach our target state? Those health systems that build the greatest resilience and agility will be the ones that not only recover from the acute crisis of the past weeks and plan for the short term, but that permanently change the way they work for the better[9].

Geographical diversification and a focus on delivering value to patients

“I would expect there will be more geographic diversification than we had in the past,” says Cueni of the move to build more resilient and agile supply chains. This applies equally to pharmaceutical companies managing medicinal ingredients as it does to hospital dealing with medical inventory. Surge requirements run counter to common inventory management practices. Because of financial pressures, many hospitals manage their supplies on a just-in-time basis and measure their inventory

[9] BCG – Health Care’s Recovery Must Be Transformative – 15 May 2020

cycles in terms of days or even hours. Although many health providers stockpile some supplies, the practice is far from universal. Hospitals should implement comprehensive vendor reviews and make sure they have alternatives for sourcing medical supplies that may run low, rare material for specialized lab and device manufacturing, and active pharmaceutical ingredients. They should also include a surge component in their supply chain planning[10]. “The cost of losing out on opportunities is much higher than the cost of diversification,” Cueni concludes.

“The main goal now for any healthcare system,” Kaddoumi also explains, “is to be able to connect value or payment to the outcome of the patient,” rather than to the activity being performed, such as an X-ray or an examination. The focus of providers and payers is shifting to enable them to obtain better value for the money spent, and the concept of value-based healthcare (VBHC) is attracting growing attention. Patient value can be increased either by improving patient-relevant outcomes or getting the same outcomes but reducing the cost of patient care, through better use of resources. A patient perspective should be the starting point for measurements of value, and a greater dialogue between patients and clinicians to understand patient needs and mitigate discrepancies between clinical and patient-reported outcomes. COVID-19 is having an enormous impact on healthcare. It has created a growing backlog of patients waiting for elective care and has amplified many of long-term conditions of patients awaiting treatment. The crisis has prompted more extensive use of technology in patient interactions and for monitoring the health of the population, and a greater appreciation of the value of prevention in health is building. Pressures on funding are leading to greater scrutiny of spending and its impact, and difficult decisions about allocation of scarce financial resources will need to be made. It is likely that the issues and developments arising from responses to COVID-19 could act as a catalyst for wider adoption of VBHC[11]. “We are helping patients avoid a lot of inefficient processes, unnecessary movements and delays, and improving healthcare outcomes,” says Nueno. “This is a perfect example of how a global value chain is transformed by the use of technology providing a better service to the end customer.

[10] PwC – COVID-19 and the health industry – 22 April 2020

[11] Deloitte – What is the future for value-based healthcare? – July 2020

NEW WORLD MODEL

MANUFACTURING SECTOR PANEL



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MANUFACTURING TRADE SECTOR PANEL

INTRODUCTION

The manufacturing industry is a major contributor of value-added processes around the world. Amidst the COVID-19 crisis, this added value has been crippled as factories were forced to close or dramatically reduce their output due to a combined supply and demand shock. However, this has triggered a re-evaluation of human value-add within the manufacturing process, prompting manufacturers to consider alternative production models. We examine the impact of the pandemic crisis on processes and industrial structures, the compounded effect of supply chain disruptions and restrictive social measures impacting manufacturers' capacity, the challenges for manufacturing operations both large and small, as well as the internal transformation required to face these challenges and form new business models to seize production opportunities across a disrupted value chain.

ABSTRACT

- *The* manufacturing industry has had to change its operation model almost overnight to preserve its output capacity while respecting new health and safety measures. The industry is especially vulnerable since most of its workforce is employed in on-site jobs that cannot be done remotely
- Manufacturers with global supply chains are likely to find that Tier 2 and especially Tier 3 suppliers are most affected by disruptions related to the pandemic, while at manufacturing sub-sector levels, the effects of the crisis will vary greatly
- Multinational companies should expect potential cash-flow constraints from overseas operations — including cash repatriation complications and irregularities
- Over one-third of Chinese companies are accelerating automation initiatives, to only 16 percent of their counterparts in the rest of Asia, and 18 percent the rest of the world
- Interrupted global trade flows and value chains have forced companies to break the silos to improve end-to-end visibility of their internal planning processes
- 39% of industry leaders have implemented a nerve-center approach to increase end-to-end supply-chain transparency, and a quarter are fast-tracking automation programs
- Decoupling of supply chains will drive manufacturers to rely on long, inflexible supply to ensure continuity and introduce more flexibility, as demand for faster delivery increases
- As the industry redesigns its production processes, it has the chance to integrate more fully some sustainable best practices into its operations
- Companies can deploy digital solutions beyond the four walls of a manufacturing plant, reaching across the end-to-end value chain to address planning challenges
- Industry must take a leading role fostering an economic recovery with sustainability as a business imperative

A vulnerable operating model upended overnight

The manufacturing industry has had to change its operation model almost overnight to preserve output capacity while respecting new health and safety measures. Christian Hoffmann, Head of Geopolitics and International Relations at Siemens AG, confirms that “we have a lot of impact in adapting, by all means necessary, the way that we produce and manufacture things.”

The industry is especially vulnerable given that the bulk of its workforce is employed in on-site jobs that cannot be done remotely. Additionally, given the nature of the industry, manufacturers should be creating social distancing in workplaces that are typically worker-dense (e.g., manufacturing plants, warehouses, material movements and logistics, etc.)[1]. However, the key element of this change is subjective. Jacek Olczak, Chief Operating Officer of Philip Morris International, points out that “you can have great technology, great automation, great connectivity, but if your people, your personnel, your employees who have to perform some of these roles don’t feel safe, if you cannot provide that safety, the whole system is going to collapse.”

This upheaval in manufacturing operations is largely caused by what Li Yong, Director General of the United Nations Industrial Development Organization (UNIDO), describes as lower spending due to unemployment and shop closures, combined with disrupted supply chains due to lower manufacturing output. This one-two punch of supply and demand shocks has created what Mohanud Helal, Secretary General of the Economic Cities and Special Zones Authority of the Kingdom of Saudi Arabia, calls “a chain of events, including a sharp decline in global foreign direct investment inflows.” The time horizon of this radical change is still uncertain.

Layers of manufacturing sub-sectors affected in different ways

Yong points out that “enterprises operating in labour-intensive industries tend to be among those most affected.” More specifically, the deeper into the supply chain, the greater the impact of the outbreak is likely to be. Manufacturers with global supply chains are likely to find that Tier 2 and especially Tier 3 suppliers are most affected by disruptions related to the pandemic. While many large manufacturers have instant online visibility into top-tier suppliers, the challenge grows at lower levels[1]. This is why Hoffmann believes that “it’s really important that liquidity measures that are being taken to support [SMEs] liquidity, be they fiscal or monetary, can help individual companies gain access to credit and financing to weather through this storm.” The government support that countries have unlocked to keep economies running is, according to Olczak, “one of the great examples of

[1] PwC - COVID-19: What it means for industrial manufacturing - June 2020

public-private sector collaborations which is so much needed these days.” Olczak believes that such partnerships can be used more regularly beyond the pandemic crisis in the interest of society and the greater good.

Looking at manufacturing sub-sectors, the effects of the crisis will vary greatly. Construction machinery and intralogistics equipment, for example, are likely to feel much less severe effects than they did during the financial crisis due to expected government infrastructure stimuli and an increase in e-commerce. On the other hand, companies in the machine tools, plastics machinery, and steel production equipment sectors will feel the effects much more strongly. The reasons for this are overcapacities that already existed before Coronavirus (steel) and the acceleration of disruptions (E-Mobility, sustainability), which are leading to restrictive investment behaviour, such as in the car market, which is important for machine tools[2].

A global ripple effect that triggered international collaboration

Though Helal points out that “some regions were impacted more than others due to the size of their domestic outbreaks and their exposure to global spillovers.” Multinational companies should expect potential cash-flow constraints from overseas operations — including cash repatriation complications and irregularities. Cash could also be bottlenecked when goods are purchased but not supplied (or delayed and stranded). Such cash bottlenecks will likely occur in regions most affected by COVID-19[3]. Helal remains confident, observing that, “overall, the global GDP forecast declined for 2020 but there is a clear expectation of recovery in 2021.”

Yong says that, “so far, it seems that sub-Saharan Africa is less affected by the pandemic but lower foreign direct investment, tight financial conditions, and delayed investments also affect African producers.” In the US, the manufacturing sector, which employs some 13 million workers, is poised to be hit hard during this outbreak, primarily for two reasons: First, many manufacturing jobs are on-site and cannot be carried out remotely. Second, slowed economic activity has reduced demand for industrial products in the US and globally[3]. The US government quickly introduced stimulus packages directed at the manufacturing sector, followed closely by similar European efforts. Hoffmann points out that these concerted “recovery plans have been important to strengthen cohesion of the European Union.” What has been globally evidenced by this slowdown is how deeply the sector still relied on human labour.

Historically, manufacturers in China have been about three times as fast as those in

[2] Oliver Wyman - *Insights: Manufacturing Industries and COVID-19* - June 2020

[3] PwC - *COVID-19: What it means for industrial manufacturing* - June 2020

other regions to deploy industrial robots. That momentum seemed to have tapered off in the first quarter of 2020, when robot sales in China fell by 20 percent compared to the same period in 2019. Yet in a recent McKinsey survey, more than one-third of respondents in China said their companies were accelerating automation initiatives, in contrast to only 16 percent of their counterparts in the rest of Asia, and 18 percent in the rest of the world[4]. With economic data pointing to an early recovery in China, it seems the Asian giant's lead will continue as we leave 2020 behind and step forward into 2021.

Yet this pandemic crisis has affected all countries, almost at the same time. What has emerged is a clear picture of how we need to work together to recover. “Years ago during the financial crisis,” Olczak recalls, “it was very obvious that everyone has to act in order to restart the consumer confidence and economic conditions. It has been much more pronounced [this time] that you need collaboration among countries rather than competition between countries. There is no way you can leave anybody behind.”

Overcoming the fear factor to increase visibility across the supply chain

Yong says that “the greatest challenge is to ensure the survival of the firms and industrial ecosystems.” More specifically, Helal points out that the priority is “ensuring the business continuity, stability, and resilience of supply chains and trade while at the same time making sure that safety measures are still being taken to prevent the spread of the virus.” The overwhelming sentiment is one of fear – of uncertainty, of disease, of consumption choices. “If I want to reduce fear and let consumers be more comfortable,” Olczak states, “you need to give me the level of comfort that everything is under control, and supported by science-based, factual information.” Hoffmann concurs, saying that “many people are focusing on their financial stability and really trying to make sure their families are taken care of.” Populations are looking for reassurance from authorities that going back to work and resuming economic transactions is safe. That is why Olczak is convinced that “there is a great role for the government and public health officials to work on a fact-based, science-based communications plan to communicate people out of the fear.”

At the company level, a core element of manufacturing and supply-chain operations—planning—has traditionally been conducted in silos, with demand forecasting, supply planning, production planning, logistics planning, and sales and operations planning (S&OP) all handled by separate teams. Interrupted global trade flows and value chains have forced companies to break the silos to improve end-to-end visibility. As a result, the potential impact from optimized planning is more evident. However, it also requires a more sophisticated analytical approach, and collaboration across multiple functions and stakeholders[4]. This delicate balance is, in itself, a new challenge to embrace.

[4] McKinsey – Industry 4.0: Reimagining manufacturing operations after COVID-19 – 29 July 2020

Leveraging digital technology to harness Industry 4.0 solutions

Helal notes that “many businesses are shifting to online transactions, e-signing, live video conferences, and online money transfers.” He also points out that “the use of new technologies like augmented reality and artificial intelligence are increasing in manufacturing.” Indeed, industry leaders are leveraging Industry 4.0 solutions: 39% have implemented a nerve-center, or control-tower, approach to increase end-to-end supply-chain transparency, and around a quarter are fast-tracking automation programs to stem worker shortages arising from COVID-19. Digital performance management (DPM), for example, has been a popular early use case at a wide range of companies, including several small precision-engineering companies where pilots of DPM have helped boost productivity by 40 to 70%⁶. Of course, Hoffmann points out that “innovation will always play a role, but also important will be quality, reliability and integrity.” As companies transform to meet this new set of challenges, they must remain focused on delivering value to their end customer.

With the use of technology comes a discussion about ethics and morals. To that end, Olczak believes that “this is a great moment in which new technologies, for example artificial intelligence, could be more adopted for the service of humanity.” However, he also notes that “some of these conversations are very emotional rather than fact-based.” Using A.I. to replace parts of business decision making traditionally handled by humans is making many people uncomfortable, despite the clear increases in efficiency these tools provide. As companies embrace digital instruments over human staff, it remains important to keep personnel informed of the rationale behind such decisions and to take a responsible approach to manage employees respectfully and decently amidst difficult conditions. It’s important to remember that new technology can also create new jobs, rather than merely replace people.

Improving productivity through technology and public-private collaboration

Helal feels that “decoupling of supply chains will drive manufacturers to rely on long and inflexible supply in order to look for new ways very quickly to ensure continuity and introduce more flexibility. The demand for faster delivery will increase.” This is partly due to a renewed, enthusiastic adoption of e-commerce and its many conveniently fast delivery features, particularly when shops remained closed during lockdowns. Tracking movements of parts and finished goods, from manufacture to delivery, will therefore become even more essential as B2B customers come to expect similar efficiencies from their own suppliers.

Hoffmann believes that “the speed up in investment in 5G will play an important role,

and this can help improve competitiveness.” Other digital solutions allow manufacturers to automate data collection by adding sensors or directly tapping into machines’ programmable logic controllers (PLCs) to collect data and display it on live dashboards. In addition, process automation and physical automation or robotics can supplement labour capacity. Wearable technologies, such as augmented-reality glasses, can enhance remote assistance in maintenance, such as when operators need off-site assistance due to limitations on travel[5]. The combination of such solutions can help manufacturers boost their productivity in a sustainable fashion, as long as they remain able and committed to invest for the long term. This will be easier for larger companies with stronger liquidity than for cash-strapped SMEs, particularly Tier 2 and Tier 3 suppliers dealing with the full force of the crisis.

Yong has words of caution, reminding us that “it’s important to make sure that governments and businesses do not miss the moment when they need to refocus their efforts from business recovery to business continuity and seek proper policies and tools to achieve it.” This is where continuous dialogue is important for the timing of new measures to remain relevant. Olczak offers that “there are a lot of innovations that can come from the private sector and now is the question: what is the platform to talk to the public sector and how can we put it all together?”

Improving quality and sustainability as we rebuild manufacturing supply chains

“Enhanced productivity, technological upgrades, and diversification are important opportunities for advanced manufacturing,” according to Yong. Accelerated adoption will take place for quick-win solutions that help companies respond and adapt to the new norms—such as tracking employee health, enforcing safe distancing on the shop floor, and supporting remote collaboration. Differential adoption rates are more likely for solutions such as digital twins and logistics automation, which fall into a middle category requiring foundational information technology (IT), operations technology (OT), and data infrastructure. Deferred adoption is more likely for solutions that require higher capital expenditure and have unclear or long-term payback periods. Examples include blockchain, nanotechnologies, and the most advanced automation systems[5]. Regardless of the pace of adoption, Hoffmann believes that there are many opportunities to rethink our ways of doing business, particularly using contactless technological solutions to meet stricter hygiene standards.

As the industry redesigns its production processes, it has the chance to integrate more fully some sustainable best practices into its operations. Industrial symbiosis is one approach to a more sustainable and integrated industrial system that manufacturers can consider, particularly those based in industry clusters such as free

[5] McKinsey – Industry 4.0: Reimagining manufacturing operations after COVID-19 – 29 July 2020

trade zones. Industrial symbiosis establishes a network in which the waste from one process (such as materials, energy, water, capacity, expertise or assets) is used as a resource in another. Developing global industrial symbiotic relationships means going beyond the traditional focus on internal operations and expanding to new business and business partnerships across the supply chain. These symbiotic communities engage diverse organizations in a network to foster eco-innovation and long-term culture change. The Kalundborg Network, located in Denmark, is a noteworthy example of industrial symbiosis[6].

As manufacturers seek to diversify their supplier base while reigning in the length of their supply chains, Helal believes that “tighter supply networks could lead to better control of standards and product quality, as well as increased reliability and resilience of supply chains.” This could help nurture customer demand back to previous levels, assuming that such demand could be addressed within the governing frameworks of local markets. Olczak feels that “it’s the role of the regulator to create the regulatory environment and promote it so consumers go and start implementing these changes.” With clear guidelines to restore business confidence and effective communication to help consumers feel safe in conducting transactions, governments can play a key part in restarting the economy while supporting improved business practices on the part of manufacturers—a win-win equation.

A more inclusive path to resilience

A recent McKinsey survey of manufacturing and supply-chain professionals found that 93% plan to focus on resilience of their supply chain, and 90% plan to invest in talent for digitization. Companies can deploy digital solutions beyond the four walls of a manufacturing plant, reaching across the end-to-end value chain to address planning (and replanning) challenges related to disruptions at suppliers or production plants, operational challenges in managing workplace health risks, and delivery challenges posed at transportation modes or in warehouses[7]. The key remains working in tandem with every player on the value chain for mutual benefit. “It is clear that planning, preparation, and international cooperation can achieve much better results than isolated approaches,” says Yong.

There are drawbacks to the quest for resilience. Helal believes “this will impose additional costs on manufacturers because they need to invest in securing multiple suppliers in order to make sure they meet targeted production and market demand.” In their search for such flexibility, Hoffmann thinks that “one important element that companies will consider is how to allocate specific components or supply chains closer to the markets.” One variable that will influence this decision is the regulatory

[6] World Economic Forum – *Why sustainable manufacturing makes economic as well as ethical sense* – 4 August 2020

[7] McKinsey – *Industry 4.0: Reimagining manufacturing operations after COVID-19* – 29 July 2020

framework of each territory and market. This framework is best developed by regulatory bodies in cooperation with the private sector to make sure that market pressures are taken into account. “The issue is not that globalization is a problem, [but] it should include the components of public-private sector collaboration,” offers Olczak. He goes on to say that, when a manufacturer either relies on, or is part of, a multi-territory supply chain, “you don’t want the borders breaking the world into parts.”

More broadly, as a large consumer of energy responsible for more than one-quarter of global CO2 emissions, industry must take a leading role fostering an economic recovery with sustainability as a business imperative. In reshaping our world toward a new normal, industry should leverage digital transformation at an accelerated pace. Typically leveraged for productivity, digital transformation is equally effective in achieving economic and environmental resilience[8]. Manufacturing players are poised to seize the opportunity.

[8] World Economic Forum – *Why sustainable manufacturing makes economic as well as ethical sense* – 4 August 2020

NEW WORLD MODEL

AUTOMOTIVE SECTOR PANEL



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AUTOMOTIVE SECTOR PANEL

INTRODUCTION

The impact of the COVID19 crisis on the automotive industry has been immense, driven by lockdowns and social distancing measures that affected mobility worldwide. As companies across the sector struggle to survive, new trends are emerging that point towards accelerated transformation to redefine the automotive sector as a mobility-oriented industry, reaching beyond its basic product and into the lives of its end customers. We examine the sales impact of the pandemic crisis, the spillover effect of the slowdown beyond the automotive industry, the challenges for automotive companies both large and small, as well as the internal transformation required to face these challenges and form new business models to seize mobility opportunities across the entire value chain.

ABSTRACT

- *Industry* sales have dropped almost overnight. Different markets, like the premium segment and SUVs, have been less affected. Some countries like China have also begun to show signs of recovery as they slowly emerge from the pandemic crisis
- The impact on the industry has reached every type of automotive company, from Original Equipment Manufacturers (OEMs) to suppliers, distributors to dealerships, down to maintenance service providers, as well as related sectors like oil & gas and the insurance business due to a drop in personal vehicle use
- The need to maintain treasury to stay afloat is forcing OEMs to re-evaluate their portfolio and to develop more agile operations to react swiftly to month by month changes in the pandemic crisis impact on customer behavior
- The crisis has accelerated the momentum of digital transformation within the industry, forcing automotive companies to focus on more software-driven solutions to offer their customers as part of the increasing move towards CASE mobility – Connected, Autonomous, Shared, Electric
- The result is a more aggressive shift towards sustainable mobility products and autonomous driving vehicles. Both of these are likely to generate even more packageable anonymised data. Such data can provide new revenue streams and customer demand forecast modelling opportunities for industry players
- Globally, we will begin to see more recurring revenue models from OEMs, shifting away from transactional sales and more towards a sustained support of the end-user's entire mobility journey

An unprecedented and abrupt decline in sales

Dr. Martin Koers, managing director of the German Association of the Automotive Industry (VDA), predicts “a sales decline in the whole world of 14 million cars. [...] This is the [annual] demand for the whole of Europe.” Such monumental numbers are echoed by a recent report by Frost & Sullivan[1] that projects a 14% decline in motor vehicle sales in 2020. In August of this year, sales were already down 16% year-on-year in the EU countries, and down 20% in the US[2]. However, China was already showing signs of recovery with sales up 11.6% in that same month, year-on-year, after experiencing sales declines earlier in the year. These steep drops in vehicle sales have affected the entire chain of companies linked to those transactions, forcing a fast change of focus towards a broader set of mobility solutions.

Entire manufacturing plants have shut down, grinding production to a halt. Whether due to lockdowns or the need for new health and safety measures within factories and offices, manufacturers found themselves unable to output new units while distributors were forced to manage stocks of unsold units for months on end. Moreover, since the industry was not prepared for such a global and far-reaching cessation of business, treasury and liquidity quickly became an issue, threatening to put hundreds of smaller companies out of business and thousands of workers and employees out of work.

On a more granular level, Andeas Tschiesner, a senior partner in McKinsey & Company’s Munich office focused on European automotive and assembly players, observes that “the premium markets are less impacted than the volume markets,” also noting that Special Utility Vehicles (SUVs) have also been less impacted than the Alternative Power segment composed mostly of electric vehicles (EVs). This suggests that more price conscious customers have prioritized other forms of spending while more demand-driven customers have stayed the course. This in turn points to a longer recovery to pre-COVID19 sales levels since the volume markets will likely only recover in line with the global economy. Tschiesner goes on to estimate that returns to such sales levels will likely take until 2023 to occur.

An impact felt throughout the entire industry value chain, and beyond

Since manufacturing and delivery of new vehicles ceased almost overnight, the impact was felt far beyond the OEMs’ front line. Parts suppliers were unable to deliver to manufacturing plants and thus unable to receive payments. Distributors and

[1] Frost & Sullivan – Global Automotive Industry Outlook 2020 – June 23, 2020

[2] Counterpoint Research – September 2020

dealerships were unable to offer new stock to entice customers and were forced to manage their inventory in more creative ways to maintain liquidity. Maintenance declined precipitously, affecting small garages and autoshop service providers and further eroding demand for spare parts. Car rentals companies suddenly found themselves with a motor pool gathering dust due to restrictions on movements caused by worldwide lockdowns. Each of these types of companies felt the impact of this crisis on its bottom line, prompting governments to issue stimulus packages to support ailing automotive businesses.

Beyond the sector, since automotive mobility use dropped sharply, the impact was also felt in the oil & gas industry as it translated to lower demand for gasoline. The tourism sector was also affected, with more people choosing local destinations, which caused them to drive shorter distances, rather than longer trips. Personal finance firms saw the volume of loans drop significantly for car purchases, with a spike in defaults for existing car payments from cash-strapped customers. Insurance companies experienced lower premiums collections, with fewer cars on the roads. Shipping companies found themselves unable to deliver completed cars to distributors and dealerships. Meanwhile, on the public sector side, a drop in fiscal revenue due to a reduction in VAT volumes paid on new car purchases, either as part of government stimulus instruments or as a result of lower demand, added to the pressure of wider stimulus packages needed to bolster local economies everywhere.

A global crisis with cross-territory ripple effects

Drops in demand for automotive vehicles in different regions followed the spread of the pandemic across the globe. Similarly, recovery in the sector is expected to follow the emergence of countries as they implement new rules and each tackle their domestic COVID19 problems. However, the global nature of the automotive supply chain means that discrepancies in regional recovery will affect other geographies too. Dr. Koers explains that “when there was a total lockdown in Mexico, we had problems with production in Europe due to interlinked value chains.” Nevertheless, the sector’s recovery is expected to be felt first in China, where the COVID19 crisis began and where demand is now slowly returning. The US and EU territories, however, remain heavily affected with no clear horizon for recovery.

The other regional challenge is that mobility solutions, from individual vehicles to larger transportation, are not uniform across territories. In fact, even within a given country, the automotive needs in urban and rural areas are very different. This puts pressure on companies to be particularly careful in their recovery strategies, using precise data to model customer demand in fine detail and allocate resources properly to rebuild sales and production chains in a relevant and robust fashion. Moreover, this also puts pressure on the public sector to provide pertinent stimulus packages for

the industry that take these differences into account. Failing to adapt to regional or even local mobility needs could harm sector players that are already vulnerable in this pandemic crisis.

A race to recapture liquidity

According to Tschiesner, the main challenge facing the industry is “adjusting cost levels according to the new volume levels, especially on the suppliers side.” With cashflow drying up, every company needs to review its capex and opex levels on a monthly basis to react and adapt to ever-changing conditions as the crisis evolves differently from country to country. This affect small companies which are typically cash poor, while also affecting larger firms that have committed to significant capex upgrades as part of the industry’s continuing transformation. Dr. Koers echoes this by pointing out that “the key issue will be how to save liquidity in the company in order to survive and to challenge the transformation process.”

Automotive companies will need to conduct a careful review of their product portfolios to determine which products to keep and which development pipelines to maintain as they work to stay ahead of customer demand. This applies to all mobility solution suppliers across hardware and software products, particularly those where investment momentum is difficult to rein in quickly once projects are greenlit, such as launching new vehicle models or building digital solutions that require custom designs.

An accelerated transformation path towards digital solutions

To face the challenge ahead, companies will need to accelerate their transformation process, particularly on the digital side. As Dr. Koers explains, “The future is not hardware driven, but more and more software driven, so we know that digitization is key to success.” In that regard, it will be essential for OEMs to develop telematics solutions that will generate data from vehicles they can then harness for monetization and modernization purposes. Collaborations between automotive manufacturers, mobility service providers, and autonomous technology companies will help drive this push towards data generation, particularly as the industry moves more rapidly towards CASE mobility – Connected, Autonomous, Shared, Electric. Such focus is part of the reason driving up share prices of EV manufacturers like Tesla, which saw its market capitalisation multiplied by a factor of six since the beginning of the year.

This same push towards digital software solutions embedded into vehicles will also require more focus on health systems within the cockpit environment. While shared

transportation and autonomous vehicles continue to attract demand as alternatives to mass transportation, the health and safety aspect of vehicles will be ever more at the forefront of passengers' minds. Linking on-board operating systems with air quality monitoring sensors and similar solutions will build trust between customers and OEM brands, driving preferences in customer choice.

More broadly, Tschiesner believes that automotive companies will need to leverage two types of internal teams to adapt to this new industry paradigm. First, an internal team focused on reactive change to industry conditions as the crisis unfolds, such as shifting capex and opex priorities, will be essential to the survival of many companies. Second, another team focused on medium to long term strategy will also be required, liaising with the reactive change team to ensure that changes remain in line with the company's broader strategy. Through this feedback loop between the two teams, companies will be able to develop an elastic agility that will ensure both their short-term survival and long-term competitiveness as the crisis unfolds.

The internal teams will need to capture more granular data about their internal processes, including Tier 2 and Tier 3 supplier financial health. Firms that failed to compile such data were too slow to adapt to failures in their supply chain due to rapid shutdowns early in the crisis. Those that manage to successfully track this kind of data will be able to pivot quickly in emergency scenarios as they take into account cybersecurity risk, bandwidth capacity, and training requirements for new digital products. This will also enable them to develop predictive modelling instruments to pre-empt supply chain disruptions and better serve shifting customer demands[3].

New business models that point towards sustainability and autonomous driving

Dr. Koers believes that "alternative power trains, to make zero emission mobility, and digitization, which leads to autonomous cars, [...] point to a multi-dimensional transformation process. This will lead to emergences of new business models to diversify the offer to the consumers." Because more and more technology will be built into vehicles as the industry progresses, this will open the door to more partnerships between manufacturers and tech companies, both on the software side to drive better in-cockpit systems, and on the hardware side to develop new types of sensors and new telemetry to drive data generation and manage autonomous mobility.

More broadly, Tschiesner also believes that "COVID19 is basically a booster for a journey towards sustainability on the regulatory side but also on the consumer and the company side. We will see a speeding up of the transformation forces for the

[3] PwC - How companies can transform information into insight - September 9, 2020

mobility industries.” Beyond technology, the disruption brought about by this pandemic will accelerate a move towards more sustainable means of transportation, in line with individual concerns about personal health that many will catalyze into increased concern for the environment. This will push the automotive industry to focus more on providing customer mobility services rather than just technical product sales. Such mobility services will lean towards more autonomous vehicles and marginal use payment for the use of such vehicles. This will open up many types of opportunities, such as for rental companies to restructure and address this demand, using their knowledge of fleet management and their local presence.

Moreover, public sector regulation offering support for this transformation towards sustainable mobility, such as incentives and subsidies for EV purchases, will help steer investment in that direction. This is partly why Yves van der Straaten, secretary general of the International Organization of Motor Vehicle Manufacturers, is “convinced that mobility will remain for a long time a key factor of social and economic welfare.” The consequences of these combined forces will be an acceleration of the sector’s transformation through collaborative partnerships and data-driven service offerings tied to vehicle sales for a more inclusive relationship with the end customer.

Increased focus on the complete mobility journey, and more consolidation

The move away from mass transport towards more personalized and sustainable mobility solutions can drive the automotive sector’s recovery and growth[4]. Indeed, micro-mobility solutions, like one or two-seater autonomous EVs, are easy to use and ideal for congested city environments as they offer passengers better control over their health and wellness. Such highly digitalized vehicles will also allow manufacturers to model and package anonymized vehicle use data for resale to public and private sector players, unlocking innovative and predictive resource planning at the intra- and inter-urban levels. This will create new revenue streams for OEMs, as well as the many suppliers providing these solutions to them.

Suppliers themselves will be able to use this period of slower production to upgrade to more automated manufacturing processes that reduce dependence on manual labour. Using more 5G connected sensors in factories can also drive better manufacturing management, creating efficiencies and more precise output conditions[5].

Of course, industry vulnerability also creates opportunities for consolidation and expansion through mergers and acquisitions, particularly in the direction of sustainable

[4] BCG – Automotive Demand Post COVID-19 – June 2020

[5] PwC – 5G and Industrial Manufacturing in a post-COVID19 world – June 26, 2020

mobility and alternative power trains. Volkswagen China's U\$1.2 billion acquisition of a 26% stake in Chinese battery manufacturer Gotion High-Tech Company, announced on May 29, 2020, reflects such increased focus on electric mobility solutions from OEMs in China. At the vehicle portfolio level, we see similar focus on broadening the electric vehicle range reflected in Mini Minor's U\$400 million acquisition of National Electric Vehicle Sweden AB, on behalf of its Chinese parent Evergrande, announced on June 10, 2020[6]. Tshiesner confirms that "it is very likely that there will be quite a substantial consolidation because we will see that certain portfolio elements need a 'last man standing' strategy and that not so many players will be able to drive down the cost curve on conventional technologies".

A more robust yet still global industry supply chain

Already, OEMs around the world are examining ways to shift their manufacturing dependency away from China to alternative territories like Mexico, Eastern Europe, and other Asian countries, while keeping the supply chain global. While general emphasis has been put on finding ways to localize more parts of global manufacturing chains, this mostly applies to redundancy options within a global production process in emergency scenarios. Dr. Koers remains convinced that "the key challenge is to make the supply chain robust. Globalisation will not be turned back."

We are also likely to see OEMs strive to generate more recurring revenue streams from customers with digital vehicle upgrades and marginal use pricing, or even subscription-based access to vehicles, to reduce ownership liability of the end user. This could lead to shorter model lifecycles to drive increased sales while reducing global inventories, in line with earlier trends observed before the pandemic crisis began[7]. Combined with denser collaborations with tech companies to integrate data gathering, modelling, and dissemination, these trends will continue to accelerate an already fast-moving transformation sweeping through the automotive industry.

[6] PwC - Automotive deal insights: Mid year 2020 - July 23, 2020

[7] PwC - Five trends transforming the Automotive Industry - January 17, 2018

APPENDIX

WEBINAR SESSIONS

INTRODUCTION

As the COVID-19 crisis continues to impact every region of the world, clear consequences are emerging. Through public rescue packages and private sector instruments, debt levels are increasing to cover the revenue gap triggered by long lockdown periods everywhere. Moreover, the need for contactless transactions and the desire for less physical, analog processes is accelerating an already rapid digitization trend across industry sectors. At the same time, the renewed urgency to procure essential goods, and the restrictions applied to international shipping and customs procedures, have shortened supply chains. This has resulted in new manufacturing models and a stronger focus on local production, with wide repercussions in multiple industry sectors.

EXPERT OPINIONS

Our event brings together senior decision-makers, global experts, and industry leaders to discuss actionable options and opportunities within the context of this pandemic crisis.

Across recorded interviews, edited panel discussions, published industry reports, interactive exhibitions, and live conversations, we examine multiple industry sectors and tackle important dimensions of business affairs for free zone stakeholders.

In our live webinars, we will examine these impacts from different points of views, with emphasis on specific aspects of business operations both within free zones and in the wider economy.

Webinar Director



Dr Mohan Guruswamy
Chief Knowledge Officer
World FZO

WEBINAR SESSIONS

CLASSIC AND INNOVATIVE ZONE MODELS

This webinar examined the basic building blocks of a solid free zone structure, based on research from UNCTAD, the OECD, the WTO, and the World FZO. It looked at priorities to set when building a free zone from scratch, tools and solutions available to improve existing operations, and innovative business models in place in pioneering free zones around the world.



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PROMOTING CLEAN TRADE ACROSS SECTORS

This webinar looks at the role of free zones in promoting clean trade across different industry sectors, including consumer goods, food & beverage, pharmaceuticals, and other fields. Angles to examine will include types of illicit trade, weakness points in free zones, and best practices to consolidate free zones for clean and safe trade flows.



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WEBINAR SESSIONS

E-COMMERCE

This webinar focuses on the e-commerce challenges and opportunities that the crisis has created, particularly from the B2B perspective. It will look at the impact of the crisis on e-commerce trade flows in different regions and across sectors, at the advantages of moving business volume to a digital platform, and at the best ways for companies to broaden both their client base and their supply chains through e-commerce solutions.



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CUSTOMS AND BORDERS MANAGEMENT UNDER SHRINKING SUPPLY CHAINS

This webinar examines the impact of the shift towards local production on global supply chains and the resulting changes required in customs management to steer through this crisis. Questions addressed will include how to provide security and reassurance in a crisis economy deeply concerned about health and safety of imported goods, how to instigate global standards of tracking and controls to maintain health and safety in trade flows, and how to adapt to lower customs and border traffic as supply chains contract.



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WEBINAR SESSIONS

BUILDING RESILIENCE THROUGH DIGITAL INFRASTRUCTURE

This webinar looks at the importance of switching to a fully digital workflow to maximize resilience in a contactless economy. Aspects to examine include how to prioritize digitization at the free zone level and company level, what tools to use to switch analog business processes to digital, and the cost-benefit equation of digitizing operations in a crisis.



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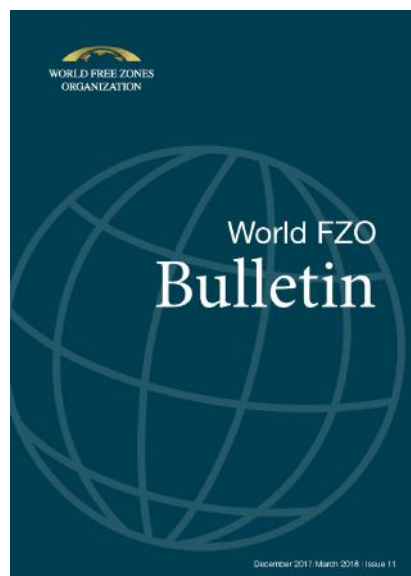
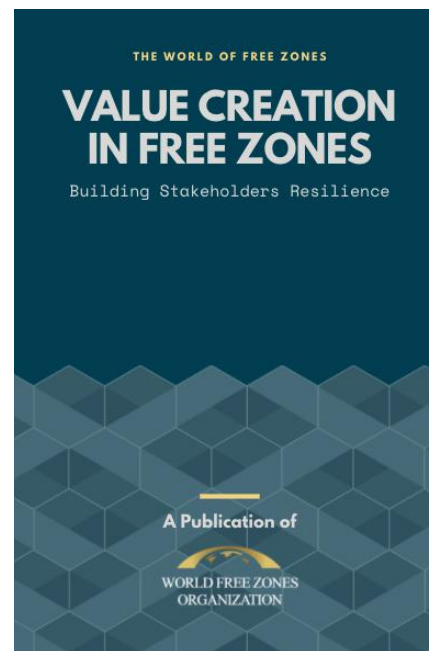
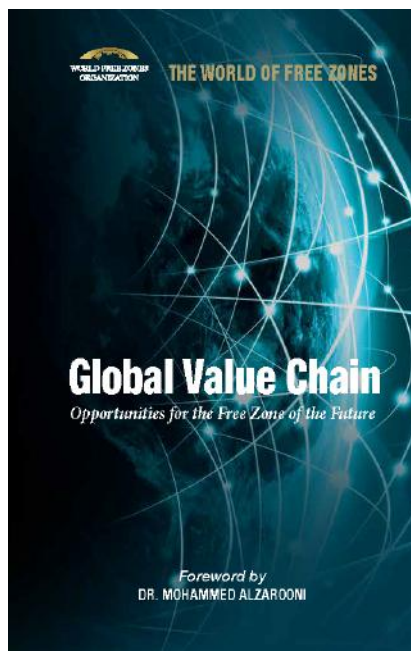
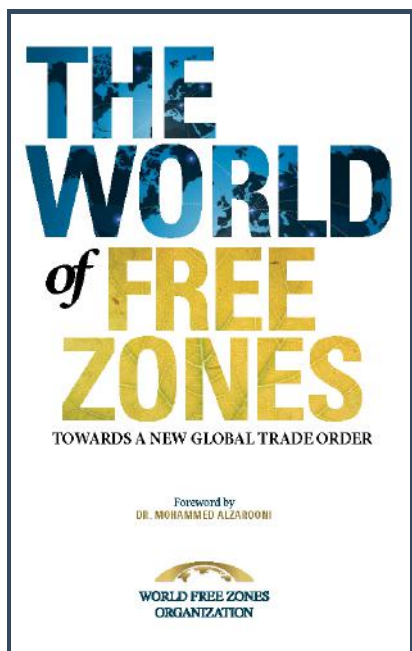


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