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COVID-19 Industry Focus: The Business Impact to Manufacturing & Where to From Here

Never, before in history of manufacturing has a single event simultaneously and globally affected supply, demand and workforce availability, causing massive disruptions and uncertainty.



Facing up to an unprecedented global pandemic meant overcoming national lockdowns, the closing of borders, grounding of passenger airlines and interruptions to supply chains. Regardless of political power, size or stage of development, economies across the world have felt the pain of COVID-19 and for many it will take months and possibly years to recover.

Businesses and significantly manufacturers will emerge from this moment in time into a new world environment that will forever be changed. Lessons learned, actions taken in response to this event and protective measures introduced, will continue to shape operations and the way we interact with our customers for a long time to come.

In fact, reflecting back on other shocking moments in time shows us that the corrective steps taken in response to a crisis, have a tendency to find a way into our daily processes and operations. We seek to navigate our way through, find improvements and to best optimise performance.

Sitting against a backdrop of supply chain globalisation, disruptive events such as the financial crisis of 2008-2010, the 2010 Icelandic volcano eruption and 2011 Japanese Earthquake did little more than force manufacturers to develop and evaluate risk management, to plan for contingency and improve visibility systems across their supplier ecosystems. Scant regard was given to the fact that globalisation had led to supply chains becoming substantially more interconnected driven by the rise of outsourcing. Meaning goods now have to pass through an increasing number of complex stages in order to reach the end consumer.

78.3% Anticipate a Financial Impact

53.1% Anticipate a Change in Operations

35.5% Facing Supply Chain Disruptions

Whilst there will be those who argue that globally, COVID-19 is something that few (if any) scenario simulations could have predicted, it did have the impact of generating a situation where demand, supply and workforce availability are affected uniquely all at the same time leading to:

Disrupted supply chains causing volatility in the supply of key components for products for final manufacturing.

Panic buying of essentials by consumers driving demand and causing unusual stress and strains on suppliers whereas other industries are facing dramatic drops in demand for their non-essential products and services.

Social distancing and employee safety measures have left manufacturers scrambling as a large number of their workforce remains unavailable to perform the necessary functions on site.

In addition, COVID-19 has placed an intense spotlight on the fact that supply chain ecosystems and low-cost manufacturing had become overly dependent on a select few countries, namely China, India, Vietnam, Indonesia and Thailand whilst in many more developed countries local domestic manufacturing capability has all but disappeared or at least significantly declined.

This is totally understandable in a capitalist society. China in particular became an attractive manufacturing location due to a host of favourable factors from the low cost of its enormous working-age population, to the manufacturing capability and availability of

“Consumer demand patterns have shifted. Global supply chains will be re-routed and Governments will likely make more significant interventions. It’s clear that companies will have to continuously adapt to new and uncertain market conditions.”

its transportation links. Additionally, the Chinese government-imposed policies are designed to facilitate the transfer of foreign intellectual property while keeping the cost of land, labour, and capital low through arguably artificially controlling its exchange rate.

This extremely favourable and economically advantageous environment has developed an excessive dependence on a manufacturing basin which in the light of a global crisis has highlighted the consequences of relying on a single source where lowest cost has been the go-to strategy.

What happened to domestic manufacturing?

Offshoring became too attractive. As we emerged from the 2008 global financial crisis, the manufacturing industry was focussed on reducing costs and having the most efficient supply chain. Domestic manufacturers looked at outsourcing their manufacturing to manufacturers who were able to produce those components cheaper or more efficiently than they could. Many developed nations opted for offshoring as the easier option because automation was still seen as an expensive investment and required companies to restructure the way in which they worked.

Now, everything is made in China or Asia, where does that leave manufacturers operating in the face of a global crisis?

Planes are grounded. Ships have berthed. Factories are not producing. People are isolating at home. We are in a debilitating situation. Manufacturers globally now have to deal with the risks from having all their “eggs in one Chinese basket”. COVID-19 has highlighted the need for both businesses and governments to build more resilient supply chains that have the ability to support and protect their local populations.

Governments have been forced to address the issue of how to make manufacturing more competitive in smaller markets where labour is so much more expensive than the average in China or other low-cost producing nations.

With people stuck at home, governments and employers are forced to look at how to reduce dependency on physical labour particularly across production, logistics and warehousing.



The new reality is digitisation will become the competitive advantage that producers and distributors need. Digitisation creates a new scenario in which less people are required, and the ability to manage the system remotely leads to more resilience and predictability.

Offshoring was all well and good before, but it is now evident that governments must redevelop an element of domestic manufacturing within its borders to minimise dependency on others and to ensure they have strategic capabilities in-country when needed.

Globally manufacturers are at differing stages of their digital transformation and what is evident is that those with strong digital infrastructure are dealing with the supply chain disruptions more effectively than those without.

The message here is clear - digitisation and the supporting data infrastructure can no longer just be viewed as operational costs, but rather it must be a strategic asset and investment.

Beyond the pandemic

If there is one thing that will come from the global pandemic, it is that the time for governments and manufacturers must act to ensure they have control of their ability to produce and supply regardless of disruption. This means taking a closer look at their relations with and dependency on certain countries and manufacturing zones (such as China).

Government and manufacturers must use this moment to come together to set the foundation for policies, investments and lay the infrastructure to ensure alternative secondary supply sources and production capabilities. Whilst this may sound like near-shoring, it is going further to the point of ensuring that beyond final production the entire eco-system of supply can be rapidly deployed or replicated in times of major disruption to the primary manufacturing and supply zones.

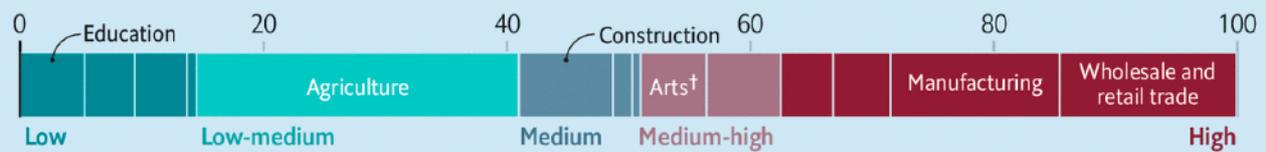
In fact, regions like the Middle East and Latin America with their close proximity to large markets, abundance of land and access to labour may emerge as the winners, provided the governments and investors take a proactive step now to work with manufacturers to create the right environment to act. The Middle East, particularly the UAE and Oman are

Labour isn't working

1

Estimated impact of covid-19 crisis on economic output

% of global employment by sector*, April 2020



Source: ILO

*Before outbreak of covid-19 †Arts, entertainment and recreation

well placed with governments prepared to invest and ensure supportive policies, whilst being logistics friendly for distribution back into Europe, Africa, Asia and the US. Africa with its abundance of labour, access to resources and increasingly growing middle class is another area of potential.

One thing is certain, outsourcing will likely soon be replaced with partial nearshoring as costs, politics, risk management and other factors come in to play. Large economies will nearshore parts of their operations as a contingency measure to ensure closer proximity to their markets.

So what happens now?

As focus turns to address new workplace requirements to allow a return to work the issue becomes increasingly how to maintain a safe workplace, how to ensure optimal levels of operations and minimising exposure to risks from over dependency.

It's clear that with no vaccine in place at the time of writing, social distancing will likely remain in place for the near future and simply put, most factories are not designed to be operated like this or managed remotely. The lack of digital tools and infrastructure for such needed activities will force senior executive "fence-sitters" to invest in new technology and adopt cloud systems as they begin to understand the value that lies in automation and digitisation.

One of the burning question is - do factories need all operators on site? With the new safety measures being put in place, workspaces are going to require social distancing, so reducing the number of operators will be critical to compliance. We will see an emergence of "virtual shifts" in which AI and automation are used to create harmony between the operator on site and the specialists guiding and supporting them remotely.

Post survival mode means organisations will start to shift their attention to what to do in the medium term to operate effectively, bring back performance and achieving profitability. The major focus points will be;

- Decoupling of supply chains and less reliance on one or two countries for supply
- A return of domestic manufacturing capabilities and focus on locally produced goods
- Greater use of robotics and automation to counter higher costs and reduction of 'on the' floor employees

- Increase digitalisation and AI across the manufacturing and supply chain eco-system
- Increased virtual shifts and remote working for non-essential line operators
- Increased inventory holding at strategic locations in the supply chain
- Increased Strategic Focus

COVID-19 has shown a spotlight on the mechanisms by which consumers and governments were sourcing and transporting their goods. It exposed the holes in extremely complex supply chains.

This sort of realisation cannot be ignored and will need more than a quick band-aid to fix it. It is likely that post COVID-19, Governments will move to intervene and play their part in securing goods for the future. As an example, in pharmaceutical manufacturing more than 70% of global active pharmaceutical ingredients (APIs) are currently produced in China. These APIs usually go to India where most generic medicines are made. When China shut down in early February, the downstream supply chains became incredibly exposed and supply of critical drugs were at risk of stopping. Governments need to decide if the centralisation of such a large portion of a key element is a sustainable model going forward.



Dr Thani bin Ahmed Al Zeyoudi, UAE Minister of Climate Change and Environment, officially inaugurated Badia Farms, the GCC's first commercial vertical farm. Courtesy Badia Farms

Food security is another area where it can be expected Governments will seek to address over dependency on imported food items and strategic reserves. Throughout this crisis, supermarket shelves have largely remained stocked albeit sometimes with less brand variety. Governments recognise the need for stable food supply and will start to look for ways to build resilience against disruptions in global supply chains and cultivate domestic

manufacturing. This will increasingly lead to greater investment in agricultural technology such as the recent investment of USD\$100m into four agri-tech companies to develop indoor farming in Abu Dhabi by the UAE government.

Where to from here?

The things we do now, and the measures and mechanisms being put in place to mitigate the risks of what COVID-19 is doing to our global manufacturing industry will remain in our businesses long after the virus has passed.

As seen in 2008 global financial crisis, forced shifts and changes to our business environments have a lasting impact long after the initial crisis dealt with. These measures will ultimately become more refined, polished and better than during the initial crisis response, but generally speaking, they will become the core elements of the new norm.

The discussion does not end here. Tune into our podcast where we are featuring a COVID-19 series covering the current global situation all the way through to the impact on driving business forward and future supply chains.

- Talk to us about how we can partner with you to:
- Develop a more resilient outsourcing strategy.
- Establish a roadmap to create business-wide automation and digitisation.
- Coach your talent so that you have the right people on your team with appropriate behaviours that fit the new norm going forward.
- Train your workforce to embrace the new norm.