WILL THE PANDEMIC LEAD TO ON-SHORING?
The corporate real estate community stepped up to respond to the challenges posed by COVID-19 through CoreNet Global’s Hackathon. The virtual ideation experience drew more than 1,000 real estate-related professionals from 35 countries to participate in 122 teams to develop collective solutions that go beyond the immediate crisis response — and help ensure the long-term health and well-being of citizens, companies and communities.

This report is a summary of one of six topics addressed in the hackathon. To see the full team reports for each topic, visit: www.corenetglobal.org/hackathonresults

The Challenge

A hackathon, by definition, is a group of individuals convening to solve problems collectively and within a short, defined period of time. Teams were formed and participants convened for a period of less than three weeks during April/May to ideate and explore what comes next in the following key areas:

6. Manufacturing & Industrial
With COVID-19 first becoming a serious challenge in China — “the world’s factory” — companies around the globe were faced with closure or reduced operations due to lack of raw materials and manufactured goods. Will the crisis prompt manufacturing companies to carry out a top-to-bottom review of their global supply chains with an eye toward reducing risks? Will manufacturing return to areas that lost factories to lower-cost production sites? Will regulatory and competitive environments shift, opening up new production opportunities in countries that have been off the radar? Will countries and locations with better overall pandemic readiness make the short list for the next new factory, even if they’re less competitive on costs? And will governments begin to offer new financial incentives to attract industrial jobs and investments as they see opportunities to capture projects that might have previously gone offshore and enable a more stable, controllable supply chain?

Challenge: Develop forecasts and key recommendations for corporate real estate professionals that address how the pandemic will impact the supply chain, stockpiles and manufacturing going forward.

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Introduction

Across the world, businesses are grappling to understand the extent to which supply chains and manufacturing will be impacted by the coronavirus pandemic.

A multitude of factors is weighing on the decision-making of corporate real estate professionals with the constant need to balance risks versus costs.

Supply chains will be reorganized as manufacturing bases shift. Businesses will need to develop a deeper understanding of their people, business environment, customers and real estate in order to compete. Portfolios will change in terms of location, function, size and design.

Will the crisis prompt manufacturing companies to carry out a top-to-bottom review of their global supply chains with an eye toward reducing risks? Will manufacturing return to areas that lost factories to lower-cost production sites? Will regulatory and competitive environments shift, opening up new production opportunities in countries that have been off the radar? Will countries and locations with better overall pandemic readiness make the short list for the next new factory, even if they’re less competitive on costs?

In the manufacturing sector, these are the key questions. And the teams provided insightful answers.

The Return To Work

The teams put forth suggestions for the manufacturing and industrial sector as work returns:

- Instead of asking landlords for rent relief, the industrial sector is better served reconfiguring their network design and negotiating space requirements to adjust levels of inventory and product, whether they are increasing or decreasing. Once the
industrial business realizes what its new footprint needs to be for the near term, network design becomes critical for both short and long term.

- Companies must contemplate new outbound strategies and reconsider how and where they are moving product. To the extent that geography is dictating demand, companies in the industrial sector will need to deactivate and ultimately sell off certain buildings and move more active products into more productive geographies—this would constitute a marked change in business models.

- Some manufacturers will change their customer base altogether. Instead of B2B relationships, they will find B2C may be more beneficial to their profit. This shift in customer base also changes space utilization. It is conceivable that the amount of individual SKUs (stock keeping units) will decrease and therefore space utilization would change again to focus on fewer, more profitable SKUs. It is also possible that, in the wake of COVID-19, some businesses will come to see more value in shifting from direct to customer to e-commerce as a primary means of transacting business. The efficacy of this trend, however, could be limited by the fact that the cost per unit of e-commerce transactions is going up as it directly ties to volume of product that isn’t moving which can tied up capital that business might want to redeploy elsewhere.

- Given the many factors the industrial sector has to consider, it has a unique opportunity to fundamentally change its space utilization and metrics. The ultimate differentiator between the companies that prosper in a post-COVID-19 marketplace will be how quickly they are able to rethink their footprints, realign their business models and implement changes that improve their operations. Companies that do not respond in this way may be forced to consider contraction and, in severe cases, their future viability might be at stake.

**Longer Term And Key Questions**

It would make sense to believe that the primary supply chain related focus for COVID-19 is to reduce the risk caused by COVID-19 contamination. However, the reality is not that simple.

Vendors and contract providers of raw materials are the lifeline of manufacturing organizations and ensuring that the vendors are able to remain financially solvent is of utmost importance. When a vendor shuts down operations, organizations are then required to find replacement firms, or they must take control of the processes themselves.

The current combination of COVID-19 and the extreme volatility in oil prices is crushing the supply chain for the oil and gas industry. One team suggested expectations that 60%-70% of oil and gas industry vendors could go out of business over the next year. As a result, primary groups within the oil and gas industry supply chain must now fully evaluate all options including considering mergers and acquisitions to ensure seamless management of the processes moving forward.

Companies will continue to manage their supply chain with reduced risk and increased efficiency. Does the increased efficiency include the consideration of new emerging markets with less risk? Yes and No. There are risks in every market, regardless of COVID-19’s presence. Some countries have done a better job with their pandemic readiness and in turn those countries will be looked at a bit more positively than in prior years.

The fact that some of the Asian countries have responded well to the COVID-19 crisis has solidified at least one firm’s decision to expand operations in South Korea and Malaysia. At the same time, as reported by Katy Huberty, head of equity research for North American Technology Hardware at Morgan Stanley, “Technology vendors are encouraged by the pace at which China’s production has
ramped up post the COVID-19 shock, and this has reinforced their belief in locating the production of their high-volume products in China. This provides reassurance that China will remain a large base for manufacturing in these products.”

Of course, the fact that China is doing well with technology products does not mean that they are equally as strong with all other product categories including pharmaceuticals and medical supplies some believe. U.S.-based companies need to consider more than economics when ascertaining the risks with items such as antibiotics of which roughly 90% are manufactured in China. Is a reduced profit margin an acceptable consequence to ensure that the world has a steady, consistent supply of antibiotics? The U.S. Government could weigh in and require that a larger component of their pharmaceutical supply chain be maintained in the U.S. in order to decrease dependency on China and India, one team noted.

However, there are still many other variables that will still need to be considered prior to adjusting supply chains. There are concerns with Mexico regarding their unsettled political environment. Canada on the other hand has a more stable political environment but overall the labor costs are relatively high in comparison to many other countries. US companies will need to decide if these concerns are low enough to risk relocating portions of their supply chain from China to NAFTA countries.

We do not know how the regulatory environment is going to adjust and what consumer preferences will be as a result of the pandemic. Tax changes will certainly impact decisions moving forward and are believed to be a potential result of the COVID-19 crisis. The ability to allow businesses to immediately deduct the full cost of their investments could have an immediate impact of US based manufacturers and their decision to onshore some or all of their supply chain. The details of this potential tax incentive will need to be fully reviewed and explored prior to any major supply chain decisions being made.

As a nation, the United States outsources a large amount of production. Will the federal government allow this to continue with pharmaceuticals and other medical products? The consensus is that the government will adjust this; it is a matter of how extreme the requirements will be, and how much the windfall will impact other industries.

Consumer and shareholder preferences will have similar impacts once they are understood.

The competition for the United States will always remain steep as other countries continue to develop similar and/or better incentives to take advantage of the potential opportunities.

**Will the crisis prompt manufacturing companies to carry out a top-to-bottom review of their global supply chains with an eye towards reducing risks?**

Yes, but responses will vary by sector, territory and business:

- **Future resilience of labor and materials disruption with costs and competitiveness in mind will be the first thing to look at.** Companies will need to have a more comprehensive risk management approach throughout their supply chains and on a local, national and international scale.

- **Companies will need to have contingency plans in place for the whole supply chain (such as dual-sourcing and a reduction in inventory pooling) rather than just elements within their immediate control.**

- **Locational decisions will need to be revised, with businesses considering the near-shoring and on-shoring of critical elements of their supply chains.** Where the previous focus was on lowest cost scenarios, now a more balanced approach to reduce risk could benefit more companies looking to locate closer to the customers and increase resilience.

- **Changes are likely to happen more quickly in countries where the state has a greater influence on infrastructure such as port and airfreight facilities, and the ability to incentivize R&D into solving the supply chain issues discussed above.** The most effective response to any future global crisis will be the ability of a country to act decisively and quickly to support key supply chains.
Will manufacturing return to areas that lost factories to lower cost production sites?

- Near-shoring may well become more prevalent for certain businesses, bringing manufacturing within country borders where possible to reduce the exposure to global pandemics. Near-shoring creates shorter lead times and transport distances which enables reductions in stock levels and the demand for warehouse space.

- In the southern states of the United States, there has been a resurgence of manufacturing over the past 20 years particularly in the automotive and aviation sector. This growth has been contained to the boundaries of popular growing cities. During COVID-19, we have seen a surge of new on-shoring products that are looking to more rural communities where the placement of manufacturing can significantly make a difference to a rural community and develop long-term loyalty and workforce.

- There are many reasons why off-shoring of manufacturing still makes sense for a great deal of businesses, and for many businesses this pandemic will not alter their manufacturing strategy in terms of re-location, but only in terms of inventory and materials management. Locational decisions will still be made on a variety of issues including, power, labor availability, connectivity and cost.

- Lower-cost locations without the benefit of skills will possibly not impact the ultimate location decisions — depending upon the skill level needed, production sites may remain the same. It is unlikely in the short term that governments will be in a financial position to incentivize and invest in the workforce to attract moves in production.

Will regulatory and competitive environments shift, opening up new production opportunities that have been off radar?

- Regular patterns may pivot, and industrialized countries could be forced to create new strategies to compete for new production opportunities.

- Some existing companies in the US have been negatively impacted by COVID-19. The disposal of excess assets or underutilized assets will create opportunities to acquire well-built existing facilities. Economic development leaders have already embraced the idea of “on-shoring” distribution and manufacturing. Key markets for manufacturing will remain where there is already a well-established infrastructure; however, there will be a need to review efficiencies for business and labor disruptions.

- Sectors such as pharmaceuticals will increase the need, particularly in industrialized countries, to establish new locations. Capacity must rapidly grow, leaving no gaps to obtain life-saving equipment, personal protection equipment and medicines. Arguably, the sheer size of the US economy and the devastating results of a global shutdown have fast-tracked the creation of new policies and programs to eliminate a recurrence, as demonstrated by this pandemic.

Will countries and locations with better overall pandemic readiness make the shortlist for the new factory, even if they are less competitive in costs?

- No, even though “pandemic readiness” and “pandemic recovery” is on the top of everyone’s mind right now. This specific COVID-19 pandemic will move into the wave of past issues and we will develop new current topics that we all have to contend with on a personal, national and global basis. In the context of “new factory” and new relocations, the workforce and the workforce’s willingness to be available, reliable and learn new skills will continue to be one of the most important topics.

- Additional topics that will make the difference in relocations include relative logistics to suppliers and eventual consumers, positive governmental participation, good reliable power and ease of doing business. Future game changers for relocations will be determined by how much technology and modern manufacturing processes are brought in the new factory.
Pandemic readiness will make the list of topics to consider relative to corporate relocations. A pandemic can also be considered under catastrophe planning with other variables such as hurricanes, earthquakes, civil unrest and other unfortunate events.

**Will governments begin to offer new financial incentives to attract industrial jobs and investments as they see opportunities to capture projects that might have previously gone offshore and enable a more stable, controllable supply chain?**

This is already happening in some countries and is likely to continue as government will want to encourage companies to behave in a way that will help protect economies for future events such as COVID-19. Funding targets may include research into improved automation and ways of ‘remote’ manufacturing. It may also include the introduction of new and extended Enterprise Zones and growth hubs. It is very possible that more incentives will be offered within certain segments of the United States. Measuring the performance of incentives may take legislative intervention and recommendations may focus more on specific functions.

Compliance requirements that may have changed for existing employers will certainly increase the discussion for new incentives.

Government’s ability to provide incentives is questionable given how far the bailouts have been needed to keep economies afloat. There is certainly opportunity but ultimately governments do not have endless supplies of cash so recompense will be needed somewhere. Other ways governments can support manufacturers include:

- Consider being strategically flexible with land-use entitlements
- Eliminate or revise/update archaic regulations without compromising safety
- Be clear about new regulations and streamline the permitting process without compromising safety
- Waive fees in a prudent manner for a specific time period
- Be open and flexible to renegotiate existing incentives agreements
- Waive or postpone clawback agreements
- Consider allowing one year “push” for job creation and other commitments on existing performance-based incentives
- Engage community colleges and workforce boards to partner in offering more online training, certifications, etc.

**Concluding Thoughts**

Disruption of manufacturing has had severe operational and financial consequences and has forced manufacturers to rethink their risk management profiles, contingency plans, workforce safety and operations. In addition to real estate costs, companies need to understand the risks involved with location of production facilities and warehousing space in order to ensure resilient and efficient supply chains.

Companies must make careful decisions on capital investment and underutilized assets and/or build greater flexibility in current assets.

The COVID-19 pandemic will have long-lasting implications for the future of manufacturing. It has clearly highlighted the pressing need for businesses to build greater responsibility, agility, responsiveness, and resilience into their manufacturing operations.

Manufacturers should look closely at end-to-end operations and assess how well positioned they are to respond to future disruptions with greater confidence and speed.

Companies need to assess existing operating models, challenge old ways of working and build greater transparency around supply chain. More than ever, companies need to adapt and reshape to become leaner and more agile. This challenge has given corporate real estate and the manufacturing industry a significant ‘wakeup’ call and the chance to learn and evolve faster.
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