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## A COVID-19 Virtual Ideation Experience

**Team Topic and Number: Manufacturing and Industrial Team 3**

**Team sponsor/chapter (if applicable): IA Interior Architects**

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The Covid-19 Coronavirus pandemic caught the world by surprise. First, for its dire health implications, and second, for its catastrophic economic effects. The confluence of both immediately and directly affected everyone worldwide, including corporate real estate professionals, suddenly at the apex of such decisions as:

1. Supply chain and overall business disruption / operations continuity
2. Transportation, travel, logistics and shipping challenges
3. Labor
4. Health, safety, security, and environmental concerns
5. Personal protection equipment (PPE)
6. Full stoppage by unprecedented governmental and public policy mandates
7. Liability

As of writing, the health crisis has led to severe economic consequences with far-reaching, yet fully unknowable ramifications. However, for all its complexity, the pandemic is fundamentally a human health problem. Therefore, the issue facing industry is not so much concentrated around shortage of raw materials or manufactured goods; rather, it is centered around a problem of healthy labor availability and safeguards thereof.

Survival of manufacturing companies will depend on access to healthy human capital, especially in industries that have limited use of automated processes for its operations. We forecast that there will be three key trends that will form the “new normal” way of business for manufacturers and industrial companies:

**Forecasts:**

- a. **Travel (airline) availability to jurisdictions (countries, states, counties, cities) with clear, reliable guidance on health protocols to remain a challenge.**

**Similarly, access to, and reliable shipment of, manufactured goods delayed or stuck in ports for import / export.**

On April 28<sup>th</sup>, leaders of the U.S. Chamber of Commerce sent a letter to Congress urging that measures to re-open the economy should “be generally consistent across federal, state, and local governments,” in order to avoid a “patchwork of differing and in some cases contradictory guidance”. In the event that such patchwork does exist, then economic activity will gravitate to (a) local areas with consistent, reasonable, and clear guidelines, and (b) areas with the least burden and risk placed on re-opening.

Airlines may go bankrupt. Overall diminished supply of flight and transportation availability. And whole supply chain disruption will continue.

- b. **Legal issues around return-to-work practices abound.**

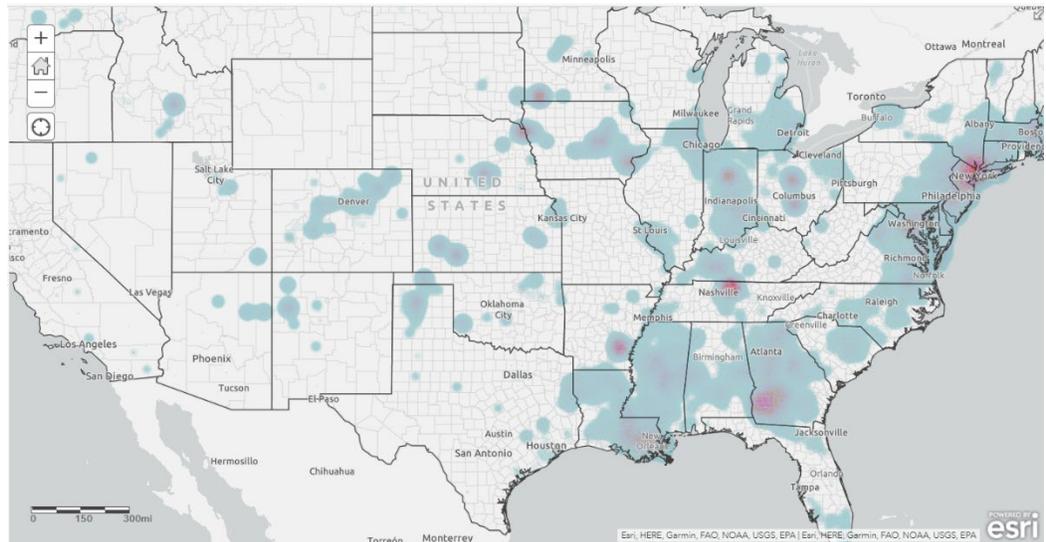
The post-Covid business world will have a changed emphasis on risk mitigation, from both employees seeking assurance of safe work environments, and from employers managing risk around constantly changing guidelines as the disease itself is more widely understood.

c. **Competition for key labor markets will intensify.**

The economic downturn resulting from the pandemic will re-shuffle economic advantages in favor of those countries and states / communities that better withstand its effects. Those that succeed will do so through a well-balanced economic mix and strong leadership for a health-oriented future.

Moreover, investment in - and promotion of - engineering and trade educations, particularly mechanical, will better prepare a labor pool to attract companies to bring their operations back onshore to the States. Currently, the United States lacks sufficient numbers of engineers to restore manufacturing at scale.

If manufacturing does return, companies will shun expensive urban centers and intensify the buildup of city outskirts, where there is cheap, plentiful land and access to labor and transportation, as well as a lower health risk.



Example of how companies may evaluate site selection criteria around Covid-19 infection rates.

We may enter a period similar to a “war economy,” where there may be pressure on companies to bring manufacturing of critical materials back onshore and where speed to produce is critical – some industries will be tasked (or mandated) to re-supply strategic stockpiles (packaging, pharmaceuticals, IT hardware, PPE, plastics and Plexiglas).

Yet, companies with manufacturing based largely overseas will only bring operations back onshore if financial incentives and regulatory guidelines offset the tremendous cost delta in on-shoring operations (versus operating in countries like China) and if the workforce is:

- available
- reliable
- trained sufficiently to handle such demand
- affordable or subsidized
- operable under business-friendly regulatory guidelines

Additionally, consumers must be willing to pay more for products, and supplier partners must make decisions together, as often companies in a particular supply chain must physically manufacture and assemble in close proximity.

Of note, the process of moving manufacturing out of China, whether to the United States or other countries, is a long prospect that could be a five-year or more timeline due to all the inherent complexities of doing so.

Beyond looking to migrate some portion of their manufacturing operations out of China post Covid-19, companies may choose to better diversify regionally, considering pro-industrial countries such as Mexico, Vietnam, Malaysia, Japan, South Korea and Indonesia among others. Companies may elect a "China+1" strategy.

Anticipating the three forecasts outlined above is only one step in the response. The other part is actually implementing plans that enable corporate real estate leaders to remain stakeholders with the C-suite, employees they support and with the public. After all, companies will be expected to consider the interests not just of their shareholders, but of the general public. This deepens the burden to conduct business responsibly.

### **Recommendations:**

We created three key recommendations that address our forecasted conditions in the post-Covid world. Those recommendations are:

**In addition to the mainstays of human resources and technology, corporate real estate must now be fully aligned with EH&S / HSS&E and legal / compliance functions.**

In CoreNet Global's 2016 report, "The Bigger Picture: The Future of Corporate Real Estate", the mood of the profession – pre-Covid – was that CRE needs in its tool kit "a thought process of how to talk about risks with the business. CRE also needs to have a better understanding of its ability to prioritize capital investments related to mitigating risks to the physical assets."

At no time is this understanding more critical to the long-term position of companies as is now. In addition to all the traditional product-quality measures, corporate leaders in the post-Covid world will need to be able to assure employees, customers, partners and visitors that facilities are compliant with certain, and possibly often changing, health measures.

This will require immediate and lasting partnerships with legal and EH&S / HSS&E. Whole new code requirements, similar to ADA, are likely to emerge, along with new governmental regulatory bodies.

**Investment in Smart Building and app technology will continue - but at warp speed - providing whole new building systems around health and wellness, including touchless systems (elevators) and building entrances and exits, temperature scans by sensors or drones or kiosks, increased monitoring and measurement, voice activated appliances (coffee / water) and tracing, etc.**

According to RealComm, some of the primary goals of workplace digitization target the employee experience and use of space. Both use-cases of Smart Building technology will enable a data-savvy company to predict and correct physical distancing flaws and therefore reduce employee risk of transmitting Covid-19 or other such diseases. Badge-access data will be a useful resource when investigating a possible contamination of a workplace. Unknowns include privacy and civil liberties concerns around such use.

**For the immediate post-Covid recovery, nimbleness in real estate and all aspects of life will be crucial.** As the dust settles, locales with trusted government policy will emerge, and those will be the areas prime for re-growth / renaissance. CRE leaders need to know how to identify what environments will benefit their business based on their own KPIs (e.g. logistics, tax regulations, customer proximity, etc. along with the new 3Rs – resilience, responsiveness and reconfigurability). Minimizing time commitments to any one particular location will benefit the overall company. And an unyielding commitment to health and wellbeing will become the new baseline.

## **Other notes of interest / discussion post Hackathon:**

1. As Covid-19 forced most of the entire world population to work from home, what percentage will come back to work? What percentage won't ever return?
2. Will Covid-19 create a real estate glut as some world economists predict? What will this mean for our profession?
3. How will ideation be affected by a physically-distanced workplace?
4. How will the basic human need of being in the physical presence of others affect work? Livelihood? Wellbeing?
5. Is corporate real estate as an industry in trouble?
6. As more tenants are unable to pay rent, how will owners and banks survive?
7. Will companies see such significant cost advantages of working from home that whole buildings and campuses will be shuttered?
8. Is the world post Covid-19 grossly overbuilt?
9. The educational system worldwide will face unimaginable change. As students pivot to online and international enrollments are down, college and universities sit on tremendous land and real estate holdings. How will whole school systems face real estate challenges against massive budgetary deficits? How might this affect corporate real estate and the inventory of available buildings?
10. As personal and environmental sanitation and cleaning is at global highs, what are the long-term effects on human, animal and environmental health? Are we now creating a new environment for "super bugs" like MRSA, etc.?

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