Team Topic and Number: Space Utilization Team #7

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Measurements Inside the Building

Temperature checks with thermometers at office entry will be one option. Leaders will need first to determine who will be doing the screening and what workers will be screened. Then they need to decide on a thermometer.

For instance, a contact forehead thermometer may be the most accurate, but it needs to be sanitized after each use. An infrared thermometer with auto-measurement means that you don't need to clean after each use, but it could be less accurate. There could also be the option of utilizing thermal imaging for pinpointing elevated body temperatures. That said, temperature checks will not be a silver bullet given the asymptomatic spread of COVID-19.

Overall, building air quality data such as humidity, temperature, air quality, and C02 levels will also become more visible to build worker trust. Next-generation sensor technology can ensure that this information is captured in real-time and adjusted automatically based on the latest readings.

Proptech will also be relied on to improve "building health" when it comes to cleanliness. Sensors can also be useful here to identify areas that need more frequent cleaning. A real-time map may highlight the most frequently used spaces, and this information can be synced with CAFM to automate cleaning efforts appropriately.

Finally, *maximum utilization rates* will need to be set and monitored in real-time. In a pre-COVID-19 world, heads of corporate real estate were driven to optimize their space utilization as much as possible. Now, the focus has instead turned to identifying when space exceeds occupancy levels recommended by the CDC and local municipalities.

Using sensor dashboards, CRE executives can set a maximum utilization rate by floor or building so that they have a real-time, accurate understanding of when and where they are reaching unsafe occupancy levels. This information will be pivotal as companies quickly iterate on plans to stagger workforce re-entry.

Office Density

When planning for utilization within a building, CRE leaders must also consider space density. Space density is defined as a measurement of how space is being used in conjunction with the portion of time the space is occupied. Interestingly enough, the impacts of COVID-19 will alter both the short term and long-term metrics used.

Pre – COVID, it was commonly known that there is a massive amount of corporate real estate underutilized. VergeSense reported that average workplace utilization dropped to 27% in 2019 from 40% in 2018 based on sensor data across tens of millions of sqft of office space. Underutilization of current space enables a short-term response of allowing density to flex.

The standard density today is 150 sqft per person. 15 years ago, it was 250 sqft per person. It's an easy calculation to figure out your density for your building by taking the square footage of space divided by the number of people it serves. Making this calculation is an excellent way for real estate executives to begin exploring density ratios.

There are generally two ways to understand density data at scale. Employee engagement surveys will give analytics on what the current employee requirements are for a building. Secondly, evidence-based design utilizing sensor data will show real estate executives how employees are using the existing space and give recommendations of changes.

We will see density metrics naturally decrease for organizations. Primarily as companies are working through the scenario of planning work from home, giving the employees a choice in returning. The first phase of the density change must be a human-centric approach that implements distancing protocols that we've seen published in industry reports, such as — *"Ready for Work"* or *"6 FT Office"*. The concepts include but are not limited to, safety, signage, and furniture reconfigurations.

The employee experience is always going to have the most significant impact on the density of space. The future of the real estate and density levels will fluctuate just as history has proven in the past. Commercial real estate executives will need to balance density with the return on investment of space. Therefore, building and floor design will need to be re-thought once again as we prepare for the future of work.

Design/Layout

Changes in office utilization and density from the pandemic will dictate how organizations implement short term and long term office designs. Initially, a human approach will be taken, where solo workspaces, employee distancing, and agility are paramount.

Even before work-from-home mandates were widespread, workplace sensors identified employee social distancing occurring throughout offices as workers followed updates on the Coronavirus. Using a metric called "*interaction frequency,"* analysts identified that multi-person occupancies of shared spaces decreased in early March.

As employees return, they'll likely continue to look for more solo-oriented workspaces such as small conference rooms and phone booths within open office designs. Large conference rooms will probably be temporarily or permanently closed, or at least de-densified with fewer chairs.

Employees have already shown increased demand for solo space within open offices over the last few years as they sought a quiet spot. Facility design has been trailing how office space is used for some time in this regard. For instance, data shows that large conference rooms and personal offices continue to be poorly utilized in most offices.

The average, mid-to-large conference room was only used 11% of the time last year. Furthermore, 30% of all conference room bookings ended up in no-shows. With added health threats, facility managers will need to finally address having an overabundance of conference room space designed for large groups of people versus smaller conference rooms. There could also be potential for using workplace retrofit solutions that provide heads down 50 sqft of individual offices without increasing a company's square footage requirements.

In addition, the crisis will accelerate the shift to more flexible and agile designs. Activity-based work settings have continued to climb each year and reached 26% of all office setups in 2019, according to data from Ted Moudis Associates. New employee demands, combined with critical realizations from the C-Suite coming out of the pandemic, will only accelerate the shift to flexible workspaces.

While at first glance, some have hypothesized that the pandemic would curb the use of hot-desks and unassigned seating because of hygiene issues, it may be the opposite. For instance, one company found that re-entry to its office in Asia post-pandemic was much easier to plan within workplaces that already had agile and flex seating in place.

Remote vs Office:

If there is one thing that many organizations can agree upon coming out of this crisis, we've learned that work can happen whenever and whenever.

In the short term, one interesting metric worth tracking is the remote working vs. office-based ratio. Research points towards a gradual migration back to the office, with initially 10-25% of the workforce returning. However, it could take 3-6 months, or longer, before those who choose to return to the workplace will be routinely back in the office.

Employees returning to work will also have new demands for office settings that allow for choice and flexibility in terms of where — be it at home or anywhere within the office — and when tasks are done. These demands will increase the shift to more distributed environments.

Even before this pandemic hit, remote work was accelerating in the U.S. and beyond. As of 2018, over 5 million employees in the U.S. said they worked at home at least half of the time. Research from Gartner during the crisis found that finance leaders will move at least 5% of their workforce that has previously been in-office to a full-time, remote schedule after the pandemic subsides.

Many executives now see remote work as a viable option and aren't thinking about upsizing to a new office space anytime soon. Instead, they'll be more likely to initiate plans to rotate their staff remotely and find better ways to utilize their current real estate for the remaining percentage of employees in the office.

However, as more people choose to return to the workplace, we may see a shift in how real estate portfolios are allocated. Accenture was designing buildings for 300 capacity decades ago and then assigning 1,000 to the workplace. Following the crisis, we'll see short-term density decreases. However, in the long-term, companies may be able to assign 2,000 people to that 1,000-person workplace because the majority of employees are only coming in a few times per week. Therefore, overall portfolio sizes may decrease over time as regional, and satellite offices are closed.

There is an argument that the cost to support a remote worker is far less than the price to provide real estate for that worker. As companies look to leverage more remote working, we may begin to see lower real estate costs, but an increase in technology to support them wherever, whenever philosophy.