Team Topic and Number: The Autonomous Workplace Team 8

Team sponsor/chapter (if applicable):

Team Lead: Chance Correia, VP of Accounts for the Americas, Freespace

Team Members:

Bryan Berthold, Cushman & Wakefield
Jon Dandurand, VP, Client Solutions Director, JE Dunn Construction
Susan Au, Managing Director, Cushman & Wakefield
Julian Lizarazu, Architect
Tim Gaylord, East Coast Innovation Leader, DPR Construction
Kristen Hayden, Workplace Marketing & Brand Management, Duke Energy
David Kontra, Senior Real Estate Leader, M&A, GE

Input your submission below. Please remember that you have 1500 words to share your insights.
Throughout the world, the Covid19 epidemic has had far reaching impacts on the workplace at large. Many businesses are shuttered, employees are working remotely, and corporate real estate companies are taking a hit to their bottom-line.

When these workspaces begin to reopen, the CRE professionals will need to consider the requirements of the main stakeholders: Maintenance/Facilities, Tenants, and Corporate Real Estate. They will have to provide technological solutions, operational and process changes that reassure all parties can be healthy and safe, perform efficiently, and ensure sustainable practices. Here is a breakdown of the different stakeholder needs, technology solutions, and recommendations for the far and near term.

-CORPORATE REAL ESTATE GROUP-

**GOAL**
- To align Corporate Real Estate to trends being developed by Building Owners while balancing the needs of the employees to the strategic direction of the organization.

**AREAS OF FOCUS**
- Short-term planning vs. long-term solutions
- Synergy with Landlord
- Employee Experience
- Space Utilization
- Collaboration
- Financial Investment

**OUTCOMES**
- Weighing what needs to be done now to ensure employee safety until longer-term strategy is developed
- Align occupancy needs to expectations of building owners
- Focus on employee needs, concerns, and expectations
- Reimagine space utilization and efficiency standards
- Reduce employee “touch points” and provide more control
- Invest in change

**SOLUTIONS AND RECOMMENDATIONS FOR AREA OF FOCUS:**

**SHORT-TERM PLANNING vs. LONG-TERM SOLUTIONS**
- Develop short-term back to the office standards
- Assess functionality and occupant receptiveness on a building by building basis
- Adapt to new laws and regulatory requirements
- Develop long-term strategy aligned to organization goals, employee safety, and industry realities

**Landlord Synergy**
- Building access control and entry to limit touch points
- Temperature screening of tenants and visitors prior to entering space
- Visitor and supplier check-in via automated sign-in process (user app)
- Visitor and supplier check-in via automated sign-in process (user app)
Automate transaction process with Landlord to improve efficiency and align to fast-changing market conditions

**Employee Experience**
- Touchless facility amenities (security, reception, reservations, entry)
- Increased cleaning intervals, notifications, and online recording
- Flexible seating environments to allow 6’ distancing with interchangeable configurations
- Dedicated work areas balanced by on-demand shared spaces sanitized before each use
- Smart office app that enables employees to reserve rooms, register visitors, verify cleaning, order meals

**Space Utilization**
- New space utilization targets based on social distancing; Target 50% in short-term
- Reduction or elimination of bench seating and move toward dedicated seats with distancing protections
- Develop circulation and directional protocols, i.e. the dawn of the one-way hallway
- Monitoring space utilization in real time to trigger alerts of pre-determined targets
- Improved signage with enclosed spaces (meeting rooms, rest rooms etc.) and current occupancy levels

**Collaboration**
- Balancing office and remote work while providing technology to support either requirement
- Technology tools to support either in-person or virtual requirements
- Collaboration tools and technology without sharing resources or devices
- Neighborhood space layouts that can be easily modified to accommodate growth/contraction

**Financial Investment**
- Investing in “post-Covid19” facilities in an uncertain economic climate
- Availability of Capex to retrofit existing layouts
- Developing financial priorities (automation, technology, cleaning, space)
- Remote work to drive reduction and/or elimination of office requirements
- Leasing strategies to accommodate flexing SF up/down faster to reduce financial risk
- Purchase options for core assets to capitalize on market conditions (landlord default, etc.)

-FACILITY MANAGEMENT & MAINTENANCE GROUP-

**GOAL**
- To provide high level of health & safety to protect People and Businesses while providing valuable reliable supportive facilities and efficient operations

**AREAS OF FOCUS**
- Cleaning Protocols
- Preventive Maintenance Protocols
• Security Protocols
• Communication Protocols and Support
• Physical Space Utilization Tracking
• Asset / Building System Tracking Solutions

OUTCOMES
• Integrating Safety, Maintenance, Security, Building Systems, with Facilities Management Protocols and Stakeholders through IoT, AI, and Integrated Platforms
• Complying with CDC, Health, and Authorities Regulations and Recommendations
• Maintaining Positive Cash Flow by Managing Contracts with Existing/New Tenants, Low Operational Cost, and Retrofitting Investments

SOLUTIONS AND RECOMMENDATIONS FOR AREA OF FOCUS:

CLEANING PROTOCOLS
• Corporate return to work strategies focused on janitorial work automatic alerts
• Use of sensors to track usage to aid in cleaning (cleaning areas that have been used vs. cleaning everything all the time)
• Inventory System to track cleaning supplies and tools
• Install touchless sensors at doors, restrooms, access / egress points

PREVENTIVE MAINTENANCE PROTOCOLS
• Use of sensor system to regulate HVAC Temperature and Humidity Levels based on CDC and Authorities Recommendations
• Inventory System to track equipment and physical maintenance supplies and tools
• Integrate facility’s maintenance management solutions with preventive maintenance protocols to safely locate, inspect, and fulfill work orders requirements
• Use sensor systems that can also help monitor areas if supervision is limited. I.e. water intrusion sensors to control any possible leaks or pipe breaks if onsite personnel are not available or in the area to address it

SECURITY PROTOCOLS
• Maintain /retrofit monitoring system to increase surveillance system
• Install RFID access points at locations that would require additional access points
• Increase WI-FI security requirements to secure facility’s and tenant’s data protection
• RFID Access points also allow for touch-less entry/time stamped entry & exit, manpower counts. This system can also aid in mass communication in case a site needs to be evacuated or cleared due to any issues (tag will vibrate or beep)

COMMUNICATIONS PROTOCOL AND SUPPORT
• Provide Bandwidth Capacity to maintain Tenants WFH requirements and facilities requirements
• Maintain integrated direct communication system with tenant’s and facilities crews
PHYSICAL SPACE UTILIZATION TRACKING

- Occupancy control - same cluster of people continuously so that you can track exposure if someone were to get sick - better to alternate weeks in clusters rather than days of the week
- Workplace sensor system to track space usage and 6 FT min. distance recommendation per occupant
- Use of sensor system to track personnel and visitors and to also see, in real time, their approximate temperature, i.e. touchless system with IR thermal cameras at the entry gates along with the RFID tracking

ASSET / BUILDING SYSTEM TRACKING SOLUTIONS

- Use of sensors/scanning to detect and disinfect airborne contamination at common areas, elevators, entry/egress points

-WORKPLACE OCCUPANTS-

GOAL
- To provide tenants with the information, communication, and ability to work, reacclimate and operate in their workspaces as close to Business as Usual as possible in their new norms.

AREAS OF FOCUS

- Two-Way Communication
- Mobile Application Technology (Employee App+)
- Touchless Egress / Entryways
- Occupancy Tracking
- Technology Enabled Workspaces (AV/IT)

OUTCOMES

- Employee apps, email and/or signage
- Amenity, seat assignment, location information & consistency of “rules” of the company & local ordinances
- Using and/or repurposing existing technologies
- Agile / hoteling

SOLUTIONS AND RECOMMENDATIONS FOR AREA OF FOCUS:

COMMUNICATION

- Manage cultural shift in how business is done via communication
- Email, physical signage, decals, LCD screens
- Changes in privacy, tracking requirements, anonymity
- Information on entry requirements, i.e. temperature checks, mask, or glove requirement
MOBILE APP TECHNOLOGY

• Employee App to foster notifications, where they sit, incl. what common spaces and amenities are available for use
• Employee App to allow tenants to provide feedback on space condition, cleanliness, FM work orders
• Interactive, liaison between end user and the facility
• Report violations of rules / social distancing
• Change management for new way of working / how space is now being used
• Coworker locator function on app

TOUCHLESS ENTRY

• Touchless building check-In (visitor management system, reception, virtual receptionist)
• Biometric entry into building: facial recognition, retina scan (DoD), fingerprint
• Elevator access to floor via hand swipe, automated via badge, phone app
• Automatic doors into tenant space (main office, bathrooms, and other high traffic areas)

TECHNOLOGY ENABLED WORKSPACES

• Touchless & seamless wireless technology for audio/video conference projections, activating screen projection automatically
• Holograms for virtual meetings
• Provide technology supporting both home and work environments

SPACE NAVIGATION

• Information on how to navigate space: what is open, where can (or cannot) tenants sit and migrate to, where are team & collaborators sitting
• Reception – interaction: virtual or in person
• Space occupancy: Use of sensor system to track personnel and visitors and space usage
• More hoteling, agile space

AMENITIES

• Enabling access to food & beverage: cafeteria, delivery, pickup, pantry rules, where is the coffee?
• Mail protocols for pickup of mail, how mail was handled (and/or sanitized)

The path forward will be dictated by on the ground realities, standards set by local governments, and corporate initiatives related to the workspace, but the key stakeholders identified will have specific needs, objectives and target outcomes with that need to be addressed.

With the various technology derived solutions outlined, there is clear indication that these types of tools will continue to have a growing impact on the workplace The common thread is all groups want to find the most efficient and effective path forward to attain some semblance of a “return to normal.”