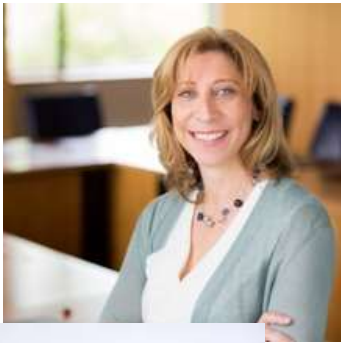




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Space Utilization & Metrics

Team Number: 7



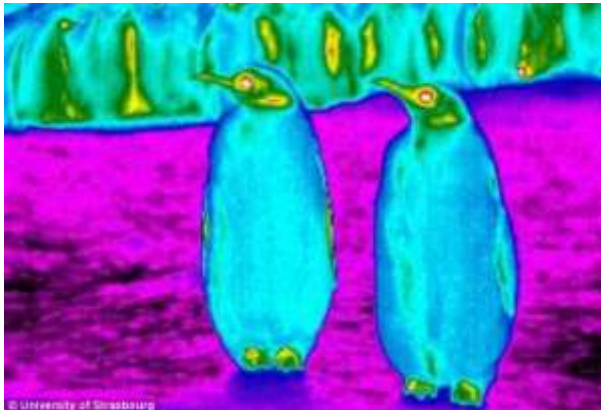


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Measurements Inside the Building

Short Term Impacts

- Use Thermal Sensors to detect for body temperatures above normal (98.5)
- Measure Occupancy to alert on over occupancy events
- Measure Social Distancing in the office



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Long Term Impacts

- Measuring Air Quality and sharing occupants in office spaces to with occupants. (400-1,000ppm)
- Cleaning costs are going to increase possibly 3x can usage data provide safe and optimized cleaning schedules.





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Office Density



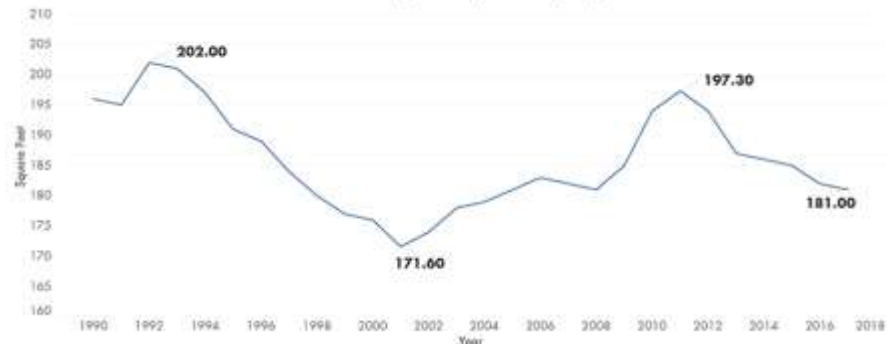
SQFT/Employee

- 15 Years ago, offices were designed for **250 SQFT/** employee
- Today, offices are averaging **150 SQFT/** employee
- What will SQFT/employee look like Post Covid19?

Office Usage

- 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
- How will work from home impact these numbers and the portfolio optimization?

U.S Office Space per Employee





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Design/Layout



Workplace Settings - Changes in office utilization and density from the pandemic will dictate how organizations implement short term and long term office designs.



Short term - Retrofit: Space division to shield team spaces.

Long term: Shift to more flexible and agile designs.



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Remote vs Office:

Short Term Impacts

- Gradual migration back to office - estimates 10 - 25% initially
- Increased spend to create safe workplace environments
 - OpEx
 - Capital - FF&E
 - Talent - for new safety roles
- Technology spend may flatten while policies and protocols are established that support the mix of where work happens

Long Term Impacts

- Remote working will continue to rise.
 - What % will become permanently remote? 5%? 10%?
 - What % will split time between office and remote?
- Technology costs will increase to support a more mobile workforce
- Real estate costs will decrease as more people will share workspaces

