DRIVERS OF CHANGE
WHAT IS DRIVING THE RADICAL CHANGE IN WORKPLACE DESIGN?
HOW MUST THE WORKPLACE EVOLVE
THE WORKPLACE IS NOT JUST AN AESTHETIC ANYMORE.

IT IS A HIGH PERFORMANCE WORK ENVIRONMENT.
COMBINING QUALITATIVE + QUANTITATIVE RESEARCH

Looking at complex issues in multiple ways is a powerful way to identify, test, and validate new areas of opportunity.
FOUR WORK MODES

The activities and interactions in the four work modes—**FOCUS, COLLABORATE, LEARN, SOCIALIZE**—occur in a variety of spaces distributed in a neighborhood, a floor, a building or even across a campus. Key spaces are designed to specifically support the needs for a particular mode of work.

<table>
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<th>Mode</th>
<th>Description</th>
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| **FOCUS** | Productive Capital  
Work involving concentration and attention to a particular task or project. |
| **COLLABORATE** | Innovative Capital  
Working with another person or group to achieve a goal. |
| **LEARN** | Intellectual Capital  
Working to acquire new knowledge of a subject or skill through education or experience. |
| **SOCIALIZE** | Social Capital  
Work interactions that create common bonds and values, collective identity, collegiality and productive relationships. |
TOP PERFORMING COMPANIES VS. AVERAGE COMPANIES AS MEASURED BY THE FOUR WORK MODES

- **FOCUS**
  - Top Performing Companies: 41%
  - Average Companies: 50%

- **COLLABORATE**
  - Top Performing Companies: 36%
  - Average Companies: 21%

- **LEARN**
  - Top Performing Companies: 20%
  - Average Companies: 7%

- **SOCIALIZE**
  - Top Performing Companies: 20%
  - Average Companies: 7%
TRENDS IN HIGH PERFORMANCE WORK ENVIRONMENTS

1. Productivity / Office Densification
2. Mobility / Technology
3. Generational Diversity
4. Globalization
5. Health & Wellness / Sustainability
1. Productivity / Office Densification

OFFICES & WORKSTATIONS GO UNOCCUPIED 50% OF THE TIME
REAL ESTATE STRATEGIES IN TODAY’S MARKET

1. Productivity / Office Densification

Carrying unused space is not only costly, but wasteful.

Stay & Pay

1

Compress & Save

2

Relocate

3

Compress & Sublet

4

Compress & Dispose

5

Enhance Environment

6
2. Mobility / Technology

TOP TEN TRENDS IN TECHNOLOGY

1. GLOBALIZATION B.R.I.C.K.
   (Brazil, Russia, India, Indonesia, China, Korea)
   India has 1.2 billion potential internet users

2. SOCIAL NETWORKING
   Using mobile devices

3. CONNECTED WORLD
   Anywhere, anytime, any device

4. MOBILE
   Your mobile device is more important than your wallet

5. DIGITAL-SATURATION
   Sweden has 90% internet penetration

6. VIDEO
   Moving to Quad-HD to Ultra HD in 5 years

7. DATA DELUGE
   Information explosion

8. CLOUD COMPUTING
   Remote servers platform that enables mobile computing

9. APPS
   Mobile phones becoming used more for applications than talking

10. EXPERIENCE
    It’s all about the customer’s experience

Courtesy of Joe Weinman, VP Strategy & Business, AT&T Business Solutions
2. Mobility / Technology

91% of employees do some work outside of the office
-Nemertes Research, 2007

83% of organizations now work collaboratively across different locations
-Nemertes Research, 2007

9% the US rate of compounded growth of the US mobile and remote workforce
-Internet Home Alliance, 2008

69% of the American workforce if given the option, would chose to work remotely
-Internet Home Alliance, 2008
2. Mobility / Technology

**FREE ADDRESS WORKSTATIONS**

Unassigned workspaces, sometimes called “free address” or “nonterritorial offices”

*Satcon Technology Free Address Stations*

**DEDICATED WORKSTATIONS**

Many companies are adopting this approach, replacing cubicles with communal tables or unassigned desks.

*Deloitte Free Address Offices*
2. Mobility / Technology

Real Estate requirements are shrinking due to mobility

It is likely that in 10 years many organizations could need half the real estate they currently occupy.
3. Generational Diversity

WHAT WE KNOW

Each generation has different **NEEDS** and **EXPECTATIONS** of the workplace environment.

Environments that encourage and support **COLLABORATION** and **SOCIALIZATION** are critical to bridge generational differences.

Gen Y offers new and **TRANSFORMATIONAL APPROACHES** for the workplace environment.
4. Globalization

Solutions of the past won’t work in the context of the changing future.

GLOBALIZATION HAS CHALLENGED OUR APPROACH TO REAL ESTATE

- Shifting from a single site approach to a portfolio wide approach.

- Regional differences challenge the workplace to accommodate a variety of geographies, cultures and global economies.
5. Health & Wellness / Sustainability

Research shows that sustainably designed buildings reduce sick time and increase productivity.

| Percentage of employees that felt greater motivation and loyalty for their company | 80% |
| Percentage of higher employee satisfaction in sustainably designed environment | 29% |
| Percentage increase in productivity due to sustainably designed environment | 4.8% |
| Number of sick days reduced annually due to sustainably designed environment | 2-5 |
5. Health & Wellness / Sustainability

4 KEY ELEMENTS

Natural Lighting
Find the most comfortable balance between daylighting and interior lighting to maximize tenant comfort and minimize SBS caused by poor lighting.

Air Quality
Compounds such as adhesives, carpeting, upholstery, manufactured wood, and cleaning agents contribute to indoor air pollution.

Acoustics
Improved acoustic performance decreases errors, increases employee motivation and satisfaction, and allows for increased productivity.

Temperature and Comfort
Personal control over air temperature and velocity increases human comfort.
MOBILITY CASE STUDIES
Originating in Europe, the program was adapted for US implementation, and is positioned as a “paradigm shift” for the organization.

Program Goal
- Change how people work in the future by providing a rich variety of setting and advanced mobile technology

Approach
- All staff are mobilized regardless of function or title through change management programs
- Free address seating provided in neighborhoods
- All relocations and consolidations apply the new model, with portfolio-wide adoption over time

Metrics
- 100% participation (target)
- 1:1.5 sharing ratio
- 30% space savings
Design
New build-out with completely redesigned kit of parts that creates an “Activity Based Work Environment”
Program Goal
• Realign the workplace with changing business models and worker demographics

Approach
• Driven by business, not real estate
• 50% of space is non-traditional seats
• Free address seating provided in neighborhoods

Metrics
• 95% participation
• 1:1.5 sharing ratio
• 50% space savings

MasterCard’s Mobile App team, a dramatic change in their working model was reinforced by a dramatic change in their workspace and technology platforms.
Design
New build-out with completely redesigned kit of parts that creates an “Activity Based Work Environment”
NEW BUILDING STRATEGIES
Site Analysis

- Site located on the southern edge of Carpenters Square with buildings to the immediate east and west and rail tracks to the immediate south.
- Building benefits from early morning summer sun across Carpenters Square and late morning afternoon sun across the south-facing facade. The west elevation is largely shaded by neighbouring buildings.
- Prevailing south-westerly winds. Potential acoustic issues with trains.
- Carpenters Square primarily a pedestrian environment with controlled vehicular access for drop-off only.
- Loading and servicing restricted to south and east portions of the building.

Our proposal aims to maximise the opportunities contained within the master plan. The views in and out, approach, civic quality, identity.

‘This exciting challenge however must not become one of formmaking, surface and decoration, but one of seamlessly fusing architecture, workplace, public space and landscape’
Design Approach - development studies to establish the most applicable core location

**OPTION 1 - CENTER CORE SCHEME**
- Centre core scheme,
- Highly efficient floorplate,
- Canary Wharf style building,
- Limited natural ventilation opportunities,
- Good for multi tenant,
- Less good for corporate.

**OPTION 2 - COURTYARD SCHEME**
- Central courtyard/atrium allows daylight into the heart of the building,
- Good for corporate headquarters,
- Less efficient for split tenancy,
- Very good for daylight and energy efficiency.

**OPTION 3 - FLEXIBLE BOX SCHEME**
- Deep plan,
- Flexible floorplate option,
- Suitable for creative industries.
Series of winter gardens, external terraces and internal atrium are brought together to form a sinuous green ‘lung’ which spirals up and around curving the building form, creating areas for social collaboration and dynamic interaction between the inside and outside.

Winter gardens and terraces are carved into the form of the building:
- Creating a network of interacting social hubs,
- Creating a more outward looking building connected to its surroundings,
- Assisting with the building’s low energy strategy.

1. The entrance is configured at the intersection of the principle routes and is thought of as an extension of Carpenter's Square.
2. A lower block of about 100,000 sq ft aligns with the building to the east. Recessed winter garden terraces cut into the plan creating variety along the side elevations and creating social areas within each floorplate.
3. At the mid level a grand terrace looks southwards with views toward the new Queen Elizabeth Park.
4. At the higher levels a building of about 75,000 sq ft is configured with a central atrium to assist with daylight penetration, inter-floor connectivity and potential natural ventilation.
5. The upper and lower blocks are unified with a recessed cut into the front of the building, facing onto Carpenter's Square.
6. These individual elements are brought together to form a sinuous green 'lung' which spirals up and around the building form, creating a dynamic interaction between the inside and outside.

The winter gardens create areas for social interaction and reveal the building to the outside.
- Working with the engineers our proposal ensures floor plates achieve highly efficient ratios of 85%, depending on floor.
- Its core configuration requires only one bank of lifts, ensuring arrival at the centre of the floorplate.
- Our proposal meets the Occupier demand whose needs are changing quickly and who require flexible and adaptable connected floorplates.
Mixed Mode Environmental Conditioning Strategy (next 3 pages)

- Combination of natural ventilation and air conditioning provides a significant saving on energy consumption whilst at the same time delivers a flexible top up conditioning strategy for cold winter and hot summer periods.

Perimeter Offices: change over air conditioning solution where the space will be in either natural ventilation or air conditioning mode.

Internal Offices: natural ventilation and air conditioning will be working in parallel to provide comfortable space conditioning whilst at the same time delivering a healthy amount of fresh air to each person in deeper office areas.
Gensler innovative approach to the design:
- expressed externally ‘green lung’ of social collaboration spaces carved into the building
- Mixed Mode decentralised MEP strategy
- dual BREEAM and LEED certification with an aspiration towards Outstanding/Platinum
BIG IDEAS FOR EXISTING BUILDING STOCK
HACKABLE BUILDINGS
A HACKABLE BUILDING IS AN EXISTING STRUCTURE THAT HAS BEEN UPDATED BEYOND RECOGNITION AND THAT INCORPORATES A DIVERSE MIX OF MULTIPLE USES WITHIN A BUILDING.
HACKING IS A CULTURE, NOT A TECHNOLOGY. IT REPRESENTS THE MOST DYNAMIC, PRAGMATIC AND SUSTAINABLE VISION FOR THE FUTURE OF OFFICE BUILDINGS AND WORK.
TO LOOK TO THE FUTURE WE HAVE TO UNDERSTAND THE PAST
IS NEWER ALWAYS NECESSARY?
NORTH AMERICA
SUPPLY = HIGH
DEMAND = LOW

ASIA
SUPPLY = LOW
DEMAND = HIGH
TO DESIGN THE OFFICE BUILDING OF THE FUTURE, WE MUST UNDERSTAND THE FUTURE OF WORK
3 DRIVERS
FOR THE OFFICE BUILDING
OF THE FUTURE
WHAT WAS ONCE STATIC
IS NOW MOBILE
MOBILITY FORCES US TO RETHINK THE ROLE OF OFFICE HEIRARCHY, LEASE DEPTHS, PHYSICAL PRESENCE, AND PERMANENCE OF SPACE
OFFICE SPACE PER EMPLOYEE MAY REDUCE BY AS MUCH AS 90% FROM 1970 AND 2015

Peter Miscovich of Jones Lang LaSalle
GENERIC OFFICE FLOOR, TYPICAL COMPANY

1970
COMPANY SIZE UNCHANGED, MORE PEOPLE WORKING REMOTELY REQUIRING LESS SPACE PER FLOOR

2010
HYPERCOMPRESSED, ULTRA MOBILE WORKFORCE

2015
WHAT HAPPENS TO ALL THE EXTRA SPACE THIS CREATES?
WHAT HAPPENS TO ALL THE EXTRA SPACE THIS CREATES?
WHAT HAPPENS TO THE SINGLE PURPOSE OFFICE BUILDINGS?
SPEED TO MARKET
EFFECT OF IMPLEMENTATION
HOOVER BUILDING

TOTAL SF: 1,900,000 GSF
HEIGHT: 130 FT
NO. OF FLOORS: 14
SF PER FLOOR: APPROX. 162,000 SF
DATE BUILT: 1972
UNION BANK PLAZA

TOTAL SF: 637,300 GSF
HEIGHT: 515 FT
NO. OF FLOORS: 40
SF PER FLOOR: APPROX. 15,624 SF
DATE BUILT: 1968
ADD ESCALATOR FOR DIRECT ACCESS
NEW PROGRAM: LEARNING HUB

UPGRADED VERTICAL

OPEN INTERCONNECTING STAIR

NEW 2 STORY

ESCALATOR FOR DIRECT ACCESS