



Connect your data dots and create your own case for healthy, happy and productive people

Facilitator:

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Speakers:

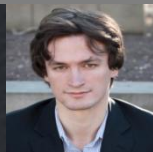
Maciej Markowski, JLL

Simon Russell, Russell Media

Giuseppe Boscherini



*Is your workplace
accelerating productivity*



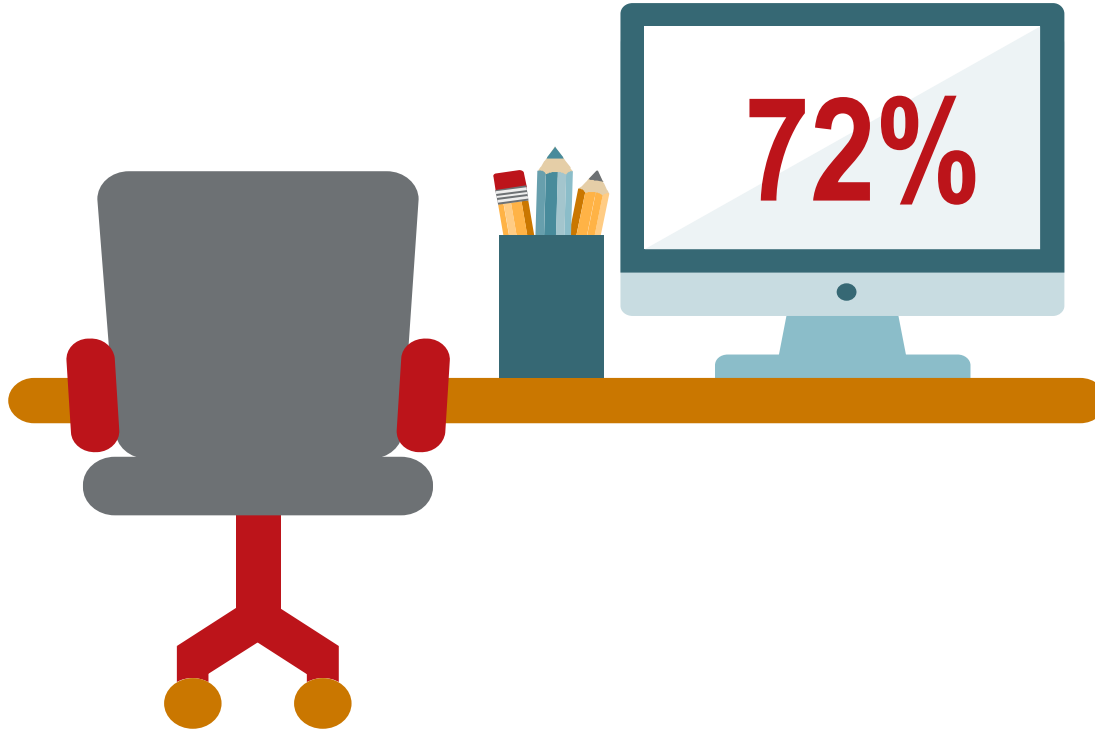
PRODUCTIVITY

© 2010 Pearson Education, Inc.

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are framed by a dark, semi-transparent rectangular box on the left side, which contains white text. The sky is a pale blue with some light clouds.

*The holy grail of the
workplace crusade*
PRODUCTIVITY

Continued demand for workplace productivity improvements



of companies are looking to
real estate to deliver improved
workplace productivity

Company expectations of productivity outcomes from real estate

72%



Workplace
Productivity

61%



People
Productivity

57%



Business
Productivity

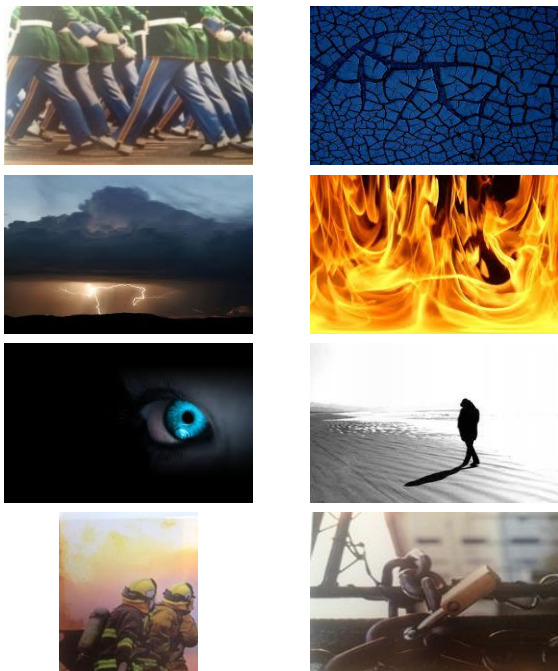
47%



Asset
Productivity

Are we delivering the promise?

Experience Today



Desired Experience



Output
Input



No of widgets

Per person



Culture & engagement



Health & well being



Factors Affecting

Leadership &
management style



Technology & support



People Productivity

Working environment



Autonomy & purpose



The physical office environment

The office environment is made up of several factors, which can be measured or evaluated in numerous ways.

Indoor air quality & ventilation

- Pollutants, including VOCs
- CO₂
- Aroma
- Ventilation rate or fresh air
- Moisture content

Thermal comfort

- Indoor air temperature
- Mean radiant temperature
- Air velocity
- Relative humidity
- Clothing
- Activity

Lighting & Daylighting

- Quantity
- Quality
- Glare
- Daylight
- Task type

Noise & acoustics

- Background noise
- Privacy & interference
- Vibration

Interior layout & active design

- Workstation density
- Task based spaces & ergonomics
- Breakout spaces and social features
- Active design

Biophilia & views

- Connections to nature
- Views outside

Look & feel

- Design character & brand ethos, including colour, shape, texture & art
- Cultural, gender & age sensitive design

Location & access to amenities

- Access to amenities
- Transport
- Quality of public realm

Ultimate aims

Maximised Return on Investment (financial evaluation based on life cycle costing – capital & operational) for all strategies designed to benefit occupants and improve productivity:

- Lower employment cost per employee, including reduced absence costs
- Higher staff retention and reduced costs of staff turnover
- Greater ease of high quality recruitment, lowering recruitment costs and adding value
- Greater productivity of staff on core tasks, e.g. deadlines met, sales made etc.
- Optimised green building ratings resulting in higher value/lower risk/improved reputation
- Reduced occupant complaints via 'Help Desk' and other similar feedback systems, leading to reduced costs
- Increased company revenue

Occupant health outcomes

The physical office factors influence the health of occupiers (health outcome) which can be measured or evaluated.

Health

- Headaches
- Eye strain/damage
- Skin irritation
- Infections
- Fatigue
- Seasonal Affective Disorder
- Asthma & breathing disorders
- Stress & depression
- Other physical complaints, e.g. back ache
- Other serious disorders, including cardio-vascular etc.

Occupant wellbeing and perception outcomes

Health is an important element of wellbeing, but an occupant's sense of wellbeing is also comprised of their perception of numerous factors, including how productive they think they are:

- Perceived physical health
- Perceived psychological health
- Perceived productivity
- Perceived office environment
- Perceived organisational culture

Organisational or financial outcomes

The office environment can have a direct impact on occupant productivity, in which health and wellbeing is often a compounding factor. This 'outcome' for the organisation can be measured or evaluated in the following ways (not exhaustive), all of which have financial implications for the employer.

Productivity

- Absenteeism
- Presenteeism
- Staff turnover/retention
- Revenue
- Medical costs
- Medical complaints
- Physical complaints
- Task efficiency & deadlines met

Design, refurbishment or fit-out strategy

With the aim of enhancing or incorporating:

- Indoor air quality & ventilation
- Thermal comfort
- Lighting & daylighting
- Noise & acoustics
- Interior layout & active design
- Biophilic design & quality views
- Look & feel
- Access to amenities

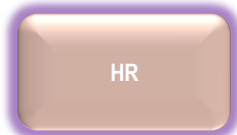
Strategies to maximise beneficial outcomes for office occupants will have a capital cost implication, ranging from negligible to high, depending on the strategy and the stage in the building lifecycle.

Examples:

- Following active design principles in a new build office = no/low additional cost
- Reconfiguring an existing office to maximise task-based spaces = medium cost
- Retrofitting an existing, occupied office with new façade to improve daylighting = very high cost

With thanks to Ashak Nordinwan, University of Sydney

BIG data – The power of the unconnected



Staff engagement surveys
360 Feedbacks
Sick days
Staff turn-over
Recruitment benchmarks

Retention rates
Requests for flexible working
Job satisfaction
Location mapping



Badge swipe data
VoIP/VPN
Sensor technology data
Mobile telephony
Computer/phone log-ins



Portfolio/lease data
Rental cost/move & churn cost
Sqm usage per employee
Overall utilization
Meeting room bookings
FM cost



Stock performance
Overall revenue/profitability
Compliance breaches
Output/Revenue per Person
Direct productivity measures
Industry benchmarks



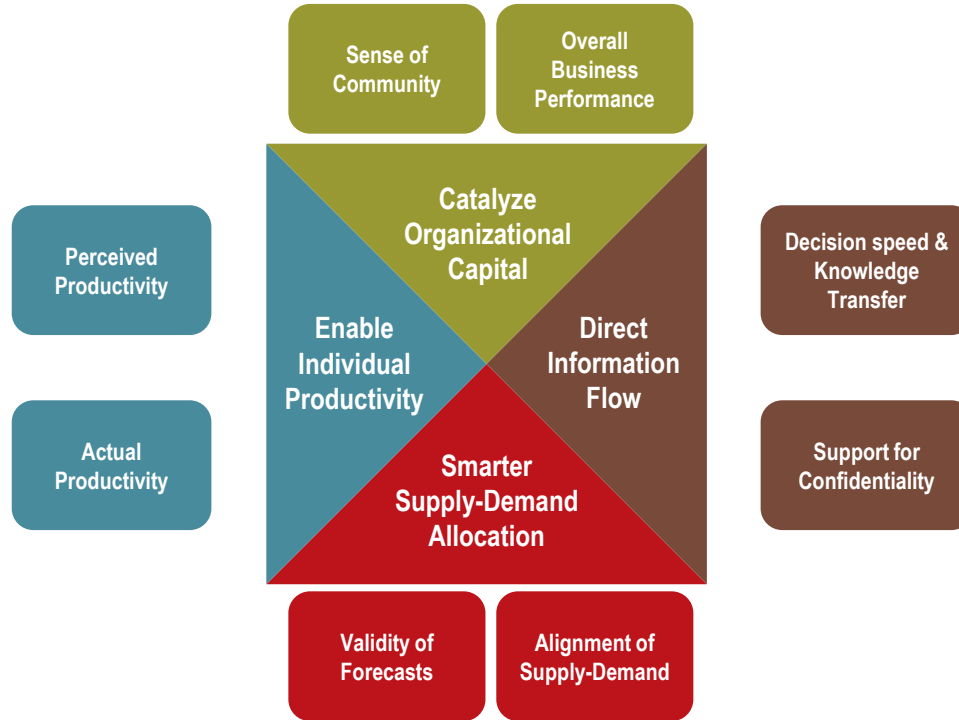
Customer satisfaction/complaints management
Brand value
Brand loyalty
Social media performance
Press clippings
Sales stats



The Internet of Things



Example Framework for integrated productivity score



What data does your organisations already collect that could be part of the framework?

The 80/20 disconnect



...the work that employees
spend their time on...

...and the work that creates the
most **value** for their organization



What constitutes value is different for each company

Brand loyalty for a fashion retailer



Client wealth and share of wallet for a private bank

Speed of new product development
at a life sciences company



ANZ productivity initiative – Case study

2014, Melbourne

Situation

Significant time and energy wasted in analysing institutional and retail banking clients, bringing high net worth clients to the surface and guiding them toward the private banking offer.

Objectives

Improve collaboration and increase frequency of connections with referral partners inside the bank.

Improve speed of decision-making around transactions as well as risk and compliance issues.

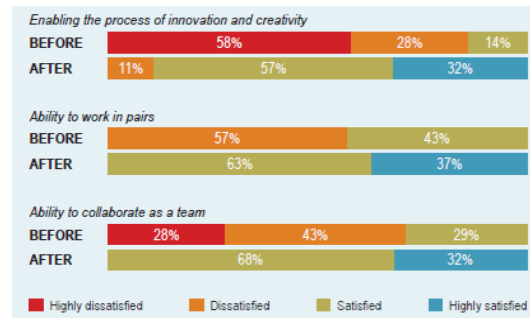
Minimize loss of productive time in accessing product knowledge and dealing with disconnected system interfaces.

Results/Value delivered to our client

Pre-workplace and post-workplace data recordings and surveys indicated significant improvements after the implementation of a new workplace strategy.

Considerable improvement in the collaborative performance.

Wasted time reduced by 85% and the speed of manager review decisions improved by 30%.



*Confluence of space,
behaviour and emotions*



So, whose office is it anyway?

The Sunday Times Best 100 Companies to Work For

www.thesundaytimes.co.uk/sto/public/business/article1379811.ece

1

Name of company
Business type



TOP SCORES

Fair deal	15th
Wellbeing	16th
My team	17th

Male/female ratio	53:47
Average age	33
Staff turnover	30%
Earning £35,000+	20%



Big Idea – Lumina Spark

It's (increasingly) about people

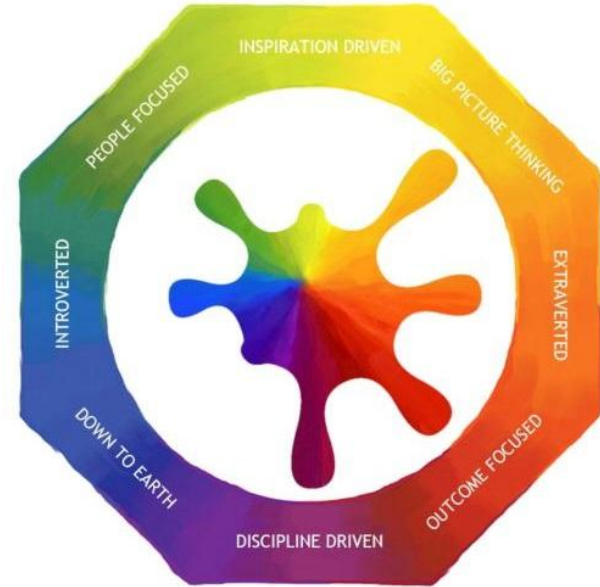
- Isn't it about time we looked at workplace from the point of view of the individual?
- Companies are beginning to see the value in responding to what their talented employees expect
- There have been some gradual shifts...

Lumina Spark



- Lumina Spark provides highly interactive and fun experiences in which learners explore who they are, using an individualized psychometric profile tool called a Lumina Portrait
- It provides a colourful framework for better self understanding and helps people identify how to improve their working relationships with others
- By applying the Lumina Spark model, learners can unlock many business benefits

Giuseppe Boscherini – Your Spark Mandala



Space and aptitude

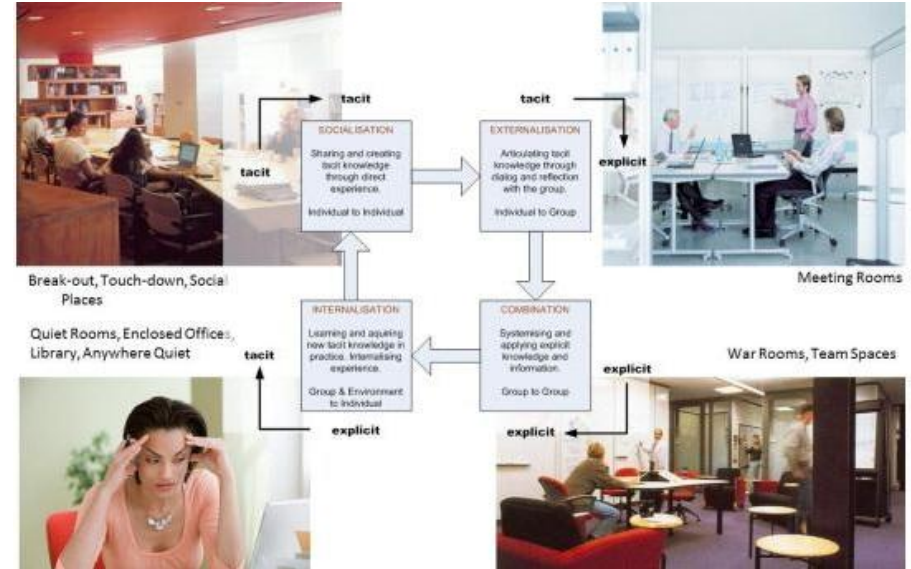
- So, is there a link between space and aptitude, at work?



Space and aptitude

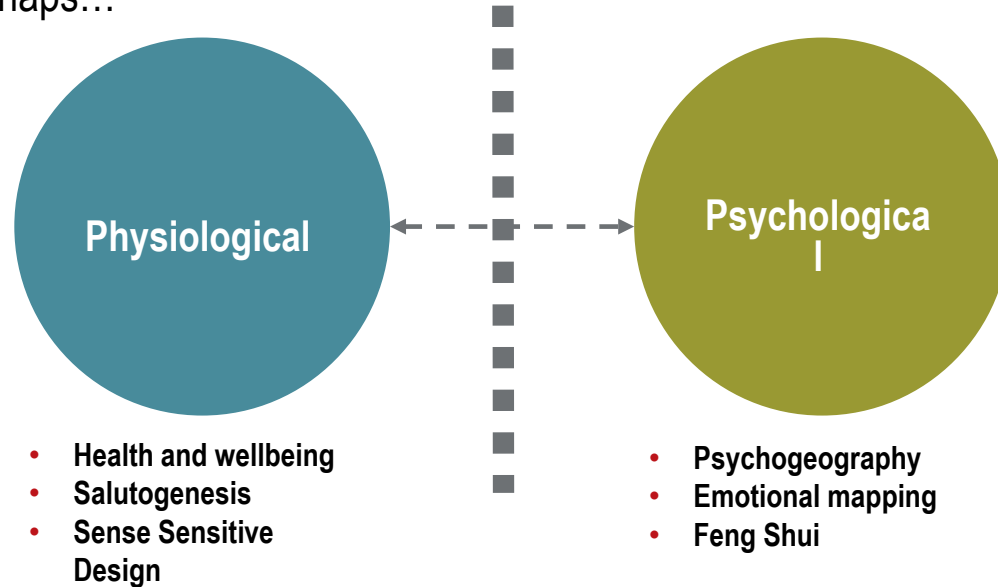
“Today the trend is towards de-institutionalization, hybrid forms of organisation and co-operative mastery of knowing and knowledge production, towards open expertise produced in multi-actor networks.”

Karvinen-Niinikoski 2004



Space and aptitude

- Space and behaviour have different triggers
- But there are major overlaps...



Health and wellbeing

Air

- Maximize natural ventilation
- Separate ventilation air from thermal conditioning
- Provide task air for individual control
- Ensure pollution source control
- Improve the quality and quantity of outside air
- Allow individual access to operable windows to reduce energy use, absenteeism, SBS symptoms, and improve productivity

Artificial light

- Maximize the use of daylighting without glare
- Separate task and ambient light
- Select the highest quality lighting fixtures
- Design plug-and-play lighting and dynamic lighting zones

Daylight

- Comparative studies of day-lit offices and classrooms demonstrate 10-25%, performance gains, 5-10% reductions in SBS symptoms, and over 30% energy savings

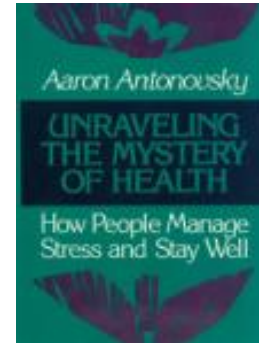


Salutogenesis

- Health processes could be strengthened and promoted by implementing design that is salutogenic – i.e., that focuses on the factors that keep us well, rather than those that make us unwell
- The aim of psychosocially supportive design is to stimulate the mind in order to create pleasure, creativity, satisfaction and enjoyment
- There is an important relationship between an individual's sense of coherence and the characteristics of the physical environment



Aaron antonovsky coined the term salutogenesis by combining latin *salus* = health and greek genesis = origin



Antonovsky focused on what makes certain people resilient as they face the stressors of daily life

Sense sensitive design

- Understanding of how our five senses work - and how they interact with the physical environment at work - can have a profound effect on the experience of work places
 1. **Vision** - Colour provokes hormone release that affects mood, mental clarity, energy levels and body systems
 2. **Hearing** - Noise affects attention, memory, problem solving and decision-making
 3. **Touch** - Plants absorb toxins Airborne toxins, formaldehyde, benzene, carbon, monoxide trichloroethylene etc.
 4. **Smell** - Floral and fruit fragrances aid concentration, slow respiration, lower blood pressure/heart rate and relax muscles
 5. **Taste** - Good food and drink improve nutrition, increase energy levels, give pleasure and reduce allergies



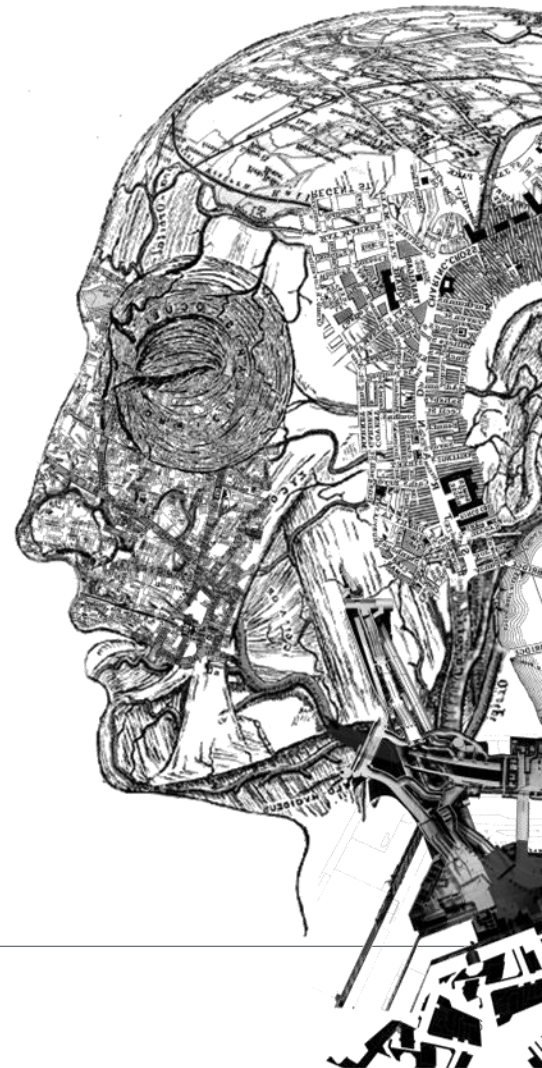
Wednesday 27 August 2014
The Independent

Psychogeography

- Psychogeography is an approach to geography that emphasizes playfulness and *drifting* (dérive) around urban environments
- It's about how we're affected by being in certain places – the architecture, the weather, whom you're with – it's just a general sense of excitement about a place
- In a dérive one or more persons during a certain period drop their usual reasons for movement and action, their relations, their work and leisure activities, and “let themselves be drawn by the attractions of the terrain and the encounters they find there.” (Guy Debord 1958)

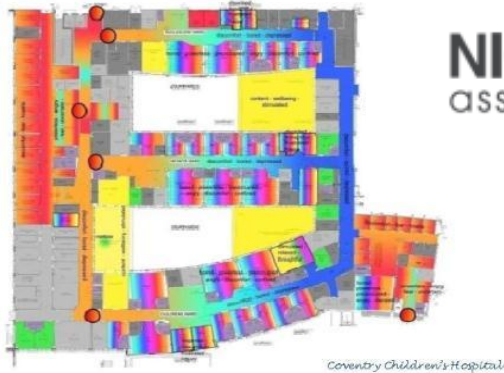


Wanderous is a new navigation application for the iPhone that creates routes optimized for adventure. Routes in Wanderous start and end where the user specifies, but during the journey the routes intentionally wander to one or more interesting, unique, or notable spots chosen by the user.

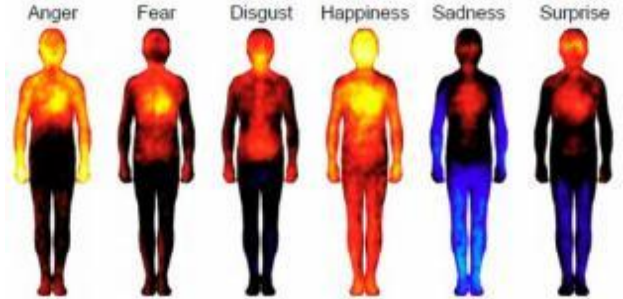
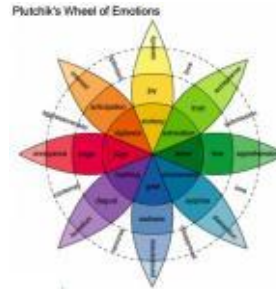


Emotional mapping

- Emotional Mapping is a new and exciting innovative design tool
- It enables workers and designers to navigate through their emotions, feelings, sentiments and sensations



NIGHTINGALE
associates



Feng Shu

Workplace Feng Shu Do's

- Place your desk in a position that allows you to see the door of your office, be sure your back is supported by the wall
- Stay up to date with repairs and replacements. Representations of nature can help you build trust with co-workers and clients

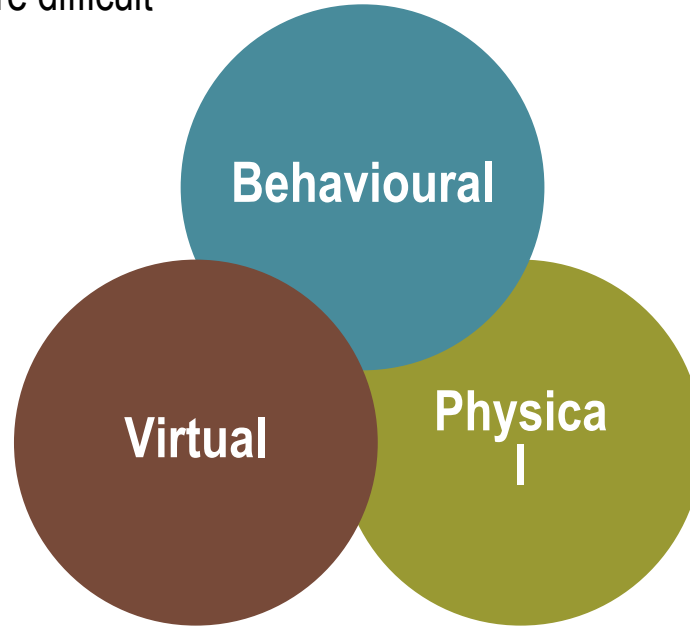
Workplace Feng Shu Don'ts

- Don't sit in line with the door
- Don't keep mirrors in your office
- Don't keep sharp plants on your desk, as they create bad chi



Virtual togetherness

- Also, the emergence of *virtual togetherness* has made the balancing of workplace priorities even more difficult
- This is now a three-ball juggle...



Technology, behaviour and workspace

- ...which translates into



Virtual

- Leverage wireless technology
- Promote on-line communication
- Adopt presence awareness

Implementing
supportive
technology
+
processes

Nurturing the
right
behaviors

Behavioural

- Encourage willingness to affect change
- Foster a sense of community
- Capitalize on shared experiences
- Think of your workplace as a precious commodity that you must share with others



Improving the
physical
workspace

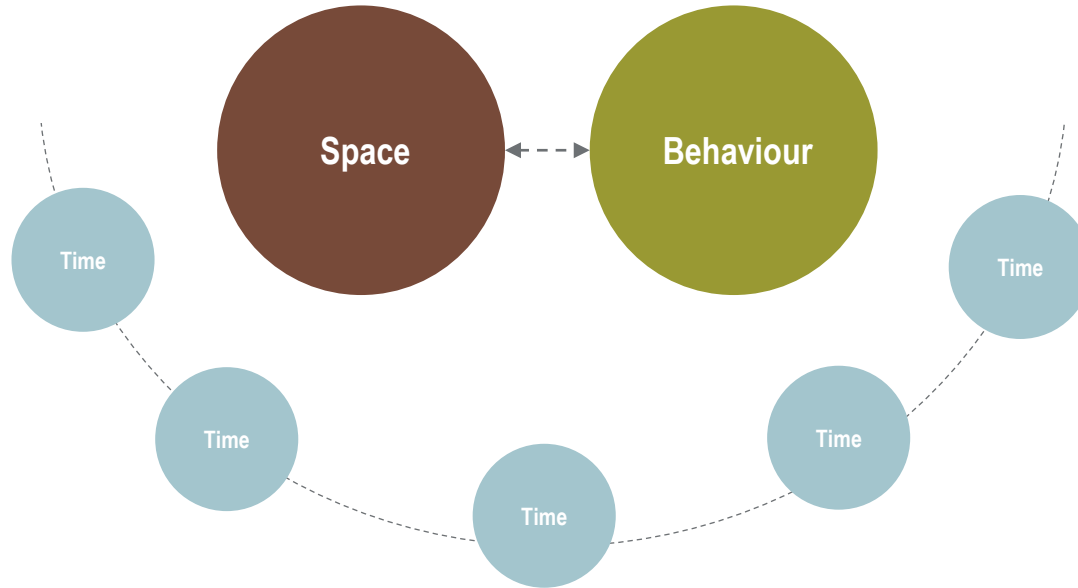
Physical

- Balance space allocation
- Facilitate interaction
- Create destination areas
- Provide a variety of stimulating spaces to perform in



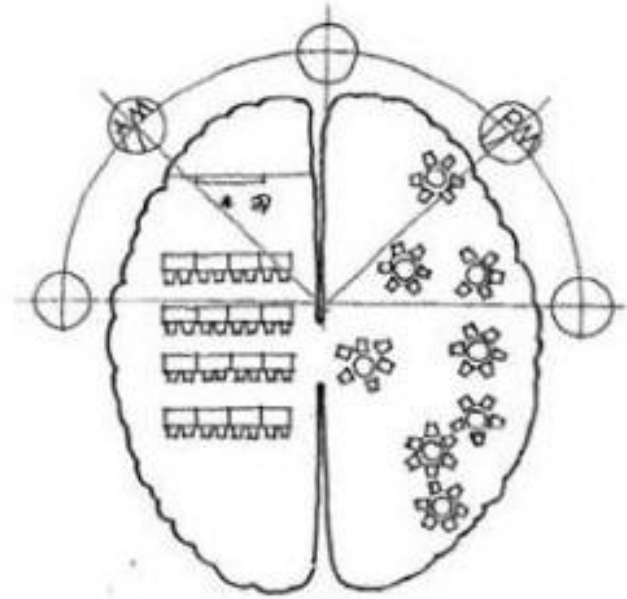
Space, behavior and time

- Time is the other element in this equation
- Space and behaviour relate to the moment(s) in time that supports the work process



Aligning time to activity

- Certain people have a bio-predisposition to sleep longer in the morning
- Memory capacity test results show that
 1. Morning: **42% correct answers**
 2. Afternoon: **51% correct answers**
- As a result it has been suggested* that schools adopt shorter winter days to reflect shorter attention spans, energy levels and allow for periods of deep concentration and pauses for resetting circadian clocks
- This could potentially lead to new working hours
 1. Team working - 11:00 am to 3:00 pm
 2. Independent working - either side of that time period



* Source: Russell Foster + Dr Paul Kelley - 2008

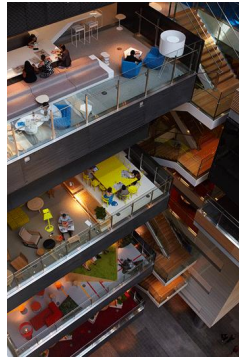
Aligning space and activity with time

- Creative work that leads to innovation is about achieving individual potential
- Like a theatrical or musical performance, creative interaction is a series of moments in time - *a gig* - the success of which depends on timing and effect



Aligning space, activity, aptitude and time

- Work is best achieved in an environment that supports and facilitates the activity designed to yield the desired business outcome
- Such an environment recognizes and supports the distinct moments of work as it unfolds in its constituent activities
- The *emotional workplace* is about an alignment of space and behavior on an experiential level
- The benefits of a successful workplace are partly derived from the enjoyment of the experience itself as well as from the achievement of tangible outcomes

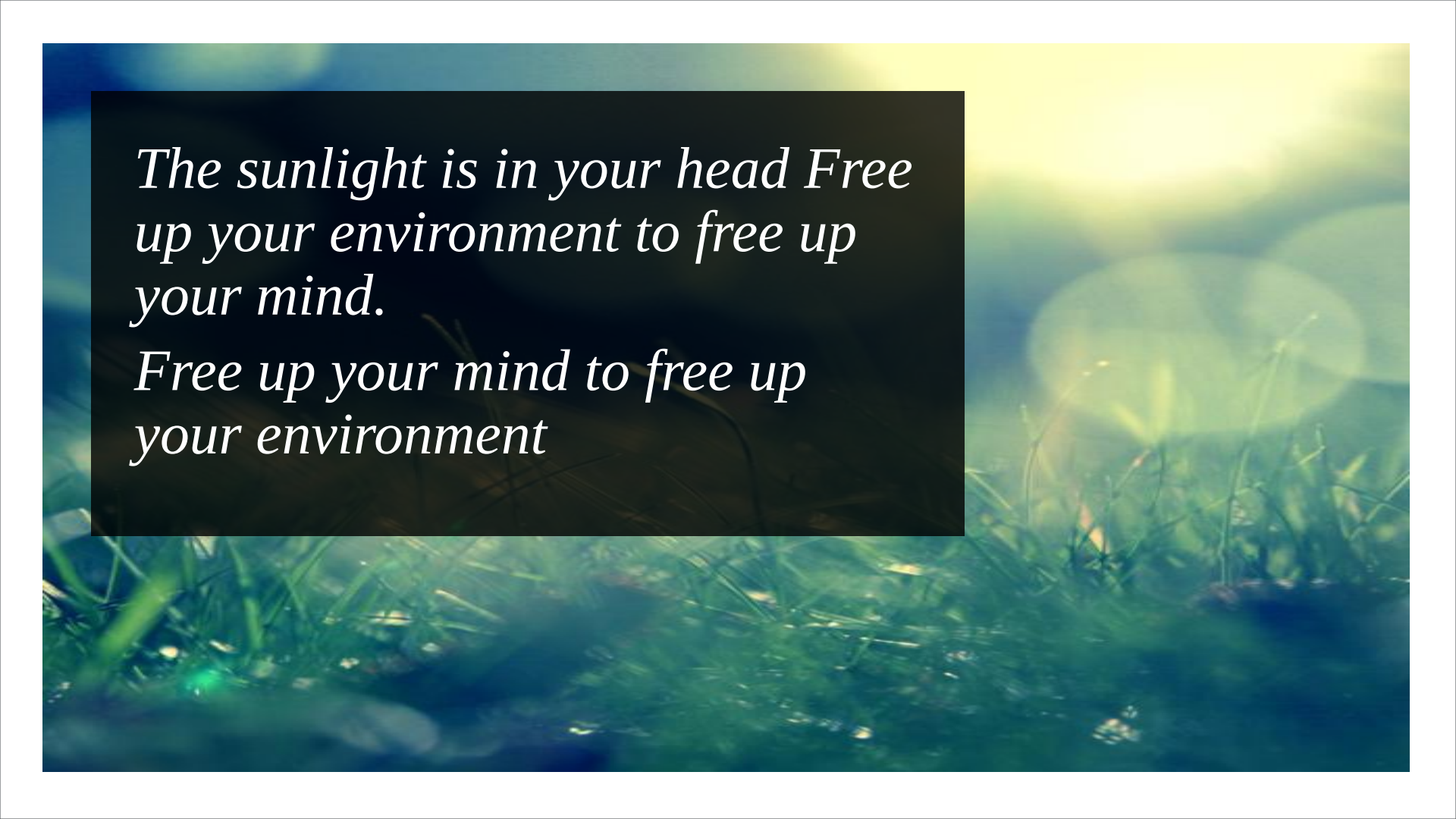


Adaptability

- Humans are adaptable to their environments and they are resourceful to make it work for them
- Is the search for an optimal work habitat that promotes maximum productivity futile?
- Is productivity an attribute of the worker rather than of the workspace?

Given a standard (or sub-standard) environment the creative non-conventional worker will always find creative ways to successfully adapt





*The sunlight is in your head Free
up your environment to free up
your mind.*

*Free up your mind to free up
your environment*

The role of DATA to drive PRODUCTIVITY



Big research before Big data

re·search¹ /rɪˈsɜːtʃ/

[plural] 1 serious st- /n [U]

discover new facts

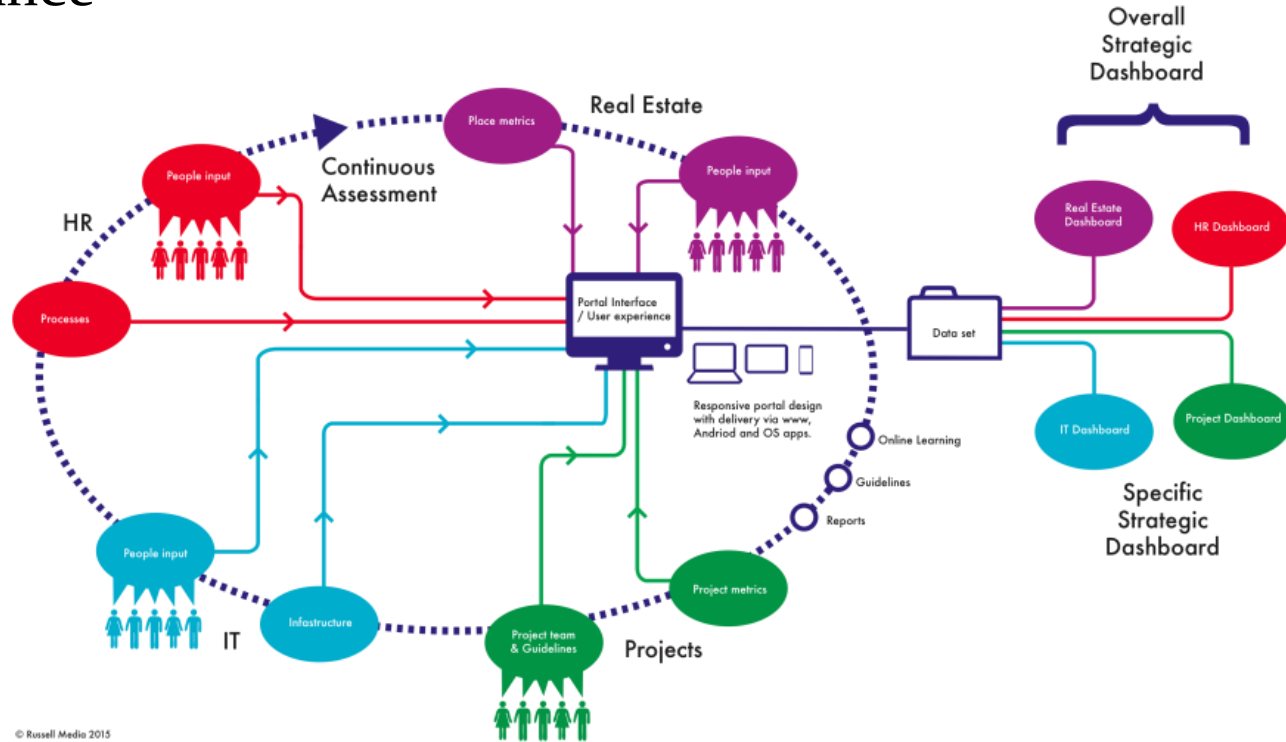
research into

student

lab

interested in or ne
doing some research

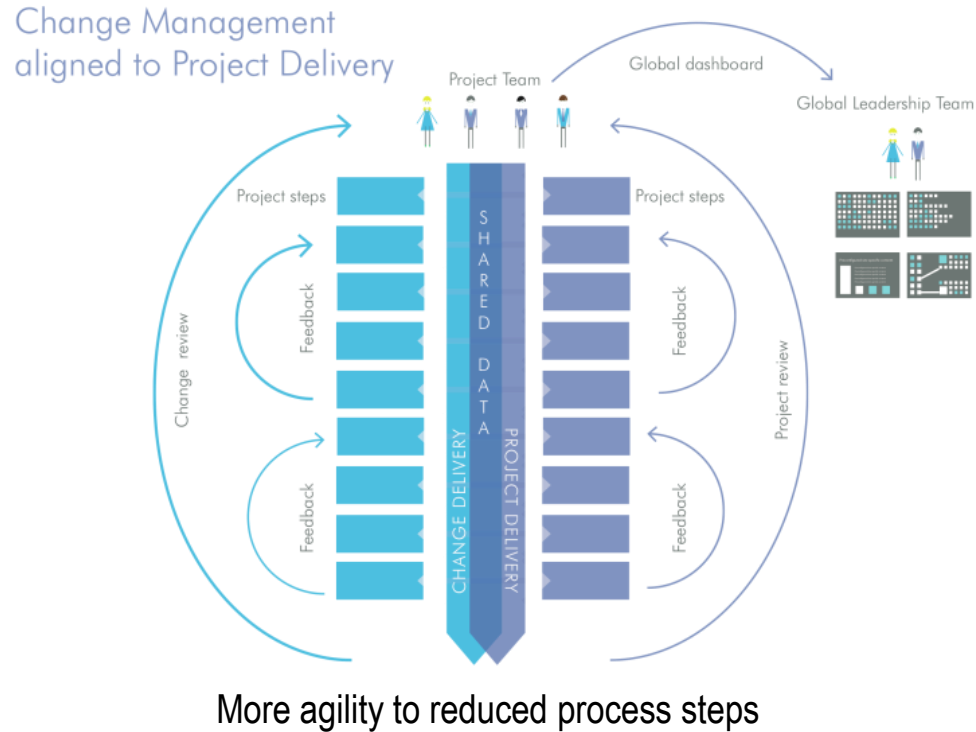
A wider knowledge base to enable better understanding of impact and performance



A photograph of a wall filled with teal-colored filing cabinets. The cabinets are arranged in a grid pattern. Several drawers are open, revealing orange folders inside. A dark, semi-transparent rectangular box is overlaid on the left side of the image, containing white text.

*Making sense of data, Less
big, more relevant and in real
time*

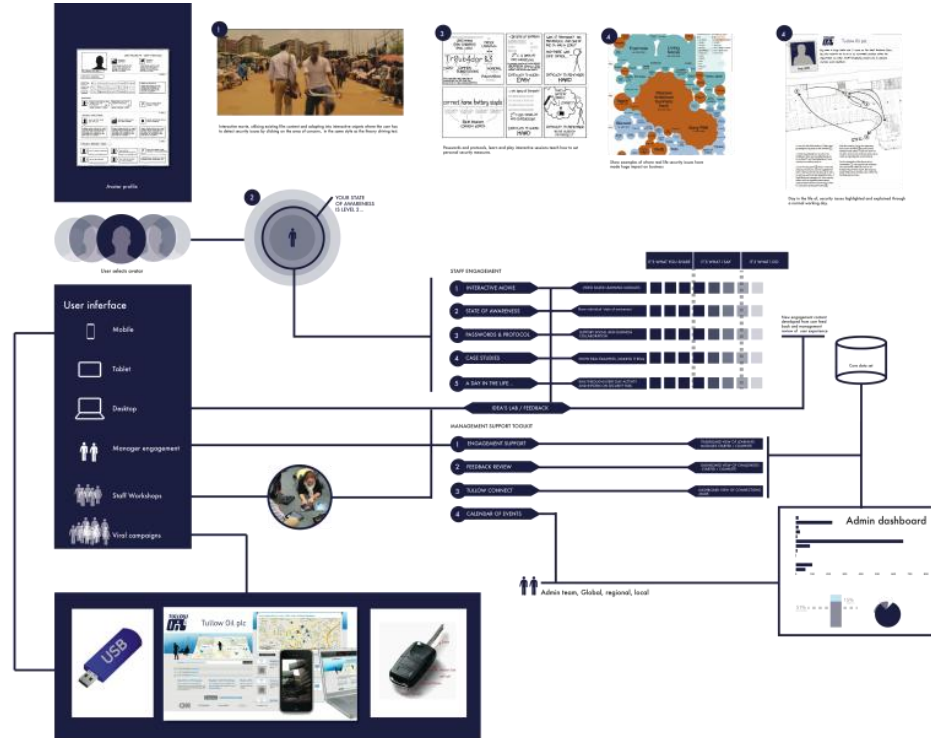
A continuously adapting process



The background of the slide is a close-up photograph of a spider web. The web is composed of numerous fine, intersecting threads that create a diamond-shaped pattern. Small, clear dew drops are trapped at various points along the threads, reflecting light and creating bright highlights. The overall scene is set against a dark, almost black background, which makes the web and the dew drops stand out prominently.

*Engagement levels and sense
of cohesion*

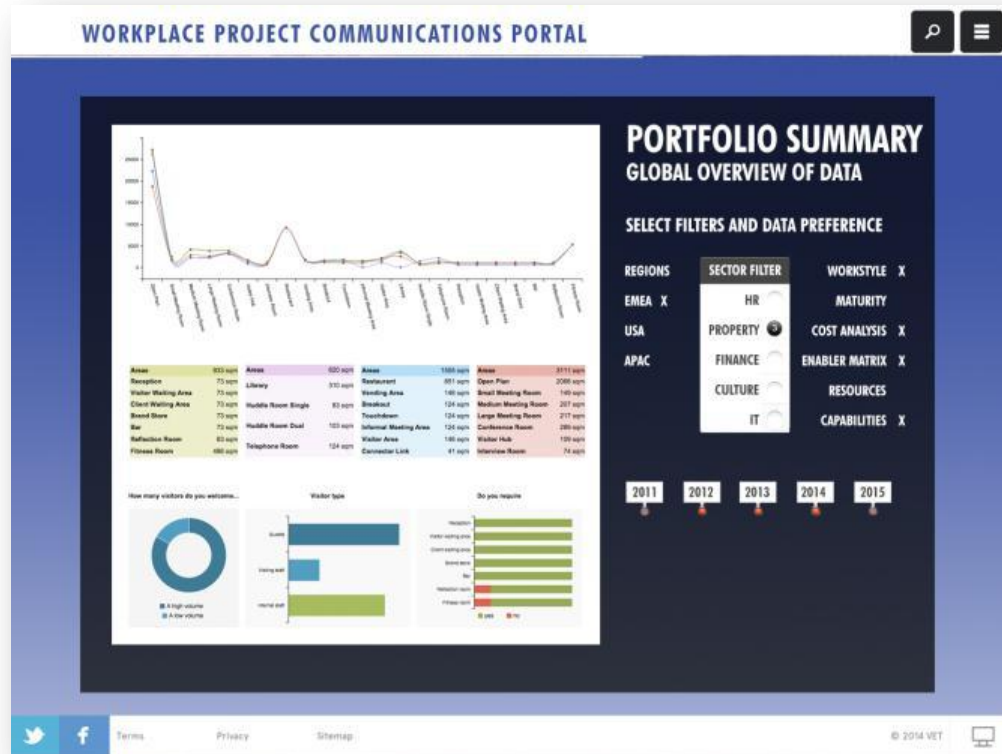
Creating the story to interact with

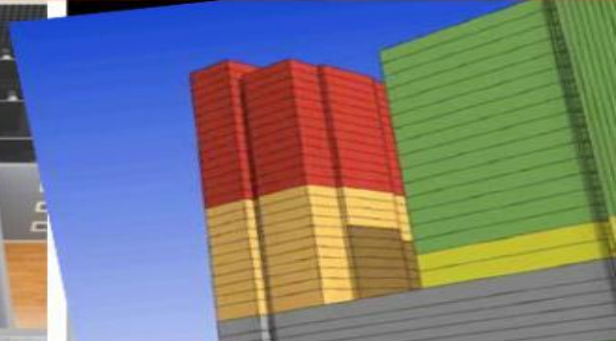


Real time user and project interaction



Smarter, dynamic visual analytics

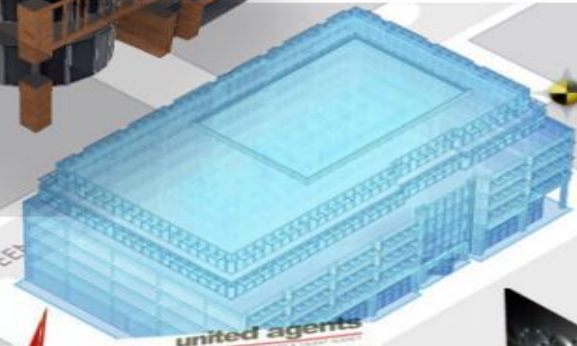
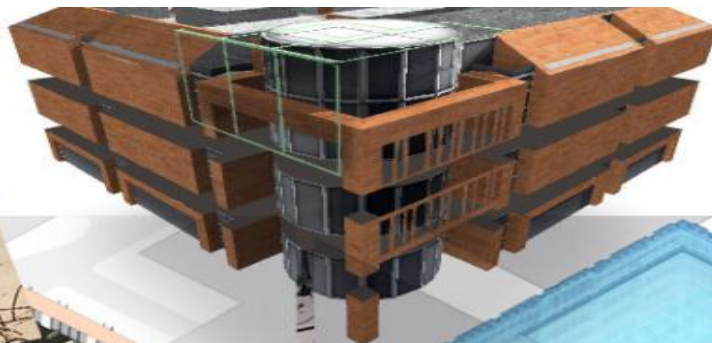






...the floor below to to
...it's current plan.

G	1	2	3
4	5	6	



FORT DUNLOP « BUILDING « OUR VISION

NOW
HISTORY
REUNITE
SITEMAP

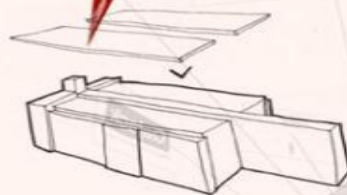
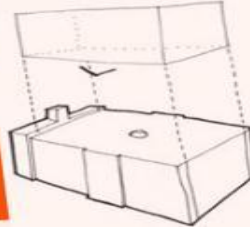
BUILDING

OUR VISION

The Fort Dunlop Regeneration —
Design Statement

Following almost two decades of dereliction, the Fort Dunlop storage warehouse (which sits alongside the M6 motorway in Birmingham), received consent for mixed use redevelopment late 2002 and the site is presently being transformed into a sustainable 24-hour community.

In creating new life for the iconic building, developers Urban Splash with architects Shelduck have adapted a principle of discerning conservation, by revealing the qualities of the original building whilst adding simple new interventions.



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Customers buy this item with [Student Task Chair - Black](#) Ameriwood

Price For Both: **\$94.98**

 **Add both to Cart**



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[Leather Executive Office Chair w/
Black Base & Gas Lift & Tilt w/
Lumbar Support](#)
\$49.77



[Dolce Dark Walnut
★★★★☆ \(143\)](#)



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