

FULFILLING WORK + ATTRACTIVE WORKPLACES

Summer 2018

“The strength, the solvency, the influence of Britain, which some still think depends upon nostalgic illusions or upon nuclear posturings – these things are going to depend in the remainder of this century to a unique extent on the speed with which we come to terms with the world of change.”

Harold Wilson
White Heat of Technology, 1963

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AN INTRODUCTION FROM LORD SALISBURY

Good, sustainable development is not just about housing. Although headlines focus on housing targets and numbers of completions, an integrated approach to development is increasingly one we need to take if we hope to build the kind of communities in which we will want to live and work. And as the nature of work is changing, we must pause to understand how, and why. As technologies change our roles, as our habits shift, where we work and how we work is changing and asks of us the question: how do we want to harness this change?

We must be mindful that what is fashionable and usual today may have changed utterly by tomorrow, driven by new technologies and new social habits, and we must bake in sufficient flexibility for that accordingly.

A handwritten signature in black ink, appearing to read 'Salisbury', with a large, stylized initial 'S'.

Lord Salisbury

WORKPLACES

Fulfilling Work & Attractive Workplaces was the fourth session of the Hertfordshire Infrastructure Charrette. This time we were welcomed to the Royal Veterinary College's modern, attractive campus - a fitting venue to explore the kinds of working environments in which we might like to spend time in the future. The event offered a glimpse of what we must plan to build, and the kinds of work future generations might one day undertake.

Our workspaces are becoming more diverse and technology is revolutionising the way we work, and as the Senior Vice-President of the British Council for Offices, Katrina Kostic Samen, notes: "With no generic occupier, there can be no generic office space". Is office design keeping up?

Workplaces was a timely event, given the recent British Council for Offices conference in Berlin showing increased focus and attention on the quality and design of our working environments. For this event, leading designers, engineers and agents spoke to a specific Architect's Journal focused on Workspace.

Roma Agrawal
Associate Director, AECOM

"We are seeing increasingly considered approaches to the curation and design of our workspaces. Over the last few years we've seen more of a focus on wellbeing, and this is likely to continue. An organisation's biggest investment is its people."

Ken Shuttleworth
Director, MAKE Architects

"It is important to make a distinction between what we are designing and what we can design and what the industry is constructing and willing to put to the market. It's the lag and disparity between the two that needs immediate attention."

Hanif Kara
Co-founder, AKT II

"We are stuck between needing to design offices that developers and investors can understand and agents can sell in the present, and then designing offices that will stand the test of time for occupiers who aren't even yet born."

Helen Beresford
Partner, Shepherd Robson

"If an office is like an appealing city, it really needs successful informal civic spaces. . . providing steps or an open atrium to provide a perfect place to get together and allowing creative and informal interaction."

These raise questions for workers and companies across the spectrum, in particular as to how we might achieve an acceptable balance between the pressures of change, development and our daily lives.

How might advances in technology change our working lives?

What trends affect the design and creation of attractive and productive working environments?

How can we create an environment in Hertfordshire which encourages small businesses and provides a melting pot for startups and innovators in the years ahead?

CHANGE IN A CHANGING WORLD

David Danson, RVC Council Member

We all have a fear of change. We fear we might make the wrong choice. It is tempting, and easy, to keep a low profile and to get slowly by. And yet we live in a constantly changing world in which the only true mistake is not making a choice. Letting the world slide past us until it is unrecognisable.

At times of great change we have the mercurial ability to harness new perspectives, technologies and expertise to create the kind of world in which we want to live.

David Danson reminded us what Charles Darwin once understood, that:

it is not the most intellectual or the strongest of species that survives; it's the one that is able to adapt to and adjust best to the changing environment in which it finds itself.

From the perspective of the Royal Veterinary College, changes which will impact us all in the future are three-fold:

1. The organisation of higher education
2. The interdependence between people and animals
3. The role of veterinary education and research in society

1. Students now acquire substantial debt to pay for their higher education, and in doing so now expect value for money. The government aims to ensure they do by introducing changes in the way high educational institutions are funded based on defining, evaluating and rewarding success.

One way the Royal Veterinary College is responding to this is through a growing emphasis on wellbeing and mental health, including the layout and curation of our campus as well as the content in educational programmes. We sponsor student research into the benefits of sport and exercise, and invest in support services including an Advice Centre, counselling and careers services, helping develop the Student Union as well as new Sports and Wellbeing Centres.

2. There is an increasingly well-understood overlap between human and other animals' health profiles. For example, many human diseases originated in animals: HIV, Ebola, Avian and Swine Flu, whilst the global movement of people facilitates the rapid spread of diseases which affect both people and animals. Collaboration between human and veterinary medicine are vital to address the changing situation.

3. Veterinary education and research in society also has increasingly well-understood positive implications. From acknowledging that animals educate young people on looking after other life, provide companionship to older people who might otherwise suffer from social isolation, and proffer all kinds of other benefits from guide dogs for the blind, sniffer dogs for the enforcement agencies and therapy or dog-walking clubs for those who need some kind of support.

THE VIEW FROM THE ROYAL VETERINARY COLLEGE

Professor David Church, Vice-Principal

The Royal Veterinary College is an old institution with a modern outlook. Established in 1791, it is the oldest English speaking veterinary school in the world. Currently hosting 2,100 Undergraduates alongside 350 post-graduate students, the College is large enough to have outstanding facilities and resources, but proximate enough to retain a sense of close community.



It is part of the University of London, but is a self-governing specialist college and remains self-governing with degree awarding powers. The RVC is a research-led institution, which nurtures strong partnerships with other UoL colleges. In the QS World University Rankings, it has been placed first in Europe and third in the world for veterinary studies in 2015, 2016 and 2017. Eighty per cent of its research is rated **outstanding**.

The RVC is mindful, however, that change is an ever present condition. And it aims to enhance the quality of its work through targeted growth. A measured approach to a sustainable increase in student numbers can encourage increased diversity, enhanced degree programmes, and heightened case load. This in turn will drive the expansion of our facilities and development of further unique expertise.

Unique Expertise + Facilities



The Royal Veterinary College hosts a multi-species biomechanics laboratory, three European Research Centre (ERC) investigators and a senior Wellcome fellow.

The applications of this expertise and these facilities is broad. From lameness detection robotics and UAV (unmanned aerial vehicle) design to cell therapy and big data programmes: the Vetcompass programme harnesses data on 4 million dogs and 5 million cats to give insight into animal health trends.

The RVC also hosts the largest small animal hospital in Europe.

Jasper

Jasper is a King Charles Spaniel. He was brought to the RVC when he was five months old, with severe muscular weakness, including difficulty swallowing. Following investigations, it was established that Jasper has a genetic defect identical to that which causes Duchenne Muscular Dystrophy in humans. We are investigating various sophisticated molecular treatments in Jasper's relatives, to help dogs and humans with this inherited disorder.

Diversity - The Gateway Programme

The RVC's Gateway programme enables disadvantaged people to find a route into higher education. Typical RVC students will need to obtain three As at A Level. The Gateway programme invites applications from students with between one B and two Cs at A Level, but who have a qualified difficulty around their studies or home life which has made the study process more difficult. Those who succeed in the initial application process are given a place on a one-week summer tester programme. If they pass this week they are automatically offered a place on the five year programme at the RVC.

During the first year, the attrition rate is marginally higher than students who join through traditional routes, but following this there is no difference in academic achievement between those with three As at A Level and those on the course via the Gateway Programme.

FULFILLING WORK, EDUCATION + HOW IT IS CHANGING

Dr. Kate Byford, Head of Degree Apprenticeships + Workforce Development
University of Hertfordshire

We need to consider how we work with young people. Millennials and Generation Z are often seen as flighty and keen to do different jobs. Deloitte research highlights, both in fact and yet counterintuitively, that work for many young people is about a sense of security as many feel uneasy about their future career. Indeed, we must be mindful that the labour market young people are coming into now is very different than one that existed thirty years ago.

How do we as business leaders and managers engage young people with relevant work which is compelling and harnesses the talents of young people?

How do we offer genuine development opportunities? People wish to see a clear path and understand the next steps they might pursue in a profession. At the same time it is important that we understand how opportunities might afford transition into different workstreams or jobs entirely. Accordingly, we must raise awareness of different occupations and different opportunities which constantly emerge. As recently as a decade ago, there was no job title 'YouTuber', 'content creator', or Deliveroo rider.

As the proportion of Millennials and Generation Z entering the labour market increases, it is essential to think differently about harnessing the talents of young people in your organisations. Diversify your workforce, and open up your organisation to new ideas. Such opportunities might include internships and placements, work-based projects or apprenticeships.

At the University of Hertfordshire, one of the tools we are working with employers to recruit and develop young talent in their organisations by introducing degree apprenticeships. Apprenticeships featured very strongly in the industrial strategy, and are a means of investing in the workforce - growing talent and developing skills for the future.

And these have vast potential to cover every occupation in every profession. At the University we currently have 12 degree apprenticeships, in areas such as Management, Health, Digital and Engineering. A further four programmes will be launched in 2019; including Chartered Town Planner, led by Professor Susan Parham.

Apprenticeships also offer organisations innovative means of developing future leaders. As well as being an equitable tool for diversifying professions and organisations at all levels.

A final thought: "People and places make infrastructure happen." Interconnectedness is paramount to drive growth, innovation and partnerships.



LOCAL INNOVATION AT THE WELTECH BUSINESS CENTRE

Ka Ng, Corporate Director (Resources, Environment and Cultural Services)
Welwyn Hatfield Borough Council

First, a few statistics on Welwyn Hatfield.



- Of the **121,000 people living** in Welwyn Hatfield, **10,600 are self-employed** (13.1% of economically active population).
- The majority of businesses within the borough are classified as micro or small in terms of the number of employees: of the 5,015 enterprises in Welwyn Hatfield, 4,515 (90%) employ between 0-9 people.

The **Weltech Business Centre** exists to serve companies such as these - to 'nurture seedling businesses'.

Weltech was opened in February 1989 and offers startup and small businesses three main kinds of use: business units, virtual office and meeting room facilities.



The Centre comprises 49 units ranging from between 170 sq ft to 799 sq ft, and it is fully let under licenses to various enterprises. These offices offer licensed businesses a 24/7 building and a reception service during office hours, which adds a professional image to businesses, broadband and free parking as well as a coffee lounge for network opportunities. Events and functions for licensees. There are communal spaces for eating, to break out and to collaborate. Internet access, full projector screen, whiteboards flip charts and refreshments all come as standard for conference room bookings.



Some of the success stories include a financial services agency regulated by the FCA moved into a 218 sq ft unit Weltech to house its three employees in September 2005. By January 2012 it had moved to a larger unit of 458 sq ft and employed eight people, whilst by November 2012 it took residency in Weltech's largest unit. During 2016 this agency occupied a further office since it now employs forty people and it may one day, as other tenants have in the past, grown to take other accommodation from the Council.

There is clearly a burgeoning demand for small business units in Welwyn Hatfield and beyond. Welwyn Hatfield Borough Council are working with the Hertfordshire Local Enterprise Partnership (LEP) and the University of Hertfordshire to identify opportunities to grow a similar model elsewhere in the Borough.

COLLABORATIVE INNOVATION ECOSYSTEMS + THEIR WIDER CONTEXT
Jeanette Walker, Cambridge Science Park

We are going to change the world with our work.

Cambridge Science Park sits on the north-eastern edge of Cambridge. The land beneath it was granted to Trinity College when Henry VIII founded the college in 1546. Historically used as farmland, it was requisitioned by the US Army in World War Two, as ground upon which to prepare vehicles and tanks for the D-Day landings. Following the war, the site sat derelict for several decades, until the 1969 Mott Report recommended a moderate growth of hi-tech industry in Cambridge. The Mott Committee was a Cambridge University Committee established to consider how the university might best respond to the 'white heat of technology' rhetoric and encouragement emanating from Whitehall under Harold Wilson's Labour government. Within twelve weeks of its report, Sir John Bradfield, then Trinity College's Senior Bursar, had persuaded the College to develop the land into the UK's first science park.



Planning permission for 14 acres was granted during 1971, and Laser-Scan - the first company - moved onto the Park in 1973. The iconic Napp building was completed a decade later in 1981.

120 COMPANIES

Although slow at first, growth has continued throughout the past forty-five years. The Science Park now covers 152 acres, hosts 120 companies and 7,500 employees.

35% LIFE SCIENCES

These organisations continue to push the forefront of innovative technologies, with companies developing biorobotics, bioinformatics and biotechnologies seeking to heal the world; enterprises protecting the world through cyber security and connecting the world through global transport systems.

65% DEEP TECHNOLOGY

Mission

To build a better world for everyone.

The Cambridge Science Park has an outstanding track record, a world-class reputation and leadership committed to curating the ecosystem.

Globally renowned
Distinguished
Visionary
Community minded

The leading science park in Europe
 Freehold owned by Trinity College, Cambridge
 Dynamic director & experienced managing agents with established track record
 Cohesive community of ambitious, like-minded entrepreneurs, a good neighbour to local organisations and residents

Diverse
Eco-conscious
Pioneering
Impactful

Home to a wide range of companies in terms of sector, size, nationality and age
 Laboratories and offices surrounded by abundant greenery, lakes and wildlife
 Early adopter of innovation, especially sustainable technologies
 Home to companies whose discoveries enhance the lives of millions worldwide

More than just a workplace

Places to jog, relax, meet friends for lunch or sit in the sunshine

Whilst the 1970s buildings are pieces of the Cambridge Science Park's and global technological history, some no longer serve the needs of technology companies, are expensive to run and fall below contemporary sustainability standards. An expansive consultation process, "Its Your Park", initiated a masterplanning process to discern how the Park should take its next steps into the future.



“The best building I’ve ever worked in in my life.”



“People maketh the place.”



“More than just a workplace”

Following this, a major new building programme is planned, alongside proposals to enhance outdoor spaces and access to nature with a central park, to improve access to the Park via non-car modes of transport, and augment the already strong amenities from a hotel with a pub and restaurant to a more spacious gym, a swimming pool amongst others.

One of the drivers beneath this phase of investment is a landmark partnership between the College and Tus Park - the Science Park development arm of Tsinghua University in Beijing, China. This includes £200m funding for the development of a 40,300 sq ft BioHub. The first bioincubator to be built on the Science Park, the BioHub meets a shortage of wet labs in the Cambridge area and the expects to attract a range of exciting start-ups.

Amenities - More than just a workplace

The Cambridge Science Park offers resident companies and their employees access to myriad on-site services and other amenities. Employees can have their shirts ironed, their dry cleaning done, their car valeted or their shoes mended - all during the week and thereby open up their free time at their weekend.

Mindful that many tenants are small to medium enterprises, or young companies, and are not set up to invest heavily in the long term potential of their staff, the Park offers access to personal development programmes for their employees on their behalf.

Amenities are wider, too. There is a bespoke Delivery System, a drive toward sustainability across the park, an aspiration to make the Park as smart as the people that work there, with smart benches which charge your phone or offer wifi, to re-use the multi-storey car park in more innovative and attractive ways and draft in autonomous vehicles in the years to come.

The Bradfield Centre - “The best building I’ve ever worked in in my life”

The Bradfield Centre is a purpose-built coworking space which opened during 2017. Much like other coworking spaces, such as WeWork, the Bradfield Centre is more like a club for technology companies than rented office space. Companies resident in the space are members, rather than tenants, they pay membership, rather than rent, for their desks and the many related amenities. The space is designed to offer comfortable seating, collaborative *and* private workspaces, open, green spaces and fresh air.

Our message to Hertfordshire: **be bold, think big.
Have a vision. Don’t be shy.**

Historically, our lives were very ordered and the different tasks of a day were neatly divided. Getting up in the morning and having breakfast with the family. Going to the office and working an eight-hour day. Coming home to have dinner and spending the evening with family or a friend. We worked five days each week, weekends were our own time, and holidays were holidays.



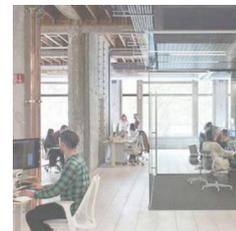
Today, however, it is not uncommon to work in evenings, at weekends or even during our holidays. We check our emails during our commutes and we write meeting minutes on our kitchen table. On the other hand our working hours are more flexible and many take sabbaticals to travel, undertake research projects or simply to switch off completely. More and more keep working when officially 'retired'; more continue learning new skills in our 50s, 60s and 70s. Digital nomads are redolent of the freedoms and connectivity of the modern world - conducting their business from every corner of our world, from hotel lobbies and airport lounges to sun kissed beaches and mountaintops.



Architecture and design reflect these developments. They cater for and influence how they materialise. Whether preemptive or responsive to these trends, the nature of the place we call the office is changing dramatically.

Google Campus London

Google is the second most valuable brand in the world, and it collects so much data about what people seek, the kinds of information people want to understand, and the everyday decisions we make about where we go, how we move about and what we do, that it is near the forefront of being able to predict the future. It is building its new headquarters in Kings Cross, London, and envisages a flexible, open and garden-like environment for its staff to enjoy.



Much of Patalab's work is the renovation of existing buildings. Most of our urban fabric is already there so we need to understand how to re-use these buildings in a smart way. A common desire is to incorporate as much natural light into the space as possible. For adequate storage spaces and display areas, to incorporate as much greenery and open space as possible. To provide informal meeting spaces with office space behind.





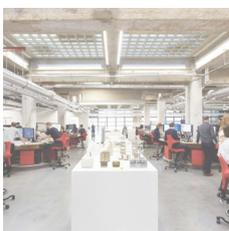
An increasingly prevalent model to illustrate these key components of a modern workplace design is **FETCH: Fluid, Engaging, Technology-driven, Convenient, and Heuristic.**



Fluid. Fifteen to twenty years ago offices were a sea of cubicles or corner offices. We have passed through a phase of dramatically open and pseudo-collaborative spaces, before realising, today, that we need both - open space to be with colleagues, as well as booths where we can get the job done. There is no one-size-fits-all approach.



Engaging. The modern office must be purpose-driven. Even within the same company, departments can define engagement in different ways. On a sales floor, for example, the goal is clear: to close. In this sense an engaging layout would be an aesthetic which is inspiring and enables privacy for prospective calls. A lobby, on the other hand, may be arranged to engage potential clients and partners in the work of the company, or a kitchen might be arranged to nurture internal camaraderie.



Technology-driven. An office in the digital age must harness technology to increase productivity and efficiency. Some examples might include machine learning and software which investigates and analyses how people interact to determine how spaces are currently used. Automatic air-conditioning which adjusts based on people's saved preferences and profiles. Spotify playlists curated for the lobby and lifts where sound plays a role in the overall design experience.

Convenient. There is a reason for the meteoric rise of WeWork. It is convenience. Office libraries, fitness rooms and kitchens are all examples of convenience and comfort within the environment of the contemporary office.

Heuristic. Allowing people to learn or discover things for themselves. A creative space can serve as an incubator of ideas and imagination, and the modern office, through the use of aesthetics, layout and technology should give workers inspiration to develop their ideas.

The park is the most flexible space we have in our communities. They cater for almost all activities: we walk, talk, sleep, argue, run, dance and dream in them. They consist of various spaces - open meadows, dense woods, intimate clearings, refreshing ponds and spots to sun bathe, hills and rocks, running tracks, football pitches, picnic areas. Benches on which to rest, view points to explore, shadow in which to hide, stages upon which to perform, small paths in which to get lost and fields in which to gather. We need to ensure we can all be happy and healthy workers and therefore must seek to create workplaces which are flexible.

WORKSHOP: WHAT DO WE FEEL IN OUR WORKPLACES ? WHERE DO WE THRIVE?

Our workshop aimed to bring people together, and - as participants - to discuss our own workplaces, as well as where within them we have been happy, frustrated or successful.

Participants were asked to spend several minutes considering their own workplace.

In what kind of environment are you happiest? Where are you most able to focus? When are you most able to connect with colleagues? Where do you feel you have your best ideas; where do you feel most able to breathe.

Following these few minutes focused on the joyful aspects of their workplace, we moved to explore frustrations.

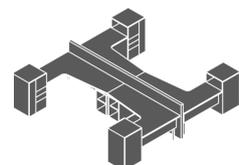
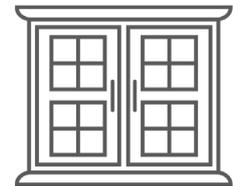
Where in your workplace do you feel the most dissatisfied, or oppressed? When do you feel unable to connect with colleagues, unable to stretch or unable to focus?

“In my role, I feel like a cuckoo in the nest as my job is so different to the rest of my team. They want silence !”

An interesting spread of responses reiterated perhaps what we all already instinctively know. **Open plan offices** with no space for private focused work are disliked and are generally felt to be unproductive. Yet they are liked for the ability they bestow on us to spend time with colleagues.

Parking and transport, as we know from previous events, are both emotive topics and felt to be paramount. Comments about parking were often phrased begrudgingly, and as observed by a number of attendees this was simply because ‘there is no viable alternative’. At the same time participants worried that they felt unable to connect with their colleagues because of a culture in which everyone rushes home after work in their cars - ‘to avoid the worst of the traffic’, or to get back to put children to bed, or simply because it isn’t tenable for many to go to an after-work social and then drive back.

We heard clear calls for access to **natural light, fresh air** through openable windows, and ideally access to some form of workspace garden or **green space**; Whilst there were some important points raised around the physical aspects of workspace design, the deeper aspects of our concerns revolved around the kind of **culture** in which one worked. Many participants were crystal clear that they would like to feel trusted and respected in their workplace, to be provided with sufficient information to undertake their role, to have leadership which looks strategically at the future, and which is not afraid of the change it needs to make.



Having explored their workspaces and working environments, participants were asked to rank their top five aspects of a prosperous and healthy workplace.



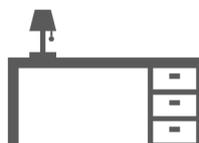
Workspaces which enable wellbeing.

This emerged as simply “wellbeing”, as well as ideas around natural light and green space, technology which enables rather than hinders productivity, fresh air as well as adequate access to the office via transport links. (Parking spaces are grudgingly considered necessary when “there is no viable alternative”). Standing meetings, nature walk meetings, and walkable environments also featured in responses.



Workspaces which flex to let us thrive.

Adaptable, flexible spaces are as important as adaptable, flexible management styles. From office spaces which can be reconfigured to change the working environment at different times, to the ability to be trusted to work productively from home.



Workspaces which draw out our creativity.

Layout and type of workspace again dovetails with organisational culture. Appropriate storage alongside a corporate culture to reduce clutter enables a professional and clean environment; one without the other may not. An open plan environment is desired, but only along with sufficient private space, hidden locations and quiet rooms in which to focus.



Workspaces which inspire us to aspire.

Participants wanted to work in: “a place with inspiring public spaces and architecture”, with “attractive outside areas”. Yet aspirations revolved around culture not just architecture, seeking “clear strategic objectives”, “an organisation that values its people and challenges them to do their best, nurturing their talent”, as well as “positivity and a thank you from managers.” How does Hertfordshire evolve an ethos which attracts innovation and quality?



Workspaces which are tech-driven, grounded in the natural world

Since it was stressed by so many, it must be reiterated here. Natural light, ventilation and access to green space are paramount in our hopes for future workspaces, as well as our sense of happiness, satisfaction and focus within present workspaces. This nevertheless took into account the increasing connectivity of the modern world and hopes were expressed about harnessing this in positive and productive manner; to enhance not diminish human physical connectivity.

CONCLUSIONS

Workspaces will change reflecting the different tasks, skills and aspirations of the millennial generation.

Workplaces need to offer flexibility for different styles of working and opportunities which will be unlocked through the introduction of new technology.

Workplaces need to better relate to their surroundings, to their communities.

Opportunities to create workplaces which offer viable access to alternative forms of walking, cycling & public transport are required in order to break the present reliance upon private car usage.

It will be important to create environments which engender creative ecosystems and serve to make Hertfordshire an attractive location from which to conduct business.

It will be necessary to embed employment uses alongside homes, retail and leisure uses. This will help to breathe life back into our centres and create attractive vibrant places.

There is appetite for a more aspirational and courageous vision.



*"We overestimate what we can achieve in a year.
We underestimate what we can achieve in ten."*

Bill Gates

