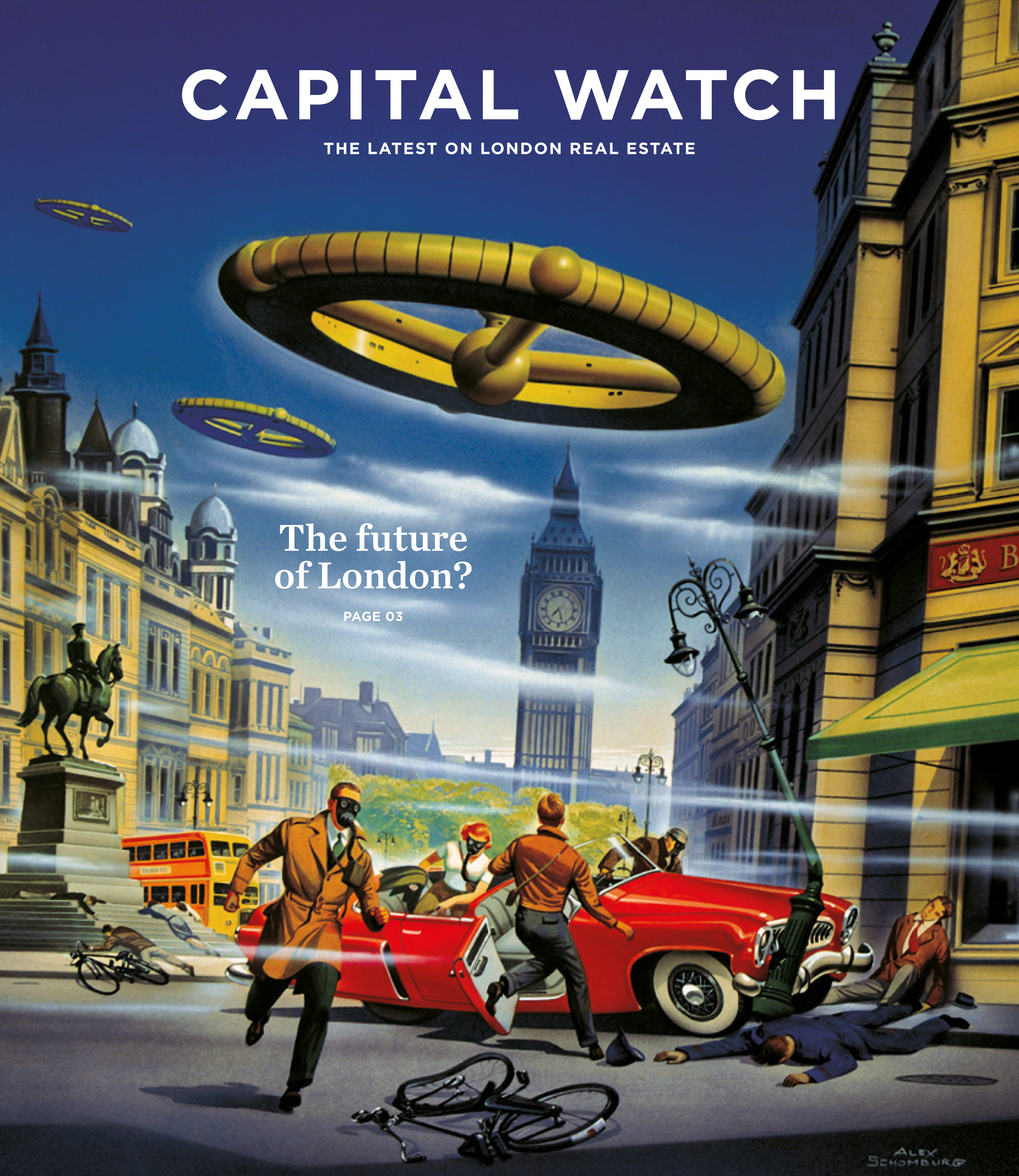
CAPITAL WATCH

THE LATEST ON LONDON REAL ESTATE



The future of London?

PAGE 03

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CUSHMAN & WAKEFIELD

Welcome

Well, we can't accuse the second half of 2016 of being uneventful!

Bookmakers and pollsters have proven themselves to be entirely inadequate at making political predictions, and they're not the only ones!

Having written a paper in June describing the unlikelihood of Brexit, I felt much more wary as we approached the US elections, and seemingly with good cause. From time-to-time the world changes, issuing in a new era. There is a sense that now is such a time.

As a predominantly anti-Brexit city, London must now grapple with a situation that it did not invite. But the vote is in the past. There are bigger challenges (and opportunities) than Brexit, and it is important that we remain focussed on these.

Fittingly, in this issue of Capital Watch, our focus is on the future of our capital. We start by taking a look at the next five years' worth of events and developments, before moving onto our feature set on the Future of Work.

For those of you that missed it, we ran a Future of Work conference in September where we brought thought-leading experts from around the world together to examine emerging trends from a number of unconventional standpoints. We've picked three of these strands here for a bit of further discussion.

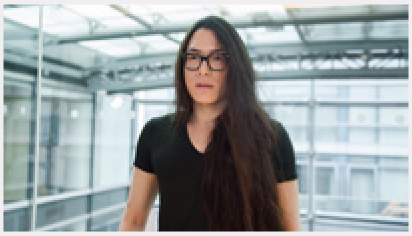
Also in this edition: Richard Howard visits Mercato Metropolitano, Candice Matthews interviews Taylor Wimpey's Ingrid Osborne, we talk to A.I. guru Dr Chlump Chatkupt, and we provide an obligatory run-down of some post-referendum stats.

We hope that you find this of interest. If you'd like to get involved in the debate, as ever please drop me a line: richard.pickering@cushwake.com.

Enjoy!
Richard

Richard Pickering
Head of Insight & Research, UK & Ireland,
Editor of Capital Watch

What's Inside



COVER STORY

London in Five Years' Time

As we approach the end of 2016, it seems timely to look forward, and very briefly backwards.

We live in dynamic and unpredictable times. The Brexit vote will be a key characteristic of the market over the next five years. Despite the initial shock passing, there is undoubtedly turbulence to come as the UK defines and transitions to a new series of relationships with the wider world. And there are bigger factors at play. Even following the vote, UK growth is predicted to run ahead of Europe's next year, with further elections on the continent potentially throwing up new surprises.

The placid waters of the past seven years have perhaps lulled us into a false sense of security. On a global stage, political stability looks to be at its most precarious for many years. And in capital markets, yields on all asset classes have ventured into unprecedentedly low territories. Meanwhile, huge technological changes sweeping through all industries are leaving many wondering how different the world might look in the not too distant future.

In times of uncertainty it is human nature (and empirical fact) that we try to find a foothold in something that is safe and will endure. That is why London will continue to prosper. Although it is a century since our capital was the largest city in the world (1825-1915), it has played a pivotal role on the global stage for most of the past two thousand years. Most recently it has been at the centre of world culture, finance, and tourism. However going further back it was a focus for religion, for the world's largest empire and for innovation in the fields of trade and automation. The passage of time may create a new raison d'etre for London, but there is every reason to be confident that it will be a world leading one.

Testament to the prospect for positive change, one only need look back at what has been achieved over five years. Five years ago (as was the case 350 years ago) London was on fire; its streets plagued by rioting and looting. However, in the years that followed, London played host to one of the greatest Olympics of all time, our future King was born, three new iconic towers appeared on the City skyline and our first Muslim Mayor was elected.

In this following section, we look ahead to key events within the next five year horizon that will shape London's future growth.

By Elaine Rossall,
Head of London
Markets Research

Key Events on London's Five Year Horizon

01

Independent UK

If negotiations go to plan, the UK will have left the EU in five years' time and both the political and business landscape may be very different from today. By 2021, the London economy is expected to be on a solid footing, having recovered from a slowdown in the immediate aftermath of the vote to leave. Depending on the outcome to trade negotiations, some banking operations may move into the EU, but the capital's tenant mix will have diversified and technology companies will hold sway. Total ICT employment numbers in Inner London are expected to outstrip financial services by 2021, with ICT employment forecast to have increased by 22,000 jobs over the next five years as banking & financial services employment declines. The freelance economy will have grown, in part following existing trends but accelerated by new startups that are created whenever the economy slows down.

"London's economy expected to recover from EU aftermath

02

Elizabeth Line

The Elizabeth line is due to open in 2018 and will be transformational in the movement of people around the capital, regeneration and public realm improvement. Ten new stations, with step free access, will improve the commuting experience for all. The new infrastructure will open up new areas to the east and west, as well as reinvigorating activity around a number of existing tube stations. Values, for both residential and commercial property along the line will have increased in five years' time, outperforming areas outside the line's sphere of influence. Existing commercial hubs will be reinforced, with Canary Wharf anticipated to be the main beneficiary in terms of the expansion of its workforce catchment. This will bolster the feasibility of both residential and commercial development in the wider area and significantly improve the 60 minute journey catchment. Meanwhile Farringdon will have the largest catchment area of any of the Elizabeth line stations. Other obvious beneficiaries include: Whitechapel (shifting from a peripheral location to a genuine commercial centre), and Tottenham Court Road (pulling the locus of retailing east along Oxford Street).

03

Pedestrianising Oxford Street

Half a million people walk down Oxford Street every day. New infrastructure will create greater access to, demand for, and pressure on the street. The Elizabeth Line's two new stations are expected to discharge 120,000 more people each day – a 40% increase. However, this is not without its issues. The street is already one of the most polluted in Europe, and one of the UK's top accident hotspots. There have been numerous plans for overcoming these challenges – from a covered mall with rooftop buses, to hop-on-hop-off trams with none coming near to fruition. Following commitments made in his election manifesto to pedestrianise the street, Sadiq Khan announced that vehicles would be banned from Tottenham Court Road in the east, to beyond Selfridges in the west by 2020. And a final stretch, up to Marble Arch, is due to be completed by 2025. The endgame might not be a totally bus and taxi free street from end-to-end, as the needs of other stakeholders need to be considered when diverting the 135 buses an hour from the street. However, with the political will in place to drive change forward, by 2021 the Oxford Street experience may well have changed for the better.

“New infrastructure will create greater access to, demand for, and pressure on the street

04

The Northern Line Extension and New Business District

The Northern line extension will connect Battersea to central London, making the journey to the West End or the City 15 minutes faster than at present, creating opportunities and communication from expanding catchment areas. Due to open in 2020, the line will include two new Zone one stations; Battersea and Nine Elms, connecting to the existing tube network via Kennington. The extension will improve access for many commuters, with a 20% increase in capacity on the Northern line during peak times, while creating up to 25,000 new jobs and 20,000 new homes in the area. The new line will help to support economic growth in the rapidly developing Nine Elms area building on the success of attracting the US and Dutch Embassies and most recently Apple. It is a key piece of the wider regeneration of the area that includes the redevelopment of the Power Station, significant residential development, a linear park, opening up of the Thames riverside path and the modernisation of the New Covent Garden market and, which by 2021, will be on the path towards being an established business district.

05

Stratford Waterfront Cultural and Education District

Stratford waterfront CGI, Queen Elizabeth Olympic Park *(Image: The Guardian)*

The rise of East London as a major destination will be cemented with the arrival of the cultural and education district, previously dubbed 'Olympicopolis'. Building on the legacy of the 2012 Olympic Games, the quarter will bring world class knowledge and cultural institutions to Stratford, backed by government funding to the tune of £152 million. Phase 1 of a new campus for UCL East will be open, with an estimated 3,000 students on site, while the London College of Fashion will bring its 6,500 students together for the first time into a new state of the art campus. New visitor attractions include the Victoria and Albert Museum, who will set up the first dedicated space for digital art and design, while the Smithsonian has agreed to collaborate with the V&A on a joint space, after abandoning plans for its own operation. This will be the first time that the Smithsonian has had a permanent gallery outside the US. Dance performances will be taking place in a new 600-seat theatre, operated by Sadlers Wells alongside a Choreographic School, a Hip Hop Academy and flexible dance spaces to complement their existing London facilities. All of which will go some way to creating an estimated 3,000 jobs and attracting visitors in the order of 1.5 million to this new cultural hub.

06

New River Crossings

The River Thames has always been more of a barrier to movement of traffic in East London than West, with a dearth of crossing points. This is all set to change with three new crossings recently given the go ahead in a bid to improve the flow of traffic and reduce pollution. This, in turn, should support stronger economic development in the area. The most advanced is the proposed new tunnel under the River Thames which would connect the Greenwich Peninsula and West Silvertown. Construction is scheduled to start by 2018, for completion in early 2022. The main aim of this development is to reduce journey times and relieve congestion, mainly in the Blackwall Tunnel, and to provide a reliable crossing for freight. Other proposed crossings include a pedestrian and cycle-bridge linking Rotherhithe to Canary Wharf, of which progress is to be accelerated and could be open by 2020 along with a further extension of the DLR, which will see it go through Gallions Reach, into Thamesmead supporting significant residential development in the area. One of the most controversial changes to London over the next five years could be the completion of a new pedestrianised crossing over the Thames. Predominantly funded by the private sector but with contributions from public bodies, the Garden Bridge aims to be a statement of innovation and creativity in London, running from Temple to Southwark.

The Garden Bridge

08

City Skyline

The City of London skyline will have continued its upwards extension, with the next wave of tower buildings completing in the next five years. To the existing cluster of towers will have been added The Scalpel, 52 Lime Street, EC3; 70 St Mary Axe, EC3; 100 Bishopsgate, EC2 and 22 Bishopsgate, EC2. These office buildings, totaling 2.95 million sq ft and rising upwards to 62 floors, are all scheduled to complete by 2020. Add to these the potential for 6-8 Bishopsgate, 40 Leadenhall Street and 1 Undershaft – the latter anticipated to be the tallest building in the City – to start on site, it is clear that the evolution of the City continues apace. The next wave of towers aim to provide office space that meet the needs of a new generation of businesses, bringing increased flexibility in use, mixed use accommodation and high quality public realm into the heart of their design.

07

Heathrow New Runway

After a long drawn out debate, the Government has given the go ahead for the extension to Heathrow Airport. While controversial for some, it will deliver significant support for London's global competitiveness. A three runway Heathrow will have the capacity for up to 740,000 flights per year and should provide sufficient hub-airport capacity until at least 2040. Research shows that the extension of Heathrow is expected to create up to 77,000 jobs by 2030 for local people and for the wider population in London and the South East. While a long way from physical completion, it should at least have made its way through the planning process in five years' time. This includes confirmation of the CPO in respect of both residents and businesses in the area, including the HQ of British Airways, as they are relocated to make way for the runway's construction.

> “Heathrow will deliver up to 740,000 flights a year

THE HOT ISSUE

10 of London's Biggest Schemes

As pressure on the central zone continues, a swathe of large regeneration schemes on the fringes of central London have made solid progress over the past five years. Looking forward to the next five years, a number of these schemes will start to complete, giving birth to new areas of London. Zoe Bignell picks out some of the highlights, and provides the key facts and figures.

Battersea Power Station, SW8

Developer Battersea Power Station Development Company

Nature of Scheme Office, Residential, Retail & Leisure

Delivery 2017+ (Phase 1)

5m sq ft development delivered over three phases comprising of Retail & Leisure, Offices and Residential. Recently tech giant Apple have agreed to lease 500,000 sq ft of office space in the iconic power station.

Stratford, E20

Developer Delancey / Westfield / Lendlease / LCR / Landprop Holdings (IKEA)

Nature of Scheme Office, Residential, Retail & Leisure

Delivery 2017+

Stratford has undergone fundamental change in recent years. Major developments include Delancey's Here East, Westfield's Stratford City, the International Quarter of Lendlease and LCR, and Landprops's 1.5m sq ft development at Strand East.

White City, W12

Developer Stanhope PLC / Mitsui Fudosan / St James / Imperial College London / Westfield

Nature of Scheme Office, Residential, Retail, Education

Delivery 2017+

6.3m sq ft regeneration to include extenstion of Westfield London, redevelopment of the iconic BBC Television Centre, 900,000 sq ft of commercial space at White City Place and home to Imperial College London's new campus.

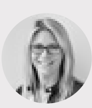
Earl's Court, SW5

Developer Capital & Counties Properties PLC (Capco) / TfL

Nature of Scheme Office, Residential, Retail

Delivery 2018+

The masterplan is based on the creation of 'Four Urban Villages and a High Street' across 77 acres, containing 7,500 homes and over 1.2m sq ft of office and retail space.



By Zoe Bignell, International Partner, Head of Development

Wembley Park, HA9

Developer Quintain

Nature of Scheme Office, Residential, Retail

Delivery 2018+

A total of 8.8m sq ft is set to be delivered comprised of 5,500 homes, 3.5m sq ft of commerical space and public realm.

Silvertown, Royal Docks, E16

Developer The Silvertown Partnership

Nature of Scheme Residential, Office, Leisure

Delivery 2019+

This 7.2m sq ft mixed-use development is geared to create a new type of community promoting openness, wellness and collaboration meeting the needs of the next generation of brands and consumers.

> “Silvertown... a new type of community promoting openness, wellness and collaboration

Canary Wharf New District, E14

Developer Canary Wharf Group

Nature of Scheme Office, Residential, Retail

Delivery 2019+

The development – formerly called Wood Wharf – will broaden and extend the Canary Wharf Estate to create a new vibrant live/work community, comprising of 2m sq ft of offices, 250,000 sq ft of retail space and over 3,500 new homes.

Canada Water, SE16

Developer British Land

Nature of Scheme Office, Residential, Retail

Delivery 2020+

One of London’s largest opportunity areas totalling 5.5m sq ft. Initial plans envisage a vibrant environment and a true mix of uses with new homes, workspace, retail and academic accommodation.

Old Oak Common, NW10

Developer London & Regional / Car Giant / Network Rail / London Borough of Hammersmith & Fulham

Nature of Scheme Office, Residential, Retail

Delivery 2020+

Old Oak Common is the core 330 acre development area, within the wider 1,600 acre Old Oak and Park Royal Development Corporation (OPDC) which also includes the Park Royal industrial area and Wormwood Scrubs. The vision for the site is to deliver 25,500 new homes and 65,000 new jobs.

King's Cross, N1C

Developer Argent / AustralianSuper

Nature of Scheme Office, Residential, Retail & Leisure

Delivery 2020+

King's Cross is now a new London district with a combined total of 8.4m sq ft of development including 3.4m sq ft of workspace, 1,900 new homes and the Coal Drops Yard retail scheme designed by Thomas Heatherwick.

Adapting to Change

By Digby Flower, Chair UK & Ireland, Head of London Markets

Having seen three inflection points over the course of my career, the referendum vote, although unique in its facets, is another challenge that will sooner (or more probably later) be overcome. London has proved on successive occasions that it has a capacity for reinvention, and there is no reason to think that this time will be any different. The prospect of Brexit has however caused a moment of introspection within the industry. Beyond market cycles, there are a number of factors conspiring to change the landscape over the next five years that are without recent precedent, and the impact of which will be profound. Many of these are tech-enabled, but the drivers are often deeper social changes.

For a business like ours we are reliant on attracting the best talent, and this is increasingly drawn from more diverse sources. The costs associated with living in London are now prohibitive for some at the start of their careers, and this is a central challenge for London businesses in the near future. Marrying Millennial, and now Gen Z, aspirations for 'purpose' with the divergent workplace requirements of an older generation is also coming into sharper focus, and directing us towards new ways of working that might seem alien to a previous generation.

Digital automation is already within sight, and unlike previous periods of innovation, this will impact on white collar jobs in London. The property industry is in no way immune, and it would be naive to think that commercial agencies will be entirely insulated from the platform-based models disrupting high street estate agencies. Adaptability and a relentless focus on value, will define success. We are mindful that our clients' business models are also shifting. The importance of designing in flexibility to major capital projects, and anticipating trends that are not yet evident is stretching established expertise, and precipitating invention. Harnessing the explosion of data that is already being created is daunting, but also genuinely exciting in terms of the advancements that it might unlock.

Will working in the property industry in London be different in five years? Almost certainly, yes. But I'm confident that the changes will bring opportunity.

ROUND-UP

London at a Glance

Sam Harper,
Surveyor,
rounds up the top news stories of the past quarter

Co-working Covenant Makes the Grade

Hong Kong investor Kingboard has bought the freehold interest in Moor Place, EC2, for £271 million reflecting a NIY of 4.86% and a capital value of £1,144 per sq ft. The 236,793 sq ft City office building is the European HQ of WeWork, with 73% of the space let to the co-working behemoth until 2035.

This is only the second time WeWork's covenant has traded and the first of this scale. This follows Corpus Sireo's purchase of a 10% geared leasehold interest in 33 Queen Street, EC2 where WeWork occupy 37,300 sq ft, in May for £40 million reflecting 5.00% NIY for a new 20 year lease. Investors are starting to accept co-working covenants which, despite as a sector accounting for 10% of London take up in 2015, have been treated with a degree of caution owing to a lack of clarity surrounding operators' financials.

Moor Place, EC2

Apple Plants Flag in the Sand at Battersea

Tech giant Apple has signed a deal to take c. 500,000 sq ft of office space at the heart of Battersea Power Station. This represents a commitment to 40% of the office space within the iconic Grade II* listed former boiler house, and will make it one of Apple's largest bases outside of the US. The new Apple campus will house around 1,400 employees from existing sites across the capital when it opens in 2021.

This is positive news for the consortium of Malaysian investors who have been driving the £8 billion regeneration project since purchasing the site out of receivership for £400 million in 2012. This transaction, along with the extension of the Northern Line to Battersea which is due to open by 2020, should act as the catalyst required to redefine this new London submarket, in the same way that Google is widely credited with doing at King's Cross.

All Points Covered on the Retail Compass

In North London, Hammerson Plc and Standard Life Investments have revealed plans this quarter for a £1.4 billion (1 million sq ft) retail and leisure extension to Brent Cross London. In Croydon to the south, Hammerson Plc and Westfield have recently submitted an enhanced proposal to deliver another £1.4 billion development (1.5 million sq ft) of retail and leisure. In the west, Westfield are pursuing a £1 billion extension to Westfield London that will provide an additional 740,000 sq ft of space. And in the east, Westfield's Stratford City goes from strength to strength with 42 million footfall in 2015 and significant rental growth.

This £3.8 billion pipeline will ensure each quadrant of London has the benefit of a world class shopping and leisure hub to support a population that the Mayor expects to reach 10.89 million by 2041. The remaining challenge for developers is how to future-proof these schemes against continual technological advancements and disruptions.

Protecting London's Fabric

Sadiq Khan has appointed US comedian Amy Lang as London's 'night tsar'. She is tasked with the protection of London's night life economy, which is worth £26 billion a year, representing around eight per cent of London's economy and supporting one in eight jobs. Since her appointment in November, Amy has already played a central role in the high profile reopening of the iconic Fabric nightclub in Clerkenwell, following its closure in September.

This is being heralded as a major win amidst the reported decline of London's wider cultural scene, including the closure of 35% of grassroots music venues since 2007. The Mayor's appointment of a night tsar recognises increasing pressure on cultural uses from higher value alternatives such as office and residential. It seems logical that such intervention will go to protect developers in the long run, as it preserves the cultural variety that has been integral to London's ability to attract the top talent and its success as a global city.

Development Aims High

In a post Brexit boost to London, AXA Investment Management / Lipton Rogers have pledged to go ahead with the 1.4 million sq ft 22 Bishopsgate. In the weeks before the referendum AXA had stated that they would review the largest development in the City if the vote was to leave the EU. The decision to build is a sign of confidence in the longer term prospects for the City, and follows on from the successful leasing performance of Leadenhall Building (100% let), 20 Fenchurch Street (100% let), 100 Bishopsgate (50% prelet) let and the Scalpel (35% prelet).

The 22 Bishopsgate design replaced the previous Pinnacle scheme, for which construction began in 2008 before being suspended in 2012 due to the economic downturn. The foundations and groundworks are largely complete which will allow for an accelerated construction timetable with a completion date targeted for 2019.

SPOTLIGHT ON...

Rates Increase in London

As the UK braces for implementation of the 2017 Rating List in April, Mark Henderson, our Head of Statutory Valuations considers the effects of the revaluation on London's commercial property market.

By Mark Henderson, International Partner, Statutory Valuations

The valuation date for the new Rating List is 1 April 2015, whereas the previous Rating List was based on values on 1 April 2008. Therefore, when the new Rateable Values become effective on 1 April 2017, they will crystallise a period of seven years' growth in rents.

For most of the country, where rents have stagnated over this period, the revaluation will have little impact. However, in London, which has enjoyed particularly strong growth, the uplift will be material in many cases.

Unsurprisingly, the impact will be felt most markedly in areas that have been subject to significant regeneration over this period. This includes areas of the City fringe, where office rents have risen on the back of the tech boom.

On the retail side, most streets in the West End have seen significant growth, with Dover Street's startling 237% increase showcasing the spill-out of luxury retail from Bond Street.

Retail	% RV Change
Old Bond Street	117%
Westfield Stratford City	101%
Dover Street	237%
Office	**% RV Change**
City Fringe	69%
Hammersmith	29%

FINAL: TRANSITIONAL ARRANGEMENTS 2017 REVALUATION (BEFORE INFLATION) FUNDED BY 3 CAPS ON REDUCTIONS						
	Property Size	2017/18	2018/19	2019/20	2020/21	2021/22
Upwards Cap	Small	5.0%	7.5%	10.0%	15.0%	15.0%
	Medium	12.5%	17.5%	20.0%	25.0%	25.0%
	Large	42.0%	32.0%	49.0%	16.0%	6.0%
Downwards Cap	69%	20.0%	30.0%	35.0%	55.0%	55.0%
	61%	10.0%	15.0%	20.0%	25.0%	25.0%
	29%	4.1%	4.6%	5.9%	5.8%	4.8%

Note: these are year on year caps on increases. For instance, the maximum increase for small properties over 5 years would be 64%. But a small property with an increase of 7% would reach their full bill in year 2. Medium is above £28,000 rateable value in London and £20,000 elsewhere. Large above £100,000.

“Impacts will be most notably felt in boom and regen areas

There are also quite wide variances within London. For example within Mayfair and the City, with micro-locations in each sub-market showing quite large variances in Rateable Value change.

This is reflective of the characteristics of the central London retail market where the street address and prominence are so significant, and turning the street corner can see a sharp drop off in rental value.

London ratepayers suffer from the double impact of having both large underlying rental growth, and also being typically classified as ‘large’ (RV > £100,000) buildings, which means that they don’t benefit from transitional relief to the extent that smaller buildings do.

Transitional relief, tweaked slightly in the recent Autumn Statement, is designed to taper the effect of the increase over a few years. However, as shown in the table above, with uplifts for large properties capped at 42% in Year 1, and 32% in Year 2, only those with exceptional growth will have more than two years’ worth of transitional relief.

The Uniform Business Rate (UBR) used to multiply Rateable Values to arrive at the Business Rates payable will be reduced next year to 47.9p in the pound (currently 49.7p), to some extent counterbalancing Rateable Value increases. However, a third sting in the tail for London are the supplements of 2 pence for Crossrail and 0.5 pence in the City of London for the special security measures, both of which are added to the UBR as appropriate and are not limited by transition.

Whilst overall average rates changes in some areas can appear modest, these averages do hide some real shocks, and ratepayers will be keen to contest assessments after the 1st April 2017. However the Government is also introducing a new system known as Check Challenge Appeal (CAA), which is a more complicated and costly process, that the Government, by its own admission, have introduced to reduce the number of appeals. Of most concern, is the fact that in the Draft Regulations for CCA, the Government is proposing to “blunt” the judicial powers of the Valuation Tribunal (VT). The proposals will only allow the VT to make a decision to alter an entry in the Rating List if they are satisfied that the Valuation Officer has acted outside the realms of reasonable professional judgement, and whilst this has not been defined, it could be interpreted as being +/- 10% or even more.

This could mean, for the largest rating assessments in central London, ratepayers could be paying several million pounds more in rates over the five year period of the Rating List than is justifiable. This would make business rates unique as a tax where the taxpayer could be overtaxed by 10% or more with no ability to have the assessment changed.

We await with interest the actual operation of CCA in practice.

FEATURE SET

Future of Work

The Cushman & Wakefield Futures Group is a collection of individuals at the top of their respective industries and at the vanguard of futurist thinking.

The group is a truly global initiative with members hailing from all corners of the world from America to Sweden, Germany to New Zealand and London to Bali.

Never before has a professor of robotics shared a stage with a global street artist and the founder of Balinese Jungle co-working space. The ability to bring these thought leaders together has allowed us to question the norm in real estate, push boundaries and lead the way for futurist thought in the property industry.

These relationships keep our business, our employees and our clients ahead of the competition, informed on the future trends in the environment, culture, economics and of course real estate in a way that is *"thought provoking, avoids industry clichés and is succinct"*.

Following on from our most recent event which covered the Future of Work, dubbed the *"best half day conference I have attended"* by one of our clients, we will be rolling out two more all-star conferences in the New Year – looking at the future of how we live and shop. 2017 is set to be another truly thought provoking year for our industry!

By Juliette Morgan, International Partner, Global Tech Group

> Millennials want a life which revolves around 'being' rather than 'doing'

Work Anywhere

Hubud, Bali's first co-working space

By Rory Young,
Occupier Representation,
Global Tech Team

In September I sat and watched as Steve Munroe of Hubud singlehandedly made a room full of people wish that they could pick up their belongings, and work from a Jungle in Bali. Steve gave a presentation in which he eluded to the mysterious digital nomad and the even more elusive millennial. A digital nomad does not see their job as a restriction to where they should be in the world and uses technology to leverage this belief. The digital nomad movement is almost moving in tandem with the growing millennial workforce, both of whom value experiences over possessions and share a distaste in being static. They are inspired by movement and want a life which revolves around 'being' rather than 'doing'.

There is no question that technology has broken down countless barriers in work and social aspects of our daily life. It is now possible to talk or host video chats with anyone, anywhere at any time. We can watch live streams of events across the globe as they unfold, transfer money, order taxis, order food, even order a private jet from our mobile phones and yet we still have to be sat behind our desk to write a simple report on word. According to Google's 'Workplace 2020' survey, 52% of respondents are able to access all the information they require for work through mobile devices, putting forward a strong case for increased levels of flexible working.

An eye opening fact mentioned at the conference is that on average we spend 74 minutes a day commuting to and from work. That works out as being around 12 weeks of our year spent just travelling to the office. The millennial generation, a generation who account for more of our workforce by the day, value experiences over anything else. It must be recognised that very soon the majority of our workforce will be made up of individuals who no longer accept a job forcing them to 'experience' 12 weeks of the year travelling to an office and on average spend 90,000 hours of their entire life.

A revolution is happening and it involves work, the worker and the workplace. The most visible of these changes being the workplace. Some would argue that the physical office itself is broken, however I believe that it is simply the meaning of the office which is 'broken'. The office will become a drop in centre for those non-routine tasks that require the social intelligence and creativity to solve them, rather than

Second Home, Hanbury Street, London – Home to Cushman & Wakefield's Global Tech Team

> **"Ability to work anywhere, means that the battle for talent has never been greater for companies**

a fixed location that you are only able to work from. This level of social intelligence is the main reason that an entrepreneur will pay over £300 a month to have a chair in a coworking space rather than just as easily working from home. A coworking space provides a community, social interaction, engaging events, relaxed atmosphere and (more often than not) good coffee. All attributes that draw people in who, as was previously mentioned, could easily not pay the membership fees and stay at home.

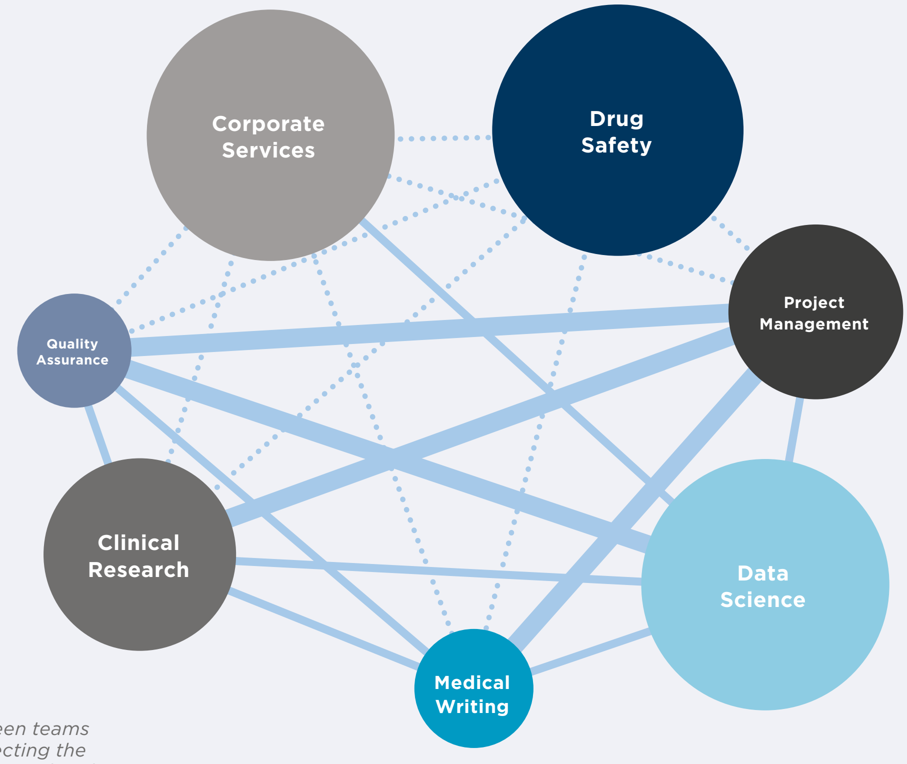
Our ability to work anywhere means that the battle for talent has never been greater for companies. As demands for more flexibility and engaging workspaces permeates through all industries, businesses are beginning to react. A number of corporates now have select teams working out of coworking spaces, such as our Global Tech Team, Ernst & Young, J.P. Morgan and many more.

Corporates now need to take the lessons learnt from coworking spaces and apply them to their very own office environments. There needs to be a cultural shift away from how and where you do your work that allows for a more flexible workforce. Creating a more engaging workplace would be a step in the right direction. I'm not talking about bean bags and slides, but a move away from banks of desks and the creation of a more collaborative environment.

To finally touch on Steve's presentation, we go through life in stages whereby we learn, then we work, then we live. We need to ensure that there is a convergence of all three of these aspects. A workplace which gives you access to these would be a workplace whereby if you can work anywhere, you would still choose.

The Links that Bind us

Neil McLocklin, Partner in Strategic Consulting EMEA, gives us his impressions of Greg Lindsay's presentation at our Future of Work conference on *where* you work within a building, the importance of mapping face-to-face and why in an age of digital nomadism, it still matters.



Mapping connectivity between teams – the size of the bubble reflecting the amount of intra-collaboration within the team, and the boldness of the line the degree of inter-collaboration.

By Neil McLocklin, Partner, Strategic Consulting EMEA

The paradox of work is that the more technology enables us to work remotely in virtual teams, there is an increasing need to have face to face contact and work together. The format and style of the contact and collaboration may be very different, but the emotional need to hang out together in physical space has never been stronger. At the base level this is about building relationships and developing a common sense of belonging – it is tribal. The high level needs are perhaps even more important. It is about developing common understandings, sharing and developing ideas and ultimately developing a sense of purpose, stimulating body, mind and soul. This need is met by creating an interactive and collaborative workplace experience with an open and sharing management style. Corporate events sharing knowledge between teams and indeed clients and partners stimulate this activity, but equally important are informal hang out areas and social space to stimulate serendipitous interactions. Branding, graphics and good design are powerful agents to support the ethos, whilst collaborative technology and workspace tools ease the process.

Big data analytics now enable business to not only promote these interactions but to measure them and seek interventions to enhance them. The analytics can measure intra team collaboration amongst its members as well as inter team connectivity between different groups. This can include monitoring e-mail and messaging flows (numbers not individual content), but also, through the use of sensors or beacons, interactions in both formal settings such as meeting rooms, as well as ad hoc interactions at coffee points or in social areas. The insight that this provides can highlight silos within organisations, as well as sub-optimal collaboration between perhaps the two areas of the business that need to work most closely together as a critical success factor for the business.

However, it is not only within companies that the importance of collaboration and working together is recognized. There are networks that extend well beyond the corporation which are becoming as important to individual's sense of belonging and knowledge development. This can be through interest groups focused on market, professional or social demographics. Events and networking are the life blood and critical to the success of many co-working offices and tech start-up incubators. These facilities typically have 'members' who are regular users of the facilities but primarily value the knowledge transfer through meeting people focused on similar market opportunities and events hosted, in some cases daily, on topics that range from the latest technological developments, sharing and developing business ideas, to personal health and wellbeing. It is the quality of this content, as well as the coffee, workplace design and services provided that attract people to become part of the 'club', and the working facilities are secondary.

Work can be done anywhere and so the question is why does somebody need to invest in the commute? Whether the workplace is within a business or managed as an independent service provider, it has to be managed and work hard to maximise the value to the employees and clients, and make it a destination of choice. Collaboration and content is what will encourage people to invest in the commute.

"The emotional need to hang out together in physical space has never been stronger

“ As computer intelligence increases, so does its ability to replace increasingly complex processes

Digital Automation

Increasingly, ‘digital automation’ is finding its way into the ‘macro’ section of consultants’ reports. Depending on one’s perspective it might be listed as an opportunity or a threat. However, all too often these reports are then put on shelves in favour of business as usual. That would be a mistake - the fourth industrial revolution is already upon us. Many reading this article (maybe me) could find their jobs significantly changed, or removed entirely, within the next five years. As a white collar worker, it is easy to dismiss such suggestions as scaremongering. However, as technology advances, some knowledge workers have become as disintermediable as were the artisans in the first industrial revolution.

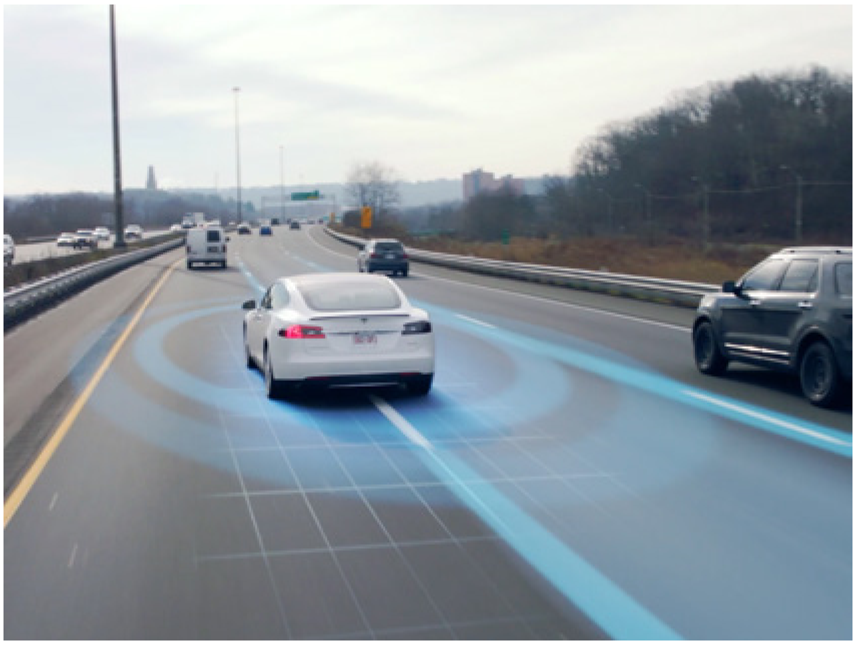
Technological revolution is typified by a sudden breakthrough at the end of a long wave of more sluggish change. Each revolution has had profound impacts for society and the property industry. First time around (1760+), this meant the mechanisation of processes, driven by steam power. It was largely responsible for the urbanisation of the UK, and associated for instance with a boom of the textile factories in the north of the England.

The second (1870+) was about mass production, and the factory lines popularised subsequently by Henry Ford and others. Together with an expansion of the rail system, new agglomerations and industrial specialisms were made possible, and cities exploded. Over a period of just 100 years, London’s population grew five fold.

The third (1970+) – the only previous technological revolution in living memory, was concerned with the introduction of modern IT and communication technology, which has changed the design of offices, and when combined with globalisation and consequent deindustrialisation, focussed our economy on services.

This new wave is about Artificial Intelligence (AI) and robotics. Its impacts are not yet known, but we can take a good guess, based on the operation of these emerging technologies. As computer intelligence increases, so does its ability to replace increasingly complex processes. The introduction of the personal calculator in 1967 might be seen as the tip of the iceberg. This was after all just a linear process, where a simple instruction to a dumb machine produced a predefined answer based on a series of logic gates. New machines have the ability to learn and spot patterns in the data.

By Richard Pickering,
Head of Insight & Research, UK & Ireland



Tesla's self-driving car

They can also adapt to unforeseen events, (such as someone getting in the way of a defined path) which is what is unlocking the adoption of autonomous vehicles, and many other new innovations. This provides an exciting step forward in human progress, potentially unlocking advances that were previously science fiction. However, it will also create significant disturbance in existing industries.

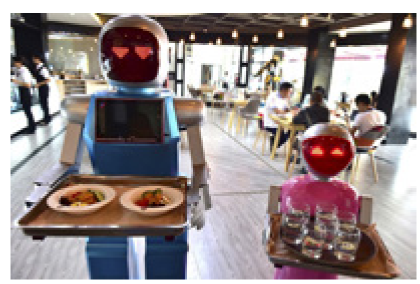
The Oxford Martin School have produced a paper which sets out those industries most susceptible to automation, and the results may surprise some. It is not necessarily low value functions that will be removed, like in the 1980s. The degree of susceptibility depends on a human's relative advantage over AI. Even matters requiring considerable intellect are, if process ladened, potentially replicable and quite possibly bettered by an AI. As Dr Carl Frey noted in his talk at our Future of Work Conference, a computer is free from the bias, heuristics, and hangovers that afflict humans. For accuracy and predictability, pick a robot. Perhaps consequently it is those jobs that in fact require the subjective biases of creativity and social intelligence that are better protected. Hence a hairdresser may be less susceptible to automation than an accountant.

> **It is not necessarily low value functions that will be removed, like in the 1980s**

So is this a good or a bad thing? Again, it depends on your perspective. History tells us that those who own the machines that facilitate change are going to get rich at the expense of those who don't. In an era of declining real wages, this is only going to exacerbate the inequality of wealth in our already polarising society. However, this is not the whole story. Although much reference is paid to the poor conditions and long hours of workers in the industrial revolution, it was precisely this ability to work long hours and gain wealth that lifted many workers out of agricultural poverty. Secondly there is the 'Luddite Fallacy'. This suggests that new technology does not reduce employment, it merely changes its composition. Innovations reduce costs; they also create demand for new goods and services. Jobs find a new home, although not without a reskilling lag, which is why education will be so important in the years to come. And finally, in the first industrial revolution someone was needed to build the looms and the factories. That is where the property industry comes in.

> **There has never been a greater need in recent times to build flexibility into development projects**

Property is an incredibly capital intensive industry where costs are amortised over many years. In this context, unexpected technological obsolescence is a huge threat to value. If you owned a new office building in the 1980s built to a pre-digital spec, and suddenly there was a requirement for new service media that necessitated an increase in the slab-to-slab height, you were faced with an instant write-down. An anticipated move to fully automated / robotised industrial space will consolidate the change in this sector started in the 1980s. Generally, one might assume that the offices and shops of the future will be differently dimensioned, scaled, and specified than they are today. Potentially new assets and sectors will be created. Previous revolutions created cities; the current one might now start to rip them apart. If so, a value model focussed on investment concentration will come under threat. More likely is that over time cities will be repurposed. Meantime, there has never been a greater need in recent times to build flexibility into development projects and watch carefully those industries that are being unlocked, and those that are being diminished. And for all of us on a personal level, there can be no room for complacency.



Robotic workers

Mercato Metropolitano, London, SE1 6DR *(Image courtesy of Antonio Olmos for the Observer)*

By Richard Howard, International Partner, Head of Emerging London

The Power *of a* Market

Smithfield, Borough, Camden, Spitalfields, Whitecross Street, Billingsgate… all of these iconic London markets have unquestionably had a hugely positive effect on the areas around them. Markets bring life and soul to an area, and imbue it with the authenticity, and feeling of being established, that can make a district feel truly stitched into the fabric of London.

> **Mercato Metropolitano also very much has the community as its ethos, and this is not just PR blurb – they mean it**

LONDON DNA

Mercato Metropolitano food & wine stall *(Image: © Saramontali)*

Launched in September, Mercato Metropolitano is such an environment, situated in 45,000 square feet of the buildings and grounds of an old paper factory in the (currently) very unlovely stretch of Newington Causeway.

It is best described as a fusion of the best aspects of the covered food halls in Brixton and the food quality and excitement of Borough, with a real community aspect (there is a brilliant cinema where you push your way through a jungle before watching Pirates of The Caribbean – possibly not accompanied by your Mum and Dad who are instead drinking amazing Italian wine in the courtyard).

As its name suggests, it is also reminiscent of Eataly in Manhattan, in that the vast majority of the food and drink on offer is Italian. In its own words it "…specialises in small producers from all over Italy and the UK, with an onsite bakery, fishmongers, butchers, coffee roasters, pizza chefs, artisan beer makers, cheesemongers, specialist charcuterie, a large selection of Italy's most exciting wines, fruit and vegetable growers, farmers and, obviously, pasta makers. All using only the very best ingredients and always keeping their passion and artisan values at heart".

As mentioned, Mercato Metropolitano also very much has the community as its ethos, and this is not just PR blurb – they mean it. There are numerous ways to participate in what is going on, whether this by taking part in the various live music events or the many cooking courses, which range from fine cuisine for the super competent to the basics, to very simply "how to read a label", or urban gardening.

What does all this mean? Well, if you subscribe to the view that people make places, there are now people visiting this area that would not have done so before – families, couples of all ages and groups of friends – these people would very simply have had a dark spot for this area in their mental map of London and they no longer do so.

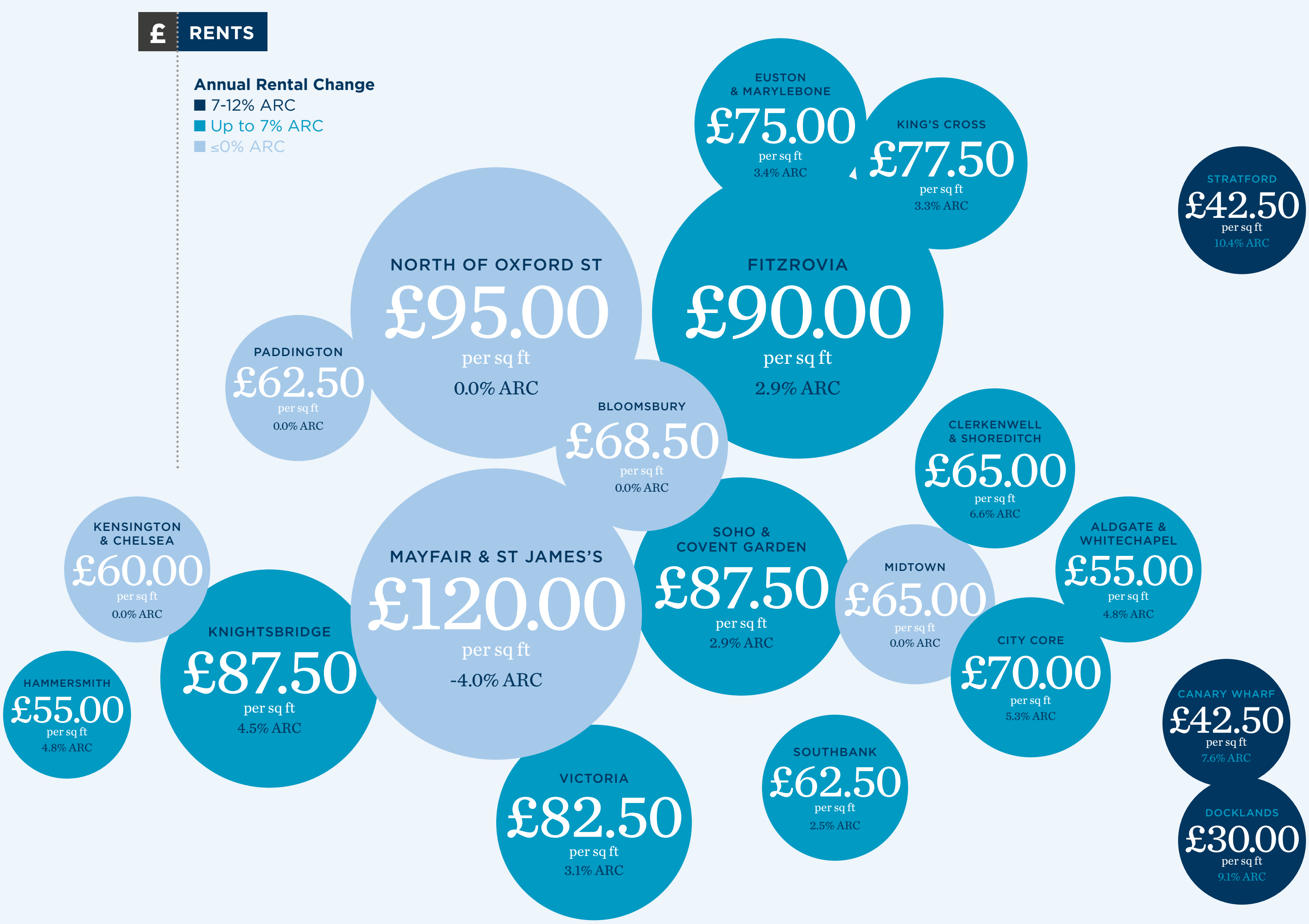
This is a very important factor for Elephant and Castle, and all the development that is going on there – now people will have their memories of the television footage of the dystopia of the Heygate Estate replaced by one of London's most attractive new offerings.

While Mercato Metropolitano will not be there forever, while it is there, it will have a significant effect on the perception of this location by the wider population of London.

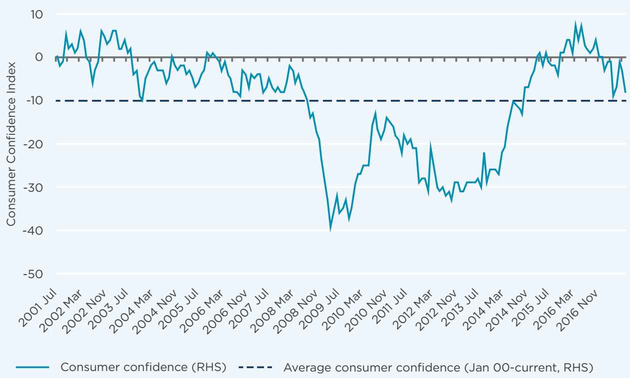
A selection of cheese and charcuterie

London in Figures

Our team of experts delve into the latest market stats and more...

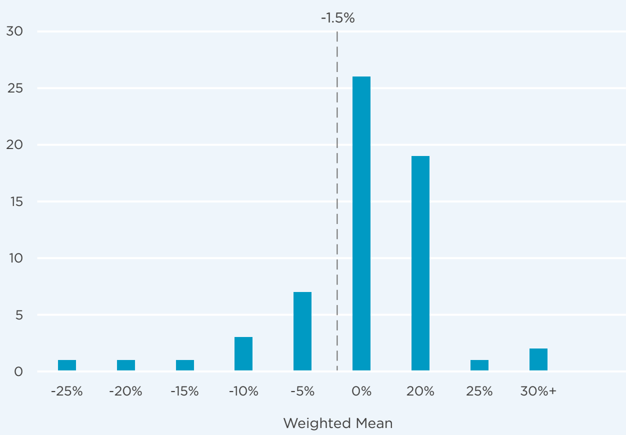


Consumer Confidence



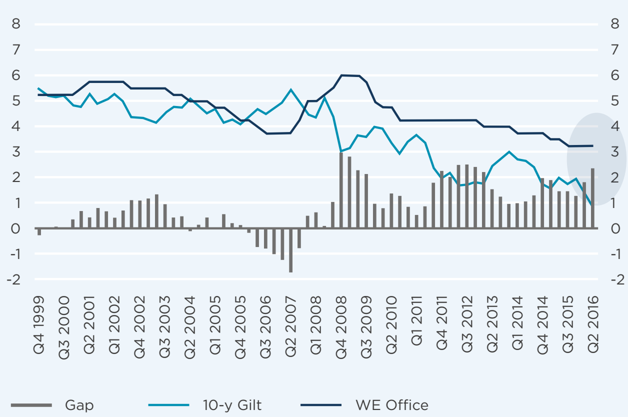
Consumer confidence dips but is above the long term average. *(Source: Gfk)*

Deal Tracker: weighted price difference pre Brexit



(Source: Cushman & Wakefield)

Prime yields v 10 year gilt



A healthy spread between prime yields and 10 years gilts. *(Source: Cushman & Wakefield Research, Bloomberg)*

Po
Bre
Brit

11%

...of premiums in Lloyds of London are underwritten in the EU. The insurance industry retains a relatively global focus.

3,000

Potential loss of finance jobs post Brexit according to a report commission by The City UK; but the figure could be up to 35,000 in the event of a 'hard Brexit'.

1%

Annual inflation has risen to 1.0% in September from 0.5% in June. This is the highest for some time; however NIESR predict 4% in H2 2017.

1.8%

Q3 retail sales volume– up on last quarter. Consumer confidence remains above long term average levels.

40%

...year on year increase in enquiries and bookings for conference centres according to London & Partners. The weak pound has significantly boosted tourism, with London the principal beneficiary.

7

...of the seven suspended open-ended property funds have now reopened. Over this period IPD capital values have fallen c.3%.

st
exit
tain

80%

...of MPs in today's cabinet voted to remain in the EU, as well as 75% of all MPs overall. Will MPs respect the referendum result following the High Court ruling?

92%

Probability of remaining in the EU implied by Ladbrokes at 10pm on the eve of the vote. How many people would have laid a bet at a point where Nigel Farage appeared to have given up?

0.25%

Base rate cut from 0.5% to 0.25% - the first movement in 7 years. With inflation now rising, can this rate continue to be held?

AA

S&P downgraded the UK's sovereign credit rating from AAA – the last to do so. But with the ability to print money, is this risk just theoretical?

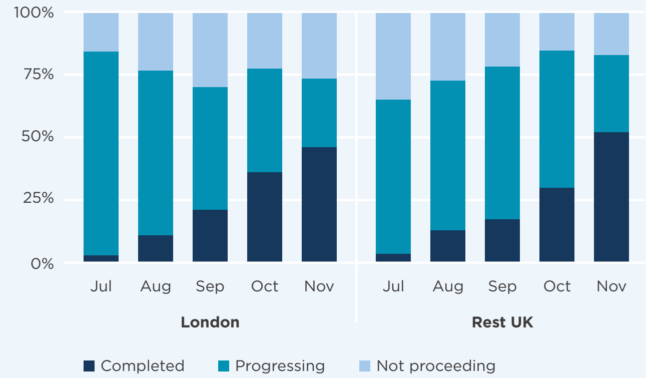
18%

...rise in the number of foreign tourists in July. London has become the most affordable global market for luxury goods according to a recent study, Will this keep pressure on retail rents?

6%

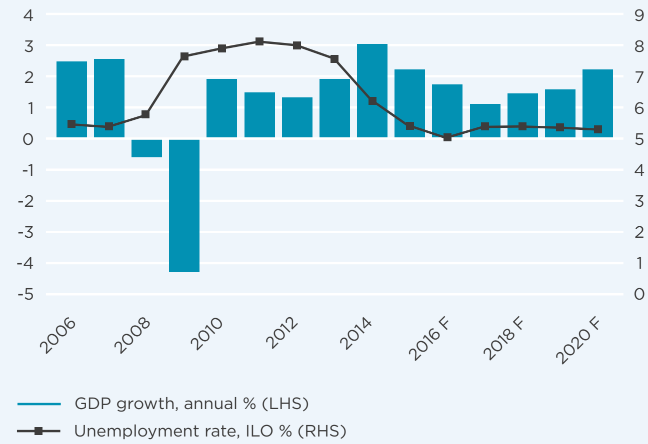
FTSE 100 up since the 23rd June and in that time managed to reach its highest level ever at 7117.

Investment Activity



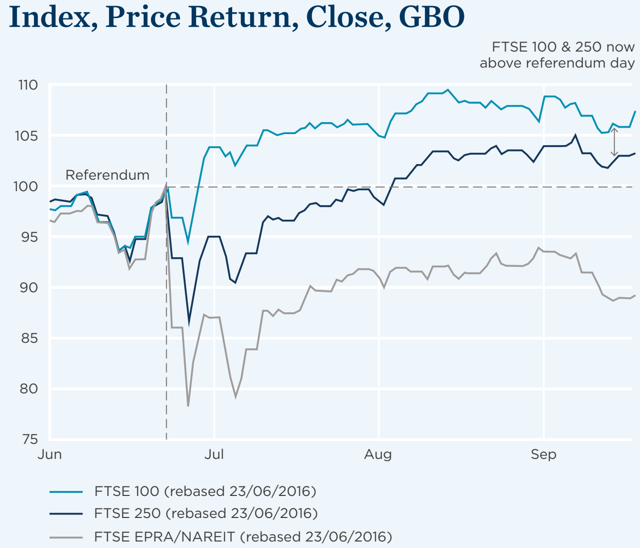
Brexit has principally caused delay rather than impacted on pricing. *(Source: Cushman & Wakefield)*

Economic Activity



No recession on the horizon, as some had predicted.

United Kingdom, Equity Indices, Index, Price Return, Close, GBO

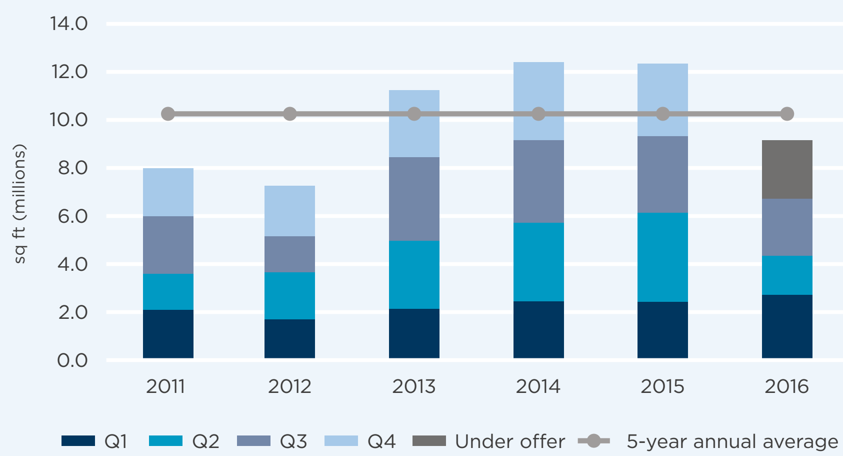


FTSE overperforms due to redenomination of dollar revenues. *(Source: Macrobond)*

> **The test to come will be with the level of new space commitments that will transact in the future**

Post-Brexit Leasing Market

Central London Leasing Volumes



Central London Under Offer Trends

The vote to leave the EU coincided with the summer lull and as a result inertia was the underlying trend in the leasing market. Nevertheless, the market received a shot in the arm in Q3 2016, with Apple committing to c.500,000 sq ft in Battersea. As a result central London leasing volumes were up 22% quarter on quarter. Q3 take-up volumes reached 2.4 million sq ft, up from 1.6 million sq ft in Q2 2016, which took the year to date figure to 6.7 million sq ft.

Leasing deals that were underway in the run up to the EU referendum are progressing, albeit slowly and there are few signs that occupiers have aborted deals as a result of the vote. Almost 60% of deals under offer pre-referendum have now signed, with a further 19% under offer and progressing, although some with greater incentives for the tenants. Just 21% are on hold or are not proceeding, but this is not necessarily a direct result of the vote.

The test to come will be with the level of new space commitments that will transact in the future. The rate of space going under offer slowed markedly in the aftermath of the referendum. In the 12 months prior to the vote, on average 2.1 million sq ft of new commitments went under offer each quarter but this dropped to 1.5 million sq ft in the three months since the vote. While July and August were quiet, as occupiers took stock, there was a flurry of activity in September when almost 727,000 sq ft of space went under offer, including five transactions over 50,000 sq ft and some substantial prelets. As a result space under offer was back to that recorded in June 2016. One must bear in mind that these figures are being supported by the length of time that transactions are taking to translate from going under offer to a signed deal.

But the scale of space under offer at the end of September has shown London's occupiers are ready to move forward when confronted by the realisation that Brexit will not be a quick process. The commitment by Wells Fargo to a new office at 33 Central along with Google's announcement that they will push ahead with their headquarters at King's Cross, creating up to 3,000 new jobs are significant illustrations of this.

This does not disguise the fact that uncertainty still prevails and occupiers are reviewing their property strategies, seeking better terms or extending their leases in the short term to allow them to assess a post-Brexit London. In this respect, 2017 could be a challenging year for the leasing market but ultimately central London should remain resilient and continue to be attractive to businesses around the world.

By Hayley Armstrong,
Research Analyst,
London Markets

In Conversation with Ingrid Osborne

Our Head of Residential, Candice Matthews talks about Central London challenges, trends and opportunities with Taylor Wimpey's Central London Managing Director Ingrid Osborne

By Candice Matthews,
International Partner,
Head of Residential

IN CONVERSATION

Candice Matthews — What are the challenges facing house-builders in the capital, and what does it take to be successful?

Ingrid Osborne — Availability of land across the capital continues to be a major factor. The most sought-after locations within Zones 1 and 2 often present a greater number of complex redevelopment sites, in contrast to the larger sections of land found further afield. The former is where we've been able to thrive as a specialist central London developer: our ability to be flexible, coupled with a highly experienced team, has enabled us to capitalise on these complex sites and tackle the challenge they pose head on.

London has forged a world-renowned reputation for excellence - whether in education, the arts or architecture. We need to preserve this commitment to quality and progress during a time of increased uncertainty. It's crucial that as an industry we maintain momentum building good quality homes and continue working together to develop solutions to improve the current status quo in regards to labour, skills and diversity.

Over the past six years we've built a diverse portfolio of schemes across prime central London, each of which is completely bespoke to its location with handpicked designers and architects with intimate knowledge of each area. Our success stems from responding to the market in good time and we're continually evolving to meet the needs of discerning buyers in the capital. Last month we launched our first show home at our Paddington Exchange development, in order to showcase the quality and finish on offer, and we'll be continuing to demonstrate our product throughout 2017 as we open further site-specific sales and marketing suites across the portfolio.

CM — What opportunities has Brexit brought, or failed to bring about?

IO — It's still too early to tell. The industry is only just starting to see meaningful data emerge from the immediate aftermath of the vote, which shows less impact on the market than predicted. The gradual change in market conditions that we've seen is the accumulation of a number of factors and it would be unwise to pin-point this solely to the result of June's referendum.

Despite initial uncertainty, London remains a highly desirable city in which to live, visit and invest. It's one of the leading cities for commerce, culture and education and will continue to attract visitors from across the globe. This sentiment mirrors the positive performance of our portfolio and our outlook to secure new land opportunities in prime locations in Zones 1 and 2.

CM — What do you see as the real opportunity areas for residential developers in London?

IO — We're seeing the boundaries of prime central London shifting beyond the traditional 'golden postcodes' of Kensington and Chelsea. As a business, our goal is to remain ahead of the curve and secure opportunities in these emerging prime areas, such as Westminster and Victoria. Our latest scheme, Ebury Place, will introduce a rare new-build option in Pimlico – an area renowned for its desirability. The new apartments will provide a fresh opportunity to live in an area that has historically lacked new-builds.

Likewise, the natural expansion of London's built environment and its rising population means global super brands will continue to be attracted to our commercial hubs. You don't have to look any further than Battersea and King's Cross to see the huge impact companies such as Apple and Google have had. News of these flagship tenants, coupled with the arrival of landmark mixed-use schemes, provides new and exciting opportunities, bringing sought-after retailers, cultural institutions and improvements to the public realm, unlocking the true potential of these emerging areas for all Londoners.

> Despite initial uncertainty, London remains a highly desirable city in which to live, visit and invest

The Place Maker

Mathematician. Tech founder. AI scientist. Economist. Engineer. 'Hacker'. Writer. Artist. Musician. Swimmer: the fascinating Dr Chlump Chatkupt is the founder and CEO of PlaceMake.io – an artificial-intelligence company promising to disrupt every level of the property value chain. We catch up with him to understand how and why.

> "The property industry is especially interesting as it is extremely traditional. It is ripe for disruption

A simple equation?

Boundlessly curious, Chlump earned a BA in Economics from Northwestern University, an MA in Philosophy from NYU, and a PhD in Mathematics from the London School of Economics and Political Science.

He says that PlaceMake.io emerged from a desire to deploy his knowledge of AI and machine learning and solve "a really challenging mathematical and technical problem."

Problem solved

And so was born PlaceMake.io, pioneering research into artificial intelligence with a particular focus on solving the most challenging location and mobility problems.

"Our mission is to help location industries to learn from their data and to build better, more efficient, smarter industries and cities."

Revolutionising place and space

The approach involves applying AI and machine learning algorithms to massive amounts of data, from traditional signals such as data from Land Registry, TfL, and ONS to powerful non-traditional signals such as social media data, search data, sharing-economy data, and soon ATM data, mobile data, and credit-card data. This means that within seconds, you can identify up-and-coming and undervalued areas, automatically identify comparable areas or properties, characterise urban dynamics and human mobility, guide site selection and portfolio optimisation and benchmarking, generate property valuations, and more.

Ripe for disruption

"The property industry is especially interesting as it is extremely traditional. It is ripe for disruption."

For all of its interest in understanding location, the industry has not been as scientific as it could be. Chlump believes that property professionals need to use and share data and exploit scientific methods to improve efficiency and focus on finding the real opportunities and sources of value.

"PropTech is nascent. There are great companies out there specialising in various elements of the supply chain – for example, maintenance, property viewings, or lease management. But as PropTech matures, you will start to see these companies aim to offer complete end-to-end solutions or break up and become incorporated into the offerings of existing service providers".

"Service providers that embrace or get ahead of this disruption will flourish. I met Cushman & Wakefield's Juliette Morgan through a mutual contact at Google, and she is a valued advisor to PlaceMake.io."

What next for PlaceMake.io?

"This is only the beginning. It is our hope that our technologies will serve as the underlying infrastructure for all location and mobility applications so that companies such as Zoopla, Rightmove, and Uber could build on top of a unified ecosystem and would no longer need to maintain their own infrastructures."

Chlump has been meeting with the great and good of the property world as well as tech giants such as Google. Investor interest in the current round is understandably high. "They are excited and see great potential. There is nothing out there like this at the moment."

> **"Service providers that embrace or get ahead of this disruption will flourish**

PlaceMake.io example of Indices

What does this mean for the industry?

Richard Pickering, Head of Insight & Research, UK & Ireland gives his view.

Big data is one the most important trends facing the property industry. This isn't a vogue; it is a paradigm shift that will be felt in the near term and fundamentally change the way that property owners and advisors do business. An industry previously riddled with opacity is beginning to open up, with far-reaching consequences for transparency, liquidity, and decision making.

The explosion of data is not in doubt – more data have been produced in the past two years than in all of previous human existence. Fuelled in recent years by the pervasion of search technology and mobile data collection, this will only gather pace as the Internet of Things delivers on its potential. The question should now be focussed on how we use it. New standards, indices and certifications (such as Wired Score) will undoubtedly emerge, and provide the platform for new data analytics. PlaceMake.io gives us a flavour for how powerful this analysis might become.

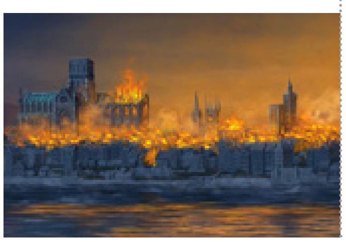
PlaceMake.io algorithms aggregate millions of data points into objective indices, structures, and models that allow us to understand the nature and dynamics of a location. But more than that, they allow us very quickly to predict change based on patterns and signals that previously were identified through intuition or months of research.

One example is algorithmic comps analysis. By identifying similarities across geographies and time, one can spot the key markers in emergent locations that might help us to establish mathematically growth potential and future development and even suggest possible interventions.

A second example is occupier site selection. By analysing existing retail store locations and a multitude of key signals, it is possible to deconstruct a site-selection strategy and even devise an optimal strategy for opening new stores. Reportedly confirmed by the cofounder of Caffè Nero, PlaceMake.io's algorithms successfully reverse engineered, using only data, the divergent store-placement strategies of both Caffè Nero and Starbucks. The value of this approach to both retailers and property owners does not take too much spelling out.

70AD
London's Roman Forum

1666
Great Fire of London



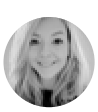
1760
Industrial Revolution

1800s
Port of London

PAST, PRESENT, FUTURE

The Wall, The Fire and the Big Bang

Throughout the City of London's 2,000 year history its environment has been shaped by constant social, political and economic change. From the devastation of the fire, to the Big Bang of the 1980s, upheaval is ingrained in its fabric. The City of today is no less prone to disruption, but it has the opportunity to be more global and interconnected than ever before.



By Sophy Moffat,
Associate Director,
Insight & Research

1980s
Financial market deregulation

1990s
Canary Wharf

2010s
Twenty-first century skyscrapers

2030+
Spiraling towers and fume-less vehicles?

The Wall: Outwards, skywards, onwards

In the 200 years after London was established by the Romans it came under repeated attack. As a result, the city – then a semi-circular area of 326 acres – was enclosed by a 2.5 metre wide, 6 metre high stone wall. For 1,000 years the wall was a success, providing a judicial boundary for both Roman and later Anglo-Saxon London.

But things started to change. Some things happening outside of the wall became interesting, and by the late medieval era the City began moving beyond its confines. First it moved westward, and later to the east, adding Holborn, Bishopsgate and Aldgate.

It is from these beginnings the 'Square Mile' came to be what it is today, providing employment for over 400,000 workers, accommodating more than 15,000 firms, and contributing billions of pounds to the UK economy.

The City's businesses have pushed outwards. Two decades ago Canary Wharf was a wasteland in east London's docklands, now it sprouts skyscrapers that provide premises for global banks with giant trading floors. Mayfair provides boutique offices for the many hedge funds that have spread westward.

The City's developers and real estate investors have pushed skywards. Incessant demand for more space has led to a wave of developments; 21st-century skyscrapers include the "Walkie-talkie", the "Gherkin" and the "Cheese-grater". There are plans to develop One Undershaft, a 310-metre high tower only slightly shorter than the Shard, along with the 278-metre high 22 Bishopsgate.

Although it is not likely to be built any time soon, SURE Architecture recently designed a conceptual tower that could theoretically house an entire neighbourhood. Having its own ecosystem, it is of a spiralling form that could be extended infinitely upwards to accommodate residential communities, businesses, schools, public spaces and shopping areas.

With a projected workforce rise of 50,000 by 2030, and GVA growth of 50% in the same period, the City of the future will inevitably continue to push beyond its existing boundaries.

> "The city of the future will push beyond it's existing boundaries

The Fire: Realities of modern urban existence ablaze

In September 1666 a fire erupted at the Baker's House, Pudding Lane EC3. 395 acres of the City were devastated and thousands of buildings destroyed. Plagued by disease, congestion and chaos, this was a chance to rebuild the City – it could be remodelled into a neat, ordered and graceful place: a new London.

This new London never arrived. The practicalities of an impatient city intervened. Tradesmen wanted to trade and shopkeepers wanted to sell. The realities of urban existence, rather than carefully choreographed plans, fuelled the rebuilding of London.

Today, as ever, the pressures of urban existence are shaping the City.

Housing in the capital is projected to experience a shortfall of 1 million by 2036, and already, the average home costs around 16 times average earnings. That the City's growing labour force requires housing, either within or outside London, means developers have an opportunity – perhaps a responsibility – to create imaginative solutions.

Infrastructure is capable of creating new, easily accessible neighbourhoods. Plans to extend the London Overground into east London's Barking Riverside development, for example, will create up to 10,800 new homes which could accommodate many workers.

With 84% of the City's working population using public transport to get to work it is positive that in just a few years, Crossrail and Thameslink will improve London's rail capacity and connectivity.

The driverless car is expected to be in use in the next ten years. Its introduction will release pressure on roads and encourage cycling. Parking spaces will be freed up, allowing for more cycle lanes and pocket parks, making the City a more attractive place.

Along with availability of labour and transport connectivity, digital connectivity will shape the City. 'Technological readiness' is now frequently used as a measure of global competitiveness. Improved digital infrastructure will provide an opportunity for the City's economy. It will raise productivity levels across all industries, and support the development of new subsectors such as FinTech.

The realities of urban existence will perennially push innovations that change the physical, and now virtual, fabric of the City.

Future London skyline... *(Image: David Edwards)*

> **"Investments managed out of London are worth a fifth of the world total**

The Industry: a prodigious capacity for reinvention

The City's role during the Industrial Revolution was first and foremost related to services - buying, selling and speculating. It was also an industrial incubator, with 17th century London manufacturers bringing in new techniques from the continent and India before they spread to the industrial cities of the north.

By the mid-17th century, it was a major international port. Its docks were an emblem of trading connections stretching from the East Indies to the New World. Although the industry of the time, the docks never managed to define London in any conclusive way. They presented an opportunity, seized and exploited then translated into something else.

The most pertinent shift for the modern City came in 1983, when Conservative Prime Minister Margaret Thatcher began reforms that deregulated the UK's financial markets. Collectively known as 'big bang', the measures were passed in 1986 and paved the way for the City of today: a global financial centre.

In the past 15 years, the specialist workforce that carries out international financial business has risen by a half. The global value of assets in hedge funds has doubled since the end of 2002 to reach $1.2 trillion. Investments managed out of London are worth a fifth of the world total (up from a tenth in 2002) and exports from Britain generated by international law firms are three times higher than they were in 1995.

The City has cultivated an economic cluster and is a place where the best international players come to compete. Since 24th June, this cluster has been reacting to Brexit. The renegotiation of the UK's membership of the EU will remain a central issue for the City, and an issue that spells uncertainty. Some things, however, are clear;

Firstly, leaders across all industries and segments have the opportunity to galvanise the City. Secondly, the City's population and workforce has the chance to show, through its everyday acts, that London remains open.

Finally, the City has a prodigious capacity for reinvention – from the Roman Walls, to the Baker's fire and the Thatcher era 'big bang' the City has continued to move outwards, skywards and onwards. Should it conquer its latest hurdle it will be on track to being one of the world's great megacities: It will be taller and denser, it will be digital, and it will have the potential to be more global and interconnected than ever before.

VILLAGE LIFE

Bloomsbury

Each quarter we take you into one of London's villages. This time our mystery man-about-town showcases the best of Bloomsbury

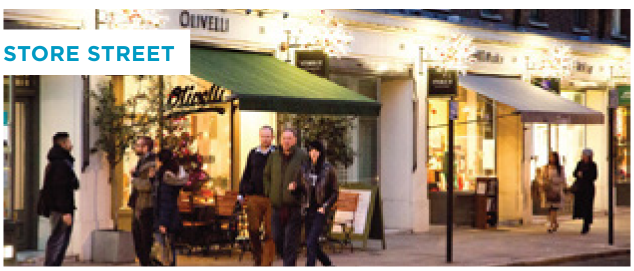
Bloomsbury, historically the 'wood of 100 pigs' (according to various disreputable internet sources) was once home to both Charles Dickens and Darwin, as well as the location of 8 Grenville Street, the home of the Darling family in JM Barrie's Peter Pan.

An often overlooked quarter of London, the area is home to numerous educational institutions, the amazing British Museum, an unbelievable 10 garden squares, as well as some of the best Georgian housing stock in London. It's also the place to head to if you have picked up something unusual on your summer travels – The London School of Hygiene and Tropical Diseases is truly world leading...

THE BUILDING CENTRE

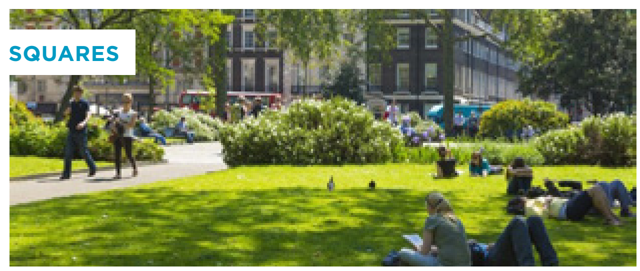
Recently refurbished and a great hub for those involved in the architecture, construction and property industry, head down and check out the various exhibitions on development activity in different boroughs within London, the construction detail for the new Elizabeth line and the NLA interactive map. A great place to take first time visitors or clients to London to educate them on what is happening where, from Stratford to Ealing.

STORE STREET



An absolutely cracking little thoroughfare. Store Street is a pretty and quiet street, home to Cloud 9 Cycles, an independent boutique bike shop specialising in custom bike builds, Foote's Music, established in the 1920's, provides a range of bespoke musical instruments, Treadwell's Books is the place to go if you want an indie bookstore with specialist books on world religion, spirituality, Wicca and paganism, or if you want to get the mother-in-law a treat head down to Orchidya, the UK's only dedicated orchid florist.

SQUARES



It's hip to be square, according to Huey Lewis and the News – and Bloomsbury has more squares than anywhere in London. Once you have spent some time looking in amazement at the Elizabeth line building works at Tottenham Court Road, take a minute walk into Bloomsbury and relax in Russell, Bloomsbury, Brunswick, Queen, Bedford, Gordon, Tavistock, Mecklenburgh, Woburn, Torrington squares. I guarantee even the most established Londoners amongst you will not have been to most of these.

LAMB'S CONDUIT STREET

A street with a strong independent spirit whereby locals fought hard to close a Starbucks that was briefly open. Check out Noble Rot for some great wines, the usual hipster sourdough and flat whites at Knockbox Coffee, tapas and paella at Gigala, some organic avocados from The People's Supermarket, luxury casual wear at Folk and for the old school who still use pens and paper, some designer stationary from Volte Face.

BRITISH MUSEUM

Get down here and check out the former British Library Reading Room, and look up at the stunning Norman Foster designed roof, before spending between five minutes and five weeks walking around some of the world's greatest treasures. Current exhibitions include Sunken Cities, Egypt's Lost Worlds to Rock Art, Power and Symbolism in Southern Africa. It's rumoured that some of the exhibitions come alive at night. (Source: Night at the Museum 3: Secret of the Tomb)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Visit cushmanwakefield.co.uk/work to learn more.
Photo: Cushman & Wakefield's office at Second Home, E1
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