

IoT Data for Smart Cities/Sustainability in the Data Marketplace

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Introduction

DigitalDisruption@BREI is a unique consortium of Academics, Real Estate Asset Managers, Developers, Property Services Firms, Funding Institutions, Lawyers and other Professionals and Representative Trade bodies, which will drive adoption of both inventive and innovative 'deep tech' in the Global Real Estate market.

The focus of the consortium is the development and deployment of research that relates to the current and future world of Real Estate. PropTech, Real Estate FinTech and PropRegTech are all fast moving sectors which are having a radical impact on what has historically been a slow moving, traditional and conservative industry.

Accurate, critical and verified data is essential as an enabler in Real Estate for data analytics, climate change and sustainability, valuations and transactions using blockchain and AI techniques. We are launching the consortium with a series of virtual events which are being held over the summer.

This, the final event, is a series of roundtables and workshop on IoT data for smart cities/sustainability and our proposal for a data marketplace. In this expert workshop speakers will identify IoT data that can be used by owners and managers of Real Estate to manage their buildings, especially with a view to compliance with energy and sustainability targets.

The consortium is a joint venture between the Bartlett Real Estate Institute and Resilience Partners Limited, and with Professor Andrew Edkins and me acting as joint chairs. We are especially grateful to the time, support and encouragement from Professor Philip Treleaven (UCL Computing), Kyle McFadden of Greystar, Jack Sibley of Nuveen and Kevin O'Grady of Arup for our current progress during these challenging times.

Jeremy Barnett

Founder, RPL and Honorary Professor of Algorithmic Regulation The Bartlett Real Estate Institute, UCL

Agenda

Introductions:

Kevin O'Grady (Associate Director, Arup);
Kresse Wesling MBE (Co-Founder Elvis and Kresse) - Sustainable Business and Real Estate.

The “Tech” roundtable:

Will Serrano (Resilience Partners) - Imperial Blockchain, neural networks and the Data Marketplace;
Claudia Giannoni (UCL) -The Real Estate marketplace;
Adriano Soares Kosiyama (UCL) - Governance and Verification of smart city algorithms;
Patrick Brown (BPF) - Ethics Governance and the Real Estate Data Foundation.

Moderated by Jeremy Barnett, Resilience Partners

ESG and the Circular Economy roundtable:

Kevin O'Grad (Arup) - Reality Capture and other IOT compliance;
Olivia Allen (Derwent London) - The Carbon Neutral Building;
Kresse Wesling (Elvis and Kresse).

Moderated by Kyle McFadden, Greystar

How this works in practice roundtable:

Michelle Percy (Newcastle City Council) - Smart Cities from the City perspective;
Derek Hidden (CloudFM) - Identifying Facilities Management Statutory Data;
Simon Pursey (Resilience Partners - ex Segro) - Data for asset management;
Robert Porter (Canopus) - Real Estate data for the Insurance Sector.

Moderator Professor Michael Pitt

Break Out Groups:

Group 1 -Sustainability and CSR, Moderated by Olivia Allen (Derwent London);
Group 2 - Remote verification techniques and automating the process, Moderated by Will Serrano (Resilience Partners) and Jonny Fry (TeamBlockchain Ltd);
Group 3 - Exploiting your own data, Moderated by Simon Pursey (Resilience Partners - ex Segro);
Group 4 - The data marketplace, Moderated by Alpesh Doshi (Fintricity).

Participant Profiles



Kevin O'Grady

Arup

Associate Director with over 33 years of International experience in cost, commercial and project controls integration across Major Construction portfolios, programme and projects. He has a proven track record in providing solutions that deliver successful outcomes in the built environment. Previously Commercial manager on London Heathrow Terminal 2 and Abu Dhabi Midfield Terminal.

From an Engineering background his understanding of key drivers and disseminating this across teams; motives and delivering the right solution. Managing the full suite of Commercial activities on major Capital Construction Projects, specialising in digital integration, business case analysis, option appraisals, lifecycle costing and evaluating the application of environmental technologies on construction developments, advising county councils on MMC funding applications. Working with British standards to revise or amend PD 156865:2008 Standardised Method of Life Cycle Costing for Construction Procurement (known as SMLCC).



Kresse Wesling
MBE

Elvis and Kresse

Kresse Wesling MBE is a multi-award winning environmental entrepreneur and Young Global Leader with a background in venture capital and significant start-up experience.

After first meeting with the London Fire Brigade in 2005, Kresse launched Elvis & Kresse, which turns industrial waste into innovative lifestyle products and returns 50% of profits to charities related to the waste. Elvis & Kresse's first line is made from decommissioned fire hose, 50% of the profits from this line are donated to the Fire Fighters Charity. The company now collects 12 different waste streams, has several charitable partnerships and is involved with collaborations across industries, from fashion houses to FTSE 100 companies etc.

Some might be hard-pressed to see how old hose could be beautiful, but 'When you polish it and see the lustrous red rubber it becomes this fantastic material!'. 'If a use couldn't be found for the hose, most of it would go to landfill, which to me is simply uncivilised. Waste is a mix of inherently valuable materials. It's shameful to shove it in the earth'.



Will Serrano

Will Serrano is a Chartered Engineer and Technology Designer specializing the technical design and design management of large and high-profile infrastructure projects, from airports, rail stations to buildings and energy plants such as CrossRail, Heathrow Gatwick Airports and High Speed 2. He has delivered solutions in Local Area Networks; Wide Area Networks; Wireless LAN; Voice; Cloud and Cybersecurity. Will Serrano holds a Master's Degree in Telecommunication Systems and Networks and a PHD in Artificial Intelligence at Imperial College London. He is a Member of the Institution of Engineering and Technology. He is an alumni researcher with the Intelligent Systems and Networks Department at Imperial College London, UK.

Resilience Partners



Claudia Giannoni

UCL

Claudia is a RICS, RIBA and ARB qualified real estate expert with over two decades of international experience in the real estate industry. She has held several senior management positions in architecture, design, planning, valuation and real estate project management and portfolio strategy in London and abroad. She has been a real estate entrepreneur for over 15 years, running real estate projects across Europe, Asia and Middle East, and now UK, London. Claudia holds a Master in Architecture from the University of Florence and MSc International Real Estate from UCL London, and she is currently pursuing her PhD in Blockchain in Real Estate, from UCL Engineering.



**Adriano
Koshiyama**

UCL

Research Fellow in Computer Science at UCL, Adriano Koshiyama has held many roles as a Data Scientist in Retail, Finance, Recruitment, and R&D companies over the last 7 years. He is the Co-founder of Holistic AI, a start-up focused on auditing AI systems. Academically, he has published more than 30 papers in international conferences and journals. During his PhD, he interned during 2016-17 at Nomura International plc in its Quant Strategies Desk (Fixed Income); late 2017 and start 2018 he was at MindX as a Data Scientist, developing machine learning products for psychometric assessment. He was an intern at the AI Labs in Goldman Sachs, working as a Machine Learning Strats, and part of the Alan Turing Institute as an Enrichment Scheme Student. His main research topics are related to Machine Learning, Finance, Trustworthy AI. He also holds BSc in Economics and an MSc in Electrical Engineering.



Patrick Brown

British Property
Federation

Patrick is Head of Insights at the British Property Federation. Patrick leads on productivity, technology and innovation, including supporting the Technology and Innovation Working Group's commissioned reports from the Future Cities Catapult in 2018 and Liquid REI in 2019 and supporting negotiations around a prospective Real Estate Sector Deal. Patrick also provides the Secretariat to the cross-industry Green Property Alliance.

Patrick holds an MSc in European Policy and Politics from the University of London and is currently studying for a degree in Computer Science with particular interests in IoT and programming with data.

Patrick Brown is currently seconded by the BPF to the Real Estate Data Foundation on a part-time basis.



Jeremy Barnett

Resilience Partners

Jeremy is Executive Director at Resilience Partners Limited (RPL). He is also a Regulatory Barrister and an Honorary Professor of Algorithmic Regulation at the Bartlett Real Estate Institute, UCL. He was a founder of the CBC at UCL and is currently a joint leader of the Real Estate Consortium 'DigitalDisruption@BREI'. He is also joint London Chair of FIBREE. Jeremy has published papers: 'E-Legal Services "To Speed up Justice for B2B systems" 2006, "Algorithmic Dispute Resolution" 2017 & "Algorithms and the Law" 2019.

RPL is a consultancy that specialises in converting critical information to add value. By collecting and validating key data and by using emerging technologies (blockchain, AI, IoT & BIM), RPL organises its clients data to avoid and (where necessary) resolve disputes; ensure regulatory compliance; lower risk and insurance cost; and help clients monetise their data. We work with property owners, developers and professional bodies to design bespoke verification processes and understand how to best harness these disruptive technologies for their individual businesses.



Olivia Allen

Derwent London

Having studied for an BSc in Environmental Science and an MSc in Environmental Assessment and Management at the University of East Anglia, Olivia started her career at Berkeley Homes as a Sustainability Assistant in 2011. During her six years with the business she worked on a variety of development projects ranging from large scale regeneration schemes to high end residential apartments in central London. Progressing to a management position she was made responsible for ensuring the social and environmental aspects of sustainability were embedded throughout the lifecycle of projects, from planning through to operation. In 2018 I spent some time developing an environmental strategy for the Royal Veterinary College before joining Derwent London in January this year. Her focus so far has been developing Derwent's approach to achieving net zero carbon by 2030 and engaging with all parts of the business to reach this goal.



Kyle McFadden

Greystar

Kyle McFadden is Director of Business Operations for Greystar Europe. One of his current areas of focus is how the digitization of real estate is affecting the operating platform. Kyle started with Greystar US in 2011 before transferring to the UK in 2014 to help build out Greystar's European platform across UK, Netherlands, Germany, Spain, France and Ireland. With data and automation becoming a necessity for the evolving real estate landscape, Kyle is keen to understand how it can be leveraged for efficiency across all verticals of the industry.



Michelle Percy

Newcastle City Council

Michelle joined Newcastle City Council as Lead Assistant Director of Commercial Development in October 2016. Michelle's role is to deliver a major change programme and shape the Council's approach to becoming an enterprising Council.

Prior to joining the Council Michelle played a leading role in a Newcastle based property company and the delivery of a 4 star Crowne Plaza Hotel, the initial phases of Stephenson Quarter – a 10 acre regeneration site adjacent to Newcastle Central Rail Station, containing several listed buildings and within a conservation area.

Given Michelle's background and experience in the property sector she took over the strategic property team in 2017 and then in 2018 all of the property services function to support the council's ongoing transformation of its assets.

In September 2019 Michelle took the role of Director of Place, overseeing the Council's functions of Planning, Highways, Property, Housing and Commercial in the city.



Derek Hidden

Cloud FM

Derek has worked for several of the major facilities management companies in varying roles, from site-based management to directorships of large client accounts and technical departments. He is the founder of Cloudfm Group which provides dedicated solutions for planned and reactive services to the hard service sector. To expand his roles within the industry he became the Managing Director of The Greenblock which provides statutory planned maintenance investigations, business risk management and EBIT improvement to the hard and soft facilities sector.

He is dedicated to educating and motivating the FM leaders of tomorrow to build a more sustainable industry.



Simon Pursey
MRICS
Resilience Partners
Limited

Simon has 20 years of experience in commercial real estate in client side and consultancy roles. He was appointed Head of UK Investment at SEGRO Plc in 2015 where he had responsibility for capital recycling and portfolio performance within a £6.4bn Logistics portfolio. From 2008 he led on over £3bn of property transactions, delivering on the restructuring of SEGRO's UK portfolio.

Prior to this Simon was a consultant at Cushman & Wakefield from 2004 – 2008 where he advised numerous blue-chip Investor, Developer and Occupier clients on business space investment and leasing acquisitions and disposals



Robert Porter
Canopus

Rob is Head of Digital Product at the insurer Canopus, a syndicate at Lloyd's of London. He has 10 years' experience in the Lloyd's insurance market, in catastrophe management and underwriting roles. In his current position he leads product development and pricing for the syndicate's Digital platform, a core aspect of which is utilising predictive analytics to improve underwriting performance and operational efficiency.

He has collaborated in the development of new data standards for improving data interoperability, and worked to increase the insurance industry's engagement with subject matter experts in academia. He has a particular interest in the use of emerging technologies for cross-sector collaboration on data capture, validation and sharing.



Professor Pitt has been involved in property research and teaching since 1990. He is a Fellow of the Royal Institution of Chartered Surveyors has served on several Facilities Management committees over the years. He has been an advisor to the HCP team at the MOD Main Building since 2008 and works closely with much of the HCP supply chain. He is also Visiting Professor at the University of Malaya and Editor of the Journal of Facilities Management.

Professor Pitt works closely with industry on projects related to facilities management (FM) linked to productivity and efficiency in the workplace with a particular focus on the office environment. Recent projects have included an examination of the impact of interior planting on productivity, waste management trends, life cycle management, the development of sustainability strategies and performance measurement systems.

**Professor Michael
Pitt**

UCL

Jonny Fry, co-founder and CEO of TeamBlockchain Ltd, is a Blockchain, Digital Assets and funds specialist. He founded, and was the CEO of Premier Asset Management Plc which he floated on the London Stock Exchange. His recent focus has been on the dynamics of financial innovation and he is a regular speaker on these topics in the UK and overseas. He works closely with a number of professional firms, such as accountants and lawyers, advising their client's on corporate strategy and adoption of Blockchain technology.



Jonny Fry

Team Blockchain Limited

Jonny spends 20+ hours each week researching and analysing developments in the Blockchain and Digital Asset sectors published as Digital Bytes. Digital Bytes is used globally by professional advisors, corporate brokers, accountants, lawyers, business schools, universities, trade bodies and corporations.

He is Non-Executive Chairman of Gemini Investment Management Ltd, which owns a Dublin-based fund hosting platform, regulated by the Central Bank of Ireland. As Co-founder of The British Blockchain Frontier Technology Association (BBFTA) Jonny sits on the UK All Party Parliamentary Group on Blockchain (APPG Blockchain). He is an advisor for several companies helping them with their strategic growth and managing corporate and reputational risk.



Alpesh Doshi

Fintricity

Alpesh is the founder of Fintricity, a company that specialises in helping enterprises leverage Data/AI solutions, technology and the cloud. He also works to help deliver the promise of Blockchain, data and AI.

Fintricity works in Digital Transformation and its application within companies transform how they engage and transact with their customers as well as transforming their internal way of working leveraging emerging technologies.