

Digital Twin Steering Board Chair and Vice Chair Positions

1. Neil Thompson, Director, Digital Integration & Delivery at Atkins – Position Chair.
2. Chris Chow, Costain Limited, Central Government Framework Director - Position Chair AND Vice-Chair.
3. Ali Nicholl, Head of Engagement, IOTICS – Position Chair AND Vice-Chair.
4. Keith Dear, Director for the Centre for Cognitive and Advanced Technologies at Fujitsu – Position Chair AND Vice-Chair.
5. Rohit Banerji, Partner at EY - Position: Vice-Chair.
6. Jonathan Hale, Data Director at Valtech – Position: Vice-Chair.

Deadline for voting closes on 21 February, COB

Nomination forms

Name: Neil Thompson

Company: Atkins

Title: Director, Digital Integration & Delivery

Position: Chair

Please write a short professional biography/Profile (max 150 words)
Neil was the previous vice-chair of the working group and seeks to lead the working group into its next phase as chair. Neil was previously part of the National Digital Twin Programme and the Head of the Construction Innovation Hub Programme at the Centre for Digital Britain. Neil is a Director at Atkins, he is responsible for delivering a digital twin environment in the defence sector as a JV senior team leadership member. Neil is co-founder of the Apollo Protocol, an inter-sectoral platform for Smart Data interfaces for cyber-physical infrastructure. He is also a co-founder of the Digital Twin Fan Club Podcast, an independent podcast that seeks to elevate the conversation around digital twins. Neil is the current chair of the Built Environment at the IET and gained an Honorary Associate Professor role at the Bartlett School of Sustainable Construction, University College London.
Please provide a short paragraph on how you will use your experience and insight to provide leadership to the Digital Twin Group (max 200 words)
I will bring my experience as an engineer, economist and technologist to this role. I demonstrated as Vice-Chair that I was able to influence policy and provide technical insight to our outputs. I will continue this effort and I will also provide a conduit to the Apollo Protocol as I believe the technology sector plays a vital role in brokering different sectors together through data and technology. I will also want to offer my network and media platforms to help raise awareness of not only TechUK activity, but the good work of the working group members. I am also responsible for delivering a major programme for work in the UK Defence sector that includes the delivery of an operational digital twin, this practical application experience will be vital for leading this working group.

Name: Chris Chow

Company: Costain Limited

Title: Central Government Framework Director

Position: Chair and Vice-Chair

Please write a short professional biography/Profile (max 150 words)

Chris prides himself on offering well-balanced and benefits-driven strategic advice, and opening people's mind through championing innovation and technology to achieve efficiencies, future-proofing, decarbonisation etc.

He has well-blended public and private sector experience. Throughout a 17-year civil service career he led ground-breaking rail and energy projects for HM Treasury, Dept. for Transport (DfT), Ofgem and Costain, e.g. leading UK experts to identify engineering solutions to reduce the costs and risks of High Speed 2 and offshore wind energy transmission (OFTO). Cabinet Office / IPA rated Chris a "star" Gateway Review Leader. As a Shadow Exco member, he contributed to the strategic management of DfT. Being a Costain Framework Director, he remains focussed on delivering projects for the UK. Before these he specialised in financial engineering for Mizuho Bank.

He actively supports youths from all backgrounds to realise their ambitions, e.g. through Civil Service coaching / mentoring, Centres for Doctoral Training.

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Chris' synergistic vision:

- Remove barriers for developing and deploying innovation and technology as the catalyst for UK's economic growth.
- Nurture the youths to become the sustainable energy at the heart of the catalyst.

Chris will steadfastly:

- Work with fellow members of DTWG to learn the lessons gained since its formation, set a pragmatic strategy and clear plan to guide techUK to focus on the top issues that matters most to the economy. The plan should include improving internal processes, more collaboration with strategic stakeholders - be they Government, industry, UK and overseas peers and potential funders. He sees people's livelihood (protecting jobs, public health, housing supply, utility services), cyber opportunities / threats, efficiencies for mega-projects (e.g. HS2), decarbonisation (e.g. sustainable fuels) as the top immediate priorities., whilst there is a vision to invest in longer-term growth and international competitiveness (e.g. AI).
- Create opportunities for youths, from all background, to thrive on choices to work in the innovation and technology sectors, e.g. through the techUK, market participants (e.g. Costain's Supply Chain Academy's free training and apprentice / graduate schemes), universities, government (e.g. gathering the industry / market to create a bigger voice to influence DfT, UKRI, regional clusters) and professional institutions.

Name: Ali Nicholl

Company: IOTICS

Title: Head of Engagement

Position: Chair and Vice Chair

Please write a short professional biography/Profile (max 150 words)

A cheerleader for change with a passion for transforming how enterprises innovate and co-create. Ali is a founding team member and leads Engagement at IOTICS, supporting organisations deploying federated connected digital twins.

At IOTICS Ali works on live projects using connected digital twins at the intersection of market sectors and industries – focusing on Utilities, Defence, Transport, and Built Environment. Today IOTICS enabled digital twin ecosystems are delivering value in ESG, sustainability, and essential sharing networks use case.

Passionate about the role of data for good, Ali has been a member of the DTWG at TechUK since 2020, is co-chair of the UK's DT Hub Community Council and a member of the Advisory board, he serves on Industry Advisory Boards to academia contributing to Digital Twin modules at Cranfield University and has contributed to DT papers including ARMC and TechUK's. Ali speaks regularly at international conferences on Digital Twin Ecosystems.

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My involvement with Digital Twin bodies and organisations across industries and experience leading other member groups has provided a understanding of the complexity and diversity of the UK's Digital Twin landscape. I would hope to leverage that to ensure that the Digital Twin Group adds real value to the wider UK Digital Twin debate, highlighting value, learnings and best practice from sector-specific activities, real world deployments, standard bodies, and cross-sector activities (such as the Apollo Protocol).

Experience enabling discussion, workshops, and content creation from a mix of academic exploration, community discussions, and commercial activities, should enable me to help bring in multiple viewpoints, at different levels of maturity, without becoming bogged down in endless definition, linguistics and theological debates which can distract the fantastic progress and innovation currently being made across the UK's technology sector. Instead placing the articulation and delivery of value at the centre of discussion.

Leadership is about providing hope and I believe that the Digital Twin Steering Group has the potential to deliver hope - providing clear learnings and roadmaps on the journey to a nation of digital twins delivering flourishing systems for the benefit of society at large.

Name: Dr. Keith Dear

Company: Fujitsu Services Ltd.

Title: Director for the Centre for Cognitive and Advanced Technologies

Position: Char OR Vice-Chair

Please write a short professional biography/Profile (max 150 words)

I am Managing Director of Fujitsu's Centre for Cognitive & Advanced Technologies, dedicated to revolutionising decision-making, and speeding and scaling the adoption of emerging technology.

A Fujitsu Global Distinguished Engineer, & Fujitsu AI SME, I sit on the Digital Twin Hub Advisory Board, the RUSI Cyber Security Committee, and provide advice within the MOD, other agencies, and to cross-party Parliamentary MPs. I talk widely on strategy and technology including at the Royal College of Defence Studies, and KPMG's C-Suite Programme.

Fellow at RUSI, Oxford's Changing Character of War Programme; RAF Chief of the Air Staff's Fellow; & Director's Fellow at Cambridge University's Judge Business School where I am completing my Executive MBA.

Previous roles:

- Expert Advisor to the Prime Minister on Defence modernisation, technology strategy, & the Integrated Review.
- Doctorate in Experimental Psychology, University of Oxford
- MA (with Distinction) in Terrorism and Counter-Terrorism, King's College London

Please provide a short paragraph on how you will use your experience and insight to provide leadership to the Digital Twin Group (max 200 words)

Joining Fujitsu in 2020, I pioneered our work with Digital Twins. We are lead technical partner for BEIS' National Digital Twin Programme, working with the Turing Institute, and the Catapults to help build Japan's Society 5.0 – where everyone and everything is a digital twin - the UK's cyber-physical infrastructure, what I describe as the enterprise architecture of the metaverse.

I am shaping Fujitsu's global strategy for Social Digital Twins, leading our Digital Twin Programme Board which brings together our global company's digital twin leaders international insight to create a world-leading digital twin solution.

My DT research includes articles in the RUSI Journal, blogs and podcasts. My Cambridge thesis focuses on digital twins in digital democracy. My doctorate explored the psychology of surveillance, what it means to live in a world where we are watched more closely than ever before, and the relative strengths of human and machine intelligence. Today I lead our advanced AI and advance compute programmes at Fujitsu, turning the academic to the practical.

I offer a global and x-sector commercial perspective, research and practical insight into Digital Twins and good strategy, national security expertise and the perspective from the highest levels of UK & Japanese Government.

Name: Rohit Banerji

Company: EY

Title: Partner

Position: Vice-Chair

Please write a short professional biography/Profile (max 150 words)

I am a Partner in EY leading Data and Analytics in the UK. I help clients realise their strategic digital potential by becoming digital twin businesses, joining the dots between competitive strategy, operating models, ecosystems and the enabling technology.

Experiences in my career have converged on digital twins as a way of doing business. 15 years managing assets in the military taught me how the modern battlefield is the epitome of digital twins in action, seamlessly connecting men, hardware, communications and logistics as a single organism. Applying the same concepts to water and electricity networks, offshore oil rigs, white goods and chemicals manufacturing plants in the two decades since has been a joint learning journey with clients.

I implemented some of the world's first scaled digital twins in utilities as early as 2013 and many more since. I currently advise business leaders of organisations in the defence, utilities, consumer products and sectors energy on digital twins

Please provide a short paragraph on how you will use your experience and insight to provide leadership to the Digital Twin Group (max 200 words)

Evidence from digital by design businesses like Octopus Energy, Amazon and AT&T strongly shows that digital twins as a basis of organisation offer disruptive competitive advantage. These organisations demonstrate up to 45% lower cost of operations and acquire customers typically an order of magnitude quicker than their conventional peers.

I will use my experience and insight to grow this vision and take it to organisations that can benefit vastly from adopting it. I will encourage collaboration across the ecosystem, sparking a virtuous learning cycle between digital twin business at different points of their journeys. I will build consensus to influence government policy in ways that help UK industry to take the lead on a disruptive wave that will define our future economy.

The UK is ideally poised to take the lead with its world leading ecosystem of industry, academia and government policy on digital twins. Work done on the Gemini principles and the National Digital Twin Programme by the Centre of Digital Built Britain (CDBB) is a case in point. I will work to embed DTWG as a guiding mind to integrate developments in AI, emerging technologies, digital business models and data standards and policy, acting as a catalyst to accelerate digital twin driven innovation.

Name: Jonathan Hale

Company: Valtech

Title: Data Director

Position: Vice-Chair

Please write a short professional biography/Profile (max 150 words)

In my role as Valtech UK's Data Director, I lead a team of Data Architects and Data Engineers providing Data Platforms, Data Engineering and Data Integration across Valtech Global's EMEA customer base.

Some of my relevant experience includes:

Technical Lead for DfT Traffic Regulation Order Data Model Alpha (A Digital Twin of the UK Road network): Designing the data integrations between existing marketplace providers, Local Authorities, DfT, and downstream Data Aggregators (Google, TomTom, Zap Maps, etc).

Technical Lead for Civil Aviation Authority ACOMS Discovery: Supporting the design of the Applications and Geospatial Visualisations, and designing the interfaces and data integrations, for the CAA's Airspace Obstacle Management Service.

Technical Lead for National Highways Dart Charge FFC Management Information Data Hub: Lead the Design, Build and Implementation to reconcile and audit datasets from multiple external data providers.

Lead Data Modeller: Development of a Digital Twin Data Model for the UK Energy Industry.

Please provide a short paragraph on how you will use your experience and insight to provide leadership to the Digital Twin Group (max 200 words)

I will use my experience to provide leadership to the Digital Twin Group, bringing a strong understanding of digital technology and the ability to lead and manage a team. My technical experience with digital technologies includes data analytics, machine learning, artificial intelligence, 3D visualization, and cloud computing.

I bring extensive experience in developing and managing projects, as well as collaborating with stakeholders and managing resources. I also lead Valtech's data craft circle. These communication skills are essential for to be able to effectively communicate the goals and objectives of forum initiatives and ensure that all stakeholders are on the same page.

Additionally, I have a good understanding of the business case for Digital Twin solutions and the technology solutions available to meet those needs.

The type of insights I would bring to the Digital Twin Group include:

- Information on the latest trends, developments and applications of the technology, data and analytics to understand user behaviour and interactions.
- Insight into the needs, preferences and current data technology adoption of Public Sector organisations.
- Competitive analysis to identify areas of opportunity or risk.
- Assessment of current performance and help surface actionable insights from structured and unstructured data.

