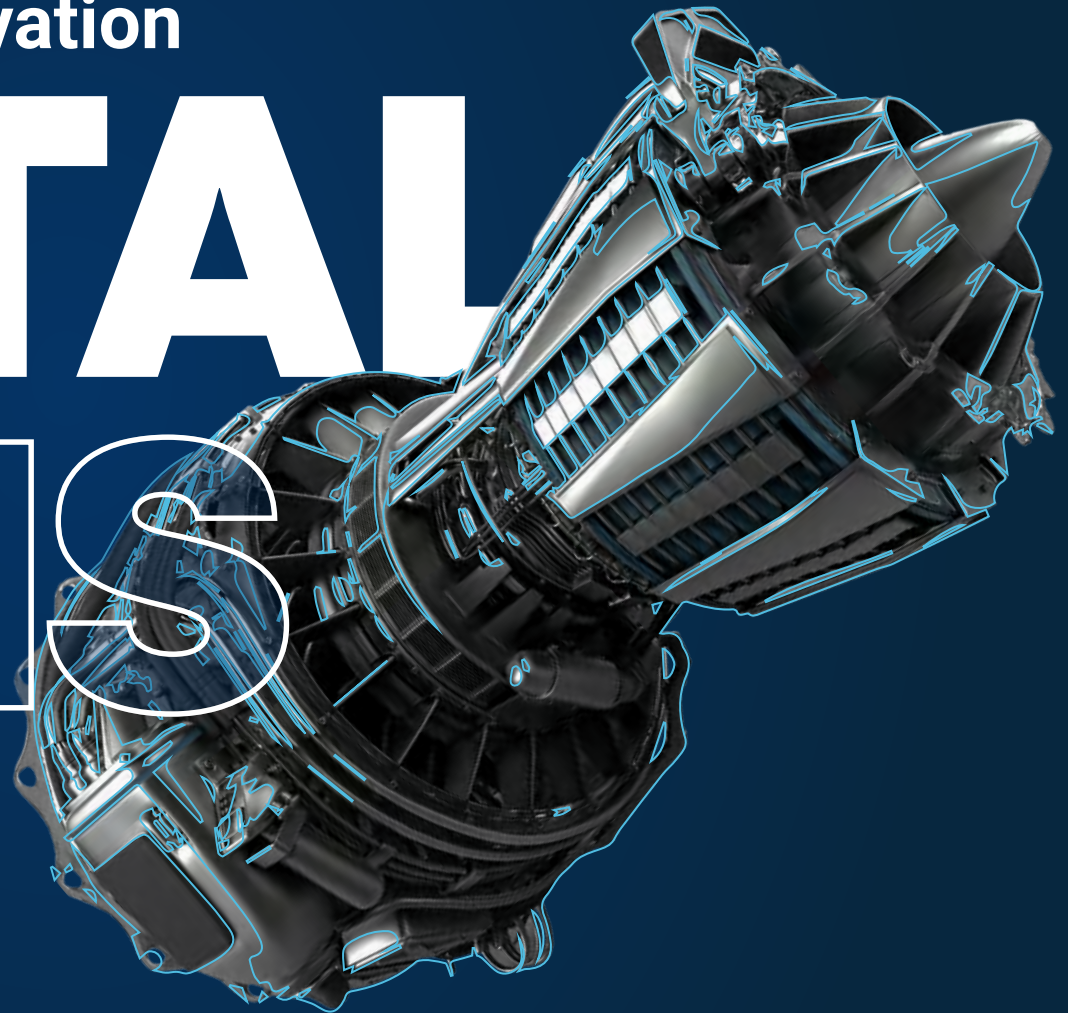


Efficiency from Digital Innovation

# DIGITAL TWIN

17<sup>th</sup> & 18<sup>th</sup> June 2019

London | United Kingdom



# DIGITAL TWINS

**Challenge Advisory** is delighted to announce the launch of our **Digital Twin Workshop** taking place in the financial heartland of **London** in **June 2019**.

This two-day workshop is designed to support the growth and adoption of digital twin technology by discussing its benefits and latest innovations along with the investments still required.

Created for the aerospace, defense, automotive, consumer products, agriculture, energy, heavy machinery, pharmaceuticals and chemicals sectors, Challenge Advisory is presently sourcing 25 expert speakers.

They will gather to debate the latest trends and developments for digital twin technology along with the key challenges facing future innovation and investment.

So join the debate and network with key technology adopters, stakeholders, experimenters, market movers and everyone else involved in the value chain.

# WHAT TO EXPECT | Topics

## Key Insights to be Obtained

- **The big picture for the digital twin sector today**  
To what extent does the technology have the potential to be genuinely game changing?
- **Shaking up the supply chain**  
How early adopters need to be able to accommodate new digital-twin models from their suppliers or partners
- **Assessing predictive analytics**  
How data collected through sensors can produce valuable insights
- **Ensuring the security of digital twins**  
What measures are needed to tackle cyber threats?
- **Industry 4.0, IoTs and digital twins**  
Examining how using augmented or mixed reality enables visualization of a digital twin
- **Analysing supplier business models**  
Bests practices in the digital twin environment
- **Investigating the latest technology developments, adoptions and investments in key sectors**  
What is happening in aerospace, automotive, energy, manufacturing, healthcare and smart cities
- **Funding challenges and opportunities for digital twin start-ups**  
Outlining the latest trends, challenges and new opportunities
- **Pitching-for-investment for start-ups**  
Innovative new technology companies outline their solutions to influential investors
- **1-2-1 meetings**  
A series of one-to-one discussions in dedicated meeting rooms designed to facilitate discussion beyond the main conference room to establish new business relationships



# AUDIENCE

## Who will be There?

- Aerospace, defense and automotive

---

- Agriculture and heavy machinery

---

- Energy and chemicals

---

- Pharmaceuticals and consumer products

---

- Financial community

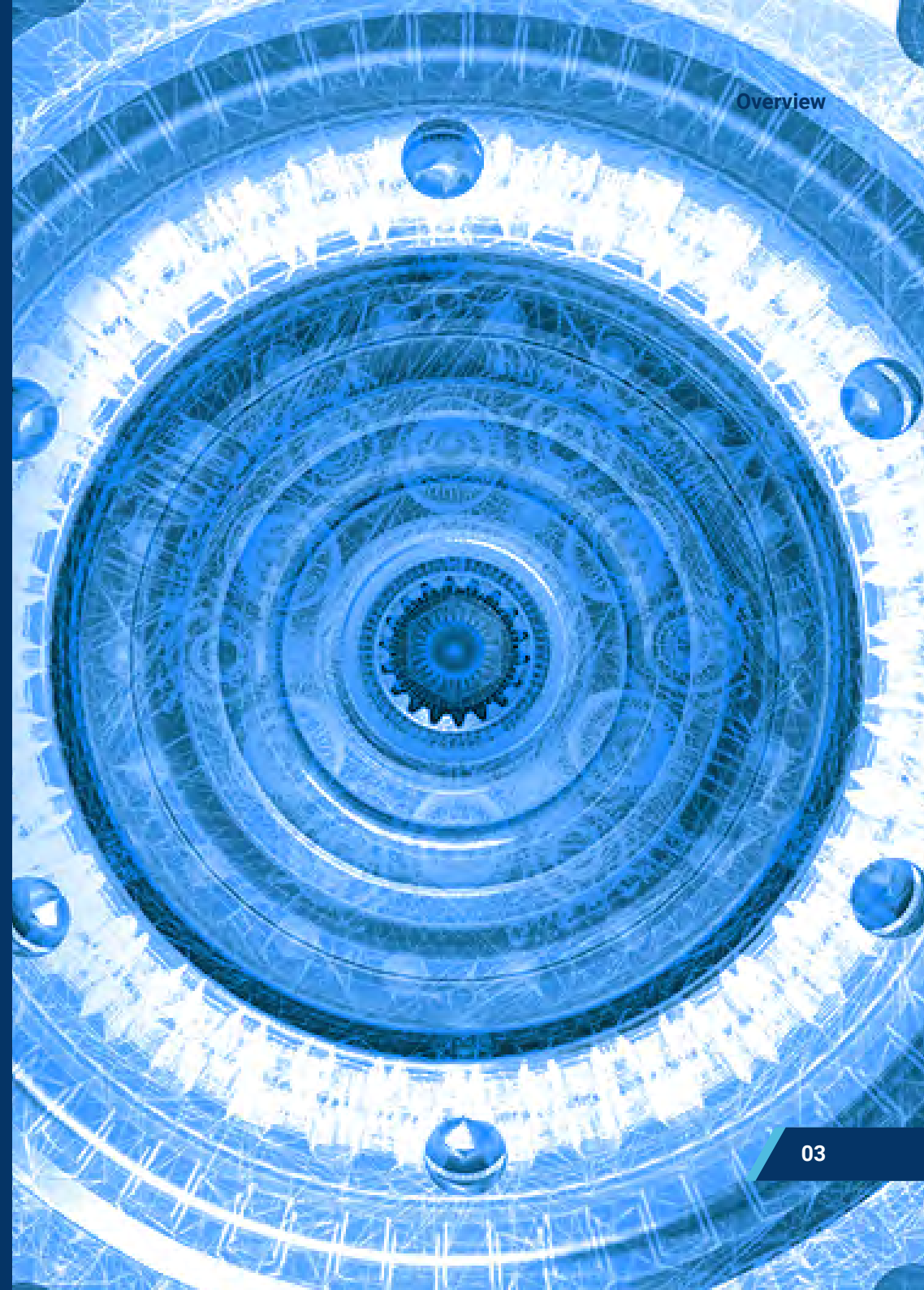
---

- Technology innovators

---

- Consultants and lawyers

---



# DAY ONE | Registration and Networking

## Chairman's welcoming remarks

*Examining the current state of technological innovation for digital twins | Part One*

### **Panel discussion:** The big picture for the digital twin sector today

*To what extent does the technology have the potential to be genuinely game changing?*

- Assessing the background of digital twin development – the concept of pairing
- Evaluating how it will play a massive role in enabling future operating models, revenue streams and relationships
- Examining the general benefits of digital twin technology for sectors such as aerospace, defense, automotive, consumer products, agriculture, energy, heavy machinery, pharmaceuticals and chemicals
- What steps should you take to grasp the technicalities and achieve a thoroughly functional digital twin?
- What steps should you take to grasp the technicalities and achieve a thoroughly functional digital twin?
- What are the realistic cost benefits of digital twins compared to existing processes?
- Are IOT and AI the most critical digital technologies to drive new levels of performance for digital twins?
- How are innovative start-ups helping now and what technological innovations are still needed?

## Panel discussion: Shaking up the supply chain

*How early adopters need to be able to accommodate new digital-twin models from their suppliers or partners*

- Strategies and importance of assisting and supporting small suppliers in adopting a digital approach
- How suppliers could be asked to submit a digital twin of their product so that it can be tested in a manufacturer's virtual factory before an order is placed
- Assessing how a digital-twin approach is needed along the entire supply chains and the complexities of doing so

## Analysing supplier business models: Best practices in the digital twin environment

- Outlining how suppliers are experimenting with 'minimum viable products' that can be discarded quickly if they fail to take off?
- Does a one size fit all approach work or is a more tailored, customer-centric method needed?
- What can larger suppliers learn from start-ups?
- Will one supplier eventually dominate?

*Funding challenges and opportunities for digital twin start-ups* | **Part One**

**Panel discussion:** Funding and investment options  
*Outlining the latest trends, challenges and new opportunities*

- Latest on funding options including venture capital, banking and established companies
- Bringing together brand leaders and innovators – are start-ups the best at developing new technologies? Should companies invest or acquire start-ups?
- Assessing the latest challenges and developments of initial coin offerings along with regulatory developments
- Outlining how start-ups are using ICO funding compared to equity funding



*Investigating the latest digital twin developments and investments in key industry sectors | Part One*

## **Latest digital twin developments and adoptions in the energy sector**

- Latest developments for the conventional and renewable power sector – examining proof-of-concepts and commercial rollouts in sectors such as wind turbines
- Case study on digital wind farms – assessing how it opens up new ways to improve productivity and efficiency via configuration insights prior and after construction
- Examining crude oil, refining and gas digital twin initiatives and commercialization efforts

## **Agriculture: Understanding the modern farmer and what digital twins can provide for them**

- Analyzing trends and challenges for digital twins: How can it shape the future of ag processes?
- Food safety, traceability and transparency: Investigating how digital twins can help
- Providing insights with digital twins: Making collected data relevant and useful for farmers
- Utilizing digital twin technology to introduce sustainable and profitable practices



### Technology investment workshop | Part One

#### Pitching-for-investment workshop for digital twin tech start-ups

Early to mid-stage companies showcase their technologies for 10 minutes to an investment community audience. Each company delivers a presentation, highlighting the most innovative aspects of their technology and business model, and outlining their go-to-market strategy.

They then take questions from our panel of investors and from our audience. The presenting companies will be highly sought-after in our networking sessions and will use the investment workshop as a launch-pad for future growth.

### Investigating the latest digital twin developments and investments in key industry sectors | Part Two

#### Aerospace: Examining levels of support and adoption for the technology, and what it is being used for

- How data transmitted from a jet engine while planes are in the air can provide advance notice of potential failures
- Using digital twins for jet engines to monitor their performance and carry out preventive maintenance
- How digital twin technology is helping NASA understand and manage the operation of machines moving through the vast reaches of the solar system, and craft next generation vehicles and aircraft

### **Automotive: Creating digital twins of every sold car**

- Updating software for electric vehicles based on individual vehicles' sensor data and uploading updates to products
- How data-driven software development processes enable more efficient resource allocation and a better user experience for the vehicle owner

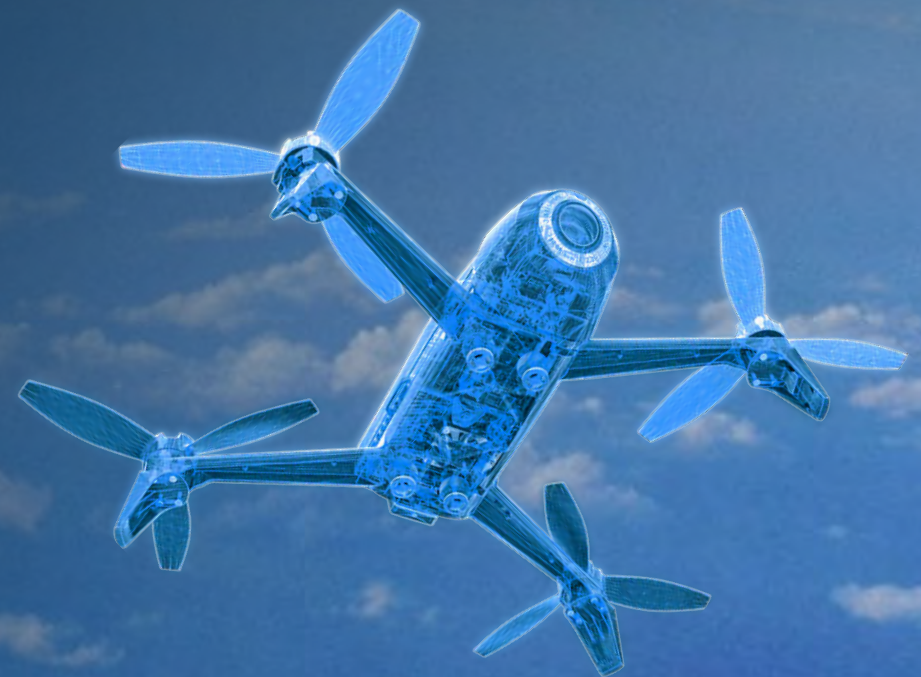
### **Healthcare: Assessing the value of digital twinning:**

Examining the latest developments and innovations, and what is still needed

- How doctors could create a digital twin version of you to signal or even predict impending illnesses, enabling early diagnosis for when treatment might be most effective
- Examining the benefits for physical healthcare equipment

### **Chairman's concluding remarks and close of day one**

**Networking drinks:** Join us immediately after the conference for drinks in the exhibition area



# DAY TWO | Registration and Networking

Chairman's review of day one and welcoming remarks

*Examining the current state of technological innovation for digital twins | Part Two*

## Assessing predictive analytics

*How data collected through sensors can provide valuable insights*

- How twins are becoming more responsive with sensors, enabling parts to be rapidly tested and manufactured
- Collecting and moving the data in effective ways, understanding what it is telling you and driving the action to achieve the expected result on the back end
- Assessing the function and importance of the requirement management system function

## Ensuring the security of digital twins

*What measures are needed to tackle cyber threats*

- What cyber security developments and concerns are there?
- Tackling cyber attacks through firewalls and walling off of external electronic interfaces
- How do you ensure system integrity along with system and network security?

**Industry 4.0, IoTs and digital twins:** Examining how using augmented or mixed reality enables visualization of a digital twin

*Technology investment workshop | Part Two*

### **Pitching-for-investment workshop for digital twin tech start-ups**

Early to mid-stage companies showcase their technologies for 10 minutes to an investment community audience. Each company delivers a presentation, highlighting the most innovative aspects of their technology and business model, and outlining their go-to-market strategy.

They then take questions from our panel of investors and from our audience. The presenting companies will be highly sought-after in our networking sessions and will use the investment workshop as a launch-pad for future growth.

*Investigating the latest digital twin developments and investments in key industry sectors | Part Three*

**Manufacturing:** What digital twin developments are we seeing and what will we see in future?

- Assessing best practice case study examples





**Delivering places and spaces with digital twins:** How the technology is making inroads in homes, offices and leisure environments

- How more companies are building 'digital-first' or retro-fitting existing infrastructure with sensors

**Closing thoughts panel discussion:** To what extent are we on the cusp of a digital twin technology explosion?

- To what extent will companies learn of real-world and pilot program success stories and will want to deploy their very own digital twins to gain a competitive advantage
- What adoption challenges and reluctance to change are there and how can they be overcome?
- What ROI can adopting digital twin technology provide? Discussing real world examples
- What practical and ethical challenges are there? What would be the implications for back offices and job functions?

**Chairman's concluding remarks and close of conference:** What are the key takeaways?





