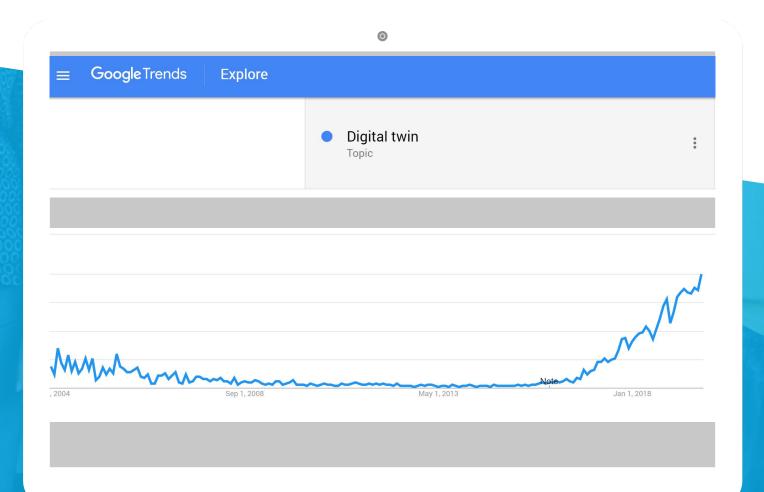
Digital Twin – A launchpad to inform the user experience of today's and tomorrow's generations

Cristina Savian
Technology Evangelist for the built environment
Founder/Director at BE-WISE Ltd

Trends

Digital Twin





Digital Twin Trends

Top ten strategic technology trends for 2018 and 2019 by Gartner

MARKET

"Digital Twin Market was valued at USD 3.8 Billion in 2019 is expected to grow at a CAGR of **37.87%** to reach **USD 35.8 Billion** by 2025.

(Gartner)

INDUSTRY 4.0

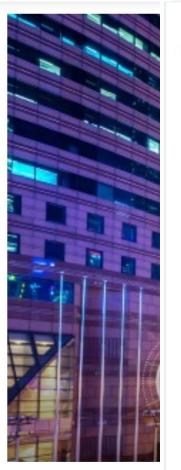
By 2021 half of large industrial, Public Companies will start using data from digital twins of **IoT connected products** and assets to improve organisations productivity.

(IDC, 2017)

VALUE ADDED

Adoption of Digital Twins by organisations will result in those organizations gaining a **10-20% improvement** in effectiveness.

(Gartner)



BIM News

Digital t infrastr

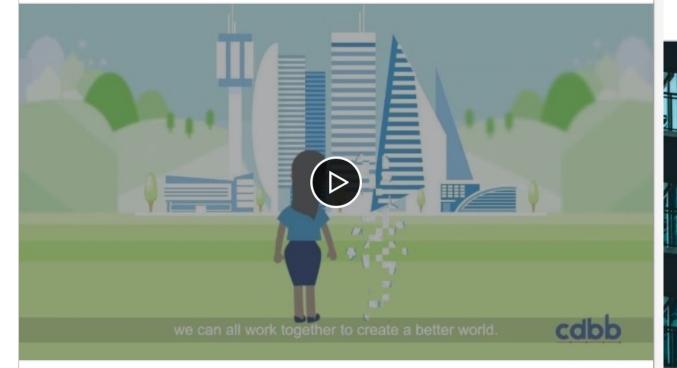
September 19, 2019



Allister Lewis • 1st

Head of Technology at ACG, Architect, RICS Chartered BIM Manager. Founder ...

What is the National Digital Twin (#NDT)? via @CambridgeCDBB #bim #datadrivendesign



What is the National Digital Twin (NDT)?

Add a comment...

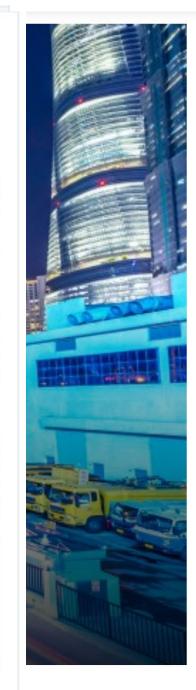
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THAT'S NOT A DIGITAL TWIN, THIS IS A DIGITAL TWIN

...that's not a Digital Twin, this is a Digital Twin.

Published on September 5, 2019



Belinda Hodkinson

Helping Enterprise in their Digital

3 article

✓ Following

How many times have you heard people with their arms crossed say with a snarl '...that isn't a Digital Twin!'? For some reason whenever I hear that I instantly go to Crocodile Dundee and the scene where the mugger is taught what a 'real knife' is. What we all know that both are a knife, similar to knowing there are many forms of a Digital Twin. This year I've watched presenters be interrupted at industry events in relation to the term Digital Twin Which led me to think about what the term means to me. This short article explores that thought process which is based on research and insights from what I've been involved in

DIGITAL TWIN for the built environment

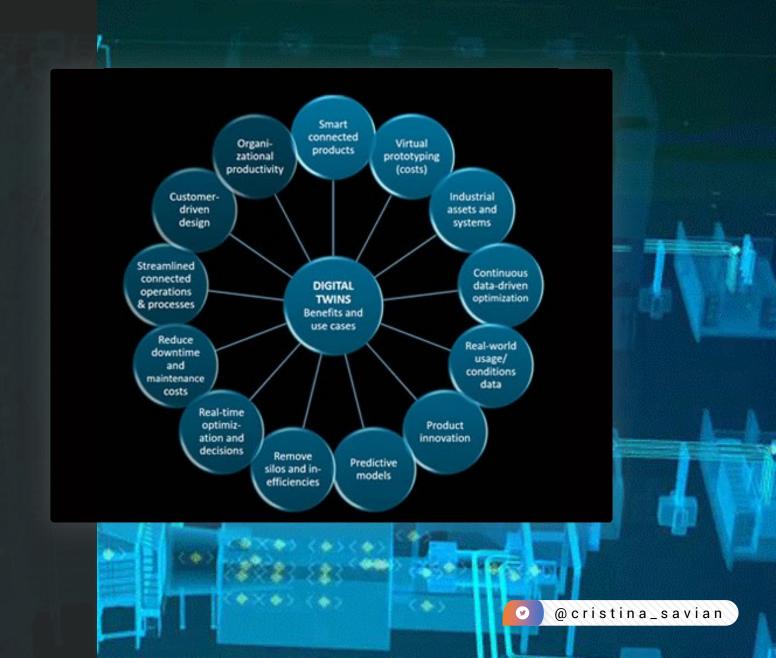


A digital twin is the combination of the canvas with the integrated inherited understanding of our existing built assets and how they interact with the previous and future generations.



Digital Twinning Benefits

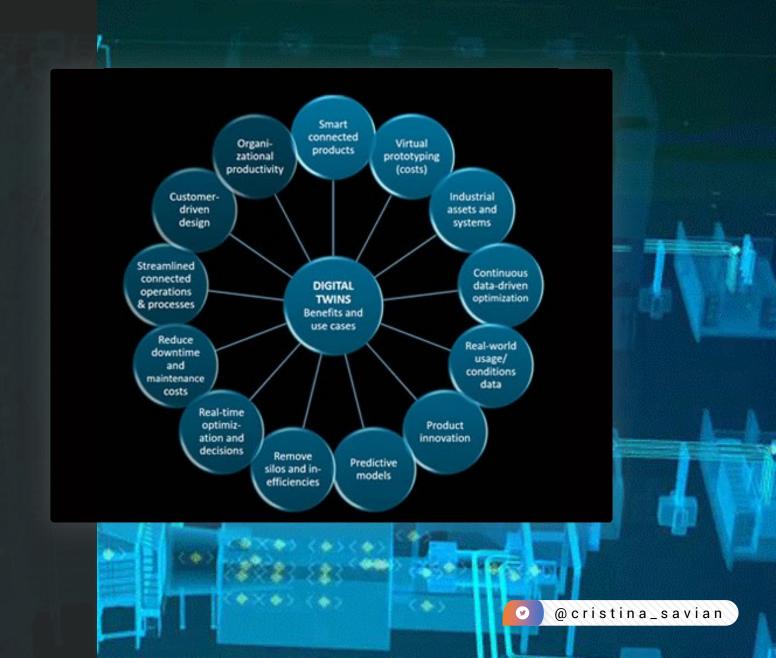
- Predict behaviour
- Reduce operating cost
- Increased productivity
- Compressing time to value
- Efficient production control
- lifecycle capabilities assessment
- **Performance** improvements
- Optimisation of operability, manufacturability and sustainability
- Assist in Training and Development



PAGE

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9

CHALLENGES



Political
Legal, Standards,
Contractual obligations

Technological

Data Security, Common language, interoperability databases, obsolesces





Commercial; Legal, Standards, Cultural, cost to develop and maintain of the virtual replica



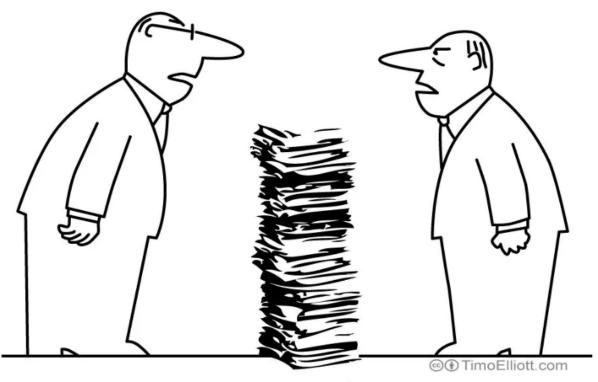


The full value of Digital Twin cannot be realised without alignment and co-ordination within and across our industry.

BE-WISE



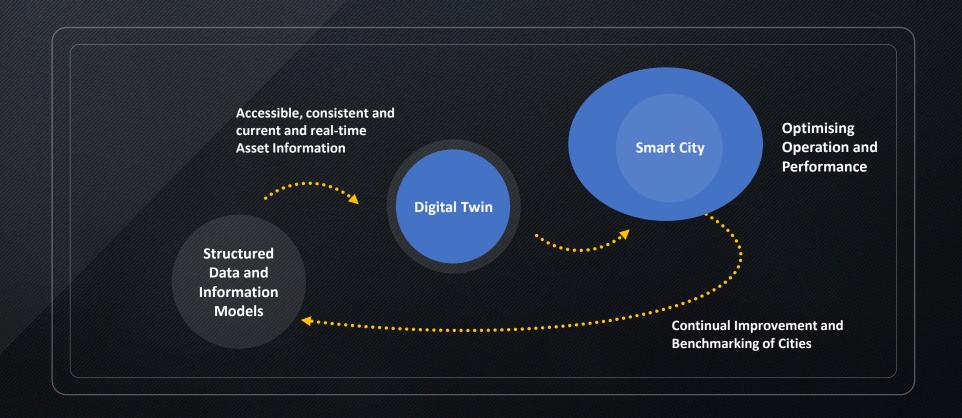
Why, Who, What, Where?



<u>Image – ICE</u>

"No, it's MY data!"

Digital Twin ENABLED VIRTUOUS CIRCLE



Could Digital Twins have prevented this?







Digital Twin as an opportunity to improve today's and tomorrow's generations



The beneficiary of digital twin is us

Report coming out on 12th October 2019!

Download from https://www.theiet.org/







Digital Twins for the Built Environment

An introduction to their opportunity, benefits, challenges and risks

theiet.org/built-environment



Thank you!

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BE-WISE

