

Brief

Will the Metaverse culture unlock the platformisation of the AEC industry?

Alain Waha, CTO **Buro Happold**; Co-founder, **Cogital**

- What happens when we move away from current tools and achieve radical democratisation of technology for a cohort or a sector (TikTok, Facebook, ...)
- How our industry might experience such a re-definition? Once the interface to the information systems becomes visual (until html and Mosaic in 1991, the internet was a nerdy place for TelNet and BinHex addicts!) The web was not only a semantic tagging idea; it was a radical democratisation through UX and navigation flows. A human would start “surfing the web”.
- The hypothesis is that the Metaverse and pervasive real time visualisation might be the Mosaic of AEC?

The Metaverse Culture

AEC Platformisation

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ALAIN WAHA

Contech & Proptech

3D REPO



Xinaps

Kinship

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BUILDING VENTURES
for a Better Built World

HELIX

Digital Transformation

R RHOMBERG

KEF KATERRA

mace

hs engine for growth

DB BAHN

JLL

pwc

QATAR
قطر تستحق الأفضل
Qatar Deserves The Best

Leadership

BURO HAPPOLD

CONSTRUCTION INNOVATION HUB

COGITAL
building a smarter future, together

We have been on a journey with BIM



KILL BĪMĪ (the word)



A digital medium



To **rethink** our approach to the use of data



To **innovate** and **reshape** capital projects delivery



To **transform** our industry

OUR INDUSTRY

Build Buildings Better

Every workhour builds the **right product** safely, sustainably and productively

Martin Fisher

Build Better Buildings

If we **succeed** in carrying out **industrialization**, the social, economic, technical, and also artistic **problems will be readily solved**

Mies vd Rohe

Build Better Societies

We shape our **buildings** and afterwards our buildings **shape us**.

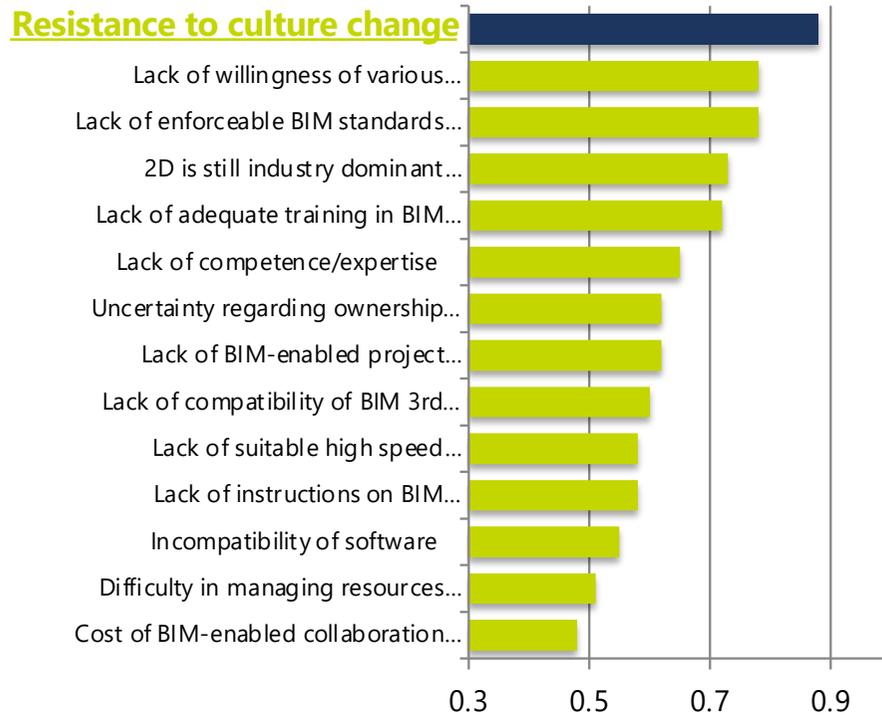
Winston Churchill



Culture is **Central** to Digitalisation

Barrier:

and Opportunity:



What separates a “good” from a “great” company?
When you look at leading companies – regardless of industry – there’s one characteristic that they share:

a strong company culture

Source: RICS June 2015 

12

Gutenberg moments

Silvija Seres



▪ 2004

VOICE: ERIC SCHMIDT - GOOGLE FORMER CEO

the 1st Platform

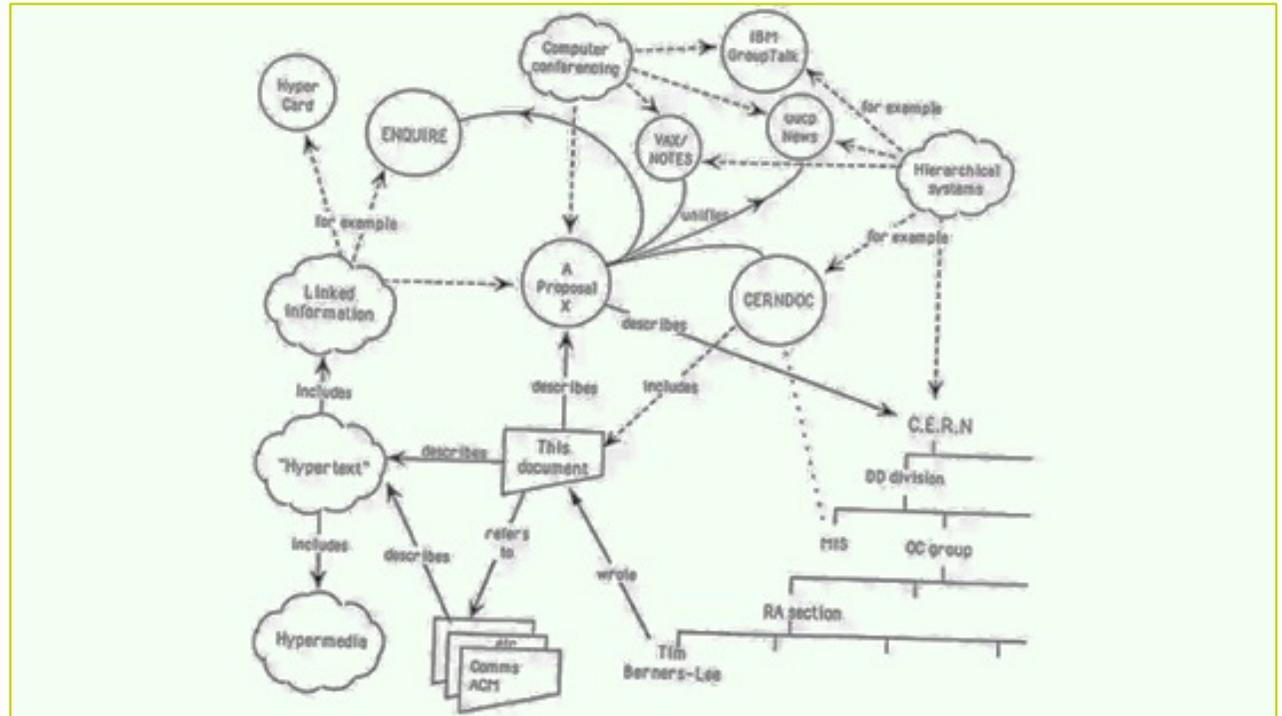
<http://url.com/index.html>

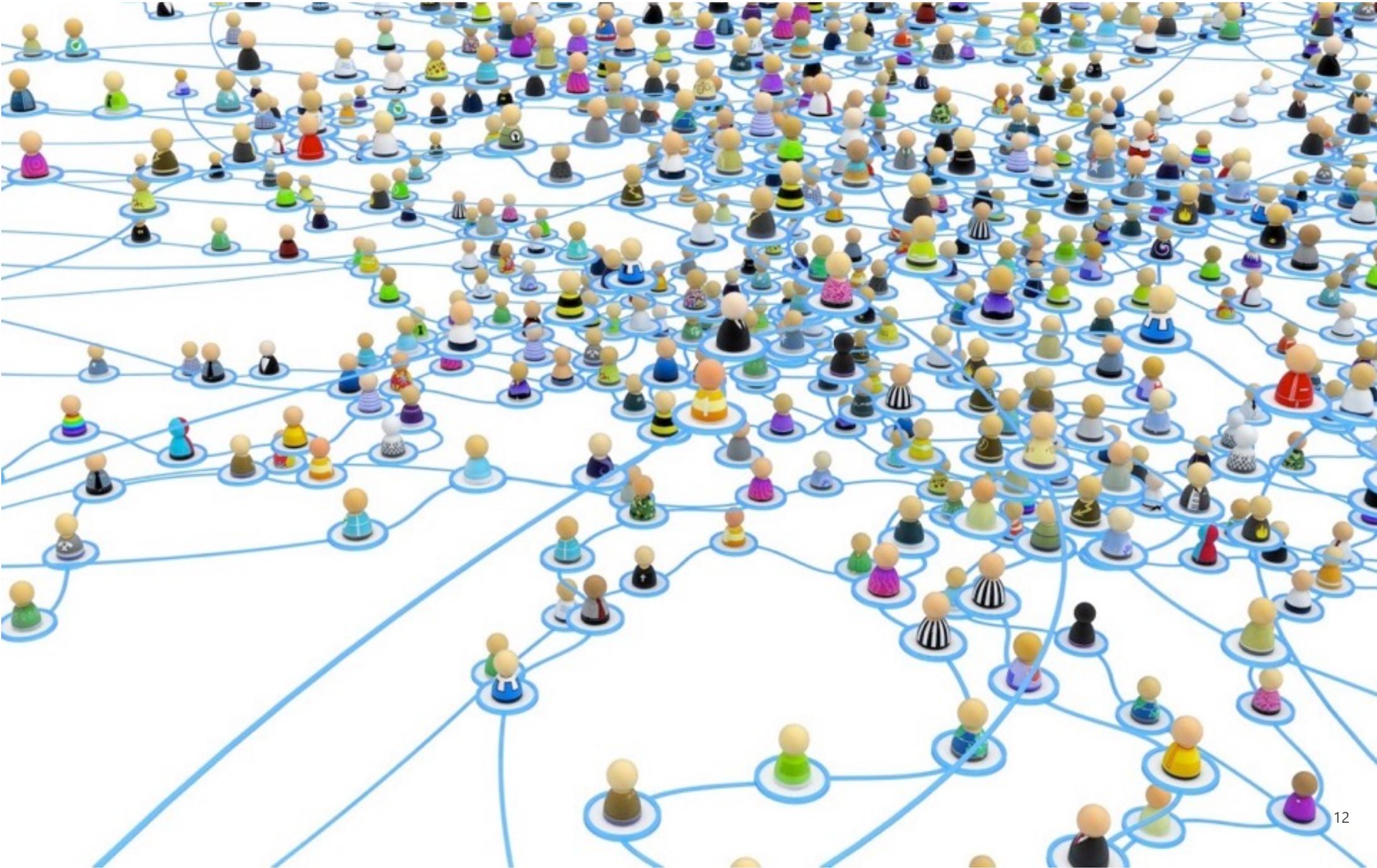
12 March 1989

Information

“Vague... but exciting”

Anonymous
TBL supervisor



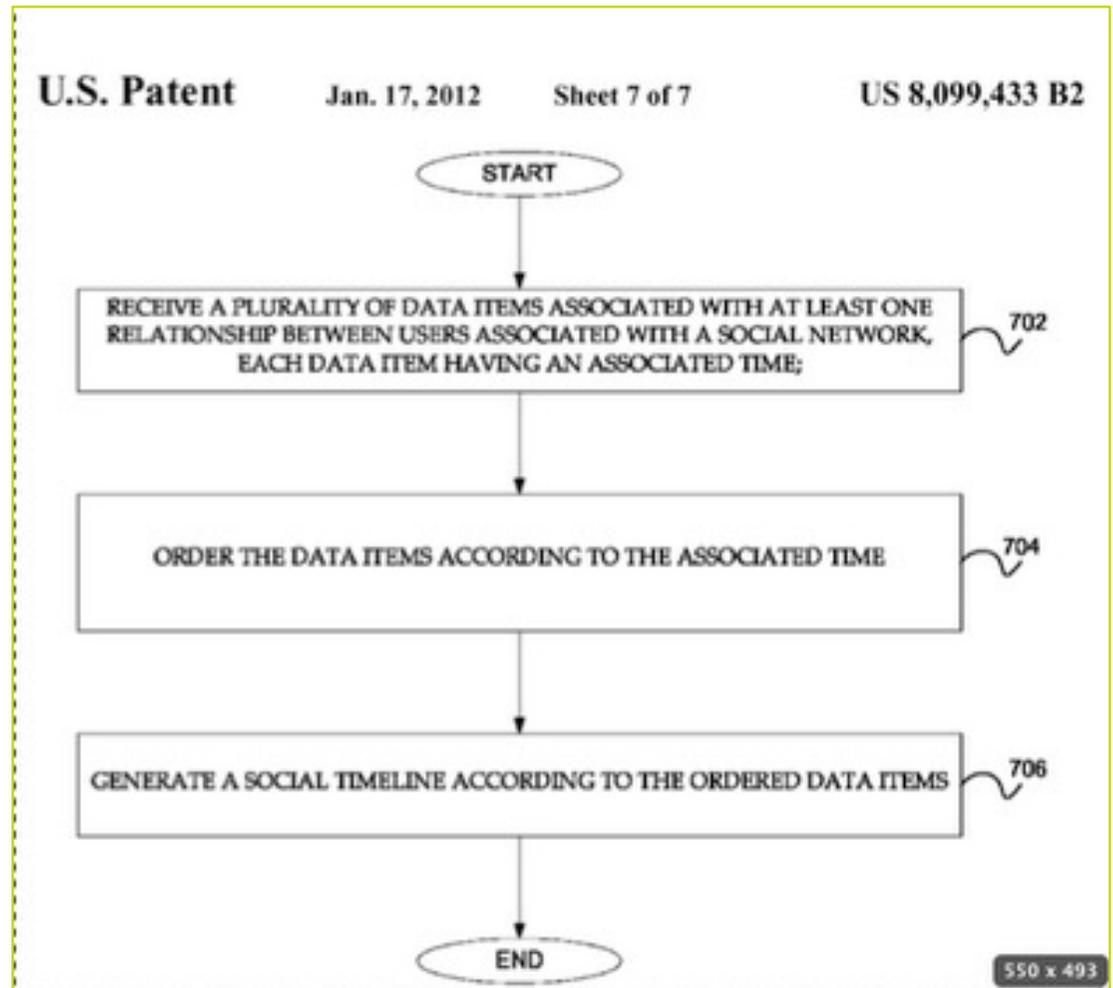


the 2nd Platform

@Social #trending

March 2004

People



the 3rd Platform

The Metaverse

2021

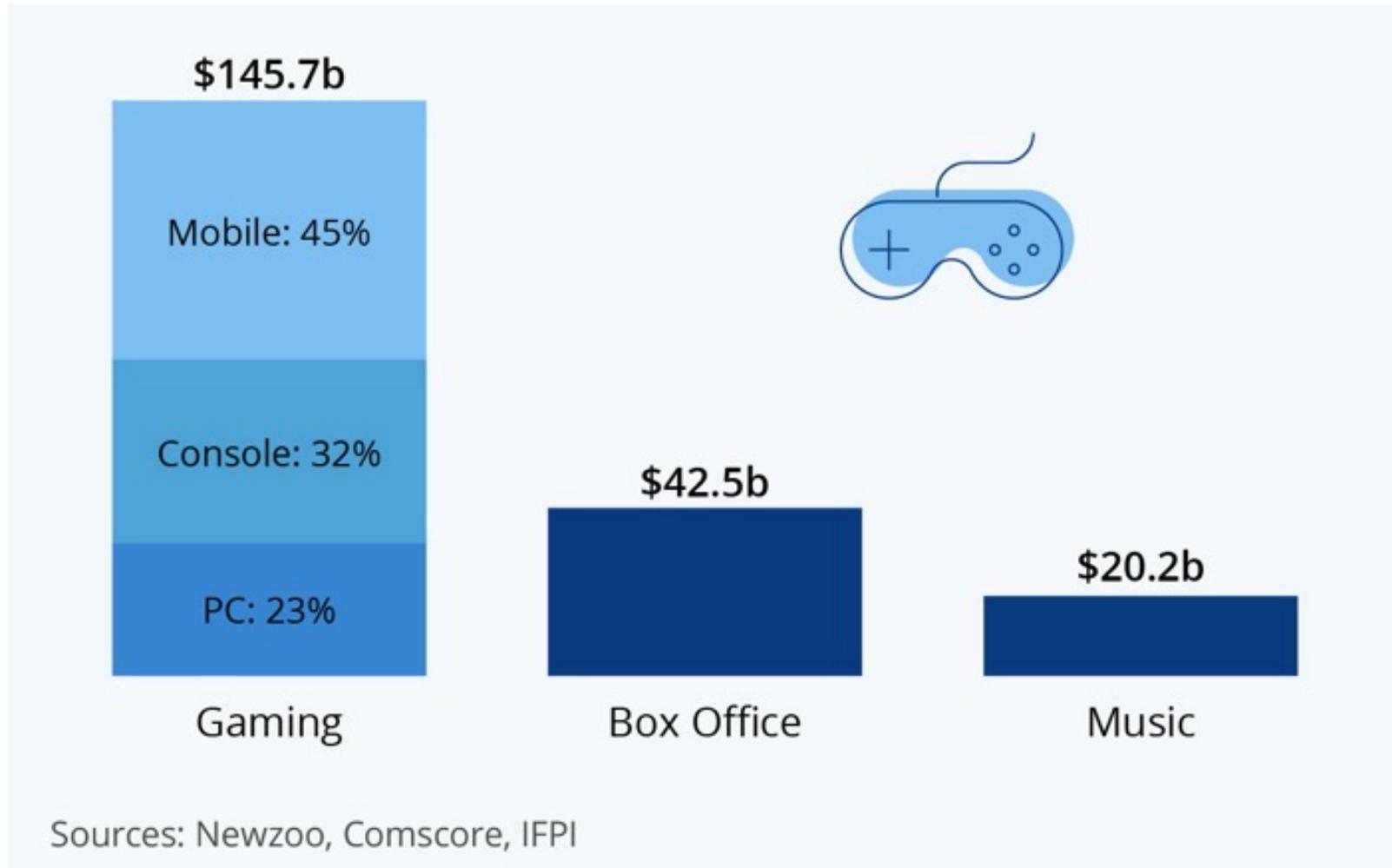
Persistent Digital Reality

“We're Probably Living in a Simulation”

Elon Musk
eBay co-founder, Tesla & Space X CEO

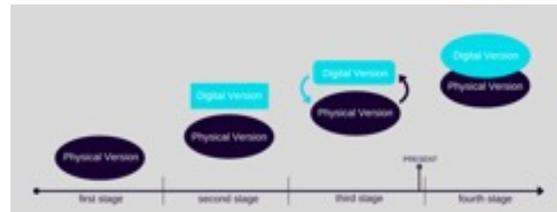
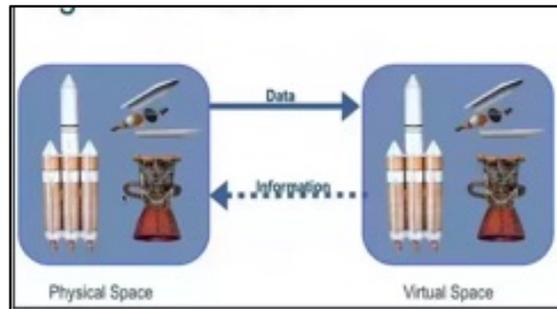


Gaming is the largest sector of the entertainment industry



AEC Industry | Gaming Technology Convergence

Digital Twinning

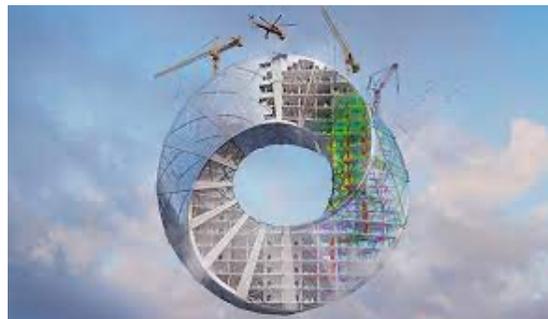


Information Mirroring Model
Product Lifecycle Management:
Driving the Next Generation of Lean
Thinking, (Grieves 2006)

Gaming Technology Acceleration

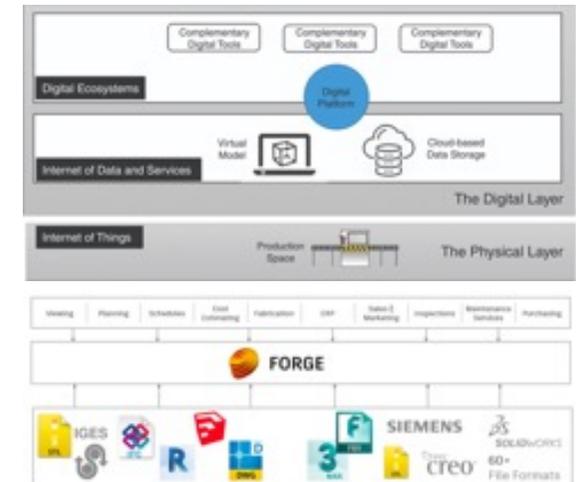


© VU-City 2020

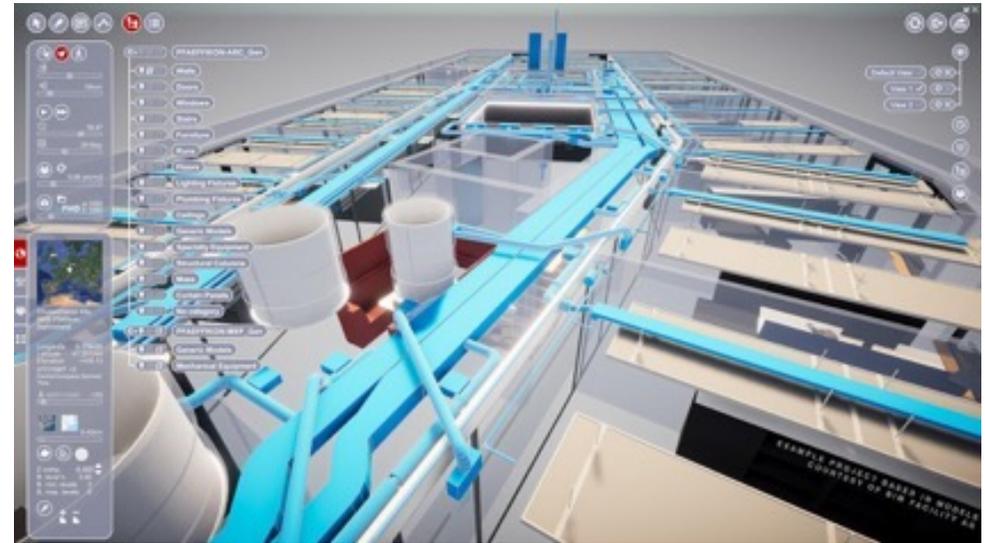
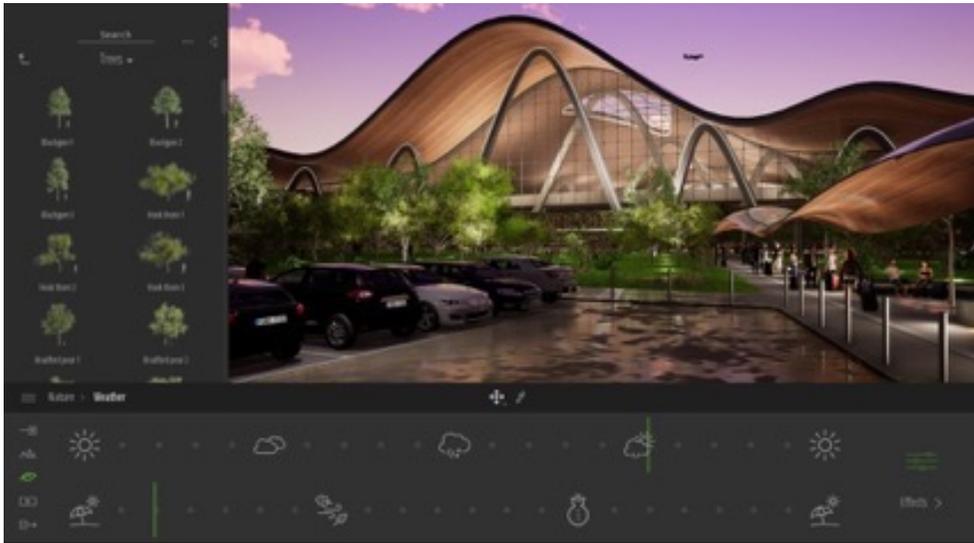


© NVIDIA Omniverse

Cloud vendor Invasion in AEC

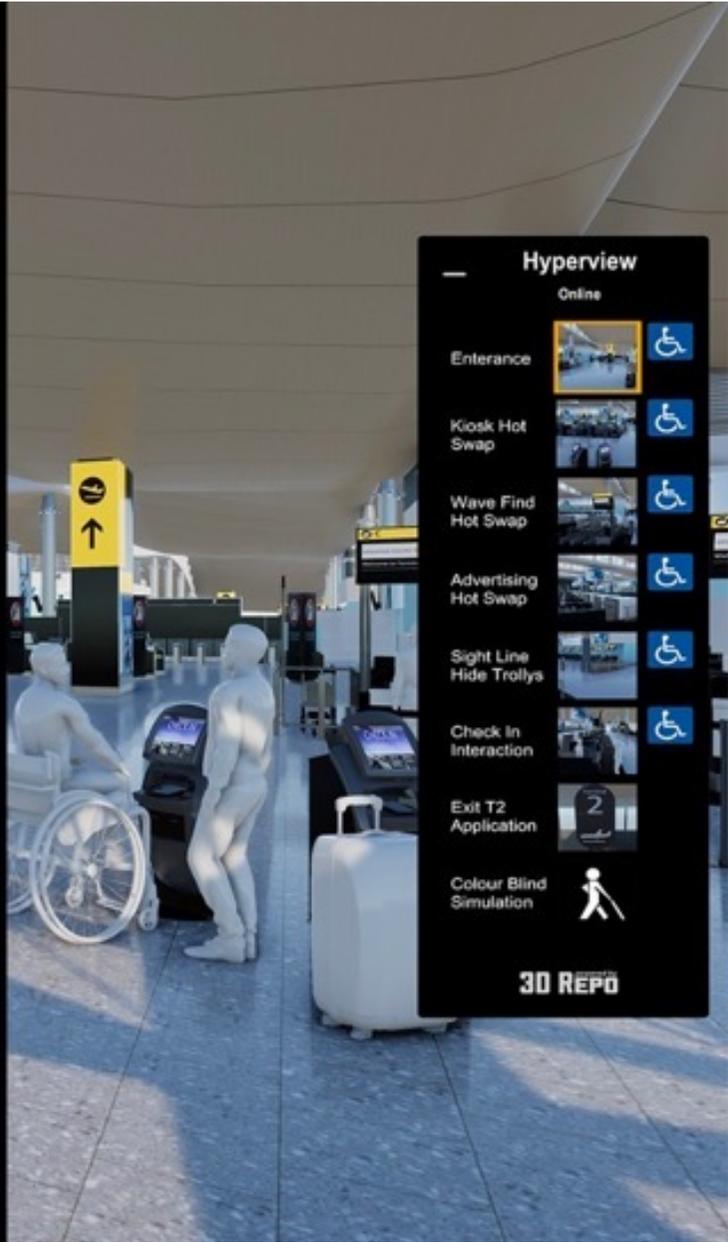
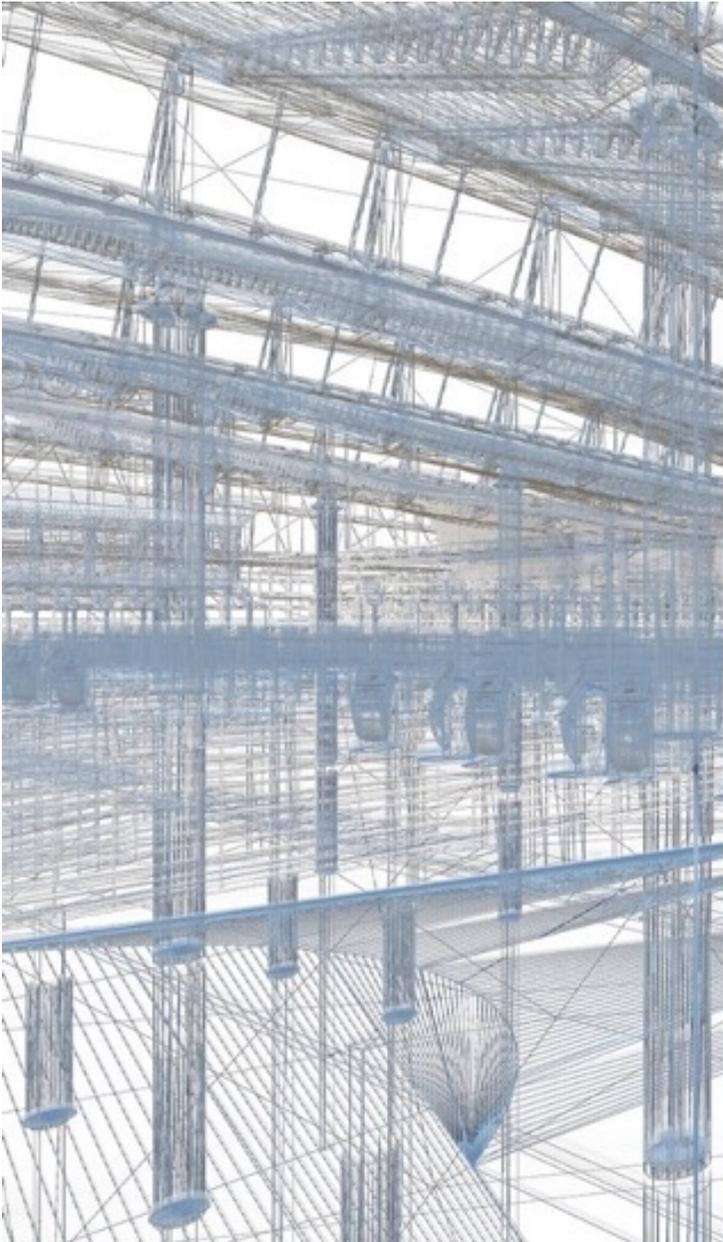


Persistent Visualisation Pipelines



Live links to Design representations





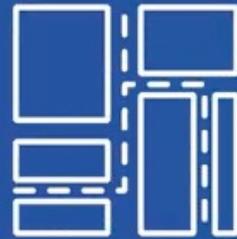


Point to point navigation

Terminal 2 | The Queen's Terminal

- Hyperview .Online
- Entrance
- Kiosk
- Maintain
- Media
- CVD
- Solar Time
- Materials
- Exit App
- Configure
- Main Controller

hyperview
LUMINOVA VISUAL TECHNOLOGY

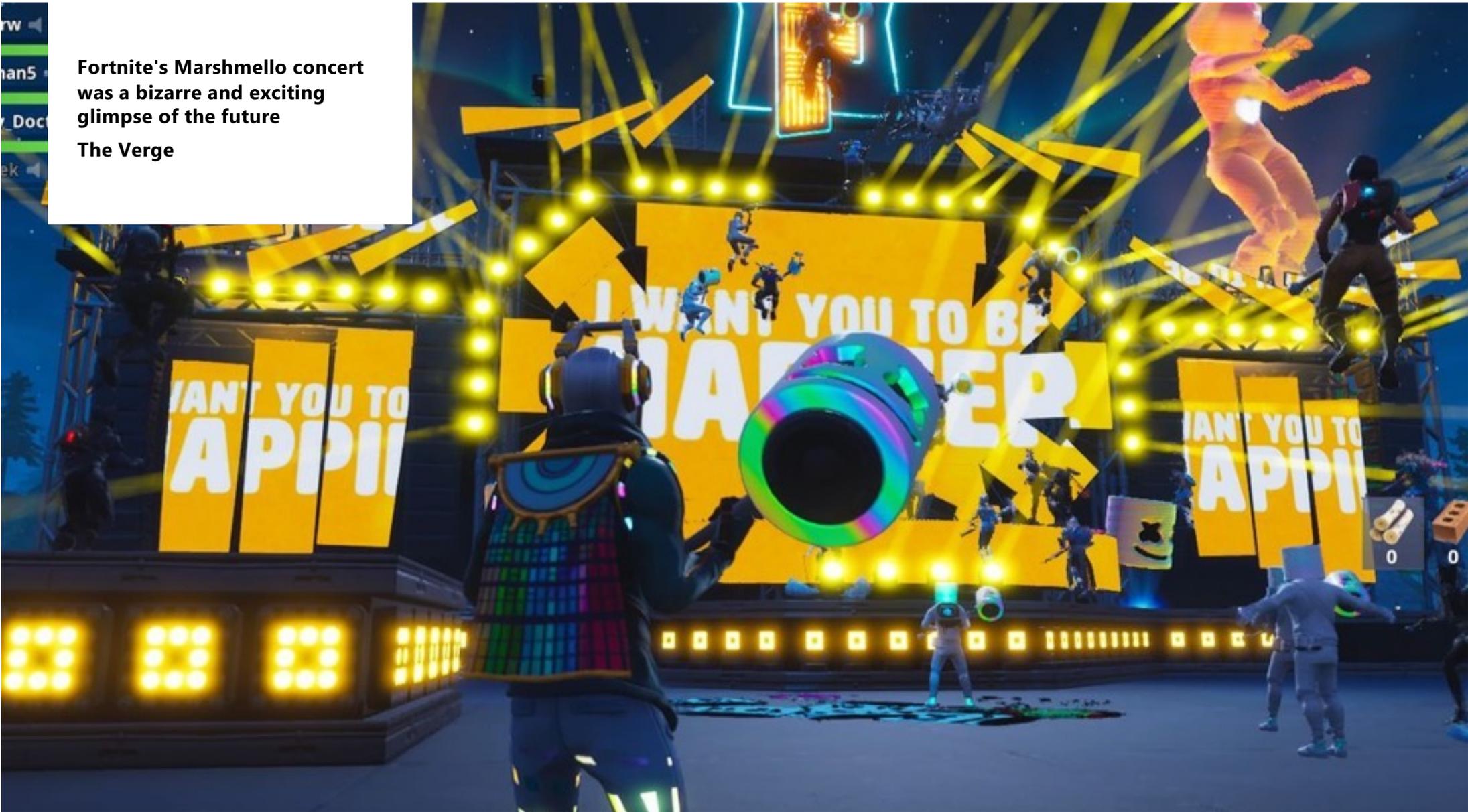


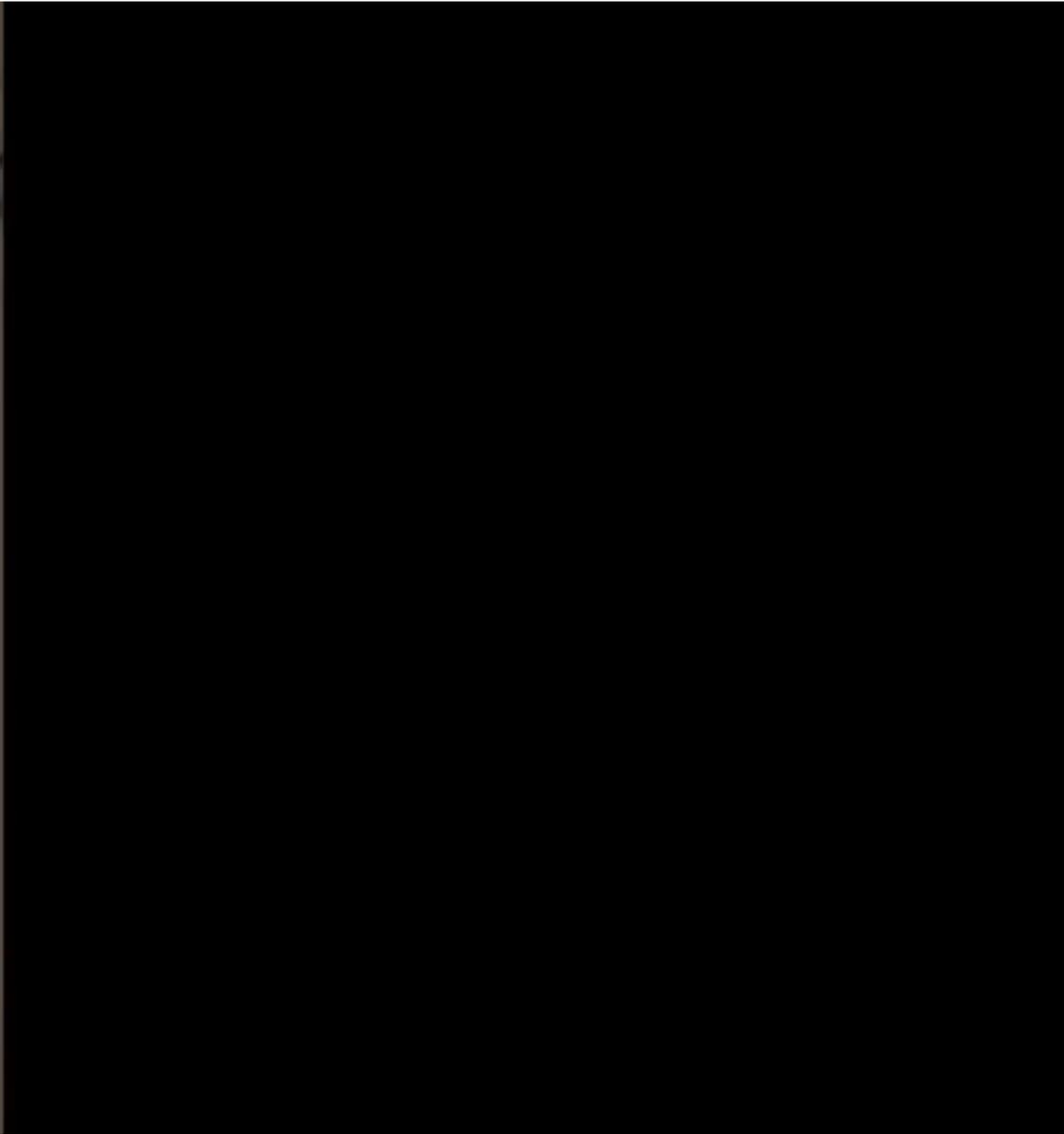
Real life in real time



**Building the Metaverse: a persistent,
ubiquitous, real time digital layer
providing (social) agency over society
(and the built world)**

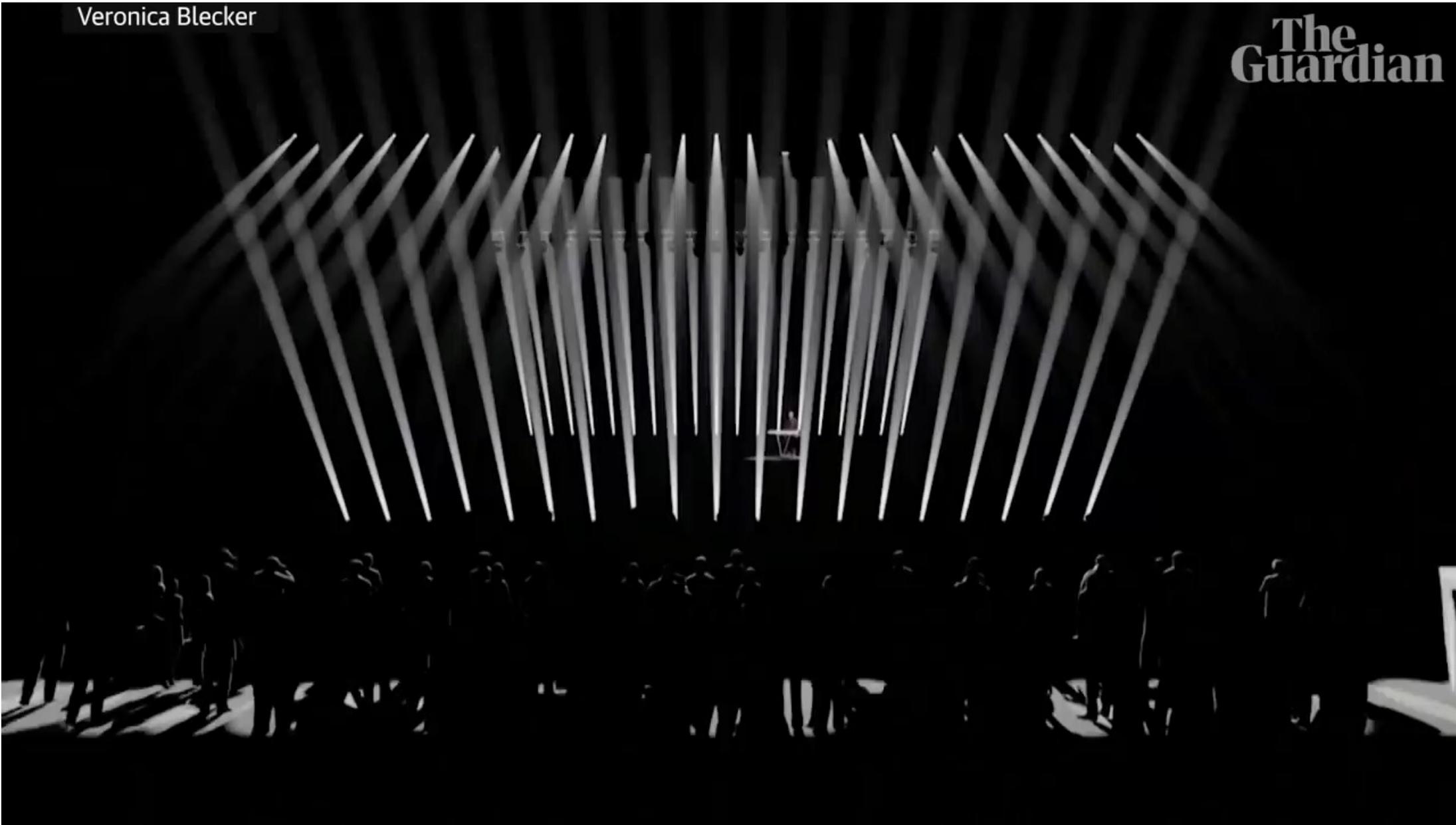
Fortnite's Marshmello concert
was a bizarre and exciting
glimpse of the future
The Verge





Veronica Blecker

The
Guardian



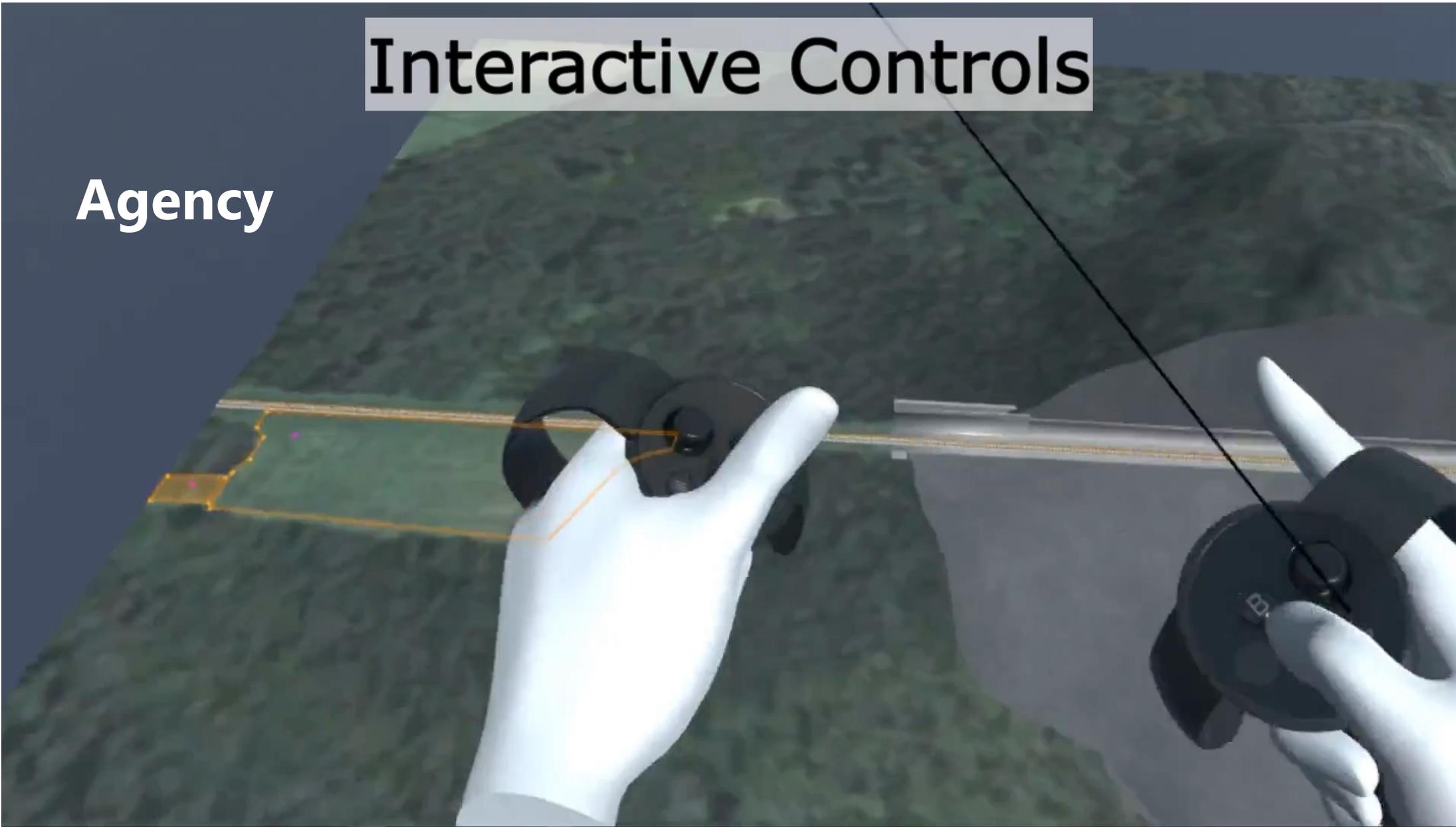


Agency

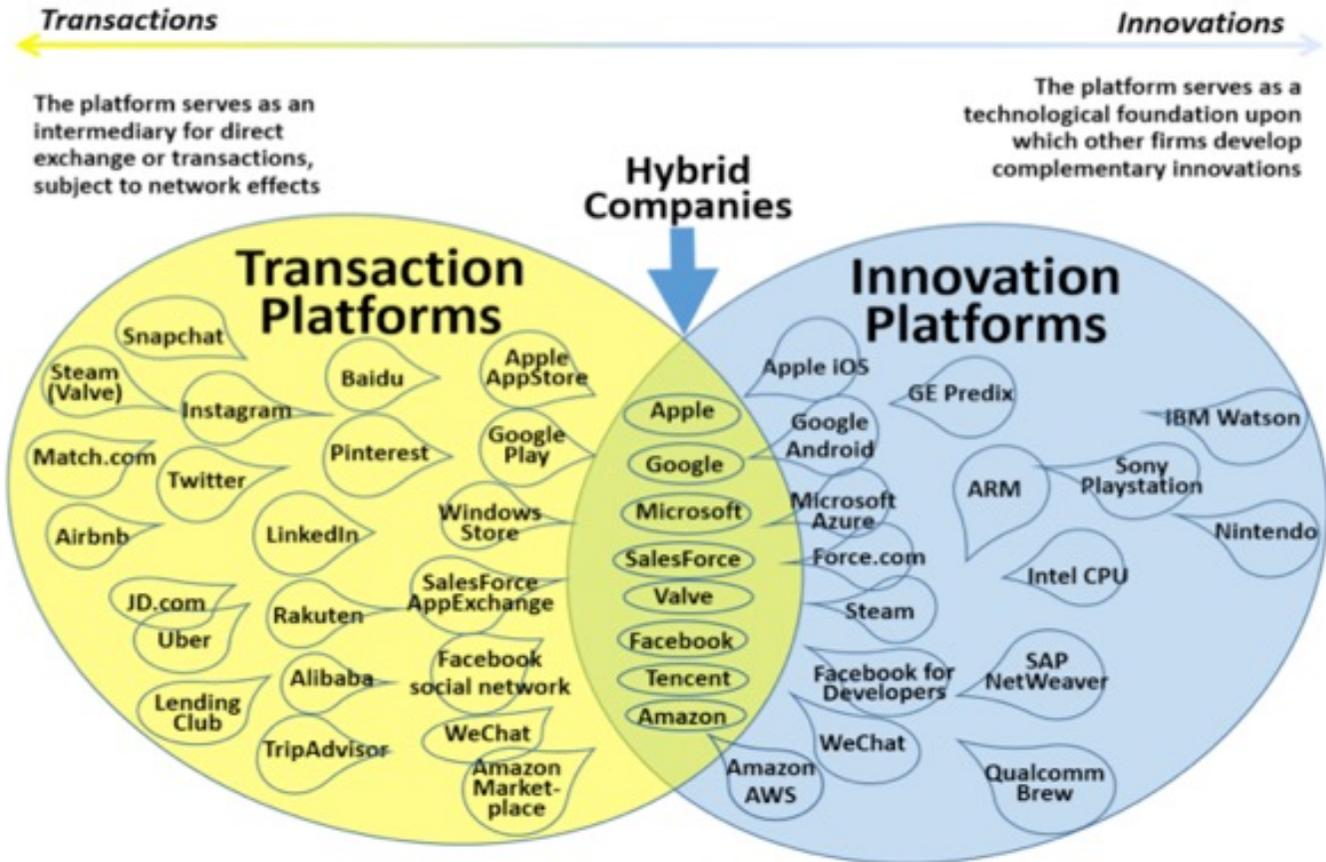
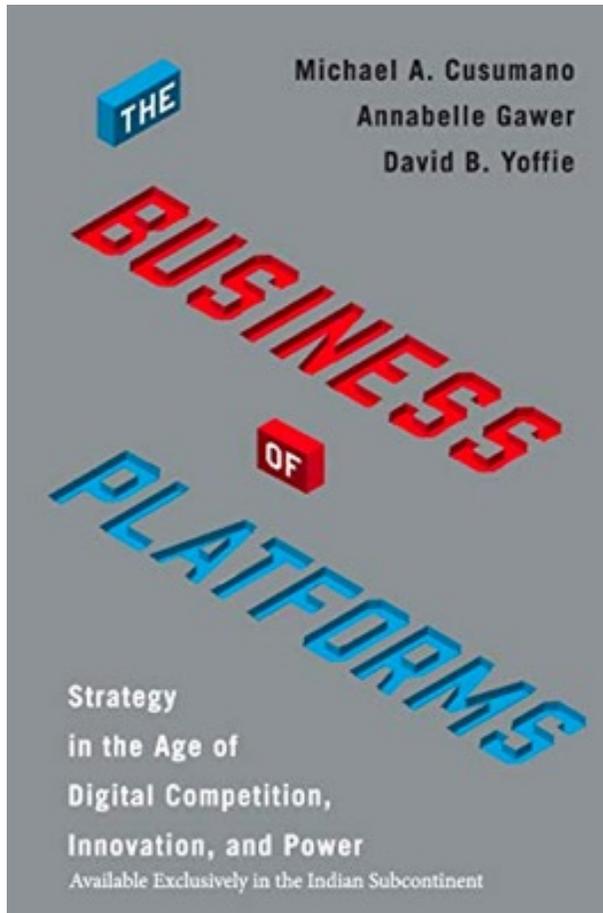


Interactive Controls

Agency

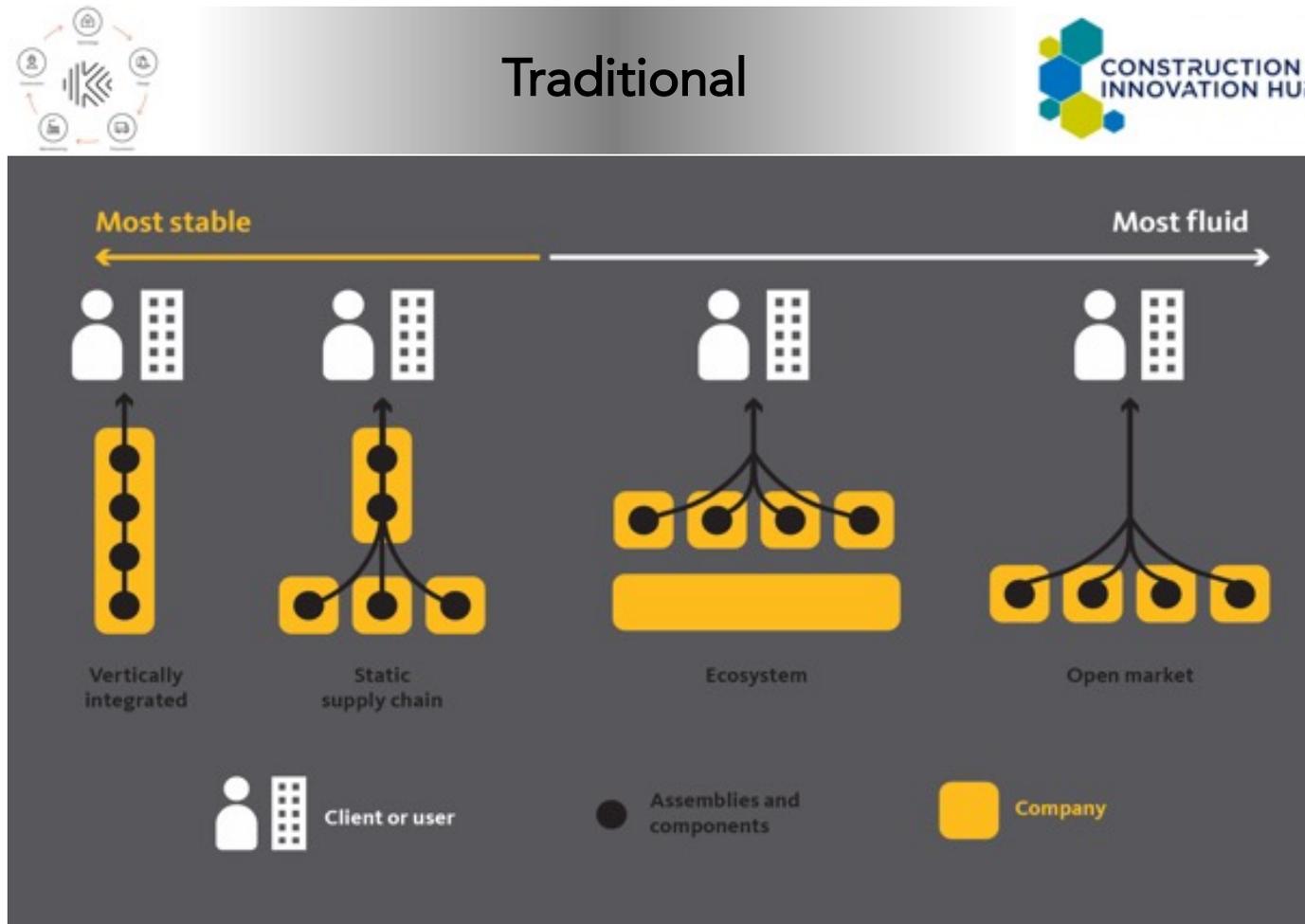


Platformisation 101



© Annabelle Gawer
Professor in Digital Economy, Director, Centre of Digital Economy, University of Surrey
Head, Department of Digital Economy, Entrepreneurship & Innovation, Surrey Business School

Enable a platform ecosystem for Built Asset delivery and operations



The Metaverse,
as a future medium, can
be a much greater
engine for economic
efficiency than any of
the closed systems that
exists today”

Tim Sweeney
Epic Games CEO





Buro Happold

Equity + Sustainability + Technology

questions to @AlainWanderings

follow @burohappold

