

# 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**

**VU.CITY**  
The best possible city for all.

**proptechlab**

**BUILDING VENTURES**  
for a Better Built World

**HELIX**



**Kinship**

**atlas+**  
Dubai • London • Sydney • Oslo

## Digital Transformation

**R RHOMBERG**

**mace**

**DB BAHN**

**pwc**

**KEF KATERRA**

**hs**  
engine for growth

**JLL**

**QATAR**  
قطر تستحق الأفضل  
Qatar Deserves The Best

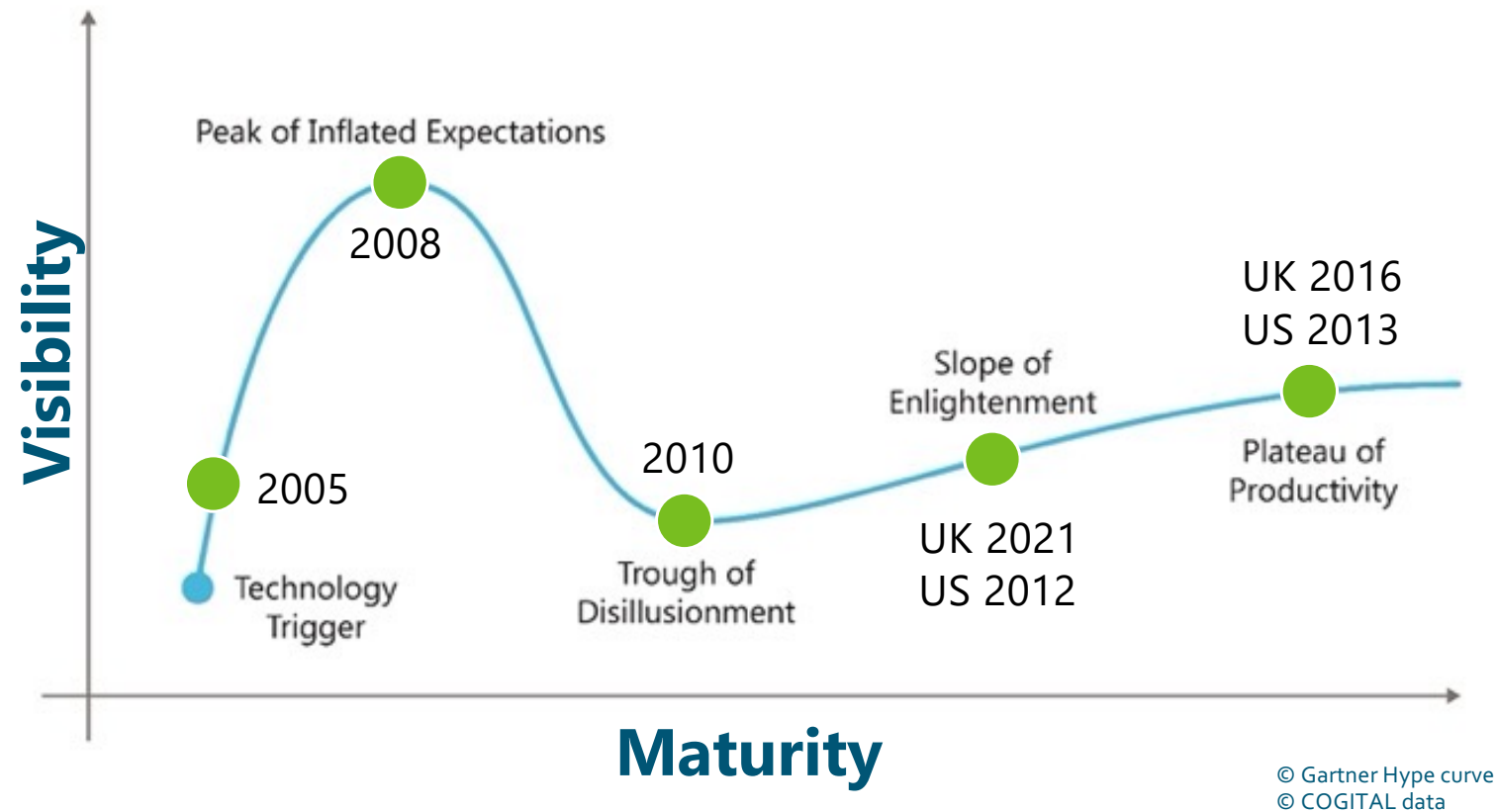
## Leadership

**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

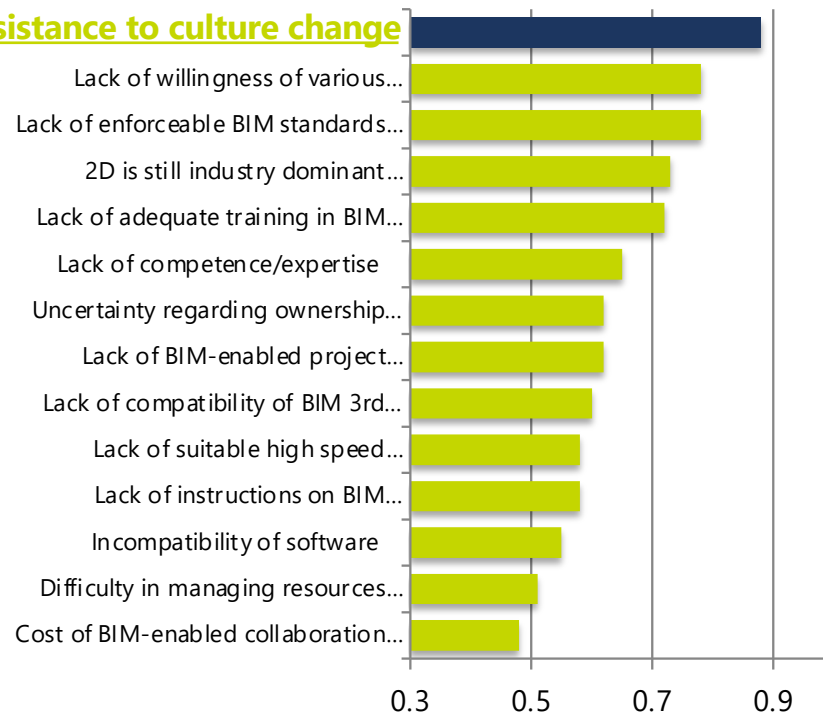


# Culture is Central to Digitalisation

## Barrier:

## and Opportunity:

### Resistance to culture change



Source: RICS June 2015



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**



# 12

## Gutenberg moments

Silvija Seres



▪ 2004

VOICE: ERIC SCHMIDT - GOOGLE FORMER CEO

# the 1<sup>st</sup> Platform

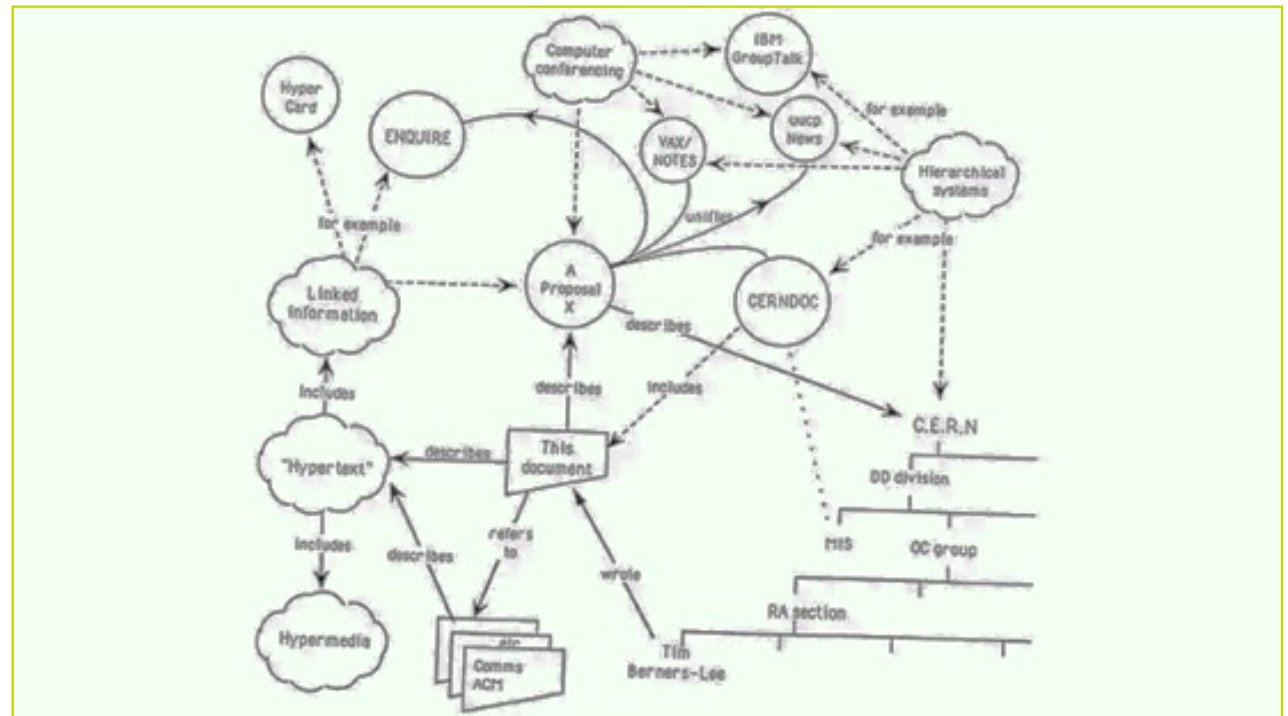
http://url.com/index.html

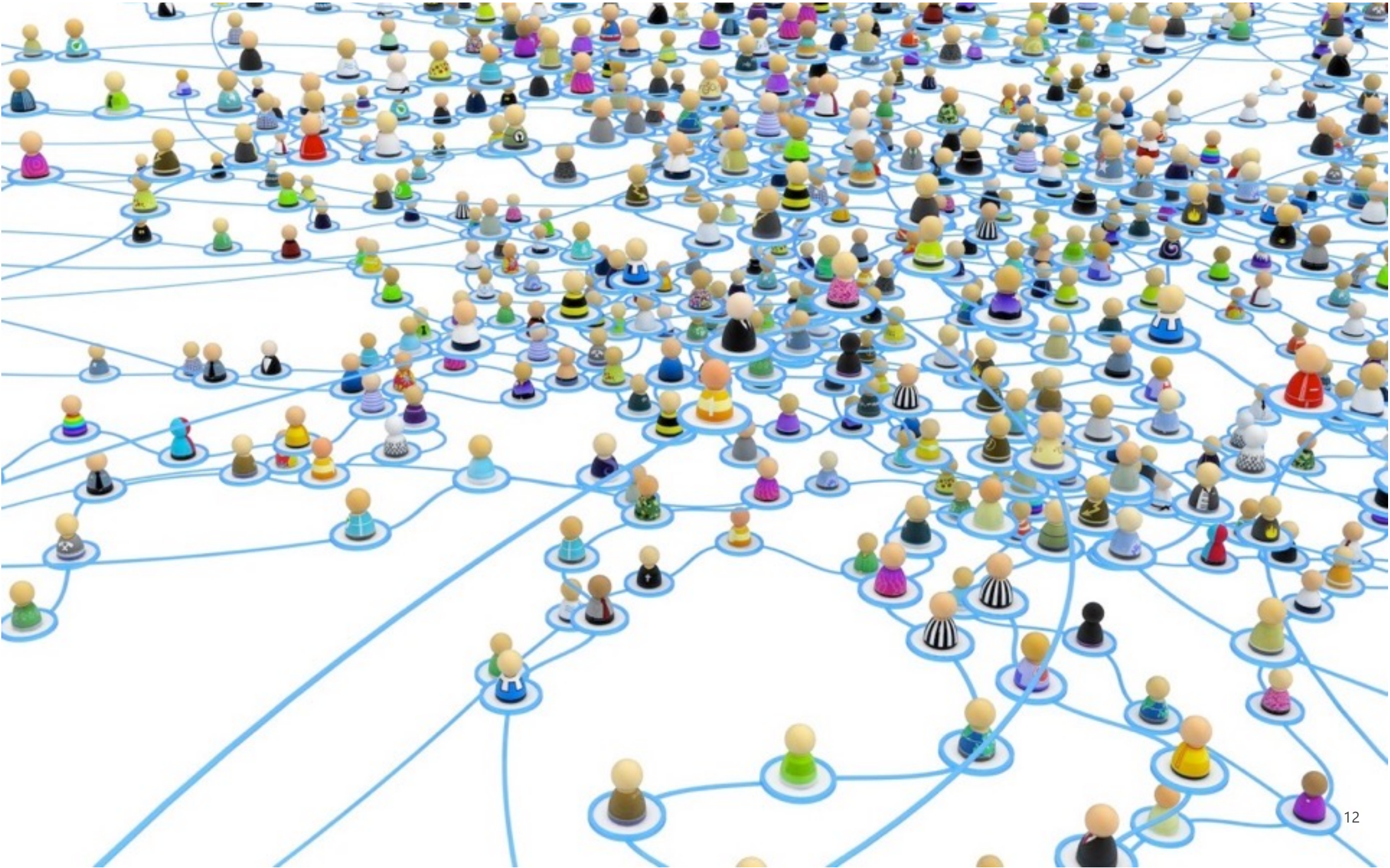
12 March 1989

## Information

"Vague... but exciting"

Anonymous  
TBL supervisor



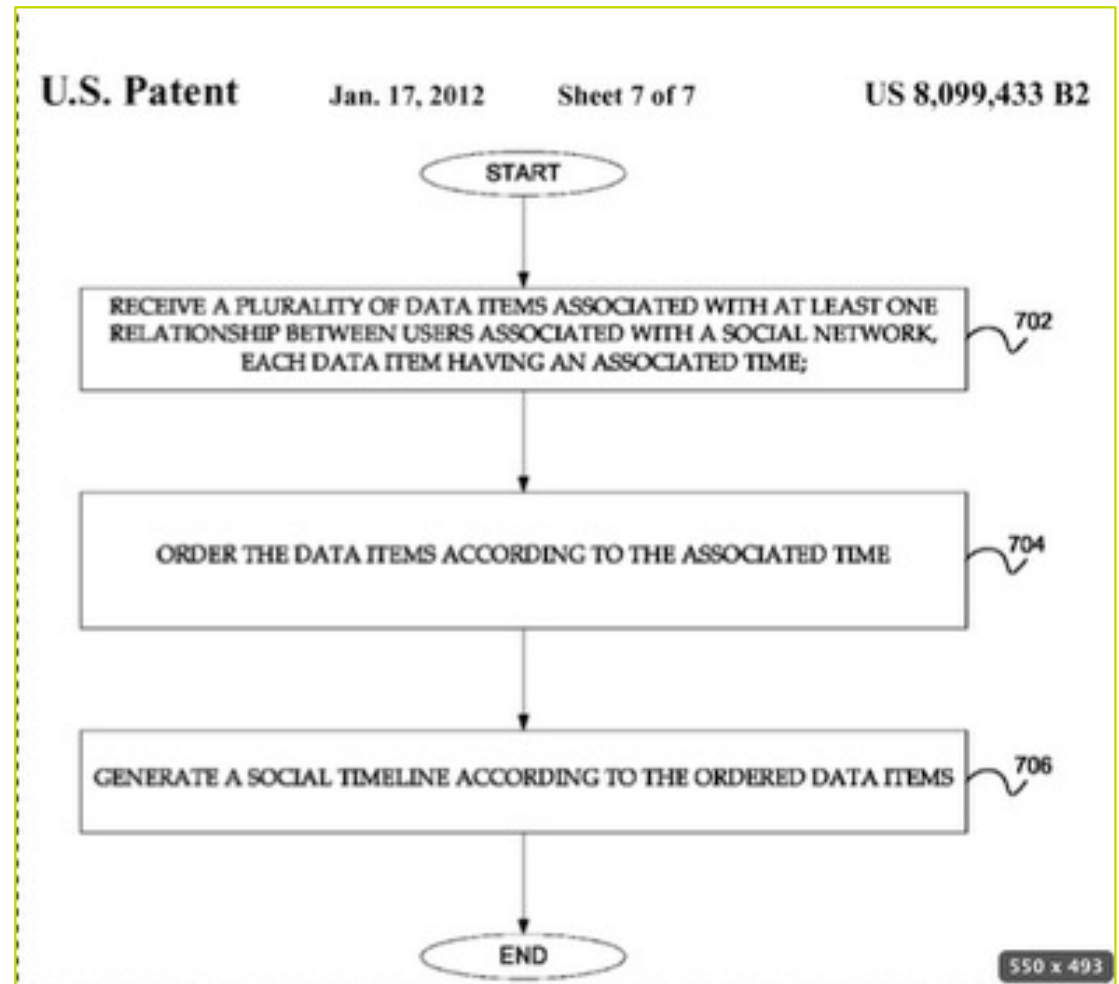


# the 2nd Platform

@Social #trending

March 2004

People





# the 3<sup>rd</sup> Platform

The Metaverse

2021

Persistent Digital Reality

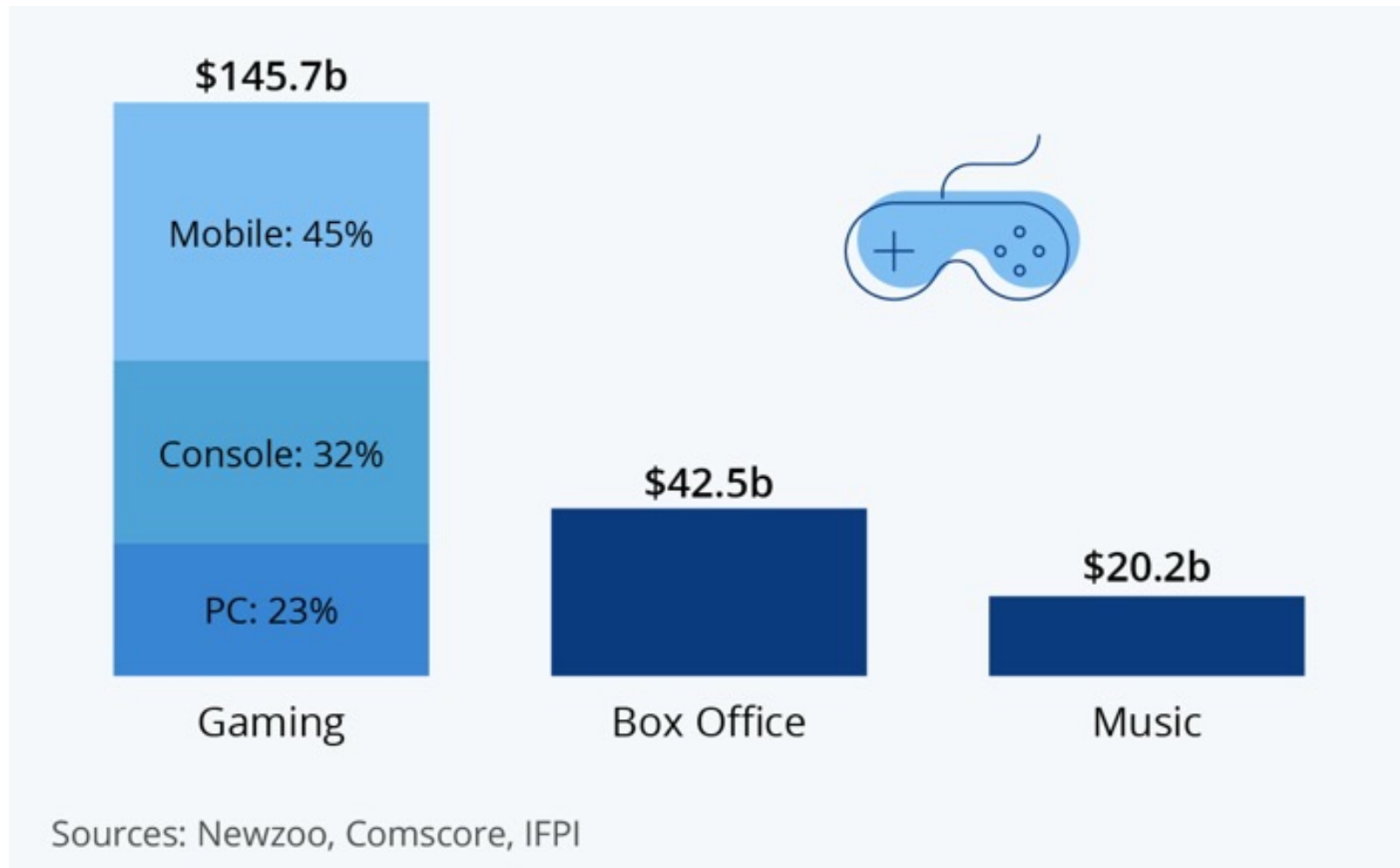
"We're Probably Living in a Simulation"

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



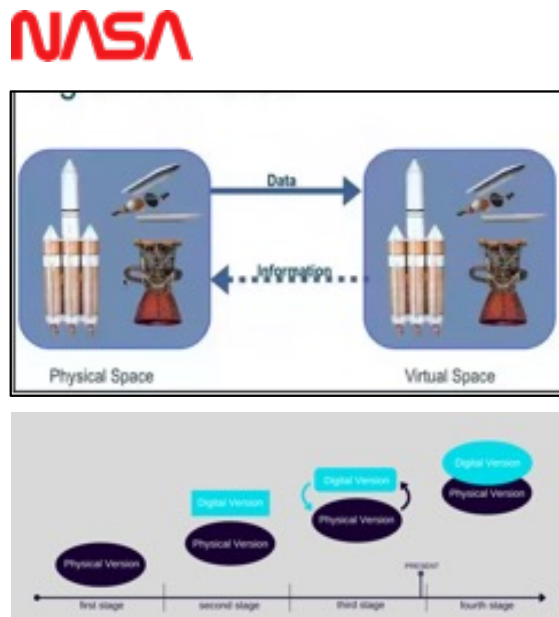


# Gaming is the largest sector of the entertainment industry



# AEC Industry | Gaming Technology Convergence

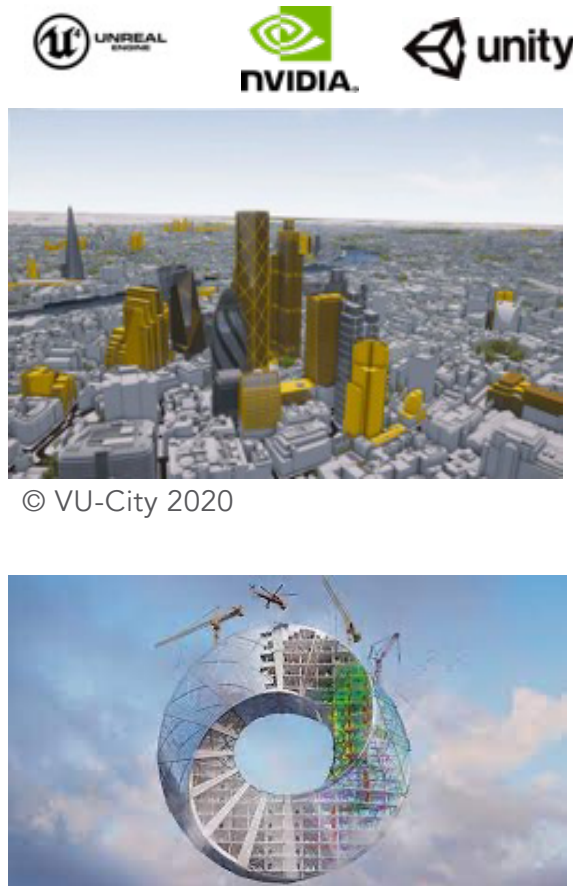
## Digital Twinning



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

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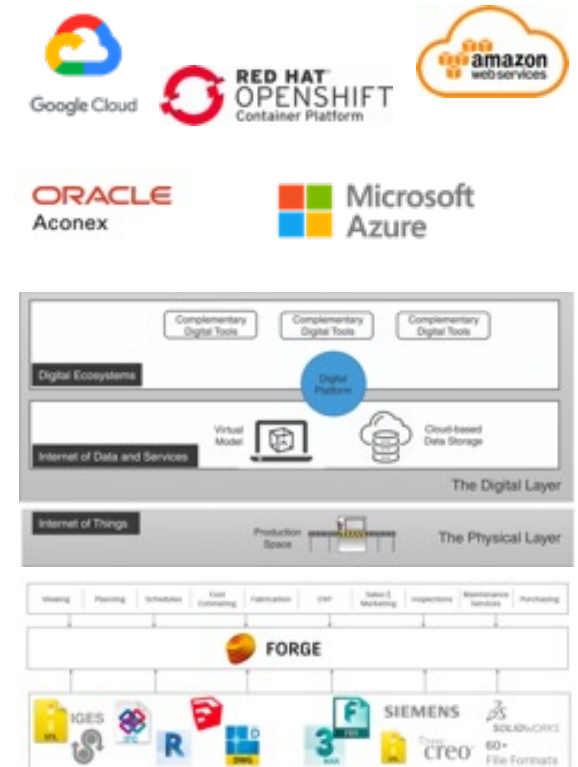
## Gaming Technology Acceleration



© VU-City 2020

© NVIDIA Omniverse

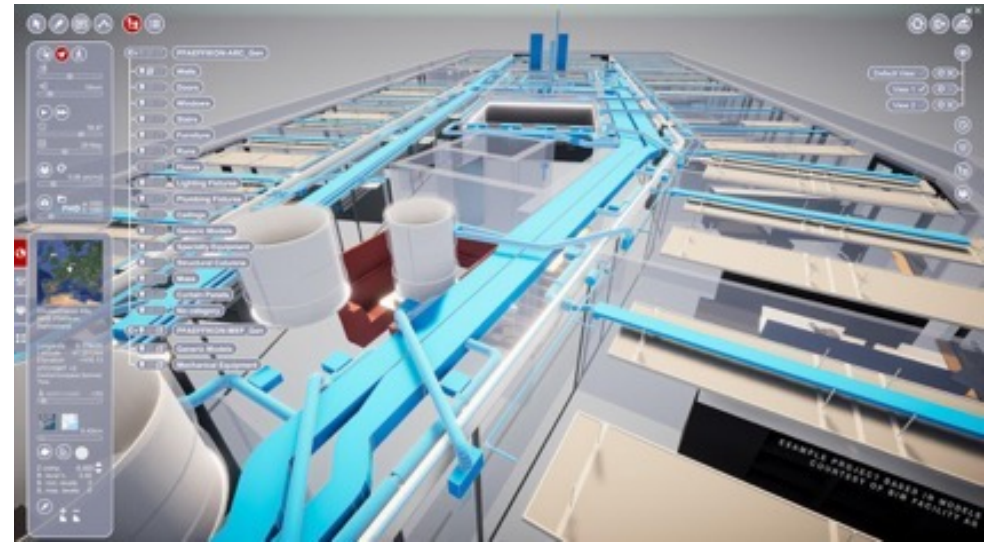
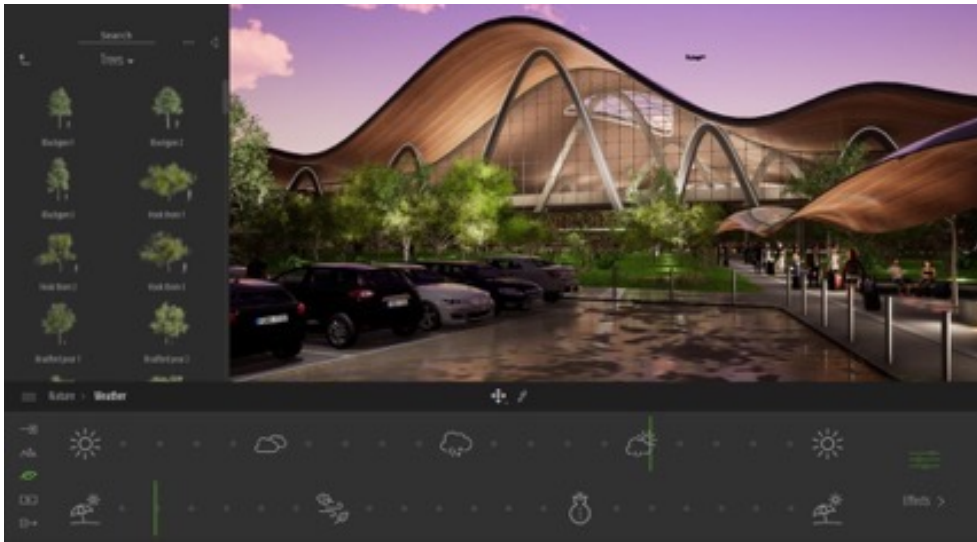
## Cloud vendor Invasion in AEC



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16

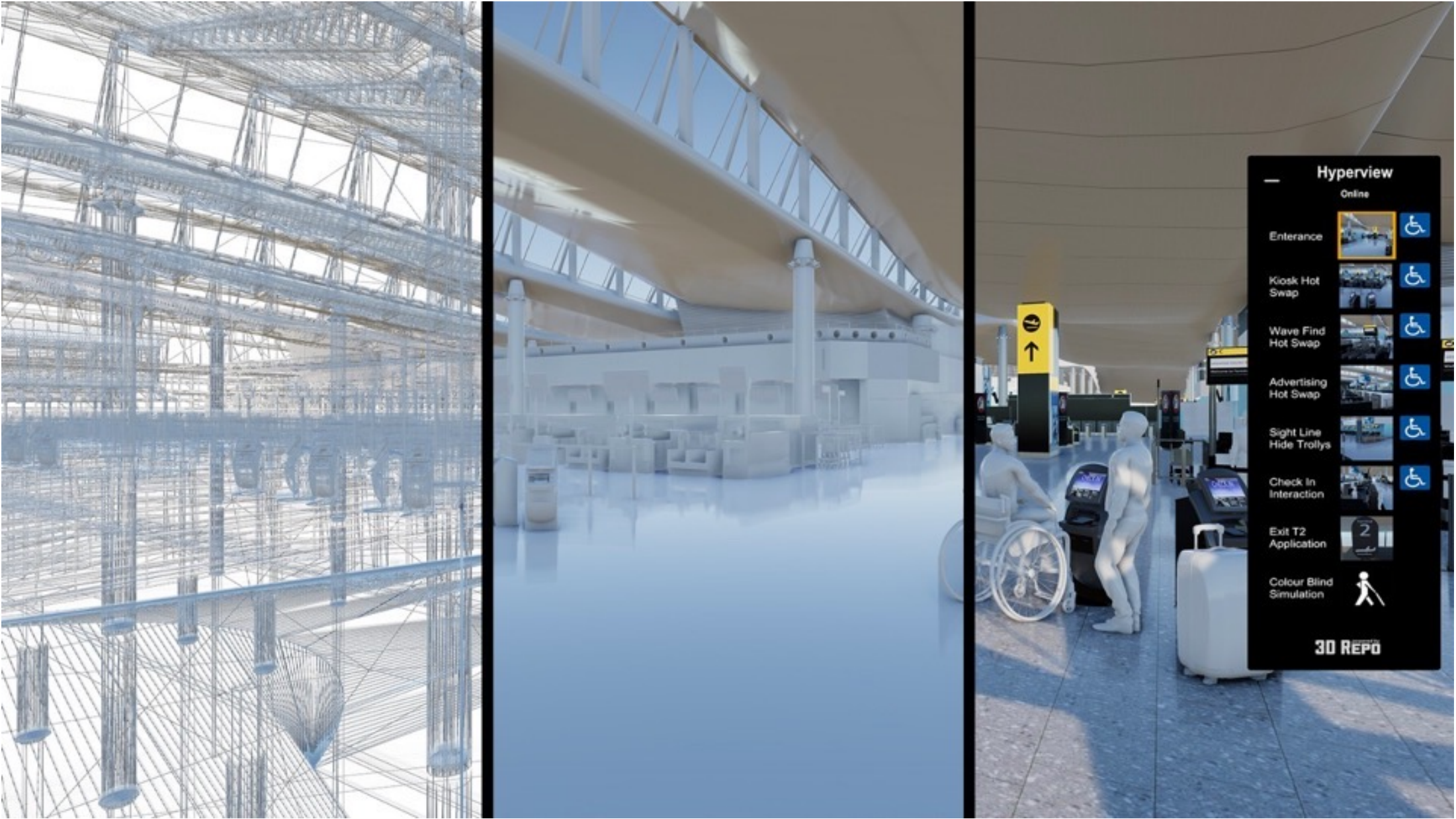
# Persistent Visualisation Pipelines



## 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



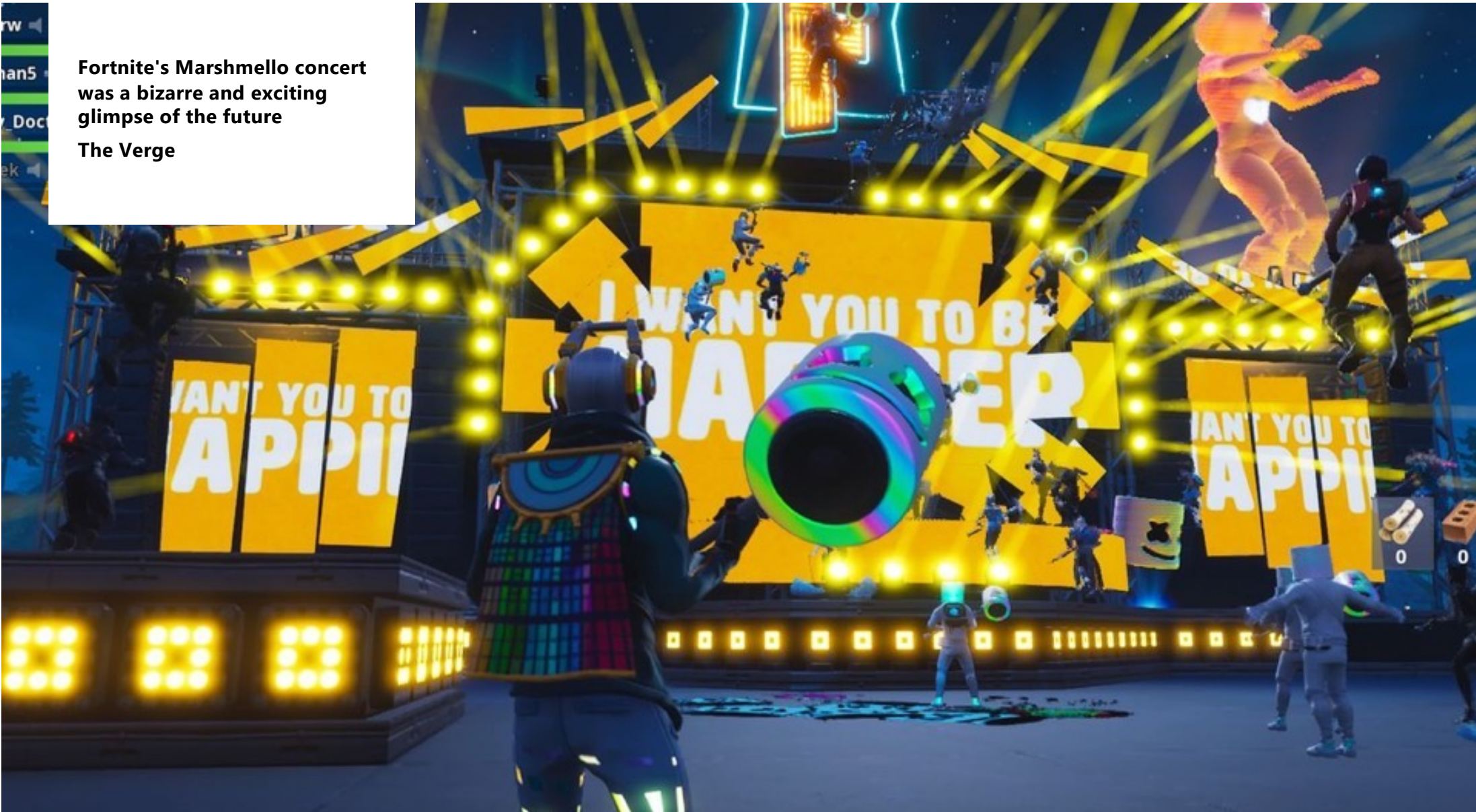


Real life in real time



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

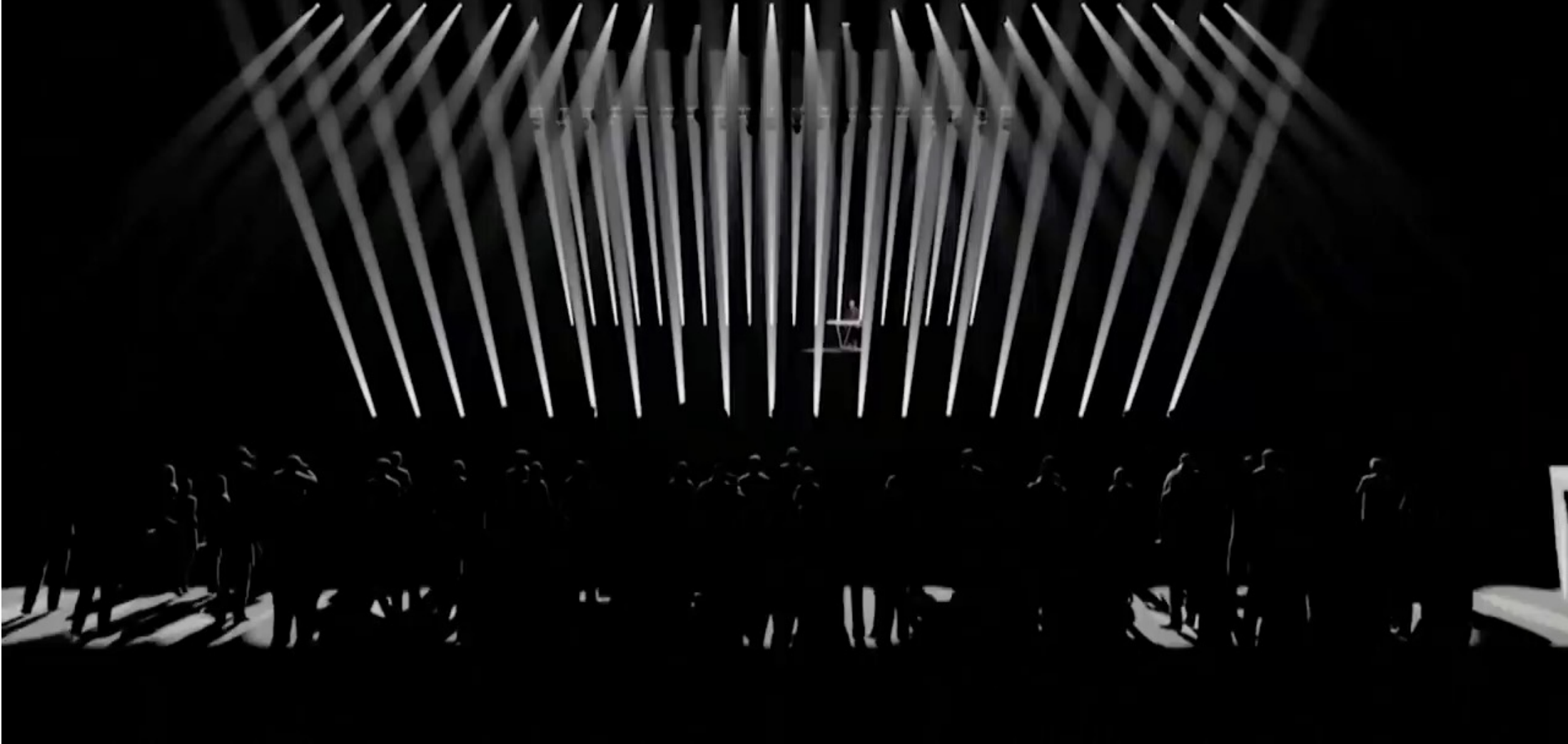
Fortnite's Marshmello concert  
was a bizarre and exciting  
glimpse of the future  
The Verge





Veronica Blecker

The  
Guardian



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25



Veronica Blecker

The  
Guardian

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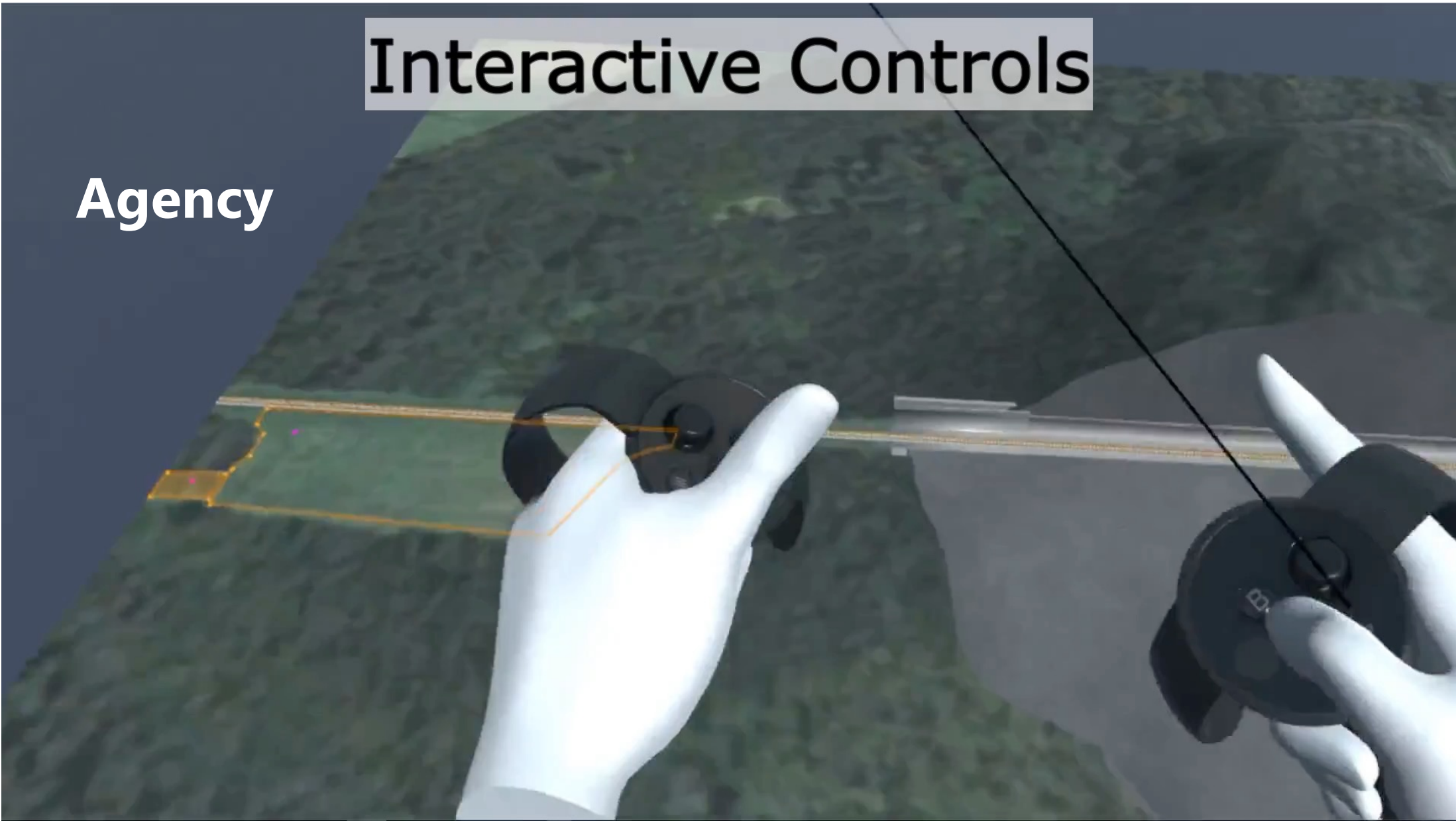
26



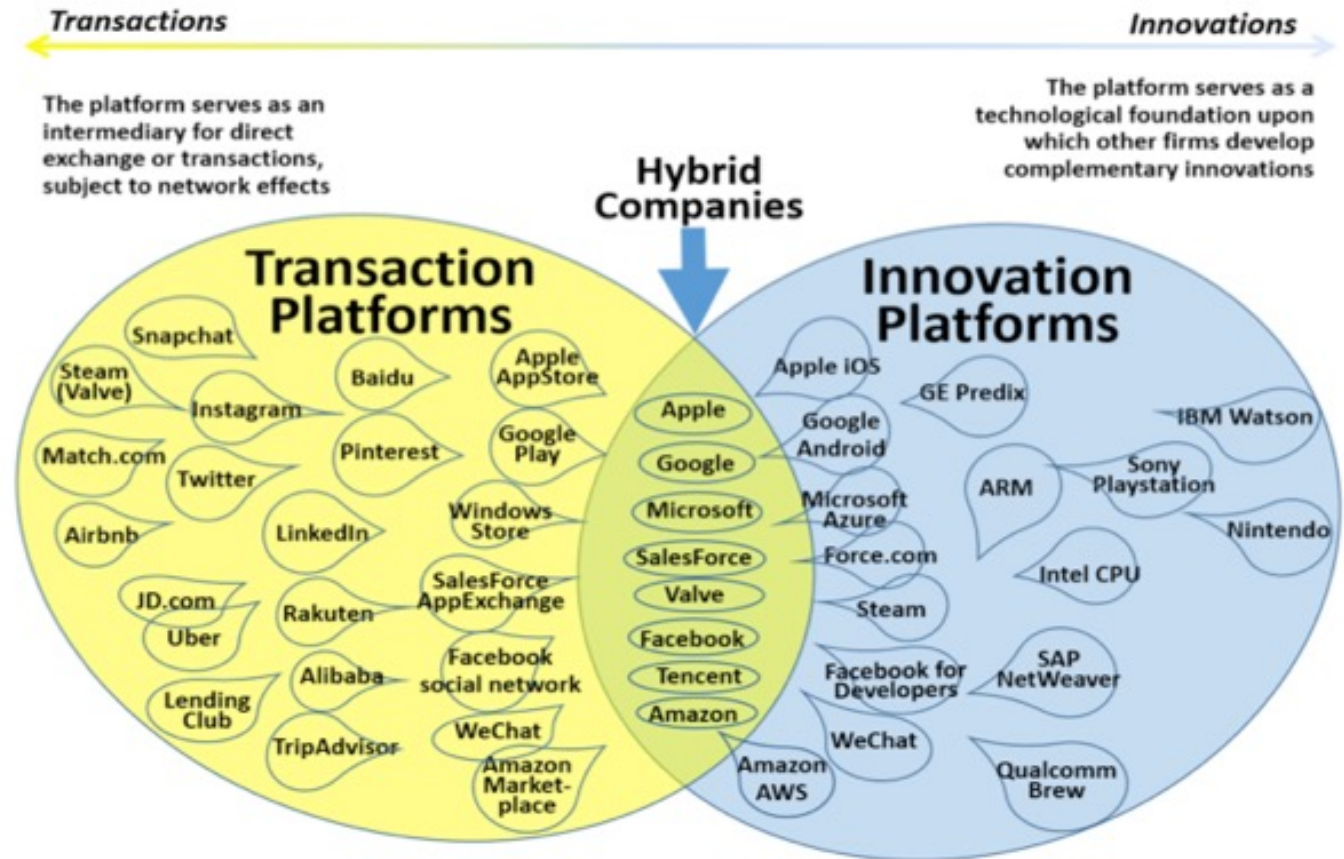
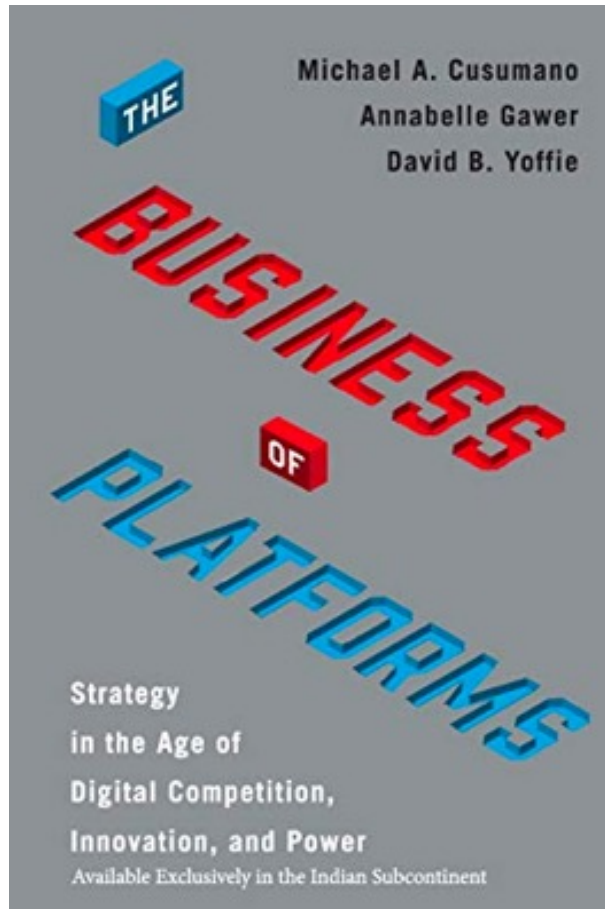
# Agency

# Interactive Controls

Agency

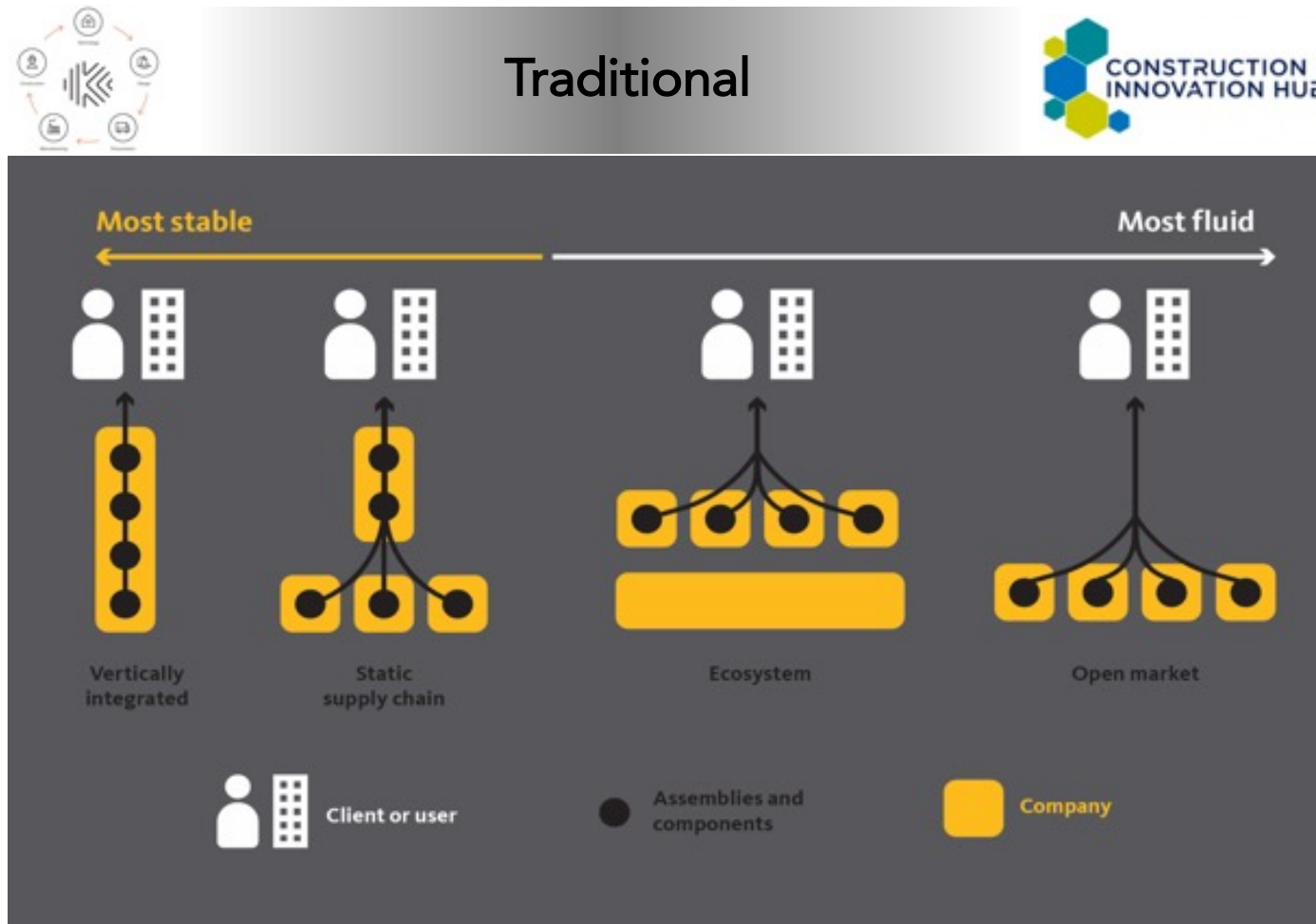


# Platformisation 101



© 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

