

ENGINEERING / THE DIGITAL TRANSFORMATION COMPANY

# Metaverse

Digital Experience

NOVEMBER 2023

## At a Glance: a Global Company

**1.5 Bn€**

REVENUE FY2023

**40+**

YEARS OF GROWTH

[READ WHITE PAPER](#)

**15,000+**

EMPLOYEES

**60+**

OFFICES AROUND  
THE WORLD

GLOBAL HQ  
ROME, ITALY

**30+**

PROPRIETARY SOLUTIONS  
FOR ALL MARKET SECTORS



### ADVISORY

#### RESEARCH & INNOVATION

6 Development Labs  
100+ Live Research Projects  
€40m+ Investments / YR  
450+ Data Scientists and Researchers

### TECHNOLOGY & IMPLEMENTATION

#### IT & MANAGEMENT ACADEMY "ENRICO DELLA VALLE"

25,000 Man Days of Training / YR  
1,300+ Professional Certifications  
9,900+ Web Classroom Participants

### PROPRIETARY SOLUTIONS

#### ASSETS

11 Portfolio Areas  
20+ Group Companies  
10+ Competence Center

### MANAGED SERVICES

3 Data Center Tier IV  
22K Managed Servers  
250K Workplaces Managed



ENGINEERING / THE DIGITAL TRANSFORMATION COMPANY

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## Building a Better Tomorrow

**Engineering** is the Largest Italian IT organisation, leader in **Digital Transformation**.

A **Business Partner** to accelerate your **innovation** processes, where **business meets technology**.

RETHINK YOUR **WORLD**  
TRANSFORM YOUR BUSINESS



[WATCH VIDEO](#)

## Welcome to the Digital Revolution

# Enabling the digital revolution to accelerate.

We invest through research, strategic acquisitions and skill development in all **advanced technologies** applying them across all Markets and creating dedicated Competence Centers.

ENABLING TECHNOLOGIES + EMERGING TECHNOLOGIES = ADVANCED TECHNOLOGIES

### ENABLING TECHNOLOGIES Click on the eight buttons for extra details



AI & Advanced Analytics



Cloud



Cybersecurity



Internet of Things



Intelligent Automation (RPA)



XR



Blockchain



Digital Twin



EMERGING TECHNOLOGIES

Drones & Autonomous Vehicles

3D Tech

Advanced Biometrics

Edge Computing

Location Based Services

Virtual Assistant

Wearable Computing

Quantum Computing

5G

## Metaverse is responding to technological trends, while looking at younger generations' preferences

### XR devices adoption

XR devices are expected to increase sales at a CAGR of 32.6% between 2023-27 globally

### User experience

3D, AR/MR/VR, reactive avatars are lowering at its minimum the differences between real and virtual worlds

### Blurred boundaries

According to younger generations, digital can be better than physical – e.g., 90% Gen Zers would rather attend events in the metaverse vs. in-person



## Key Market Trends

**Metaverse has been growing due to industries' investments...**

**\$65.5B**

GLOBAL METAVERSE MARKET SIZE IN 2022

**Gaming industry** (+\$200B in 2022) is driving metaverse development, still covering **almost 50%** of its **market share**

Since 2016, investors have poured approximately **\$94B into Web3 companies**, funding developments across all its applications, especially NFTs and Metaverse

**+39% CAGR**

EXPECTED GLOBAL METAVERSE MARKET GROWTH 2022-30

**...however, some challenges are limiting full adoption among companies...**

**Lack of adoption:** as happened for the internet, awareness is high but usage low, especially due to the cost of devices and difficulties in accessing the metaverse, still perceived as "outside" experiences

**Security concerns:** users' lack of awareness of service and security options are causing losses due to cyber-attacks

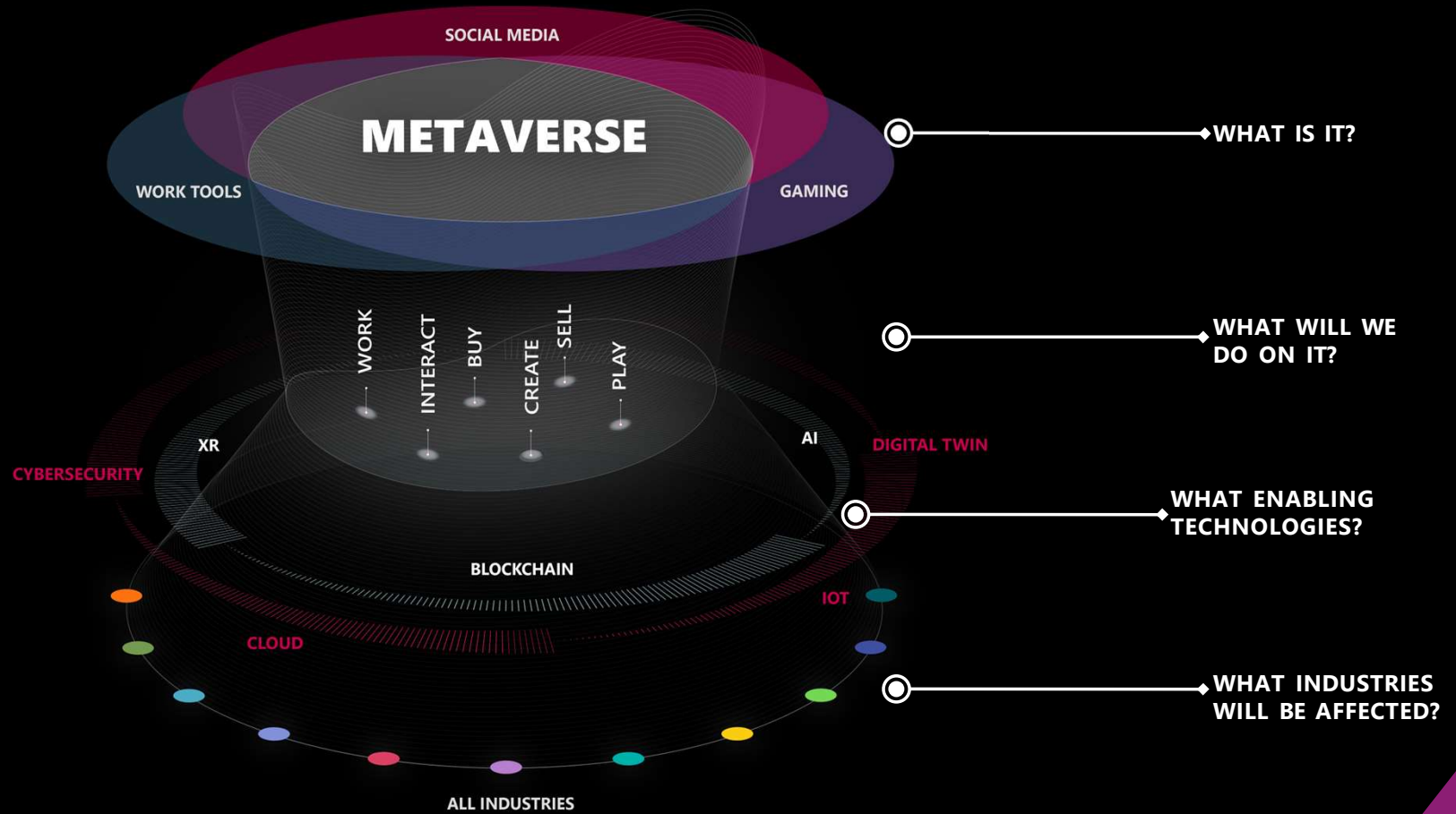
**...which can be addressed through solution design and technology**

Design and development of a metaverse solution **seamlessly integrated within existing environment**, to facilitate users to switch to the virtual world for their activities

**Artificial Intelligence** is revealing itself as the most **economic and efficient solution** to be used to monitor user behaviour and detect any suspicious activity



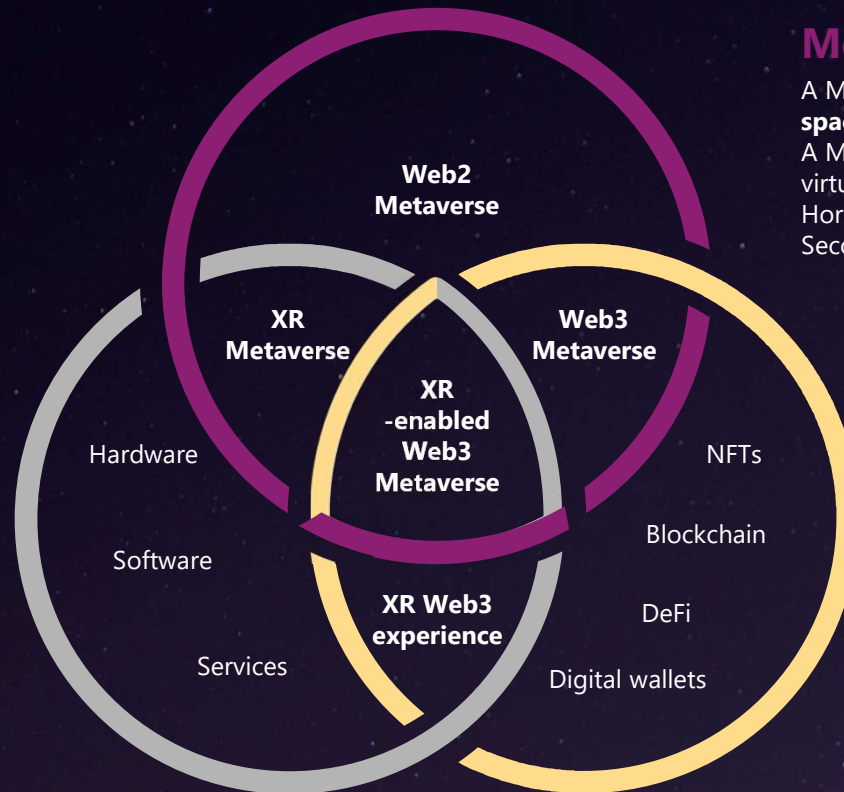
# Introduction to the Metaverse



# Metaverse is a persistent, shared digital space for users to live in, interact and explore which spans between the virtual and the physical world

## XR

Extended Reality (XR) is an **immersive and interactive simulated digital experience** using a head mounted display (HMD), and is based on Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) and spacial computing



## Metaverse

A Metaverse is a persistent, immersive **shared digital space** for users to live in, interact and explore. A Metaverse can be interfaced via a fully immersive virtual reality experience using an **HMD** (e.g., Meta's Horizon Worlds) **or with a 2D screen** (e.g., Roblox, Second Life)

## Web3

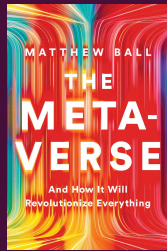
Web3 is the expected **third generation of the internet** that adds decentralization, verification and ownership to Web2 through various new tools and concepts including NFTs, cryptocurrency, and other digital assets





# What is the Metaverse

An expansive network of persistent, real-time rendered 3D worlds and simulations that [...] can be experienced synchronously by an effectively unlimited number of users, each with an individual sense of presence.



Matthew Ball

The “metaverse” is a set of virtual spaces where you can create and explore with other people who aren’t in the same physical space as you.



The metaverse is a future persistent and interconnected virtual environment where social and economic elements mirror reality.



A metaverse is a collective virtual 3D shared space, created by the convergence of virtually enhanced physical and digital reality. It’s persistent, providing enhanced immersive experiences.



...many definition proposed agree on **4 principles**:



Shared Experience



Interoperable



Virtual



Persistent



## Guiding Trends

### XR

+890%  
market size growth by 2025

### Blockchain

\$3.1 trillion  
business value generated  
by 2030

### Cloud

+50%  
of IT Spending will shift  
to cloud by 2025

### Cybersecurity

+20%  
year on year

### Social Media

+115%  
over the past 6 years

### Gaming

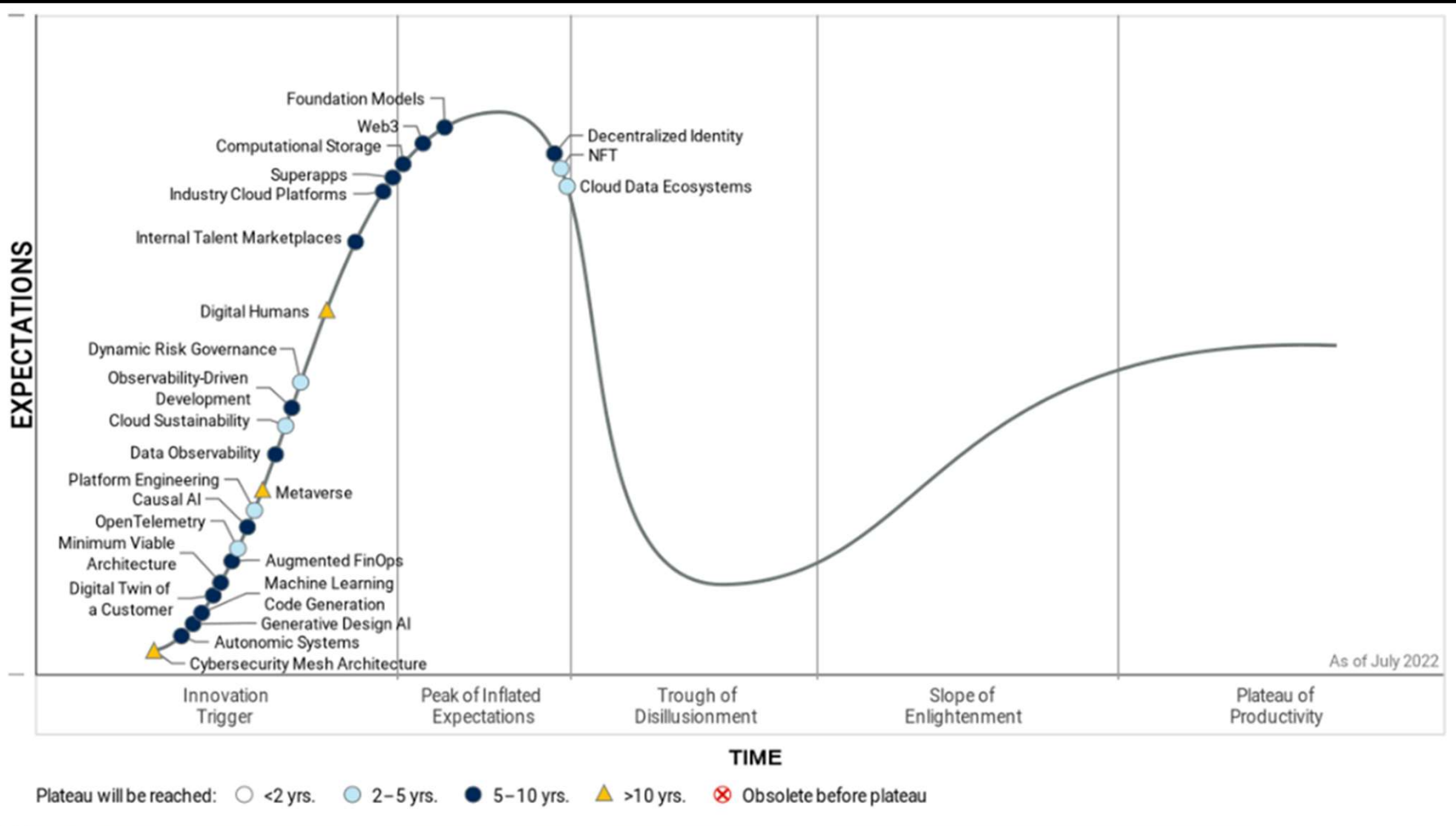
+70%  
market value growth by 2025

# Key Technologies...

Data displayed represents our elaboration  
of data coming from multiple sources  
(for example: STATISTA)



Gartner



# Meta



## Metaverse: open platforms



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JP Morgan,

Samsung,

ATARI,

CocaCola,

Absolute Vodka,

Metaverse Fashion Week,

Forever 21,

Philipp Plein



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SNOOP DOG

ADIDAS,

THE WALKING DEAD,

ATARI,

A\$AP Rocky,

Deadmau5,

Care Bears,

The Winklevoss Twins



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Nikeland,

Gucci Garden Experience,

KSI (youtuber),

twenty one pilots (band) ,

NASCAR,

The Fashion Award,

Ralph Laurent,

VANS



## Metaverse's use cases can range across different industries



### GAMING

Gaming experiences across many categories of games developed by studios and users

#### EXAMPLES

**Minecraft, Roblox and Fortnite** are gaming metaverses where users can create and purchase digital avatars



### MEDIA & ENTERT. AND SOCIAL

Live events, movies, exhibitions, formal/informal get togethers, weddings, etc.

**The Sandbox** partnered with Warner Music Group to create a musical theme park for users of the metaverse



### RETAIL / COMMERCE

Shops, showrooms, etc. of both physical and digital assets, services – consultations, tourism, etc.

**Decentraland** hosted a fashion week in which brands sold physical goods deliverable to the buyer in the real world



### HEALTHCARE

Virtual sessions/ appointments, XR-assisted surgery and recovery exercises, avatar-supported recovery

**Novarad's** OpenSight AR system uses Microsoft's HoloLens for preoperative surgery planning and medical imaging



### EDUCATION/ TRAINING

Virtual classrooms, learning tools, virtual field trips, corporate trainings, simulation trainings

**Walmart** has been using VR to train more than 1 million associates with +17k headsets



### COLLABORATION & CO-DESIGN

Virtual office, tools for live design creation (e.g., architects), workshops, events and meetings

**Horizon Workrooms** enable companies to host virtual meetings and customize workspaces



### INDUSTRIAL

Digital twins and simulations within virtual worlds, assets planning

**Hyundai** has partnered with Unity to create a metaverse digital twin of their factory

CONSUMER FACING

INTRA-ENTERPRISE



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Trend Radar**



# Thanks for your attention.



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Direttore Digital Solutions



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