

Blockchain web3 Metaverse

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Senior Manager Blockchain



Building a better
working world

EY Blockchain

300+

Dedicated Blockchain Professionals and developers



1000+

Blockchain-trained professionals



14

Global hubs



9

Software Platforms



City of Vienna



BNP PARIBAS

NORWEGIAN FASHION HUB



THE BANK OF KOREA



TOYOTA



MAERSK



ExxonMobil



Microsoft



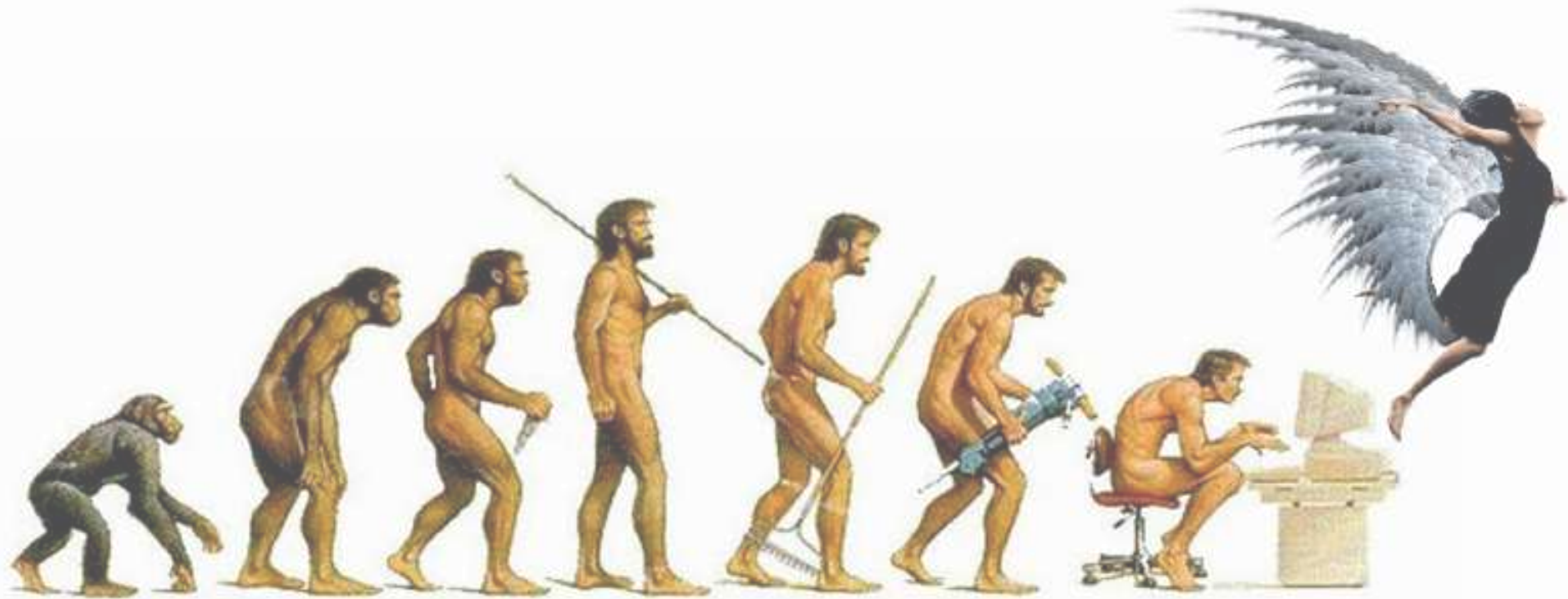
WORLD BANK GROUP



MERCK
Animal Health



Evolución



A hand with a pointing finger is positioned in the lower center of the frame, pointing upwards towards the word 'INTERNET'. The background is a blue-toned globe with a white grid of latitude and longitude lines. The word 'INTERNET' is written in large, white, bold, sans-serif capital letters across the middle of the globe. The lighting is soft, and the overall color palette is dominated by blues and whites.

INTERNET





**You
Tube**





COLABORACIÓN



Web3?

Web1

Read

1989 - 2005



Web2

Read | Write

2005 - Today



Web3

Read | Write | Own

Today - Future



2D to 3D

A natural development of internet



Que es Blockchain

- Una LEDGER o “base de datos” **replicada** entre diferentes participantes.
- **TODOS** ellos tienen la certeza absoluta de que todas las transacciones y anotaciones registradas en la misma son **ciertas, duraderas e infalsificables**.
- ¿COMO? Garantizado por las matemáticas y la **criptografía**



Bitcoin ≠ Blockchain

Blockchain es una tecnología (o plataforma) que permite establecer un “libro” de transacciones seguro y distribuido.

Bitcoin es una "moneda criptográfica" que utiliza una plataforma Blockchain como su motor de transacciones.

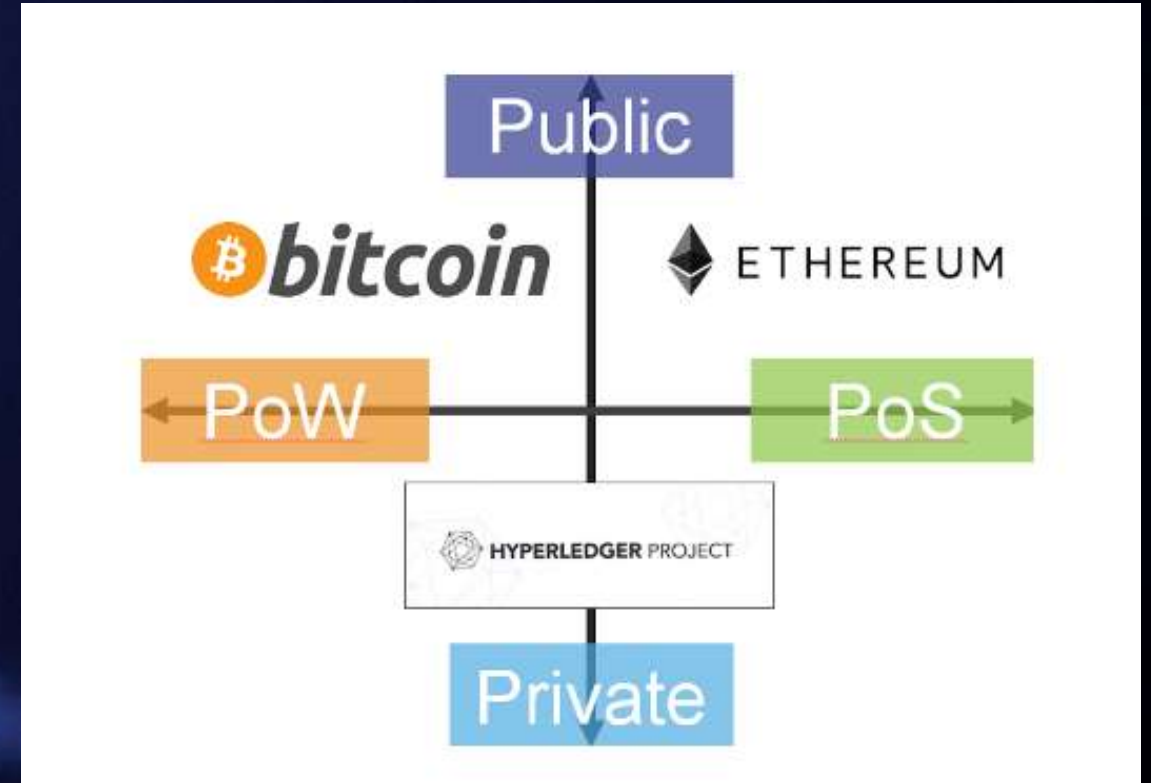
Tipos de redes

PÚBLICA

- SIN RESTRICCIONES
- ANONIMATO

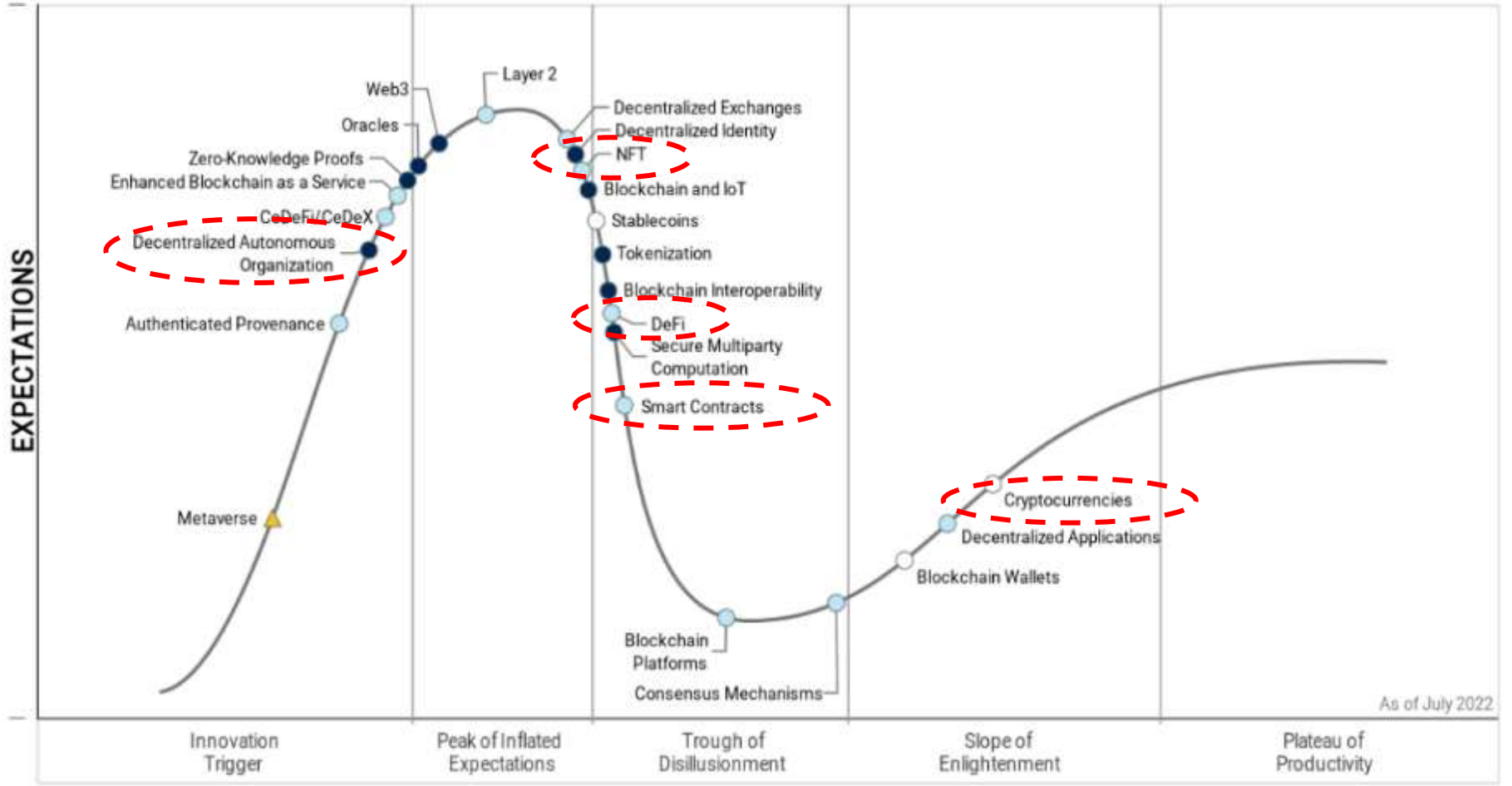
PRIVADA

- SE LIMITAN LAS OPERACIONES
- PARA USUARIOS CON ACCESO



Hype?

Hype Cycle for Blockchain and Web3, 2022



As of July 2022.

Plateau will be reached: ○ <2 yrs. ● 2-5 yrs. ● 5-10 yrs. ▲ >10 yrs. ⊗ Obsolete before plateau

What are cryptocurrencies?

Cryptocurrency is a *digital/virtual asset* also called a *token* or *coin*. They are stored in *digital wallets*. Tokens/coins may be used for *payments, store of value* or be *programmed* to perform specific tasks or hold specific legal rights etc.

Cryptocurrency

Pseudo-anonymous

Privacy coins



Bitcoin



Monero



Ether



Zcash

Claim on no one
Volatile

Stablecoins



USDC



Diem (Facebook)

Claim on someone
Stable 1:1 USD etc.

CBDCs



DCash

(Eastern Caribbean Central Bank)



E-krona

(Riksbanken Sweden)

Claim on central bank
Stable 1:1 local currency

A natural development of internet

Web 2.0

Payments & Commerce

- ▶ Traditional payments (e.g., debit/credit)
- ▶ Fiat currency
- Transaction fees paid to banks/providers*

Ownership

- ▶ Formal titles
- ▶ Operated by law
- Fees paid to central market places/intermediaries*

Finance

- ▶ Operated by banks/intermediaries
- ▶ Strict KYC/AML and verification procedures
- Fees (interest) paid to banks/others*

Governance

- ▶ Centrally owned, legal entities
- ▶ Board of directors / shareholders

Web 3.0 (*blockchain-based*)

- ▶ Crypto wallets
- ▶ Cryptocurrencies / digital fiat
- Transaction fees paid to community (miners)*

- ▶ Non-fungible tokens (NFTs)
- ▶ Operated by smart contracts
- Fees paid directly to the community/creators*

- ▶ Decentralized Finance (DeFi)
- ▶ Lending/borrowing against virtual assets
- ▶ Without the need for a bank account...
- Fees (interest) paid to community (liquidity providers)*

- ▶ Decentralized Autonomous Organizations (DAOs)
- ▶ Operated by community consensus
- ▶ Voting in native tokens

Metaverse will be relevant for all industries

TMT

New metaverse media content companies. New virtual experiences (e.g., concerts, virtual cruises, etc.). New technology infrastructure companies



Consumer

New virtual apparel / retail companies. Physical companies establishing virtual stores to promote sales



Manufacturing

New machinery maintenance models via 'digital twins' and smart sensors. Supply chains managed virtually



Health Sciences

New virtual patient care experiences and enhanced surgical methods. New training methods for students and therapeutic treatment methods



Banking & Capital Markets

New banking activities (e.g., loans, payments / transfers, storage, etc.) using digital currencies



Asset Managers

New investment funds focused exclusively in digital assets (e.g., virtual real estate, NFTs, etc.)



Government

New citizen service experiences



Metaverse?

XR

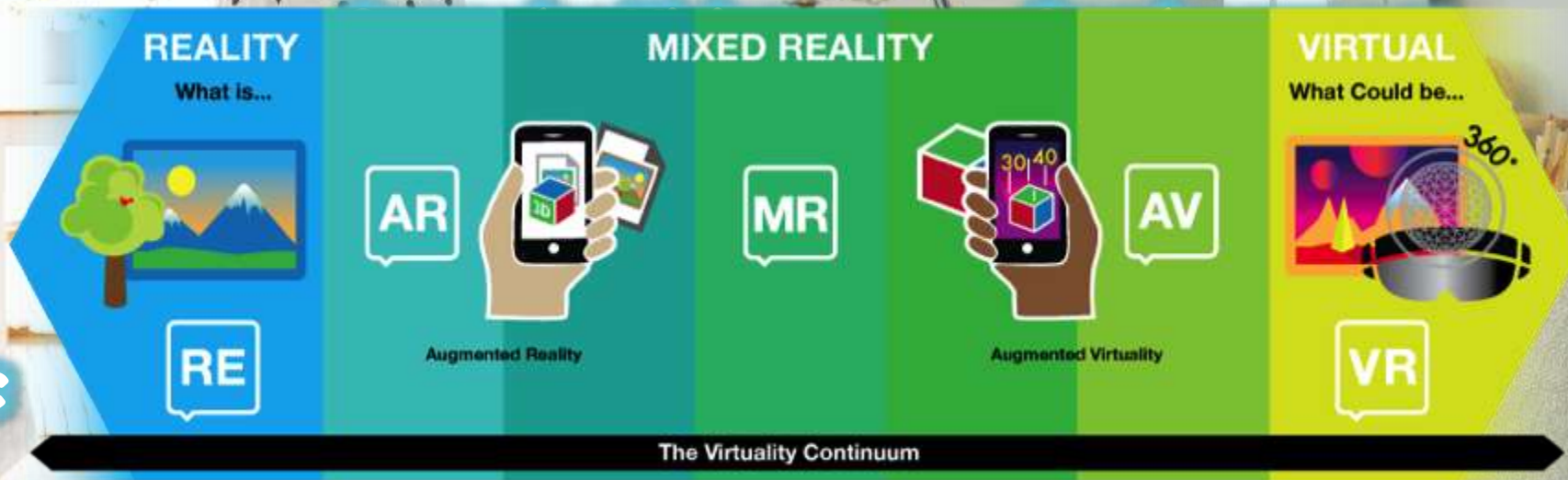
- 3D
- Avatars
- VR
- AR
- MR
- Volumetric Capture
- Spatial Audio
- Etc.

AI

- Etc.

Blockchain

- ID
- Etc.



Web3 is NOT Metaverse

The metaverse is the future state of how humans will experience the Internet

Web3 is the next generation of decentralized infrastructure enabling the new Internet paradigm

3D
Virtual/physical
Immersive
Persistent
Creative

METaverse

NFTs
Identity
Digital
Currencies

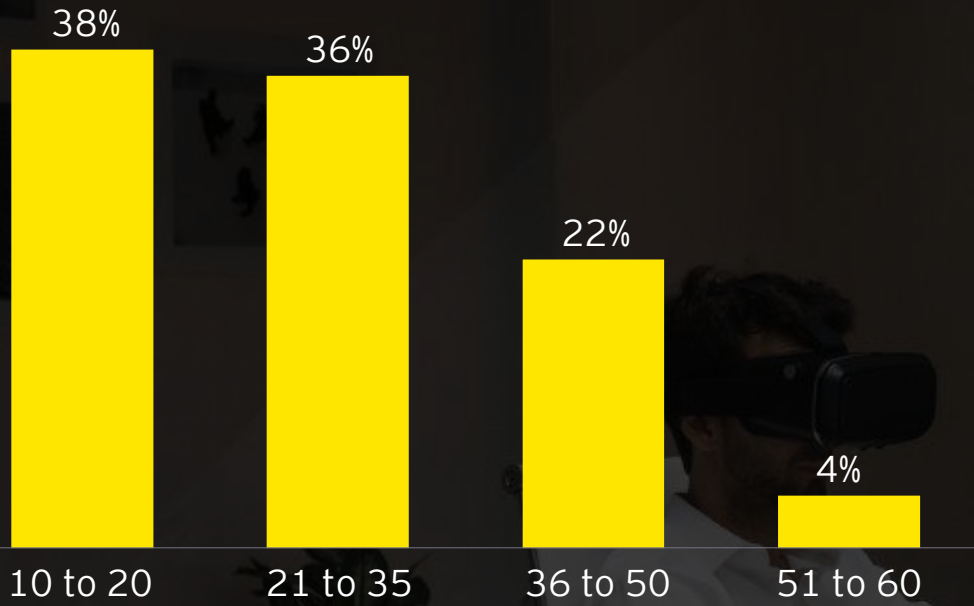
WEB 3.0

Blockchain
Decentralized web
Apps
DeFi
DAOs
Creator economy
Personal data ownership

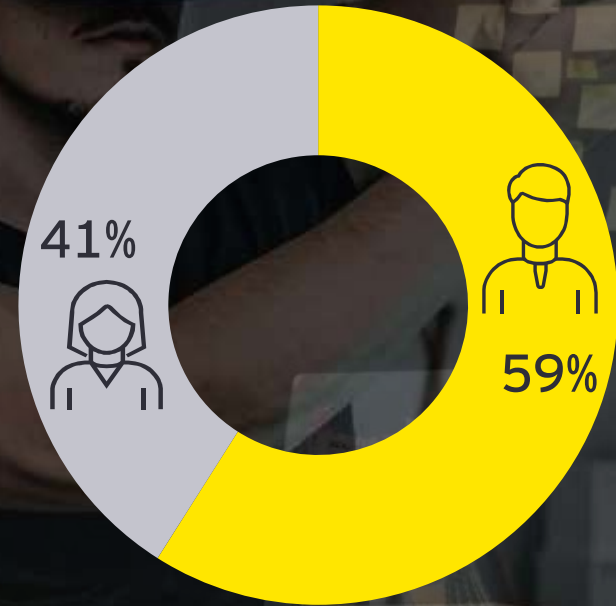
Interrelated but separate

Is Metaverse relevant for ALL your customers?

Age Distribution



Gender Distribution



*Metaverse Gamers: Demographics, Playing and Spending Behavior (newzoo.com)



Metaverse

USD **800 billion**

Emergen Research

USD **8 trillion**

Morgan Stanley

A new kid in town..

*“Metaverse is Money
and Crypto is King!”*

Skin in the game

- Adidas
- Fendi
- LVMH Mœt Hennessy
- Peroni
- McDonald's
- Ralph Lauren
- Sampdoria FC
- Microsoft
- Coca-Cola
- Samsung
- Nike
- Facebook
- Nvidia
- Apple
- Google
- PayPal
- Visa
- TIME
- Twitter
- Burger King
- Pizza Hut
- KFC
- Taco Bell
- Christies
- Sotheby's
- Tencent
- Budweiser
- Pepsi
- Consensys
- Binance
- Australia Open
- Barcelona FC
- Juventus
- Inter Milan
- Lazio
- PSG
- NBA
- Warner Music Group
- Etc.

New business models?



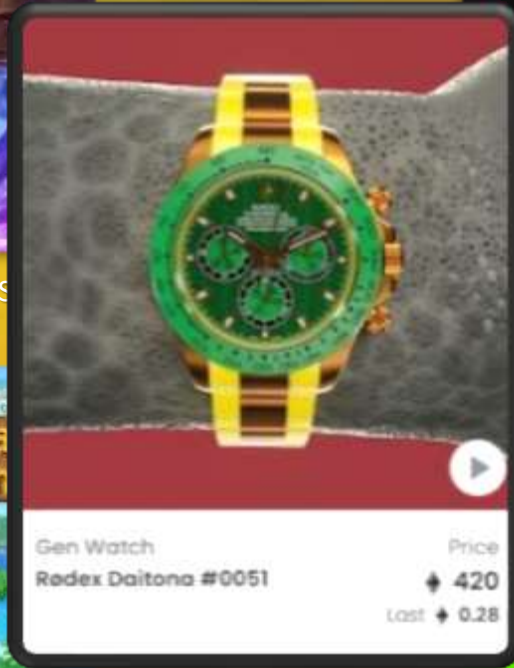
Nicolas Ghesquiere (**Louis Vuitton**) - Leagues



Tisot - NBA2K

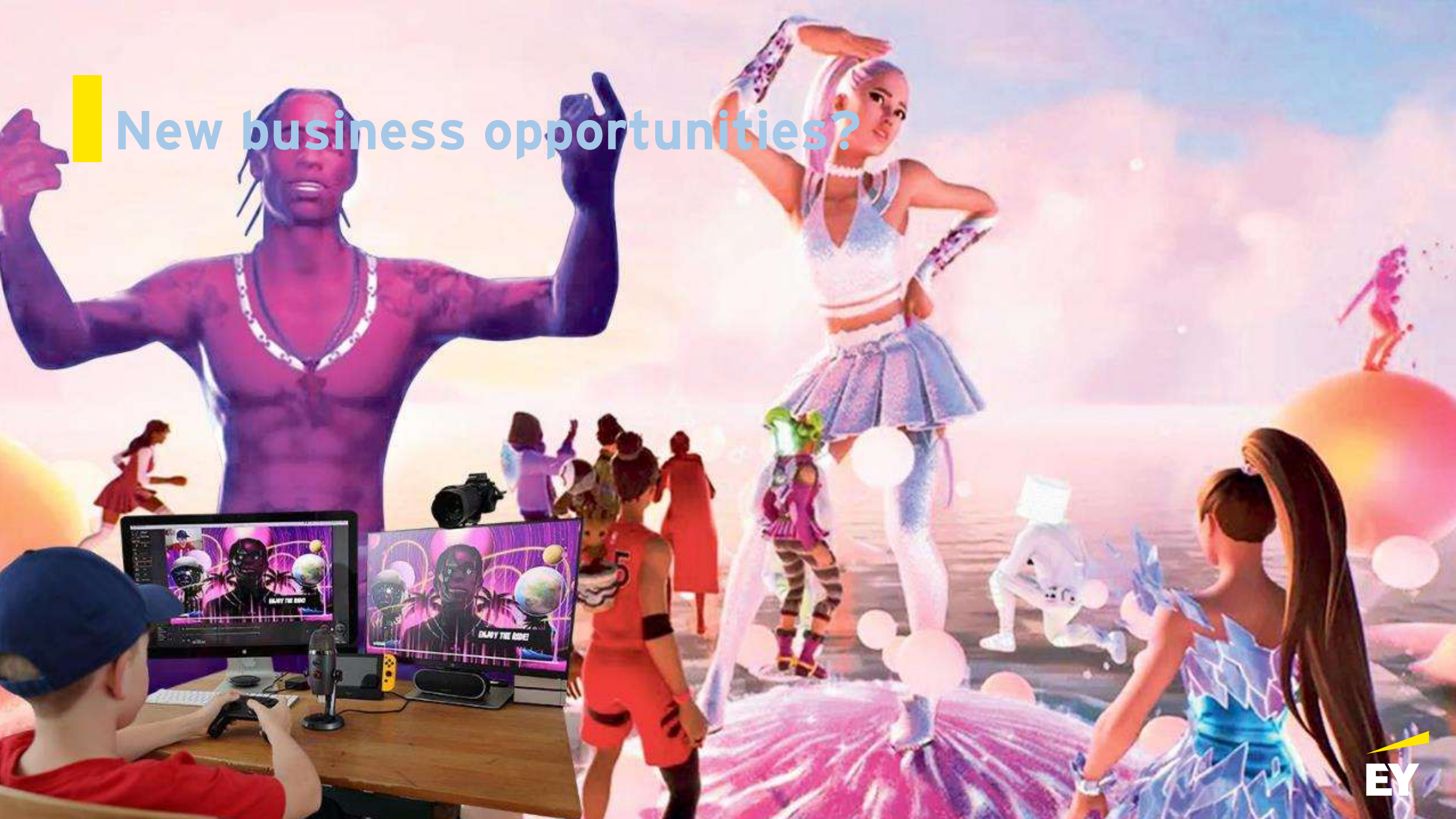


Marc Jacobs, Valentino etc. - Animal Crossing



Moschino - SIMS4

New business opportunities?



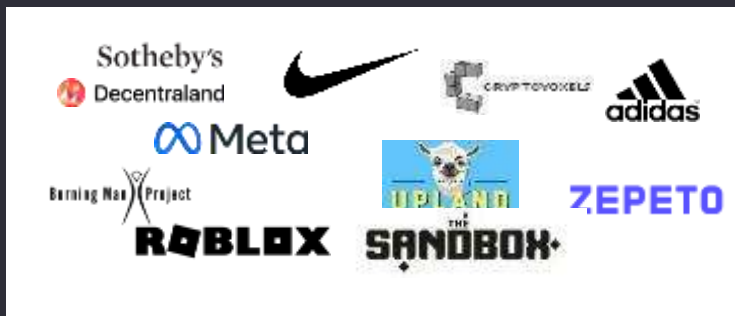
The Metaverse Economy is already 350+ \$Bn and growing high double digit



Persistent ecosystems

- ▶ Shared immersive virtual worlds
- ▶ Users are usually represented by avatars
- ▶ Users can live their life using NFTs as objects or land
- ▶ Users can interact with each other and construct experiences

120 Bn\$ (zero in 2020)
>x2 quarter on quarter



Collectibles

- ▶ Digital collectibles with items of different values
- ▶ Unique, rare or limited-edition copy of a virtual or physical item
- ▶ Digital art, trading cards, images/pictures, music or video clips

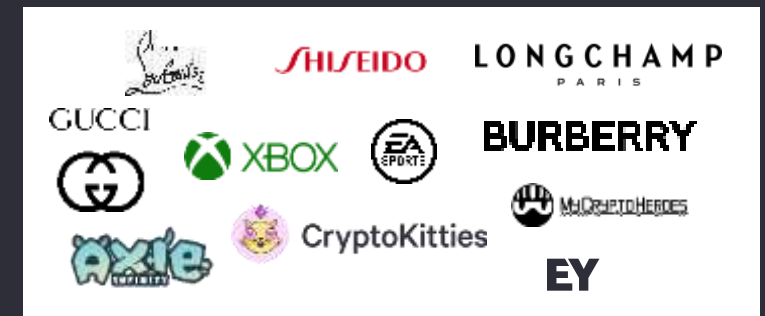
50 Bn\$ (<1Bn\$ in 2020)
x2 quarter on quarter



Gaming

- ▶ Games allowing the use of NFTs (es. Digital garments, skins)
- ▶ Win NFTs or upgrade the ones you own
- ▶ Skins, virtual pets, virtual land, etc.
- ▶ Games can be coupled with the metaverse

180 Bn\$
Growing +20% CAGR



Top market trends and use cases ...

Use cases ...



Games (making in unity or Roblox)



Social experiences (rec room)



Immersive commerce



Collaboration (in spatial)



Fitness



Travel (Matterport heritage sites)



Architecture, engineering and design



Automotive (Hyundai omniverse)



Real estate (Matterport)



Learning and education



Volumetric livestreaming



Esports



Live music



Immersive theatre experience

The Emperor's New Clothes?

TECH



Cows stuck indoors for winter are getting virtual reality goggles to feel like they're outside

By Liam Coleman, The Sun

January 7, 2022 | 12:05pm | Updated



Cows graze with virtual reality glasses on in Aksaray, Turkey on December 26, 2021.

Anadolu Agency via Getty Images

A modern office environment with large windows and people working at desks. The scene is viewed through a glass partition. In the foreground, a person is sitting at a desk with a laptop. In the background, other people are working at desks, and a person is standing near a whiteboard. The overall atmosphere is bright and professional.

Questions?

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