



animoca
BRANDS

NFTs, Digital Property Rights,
Gaming and the Metaverse



What Is the Metaverse? The Future Vision for the Internet

Tech leaders describe the online world as an extensive place where people and their avatars can work, shop, attend classes and even walk on the moon.

Meghan Bobrowsky and Sarah E. Needleman

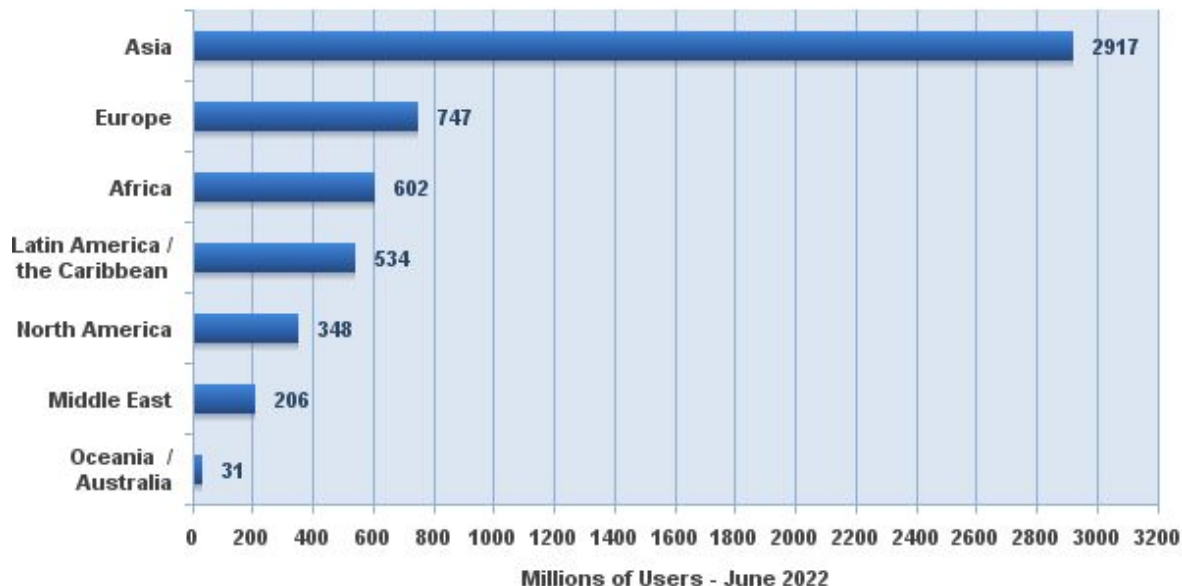
UPDATED NOV. 6, 2021

[TAP STORY >](#)



5.3 BILLION INTERNET USERS

**Internet Users in the World
by Geographic Regions - 2022**



Source: Internet World Stats - www.internetworldstats.com/stats.htm

Basis: 5,385,798,406 Internet users estimated in June 30, 2022

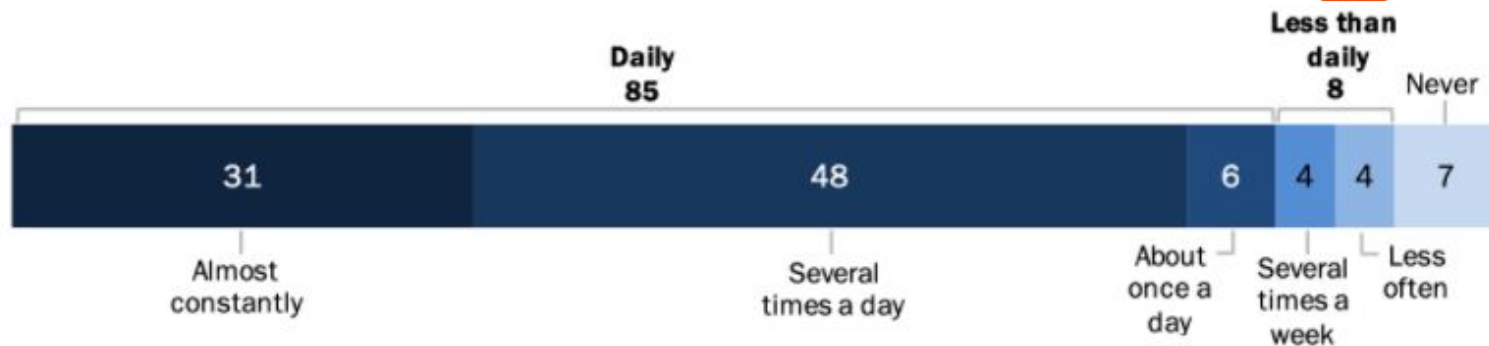
Copyright © 2022, Miniwatts Marketing Group

ABOUT THREE-IN-TEN U.S. ADULTS SAY THEY ARE 'ALMOST CONSTANTLY' ONLINE

More than eight-in-ten U.S. adults go online at least daily

More than eight-in-ten U.S. adults go online at least daily

% of U.S. adults who say they go online ...



Note: Respondents who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER

2022

DAILY TIME SPENT USING THE INTERNET

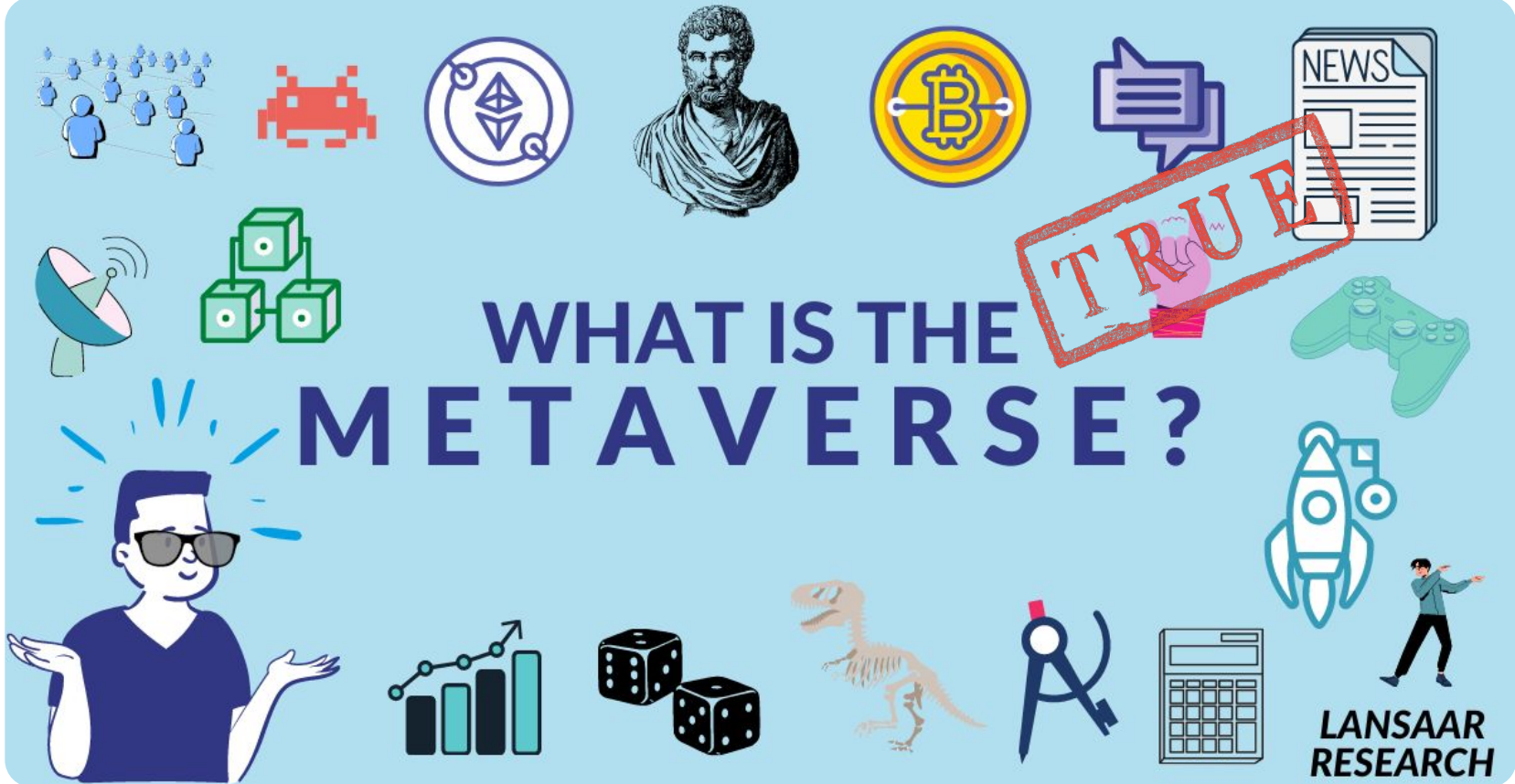
Average amount of time (in hours and minutes) that internet users aged 16 to 64 spend using the internet each day

#	LOCATION		TIME SPENT
01	SOUTH KOREA		10:46
02	PHILIPPINES		10:27
03	BRAZIL		10:19
04	COLOMBIA		10:03
05	ARGENTINA		09:38
06	MALAYSIA		09:10
07	THAILAND		09:06
08	MEXICO		08:55
09	INDONESIA		08:36
10	U.A.E.		08:36

#	LOCATION		TIME SPENT
11	TAIWAN		08:07
12	SAUDI ARABIA		08:05
13	EGYPT		08:02
14	TURKEY		08:00
15	PORTUGAL		07:56
16	RUSSIA		07:50
17	ISRAEL		07:35
18	SINGAPORE		07:29
19	INDIA		07:19
20	ROMANIA		07:09

WHAT IS THE METAVERSE?

TRUE



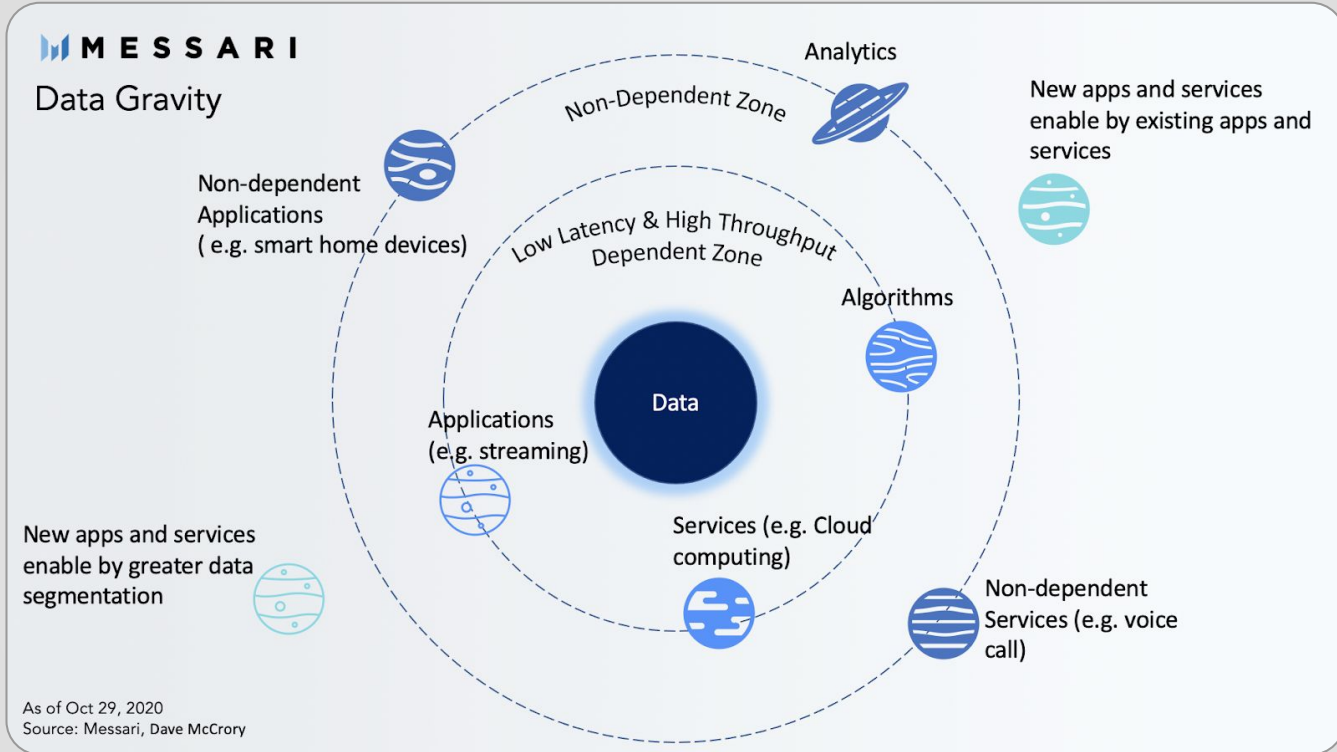
**LANSAAR
RESEARCH**



DATA AND THE NEW RULES OF COMPETITION

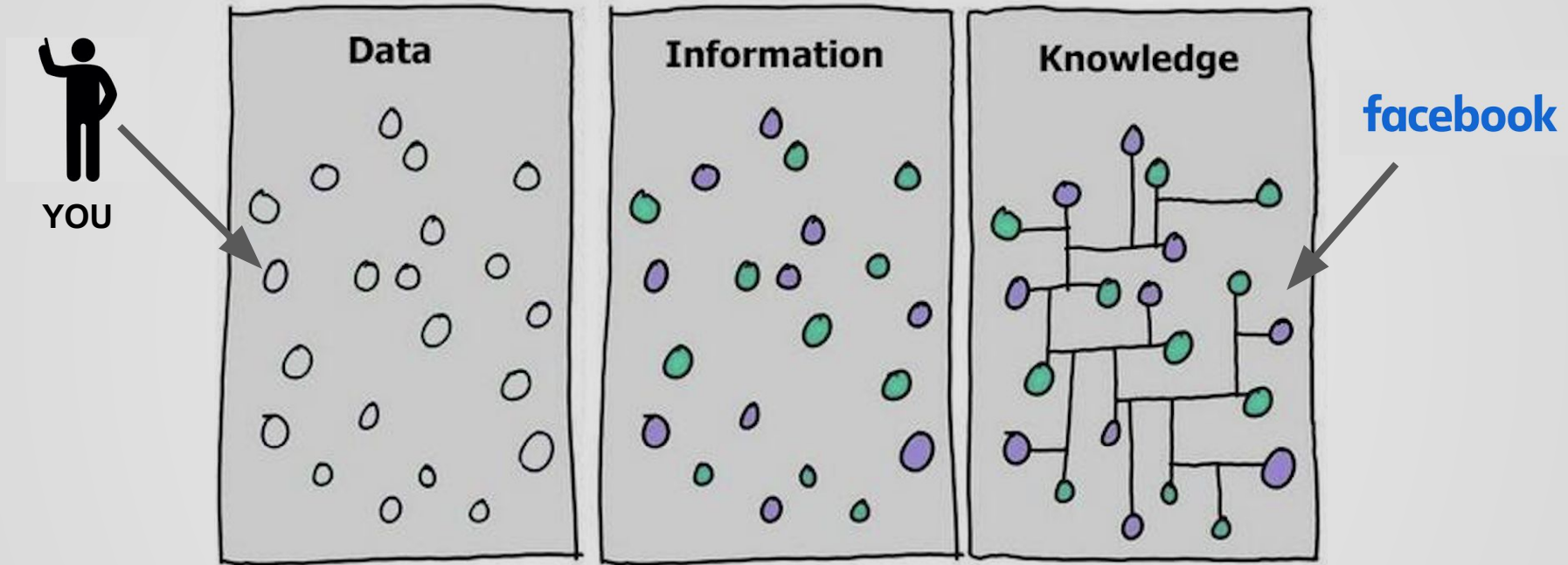


DATA GRAVITY





DATA AND THE NETWORK EFFECT (AND YOU DON'T OWN)



Tencent 腾讯

THE DATA WARS

TECH INDUSTRY

GOOGLE
HOUSE



BATTLE!

KINGDOM OF
FACEBOOK



HOUSE OF
APPLE



ORDER OF
MICROSOFT

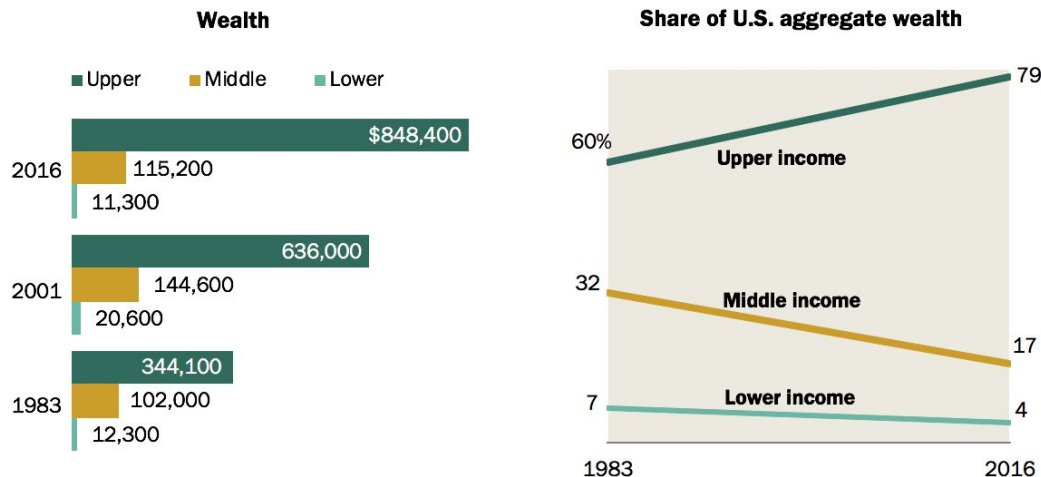


*T'was the year 2017, and across
the land of Busy-ness the four
mighty powerhouses did constantly
wage war upon each other...*

Rising Wealth Inequality

The gaps in wealth between upper-income and middle- and lower-income families are rising, and the share held by middle-income families is falling

Median family wealth, in 2018 dollars, and share of U.S. aggregate family wealth, by income tier



Note: Families are assigned to income tiers based on their size-adjusted income.

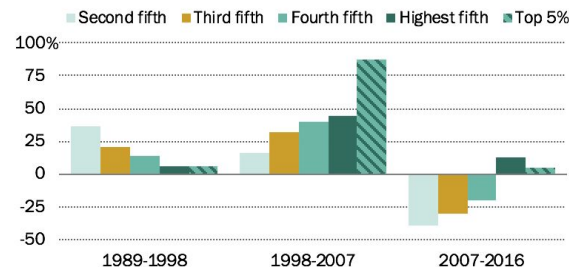
Source: Pew Research Center analysis of the Survey of Consumer Finances.

"Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call It a Top Priority"

PEW RESEARCH CENTER

The richest families are the only group to have gained wealth since the Great Recession

% change in median family wealth, by wealth quintile and for the top 5%



Note: Data for families in the first quintile (bottom 20%) are not shown. Their median wealth was as follows: 1989 – \$0; 1998 – \$0; 2007 – \$36, and 2016 – negative \$1,099 (figures in 2018 dollars).

Source: Pew Research Center analysis of the Survey of Consumer Finances.

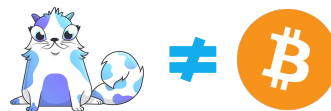
"Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call It a Top Priority"

PEW RESEARCH CENTER

NON-FUNGIBLE TOKENS (NFTs)

Emerging segment in global game market: virtual tokens for digital scarcity, security and authenticity

Fungible	Non-fungible
E.g., One US Dollar	E.g., Limited-edition postal stamp
Interchangeable	Not interchangeable
Uniform (all are the same)	Distinct or unique
Divisible	Indivisible



NFTs are not cryptocurrencies!

The cats you see on this page are from *CryptoKitties*, an app by Dapper Labs that is built on blockchain, similarly to Bitcoin and Ethereum - but *CryptoKitties* uses NFTs and is not a cryptocurrency.

NFTs allow *CryptoKitties* to be traded as unique items. Ownership is tracked securely thanks to blockchain.

Token Interfaces

ERC-20: *fungible tokens*. For ownership of assets like currencies. Such tokens are uniform and interchangeable.

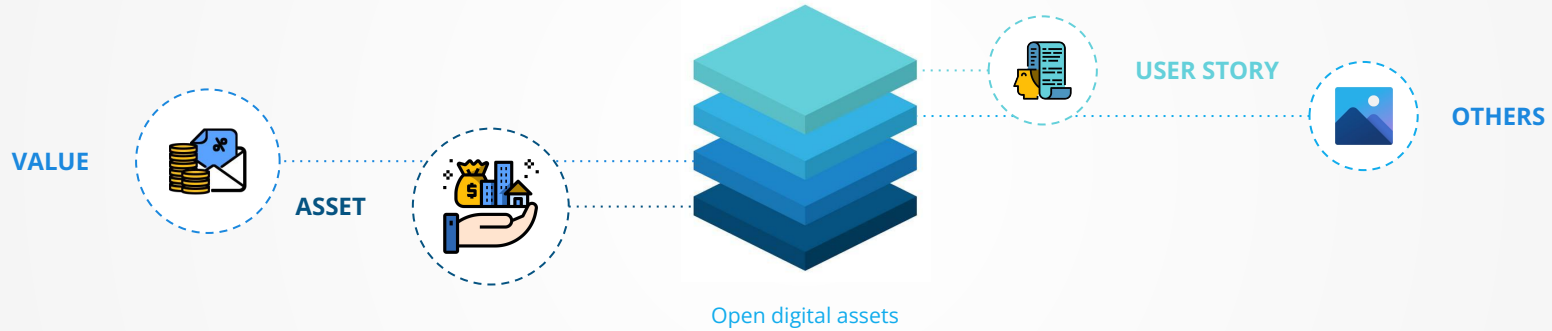
ERC-721: *non-fungible tokens*. For ownership of things. Such tokens are completely unique and not interchangeable.



♦ **ERC 721** ♦



OPEN DIGITAL ASSETS = YOUR DIGITAL PROPERTY =NFTs



WHAT IS OPEN DIGITAL ASSETS

Open digital assets is a kind of open source of assets that users can add layers on top, e.g their own story, value, asset to it.

UNIQUE FEATURES

NFTs have been growing significantly in popularity in recent years as it

- provides a certificate of authenticity.
- registered it's transaction on the blockchain and provides a permanent and transparent record of each purchase and proof of ownership.

PLATFORMS

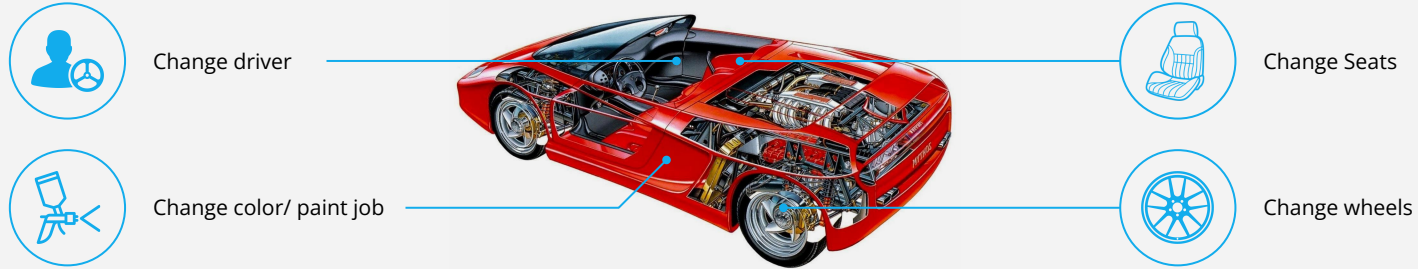


OpenSea



Several emerging platforms including **OpenSea** and **WAX** have been providing marketplaces on which digital goods can be offered and sold. Anyone can go online and verify who owns a specific NFT, that can a specific piece of digital art from e.g Beeple

OPEN ASSETS VIEWED IN PHYSICAL TERMS



source: Ferrari Myths

Open digital assets can be central to the experience. For example, different services can be added to a car regardless of its manufacturer. In this manner, the content becomes the platform.

WHAT ARE OPEN DIGITAL ASSETS

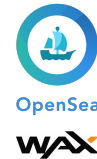
UNIQUE FEATURES

PLATFORMS

Open digital assets are a type of open source assets to which users can add their own layers, e.g their personal story or customization.

NFTs have been growing significantly in popularity in recent years:

- They serve as a certificate of authenticity
- They require registered transactions on blockchain providing permanent and transparent records of each purchase and proof of ownership



Several emerging platforms including **Opensea** and **Wax** have started providing marketplaces for digital goods. Due to their open nature, anyone is able to verify who owns a specific NFT.



DiDi

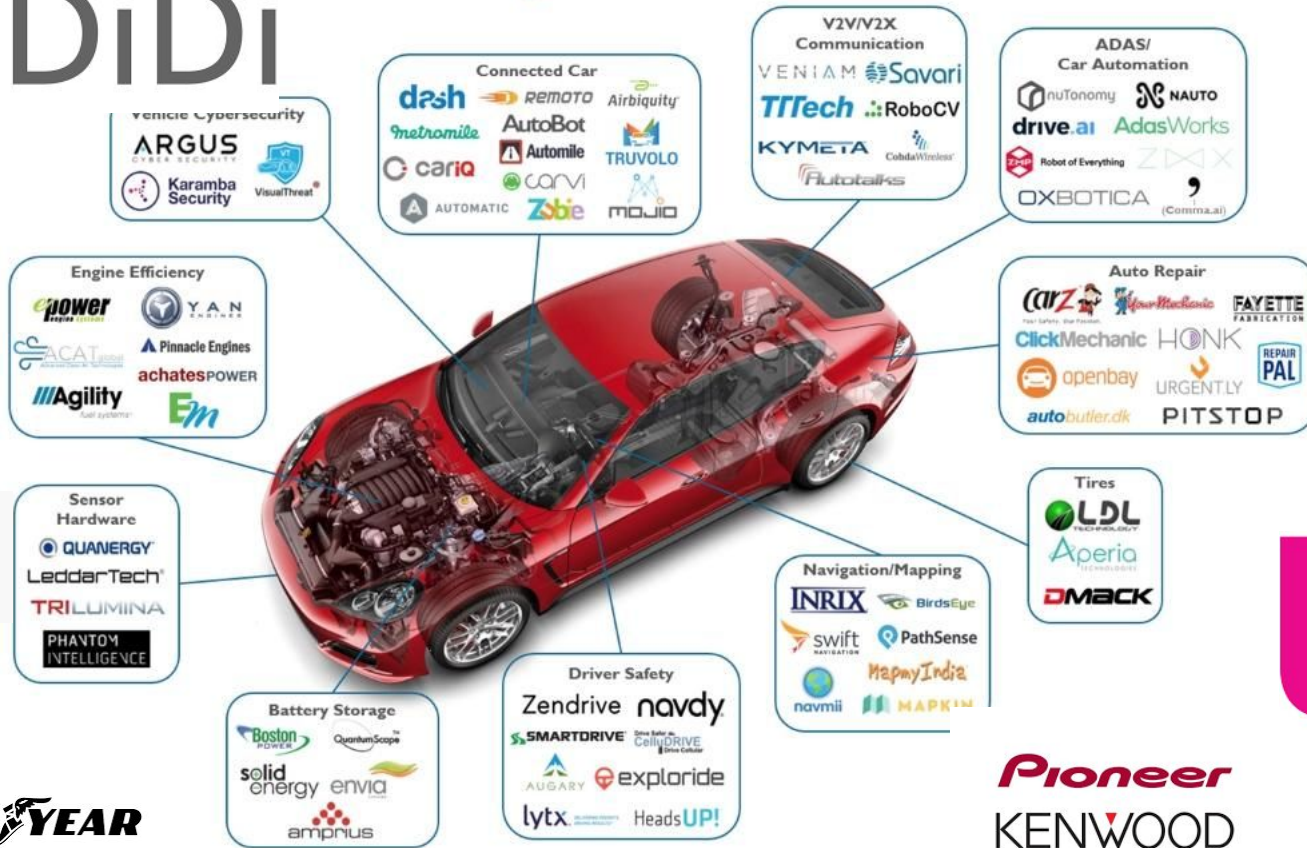
Unbundling The Automobile



MICHELIN

Uber

GOODYEAR



**animoca
BRANDS**



lyft

**Pioneer
KENWOOD**



INTEROPERABILITY = P2P OWNERSHIP ECONOMICS

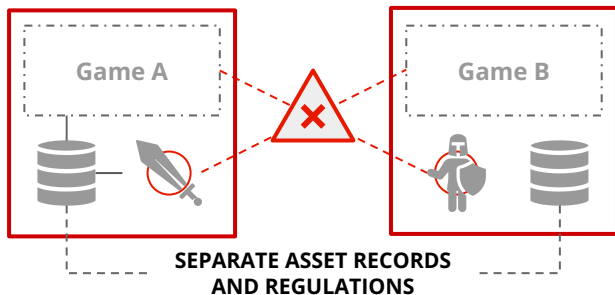


Cross-application interoperability refers to the capacity of games to utilize a shared asset

TRADITIONAL CLOSED LOOP MODEL

PROBLEM: As long as assets are bound to one server, their value hinges on a single use case - the original game. The traditional centralized game model traps players by forcing them to sink costs in the platform.

SILOED DATABASES CONFINE ASSETS TO THEIR NATIVE ECOSYSTEM

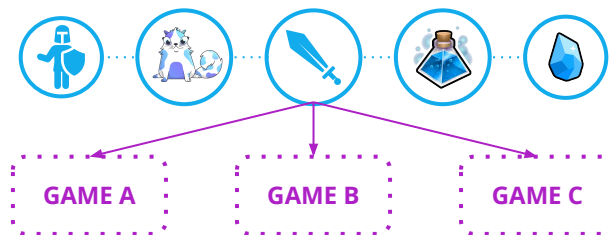


User transactions are merely license agreements: a right to use items within, (and only within) the context of the original game. This forms a closed loop between player and developer.

DECENTRALIZED NETWORKS ENABLE INTEROPERABILITY

SOLUTION: players are able to leverage assets that are stored on blockchain in multiple games. Decentralized networks foster an open economy in which assets are able to have uses cases from one game to another.

A DECENTRALIZED MODEL FACILITATES XCH. BETWEEN GAME ECOSYSTEMS

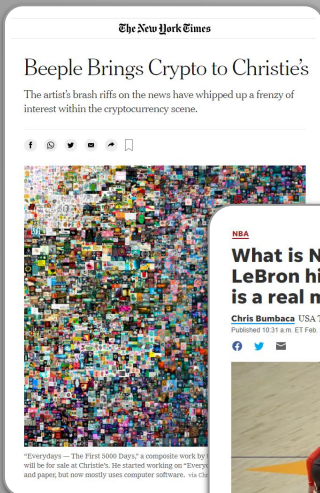


NFTs PROMISE TO SET THIS BOLD NEW STANDARD FOR CROSS-APPLICATION SUPPORT

Assets are no longer constrained to a single ecosystem.

If a blockchain game shuts down, player assets are *not* lost. Players can still use assets in other games and can continue to trade them on decentralized marketplaces.

EXAMPLE OF NFTS



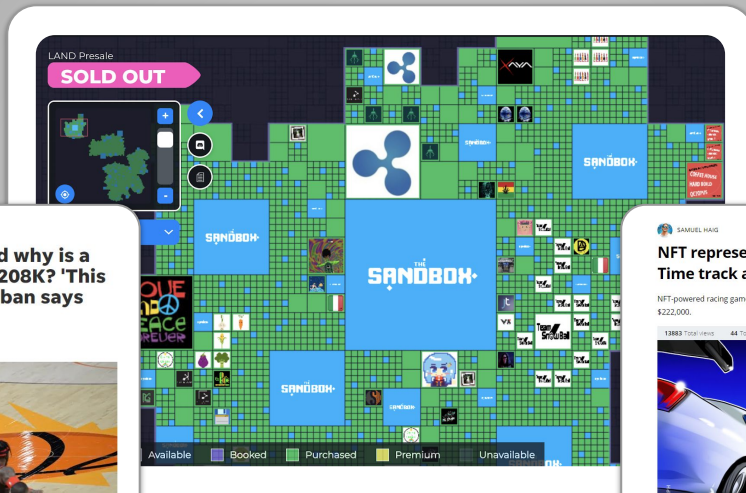
What is NBA Top Shot and why is a LeBron highlight worth \$208K? 'This is a real market,' Mark Cuban says

Chris Bumaca USA TODAY
Published 10:31 a.m. ET Feb. 26, 2021 | Updated 8:40 p.m. ET Feb. 26, 2021



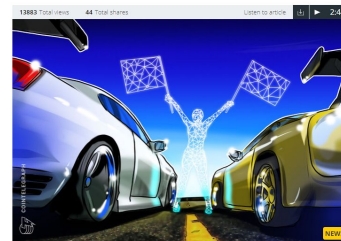
NBA All-Star 2021: Who got snubbed?
USA TODAY Sports Jeff Zagar break down the 2021 NBA All-Star rosters USA TODAY

Pull up YouTube and type the words "LeBron James Nemanja Bjelica" in the search bar. The page will load with clips – one titled "LeBron James Wanna Murder Nemanja Bjelica With Dunk Then Stare Down" – of James firing down the lane and dunking over Bjelica.



NFT representing 5% of Monaco F1 Delta Time track auctioned for \$220K

NFT-powered racing game F1 Delta Time has auctioned off a segment of an in-game track for \$222,000.



A segment of a race track in F1 Delta Time, a nonfungible token-powered motorsports game from Animoca Brands, has been auctioned off for more than 9 million of the company's REVV tokens, worth approximately \$222,000. Animoca says it's a record price for an in-game NFT.

The token, "Formula 1 Grand Prix de Monaco 2020 1A" was auctioned on NFT marketplace Open Sea, with bidding taking place from Nov. 29 until Dec. 2. The token offers its owner an "Xper" share in the game's Circuit de Monaco track.



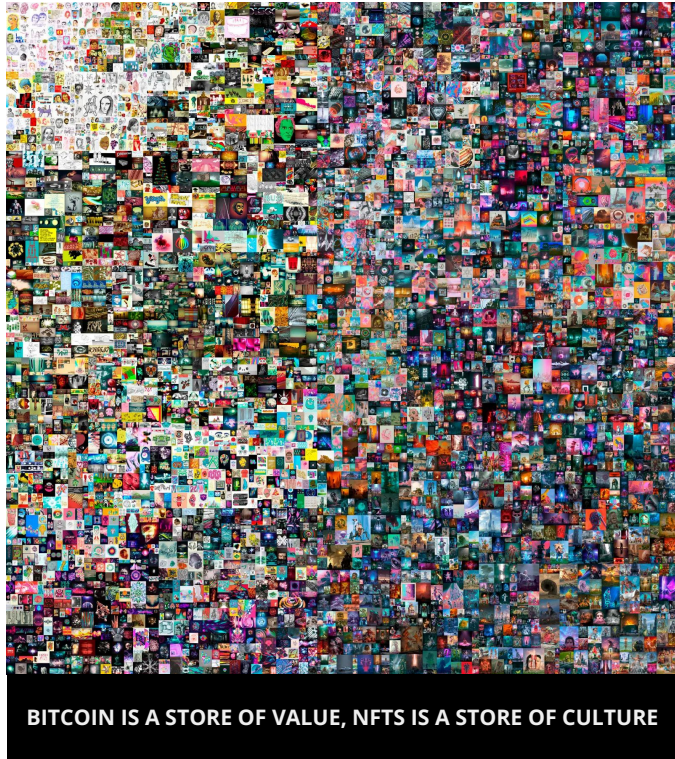
3LAU Just Sold His Ultraviolet Album NFTs For \$11.7 Million

OLIVER TOYON INDUSTRY TECH
FEBRUARY 28, 2021

3LAU's auction for the unique NFTs of his album have sold for a total of \$11,684,101.

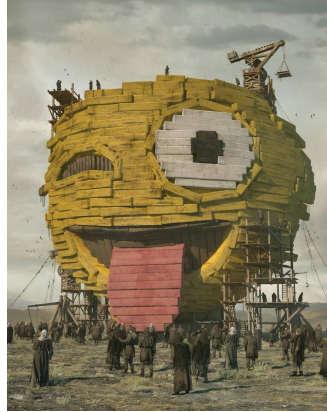
A non-fungible tokens (NFT) is a digital asset that, being linked to the blockchain, allows for ownership of the asset. Recently, with the latest rise of cryptocurrency, NFTs have also risen through the ranks and are very popular at the moment. NFTs can be a range of different files but the focus is largely on art at this moment. NFT is the future and many are bullish on its widespread adoption, to the point that they'll bet thousands or even millions of dollars on an artwork.

NFTs ARE A STORE OF CULTURE



BITCOIN IS A STORE OF VALUE, NFTS IS A STORE OF CULTURE

NFTs capture the imagination, ideas and creativity that shape a digital collective born through human achievement which has recently been best expressed with art nfts.



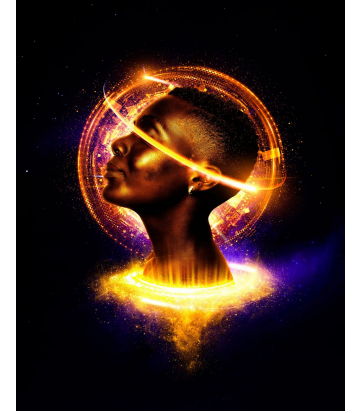
Beeple, The First Emoji. Part of the \$69.3 million Everyday. Beeple/Christie's

There are so many people from different backgrounds and genres coming in to share their art, connect with people and potentially build a career.



BLACKSNEAKERS, Holding Up The Sun. Sold for: \$7,088 BLACKSNEAKERS

The street art and counter cultural styles are being used in NFTs. Some finance-crypto people are may be considered as 'punks'.



Shaylin Wallace, Stellar Goddess. Current bid: \$2,647 Shaylin Wallace

Young artists of color are not left out, even though they may long been marginalized in the "traditional" art world

SERVICES FOR MERCHANTS (NFT's)



Introducing Rocket NFT Loans

By Cooper Turley January 20, 2020

Rocket Loans



DeFi Rate

Yieldl Announces Marketplace for NFT Rentals and Mortgages

Predicting the increasing tokenization of real-world assets, Tokyo-based startup Yieldl plans to launch the first P2P marketplace for NFT mortgages and rentals.



SAMUEL HAIG

AUG 20, 2020

Yield Racing: F1 Delta Time Players Can Now Stake Their NFTs

Players of the crypto-powered F1 Delta Time game can now stake their NFTs to generate rewards in the form of Animoca Brands' REVV token.



The NFT Game That Makes Cents for Filipinos During COVID

Aug 26, 2020 at 13:36 UTC

Updated Aug 26, 2020 at 14:08 UTC

Twitter Facebook LinkedIn



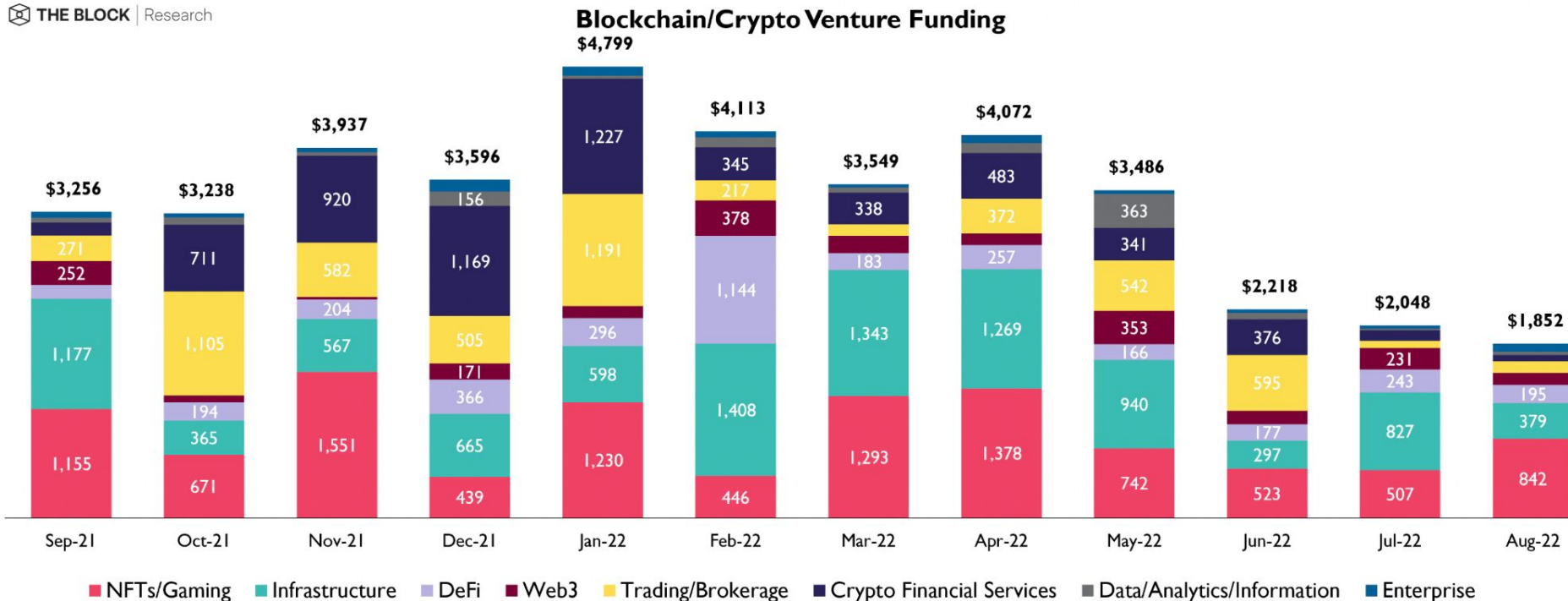
OPINION

A collage of people in Nueva Ecija playing Axie (Emfarsis)

NFTs/GAMING MOST FUNDED IN 2022



THE BLOCK | Research

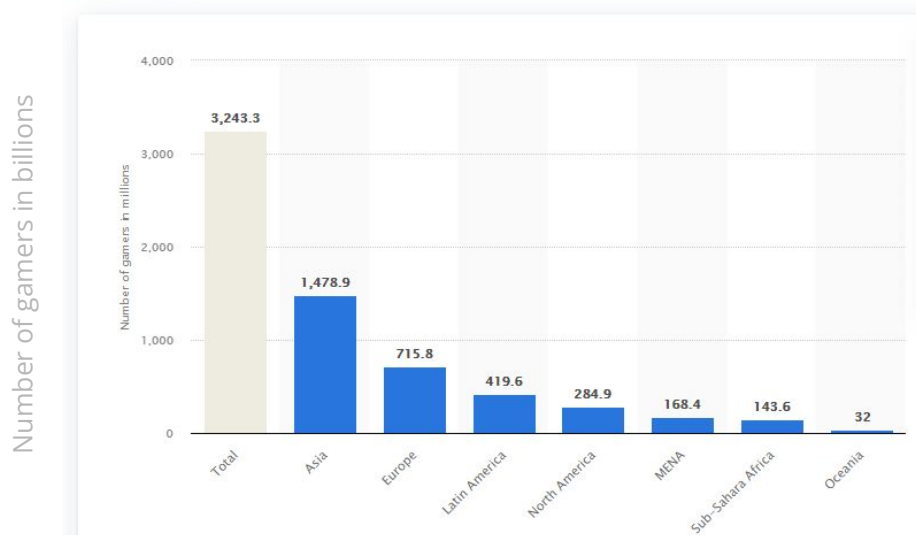


Source: The Block Research

Note: U.S. dollars in millions; Missing numerical values indicate investment value <\$150 million for visual clarity

OVER 3.2+ BILLION GAMERS TODAY

Number of video gamers worldwide in 2021, by region
(in millions)



The video gaming industry is huge and shows no signs of slowing down. While there were about 2.3 billion video gamers across the world in 2019, this figure has now exceed 3.2 billion gamers.

Asia Pacific

1.48 b
gamers

\$71.4B
revenue

X2
North America

This represent more than **double** the revenue generated in the second largest region, North America (2018)

The world

United States

3.24 b
gamers

66%
of population

45%
are females

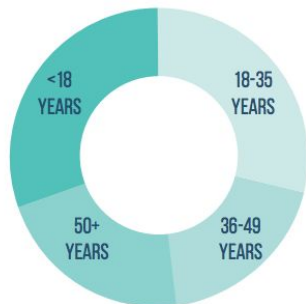
There were about 3.24 billion video gamers across the world in 2021

Gamers accounted for 66% of the general U.S. population, up from **58% just 5 years earlier**

female gamers made up 45% of the U.S. gaming population in 2018, **up from 38% in 2007**

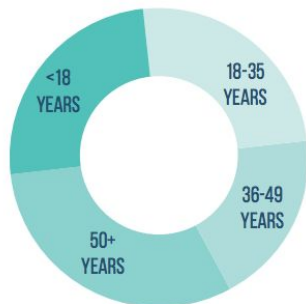
The average gamer is 34 years old.

AVERAGE GAMERS BY AGE GROUP



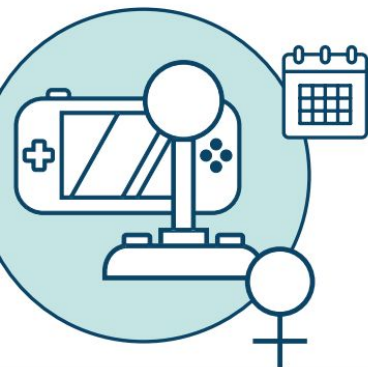
MALE

UNDER 18 YEARS OLD: 17%
18-35: 16%
36-49: 12%
AGE 50+: 11%



FEMALE

UNDER 18 YEARS OLD: 11%
18-35: 13%
36-49: 8%
AGE 50+: 12%



The average female video game player is **36**, and the average male video game player is **32**.

45% of US gamers are women.

WHY WE PLAY

Games are uniquely able to connect us, to entertain while inspiring teamwork, cooperation, and sometimes a little competition. It's not about who you are, but how you play—and anyone can play.



65% of video game players play with others

17%
team/guild/
clanmates/
"online only"
friends of
all types



7%
parents

42%
friends

27%
spouse/
partner

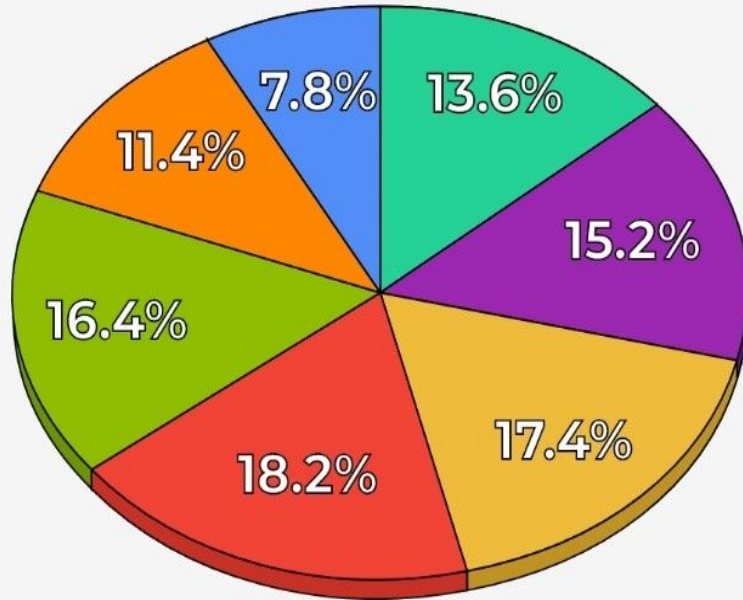


Adult video game players spend...

6.6 HOURS
a week playing
with others online

4.3 HOURS
a week playing with
others in person

Time Gamers in the United States Spend Playing Games



13.6% Less than 1 hour a week

15.2% 1-2 hours a week

17.4% 2-4 hours a week

18.2% 4-7 hours a week

16.4% 7-12 hours a week

11.4% 12-20 hours a week

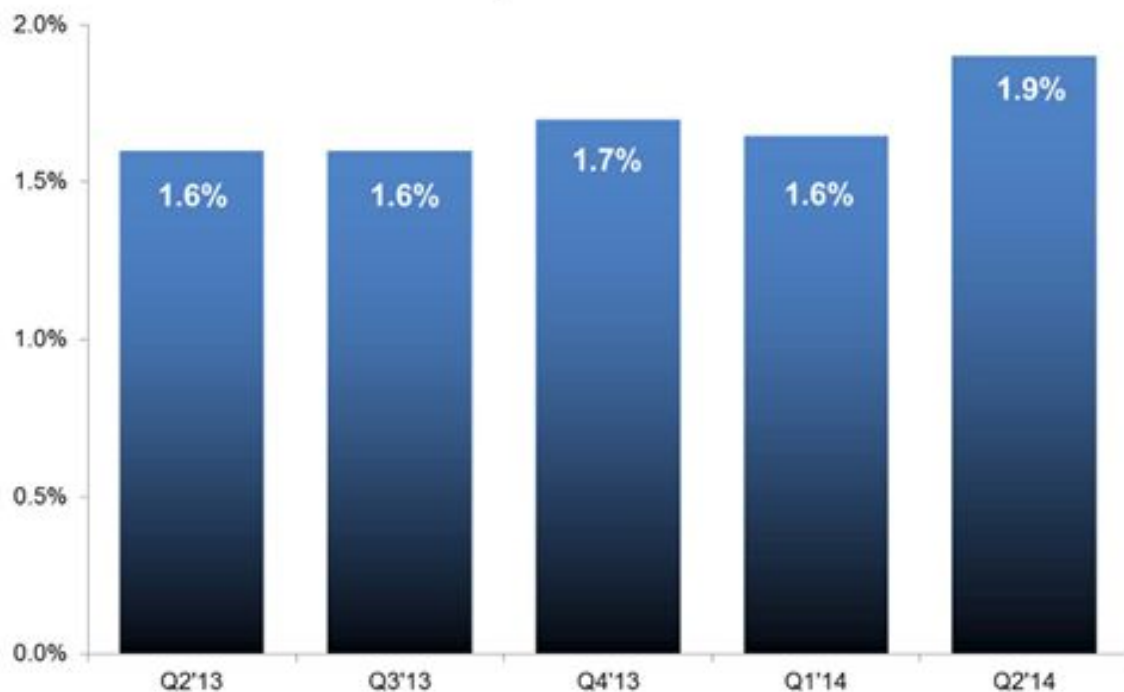
7.8% More than 20 hours a week

13m+ are full time, 50m+ are part time

Monetization



Payer Conversion

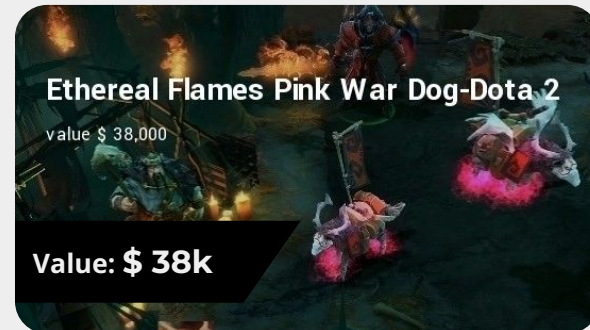
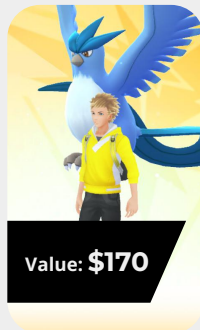


MUUs and MUPs exclude NaturalMotion as the necessary data is not yet available

BILLION DOLLAR RENTAL MARKET

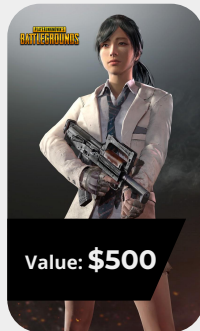
\$50B+
2019

The global virtual goods market size was valued over USD 50 billion in 2019. The rising popularity of free-to-play games have encouraged the purchase of virtual goods, thereby, resulting in a rapid forward momentum of the market.



\$100B+
2022

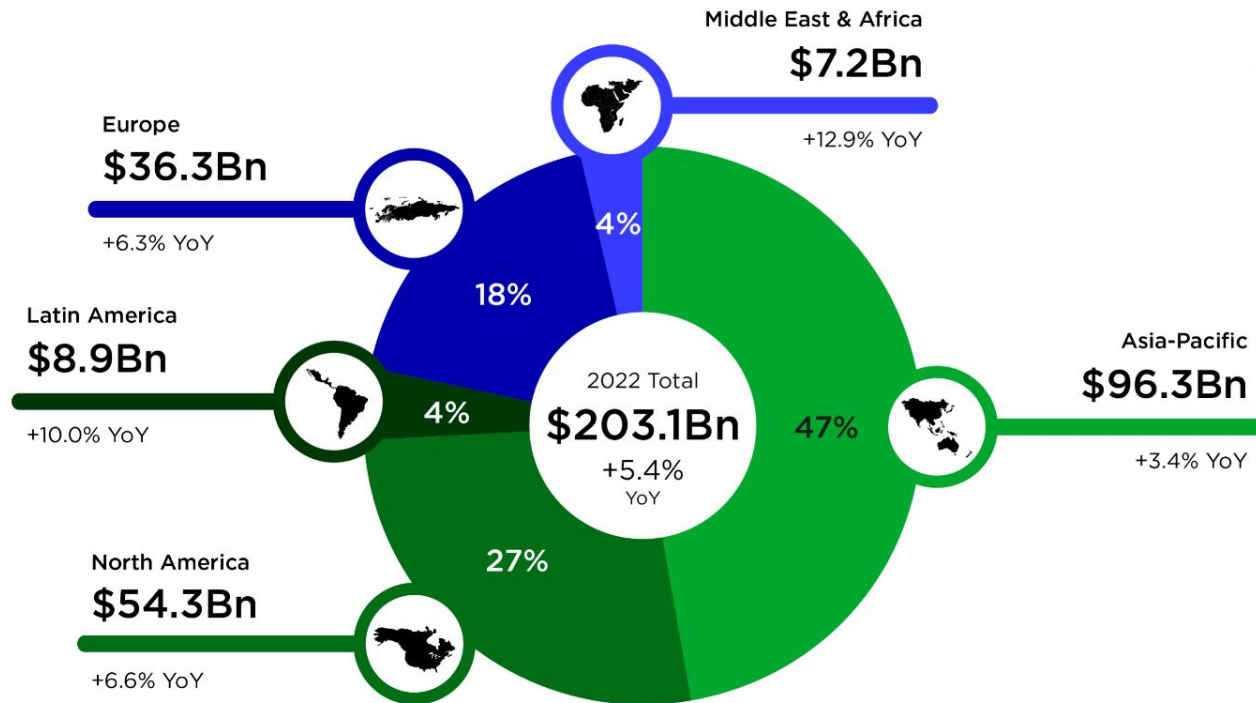
The market size was forecasted to reach a value over USD 100 billion by 2022. The emerging popularity of MMOG facilitated by social networking websites has led to gamers spending a considerable amount of their time in the game worlds.





2022 Global Games Market

Per Region With Year-on-Year Growth Rates



50%

of all consumer spending on games in 2022 will come from the U.S. and China



U.S. Total
\$50.5Bn



China Total
\$50.2Bn

Our revenues encompass consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like Xbox Game Pass. Mobile revenues exclude advertising. Our estimates exclude taxes, secondhand trade or secondary markets, advertising revenues earned in and around games, console and peripheral hardware, B2B services, and the online gambling and betting industry.

Source: ©Newzoo | Global Games Market Report | April 2022

newzoo.com/globalgamesreport

CONTENT = ASSETS = SOCIAL IDENTIFIERS

Entertaining & Social

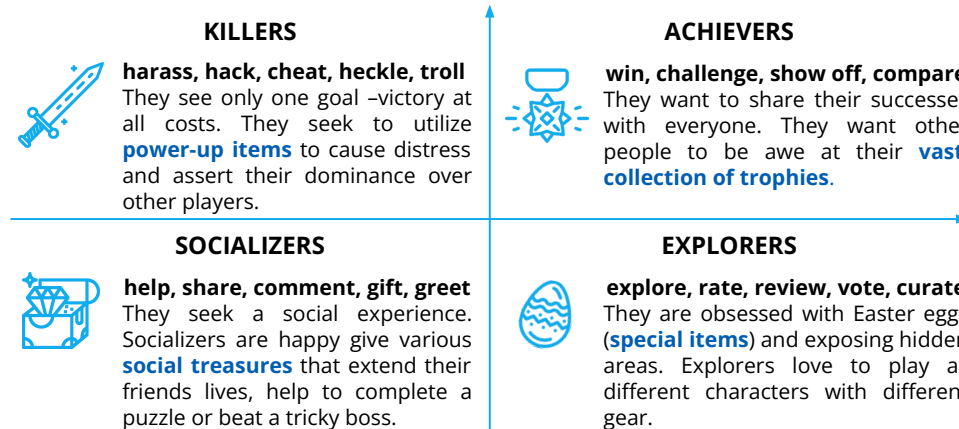
Single player → Multiplayer

Blockchain

Digital Property (NFTs)

Bartle's taxonomy of player types provides a handy way to look at the different motivations that drive engagement on gamified systems. In the 1990s, Dr Richard Bartle outlined 4 basic types of game players. These are the Achievers, the Socializers, the Explorers and the Killers.

As players advance in power and prestige in these environments, they accumulate virtual items that are valuable to other players, particularly new or lower level players. This is why gamers need blockchain:



OUR ASSETS ARE SOCIAL IDENTIFIERS



=





Clear

Map ?



For Sale

Premium

On OpenSea

AND on OpenSea

My Lands



SANDBOXGAME
Snoop Dogg
0, -84



Snoop Dogg
Booked By : Sandbox
[Visit site](#)

THE NEWS WITH SHEPARD SMITH

INVESTORS BUYING UP VIRTUAL REAL ESTATE IN METAVERSE



CNBC

Thursday, September

[Sign up](#)[Login](#)[Language](#)

Connect with a Global Community

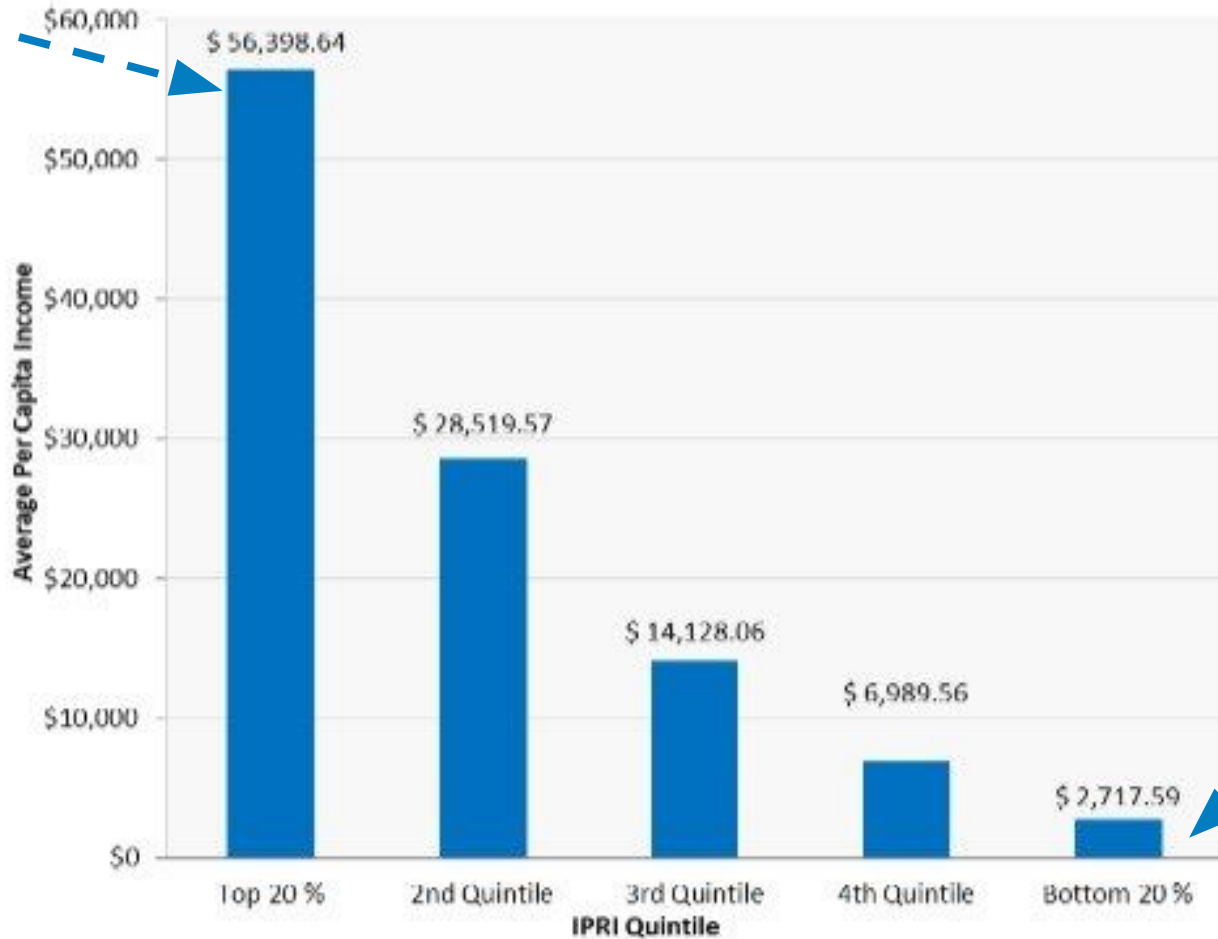
Meet and chat with real people
from around the world!

Get Started



Figure 19: Average *per capita* Income by IPRI Quintiles

STRONG
PROPERTY
RIGHTS

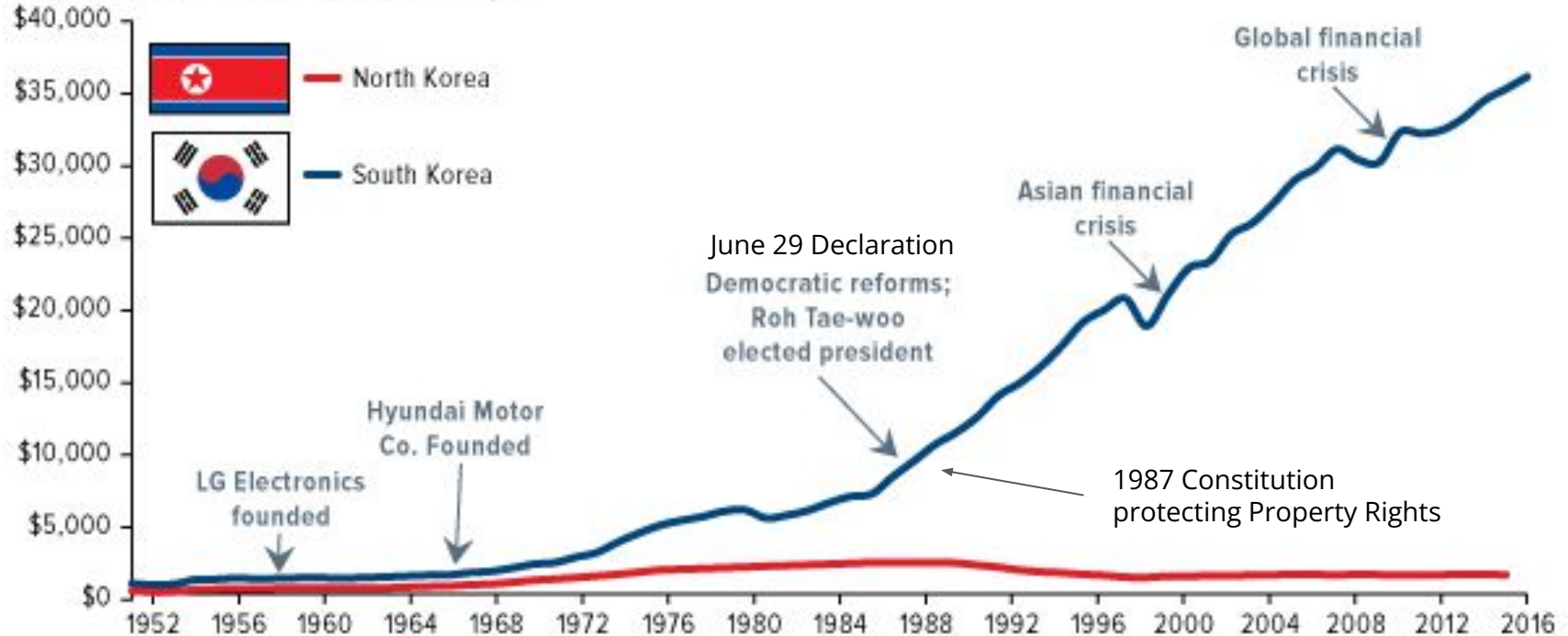


LOW
PROPERTY
RIGHTS

MIRACLE ON THE HAN RIVER

Miracle on the Han River, 70 Years Later

Gross National Income (GNI) Per Capita



Source: Maddison Historical Statistics Project, U.S. Global Investors



Freedom and Property Rights
are inseparable. You can't have
one without the other.

~ George Washington



UNREAL
ENGINE

**MEET THE
METAHUMANS**





Sylvia 1000 / 1000

Shield

Taunt

Shotgun Mk I

8/10

&



"IT'S FOOD ON THE TABLE, IT'S
MONEY FOR THEIR FAMILIES AND
IT'S SAVING THEM WHEN THEY
CANNOT EVEN LEAVE THE HOUSE."

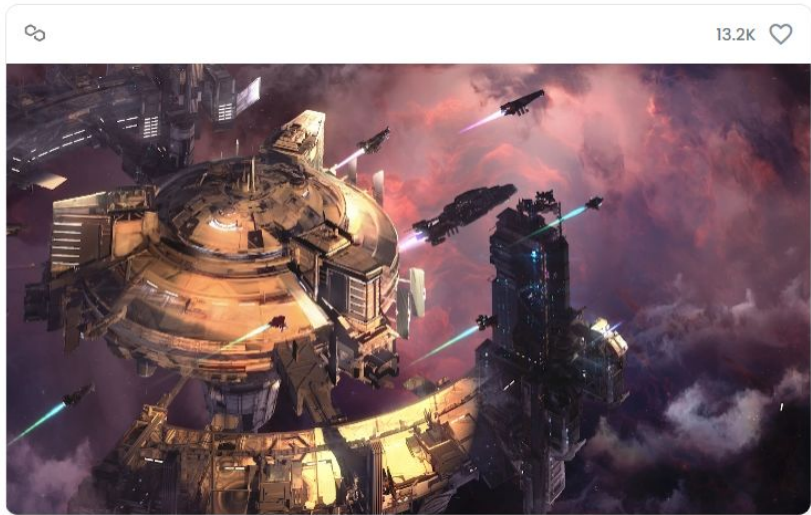
PLAY-TO-EARN

NFT GAMING IN THE PHILIPPINES





Halberd-001



514.9K owners 562.8K total 459.2K views 13.2K favorites

🕒 Sale ends October 19, 2022 at 11:02pm GMT-7

Current price

💎 **0.0035** \$4.73

FREE NFT CLAIM

PLAY TO OWN

USER ACQUISITION AS AIRDROP

90% FIRST TIME NFT HOLDERS



Gaming App Install Ad Spend, 2019-2022 (Billions)



Korea's gaming industry turns to blockchain, unwavering by Seoul's policy

Play-to-earn and NFT games expected to dominate the market in 2022



KRAFTON, Inc. headquarter in Bundang-gu near capital Seoul

Come next year, Korea's online game developers are poised to release a number of games on blockchain platforms.

The companies have lined up the so-called Play-To-Earn (P2E) games or those using NFTs, despite the Korean government's hesitance towards recognizing these games as legitimate products. Seoul is concerned about the speculative nature of some of the P2E games.

GAMING GIANTS BULLISH ON BLOCKCHAIN

Microsoft's Minecraft to Ban NFTs on Game Servers, Derivative NFT Projects

Minecraft will change its usage guidelines to prohibit NFT use on its servers, as well as prohibit NFTs that use the game's assets.



By [Andrew Hayward](#)

Jul 21, 2022

5 min read



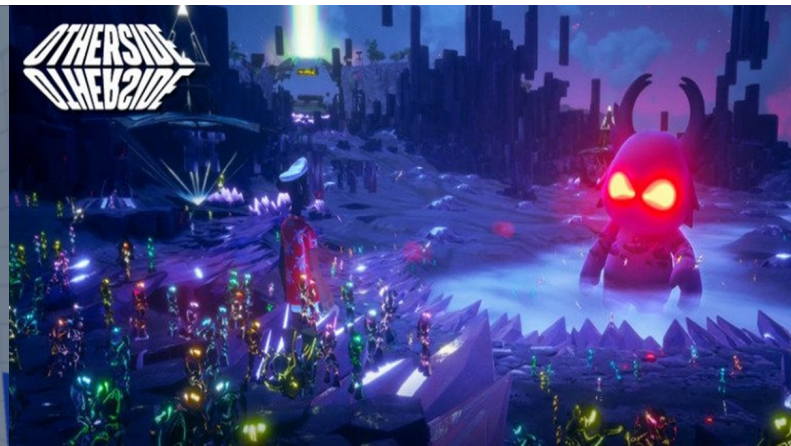
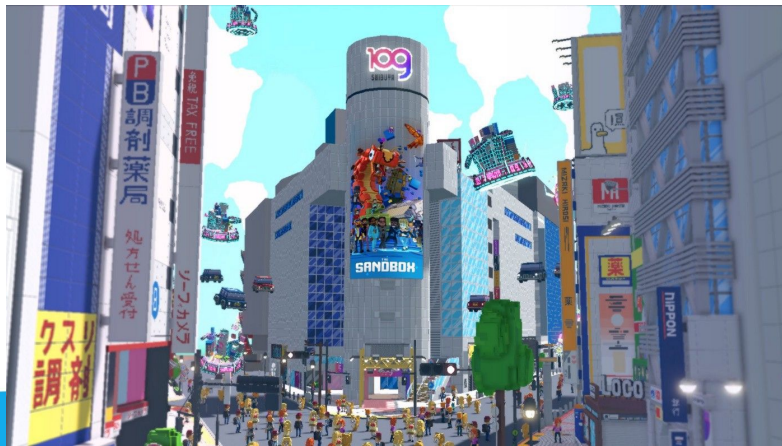


TASCHA CHE

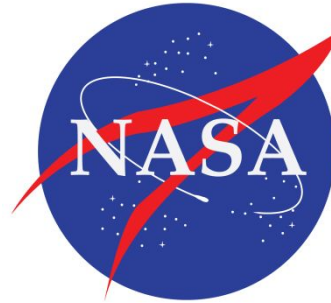
IDEAS FEB 9, 2022 8:00 AM

Public Blockchains Are the New National Economies of the Metaverse

The “fiscal” and “monetary” policy tools of smart contract blockchain platforms may work even better than the economic policy tools of governments.



George Land and Beth Jarman, Breaking Point and Beyond. Results from 1968



IMAGINATIVE THINKING TEST

98%



30%

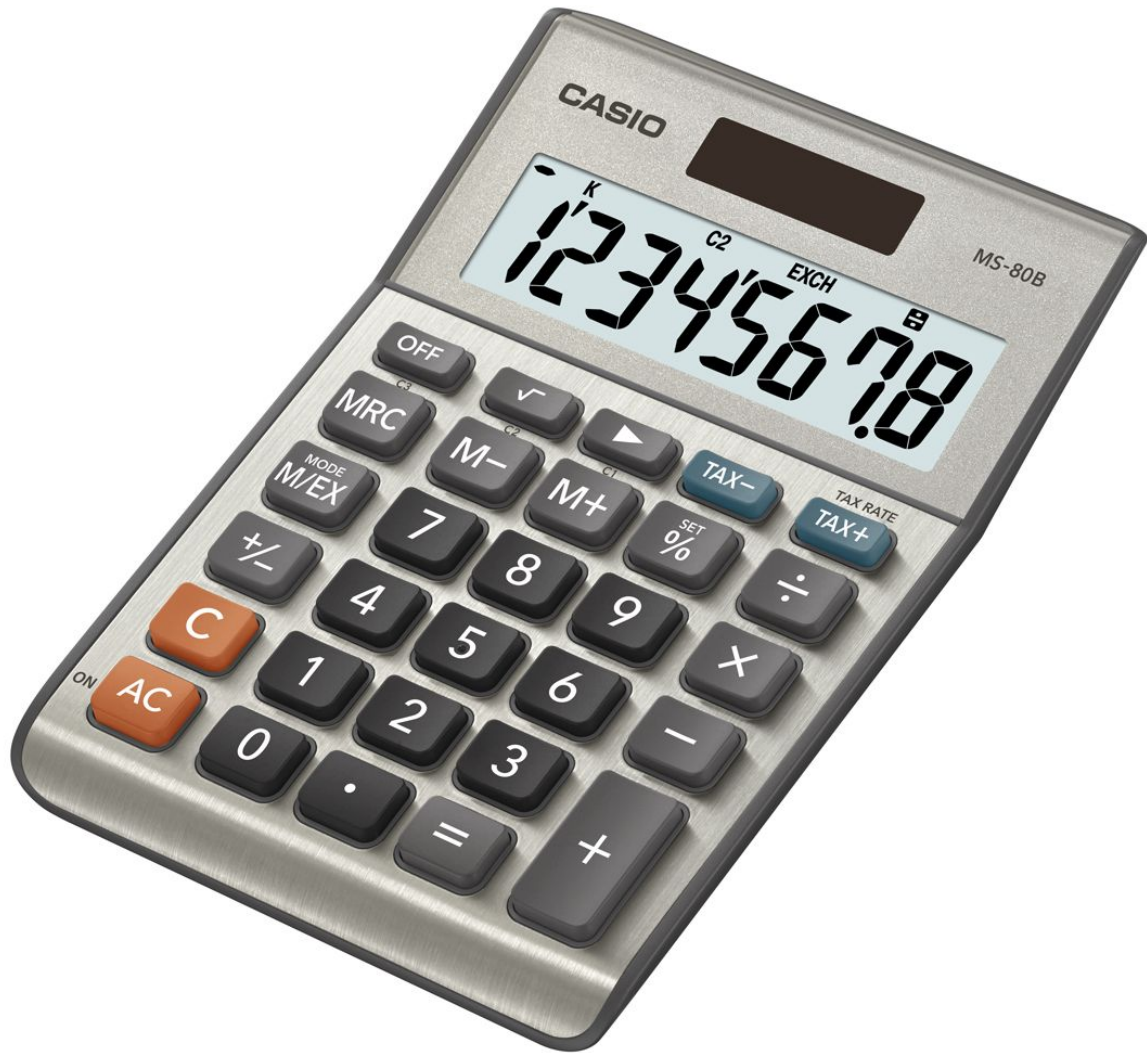


12%



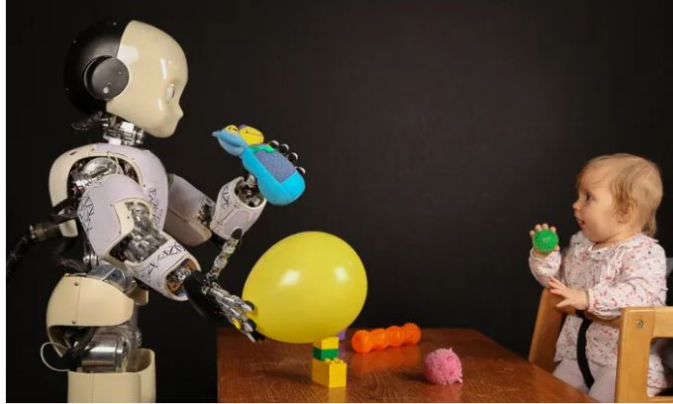
2%





AI will create 'useless class' of human, predicts bestselling historian

Smarter artificial intelligence is one of 21st century's most dire threats, writes Yuval Noah Harari in follow-up to Sapiens



📷 An iCub robot learns how to play from a child. Photograph: Dr Patricia Shaw/EPSRC/PA

Ian Sample *Science editor*

🐦 @iansample

Fri 20 May 2016 13:20 BST

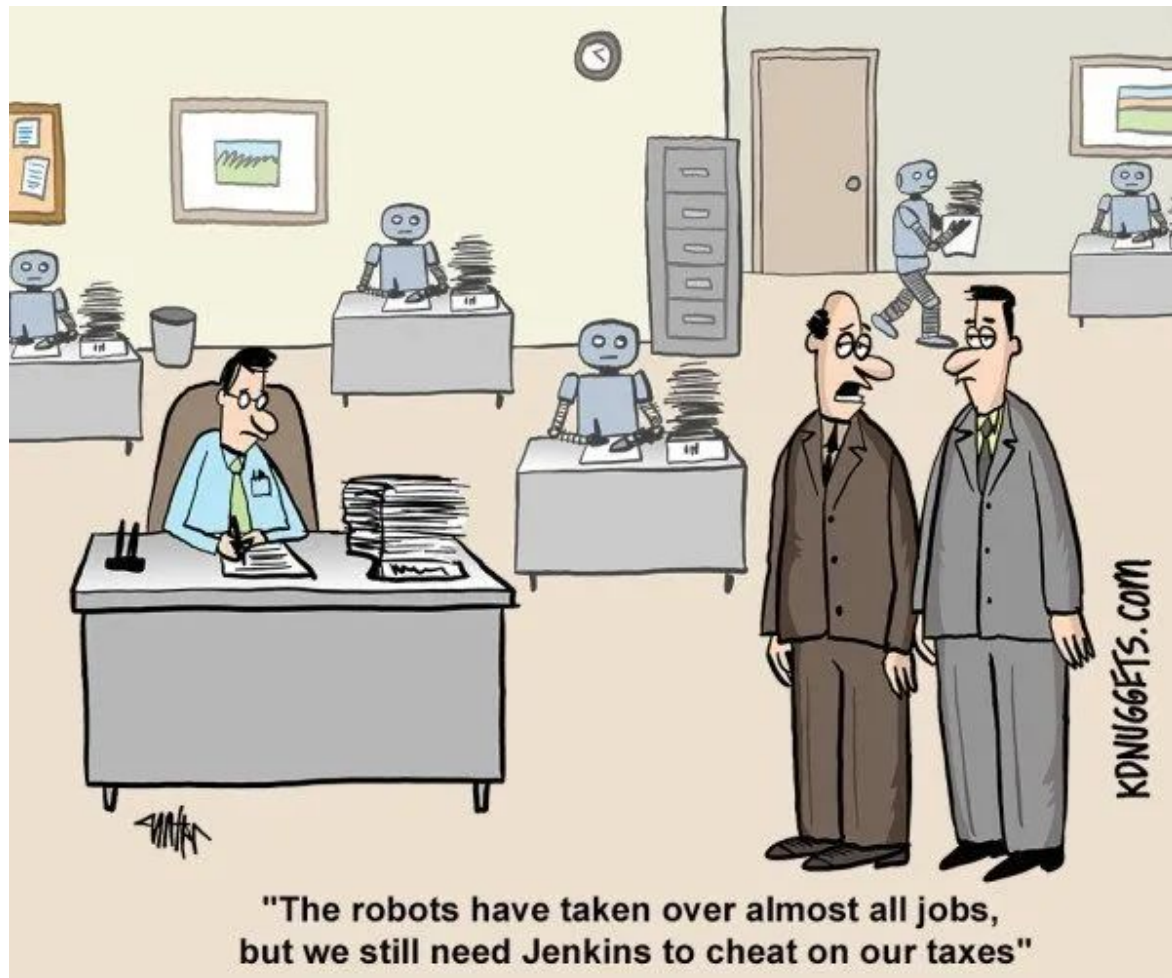


1,243

It is hard to miss the warnings. In the race to make computers more intelligent than us, humanity will summon a demon, bring forth the end of days, and code itself into oblivion. Instead of silicon assistants we'll build silicon assassins.

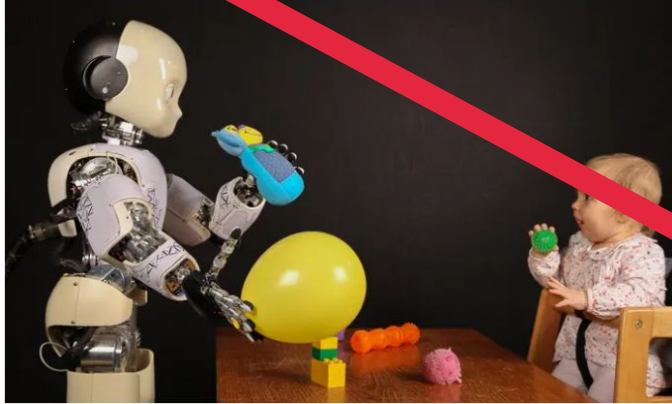
The doomsday story of an evil AI has been told a thousand times. But our fate at the hand of clever cloggs robots may in fact be worse - to summon a class of eternally useless human beings.

At least that is the future predicted by **Yuval Noah Harari**, a lecturer at the Hebrew University in Jerusalem, whose new book says more of us will be pushed out of employment by intelligent robots and on to the economic scrap heap.



AI will create 'useless class' of human, predicts bestselling historian

Smarter artificial intelligence is one of 21st century's most dire threats, writes Yuval Noah Harari in follow-up to *Sapiens*



📷 An iCub robot learns how to play from a child. Photograph: Dr Patricia Shaw/EPSRC/PA

Ian Sample *Science editor*

🐦 @iansample

Fri 20 May 2016 13:20 BST

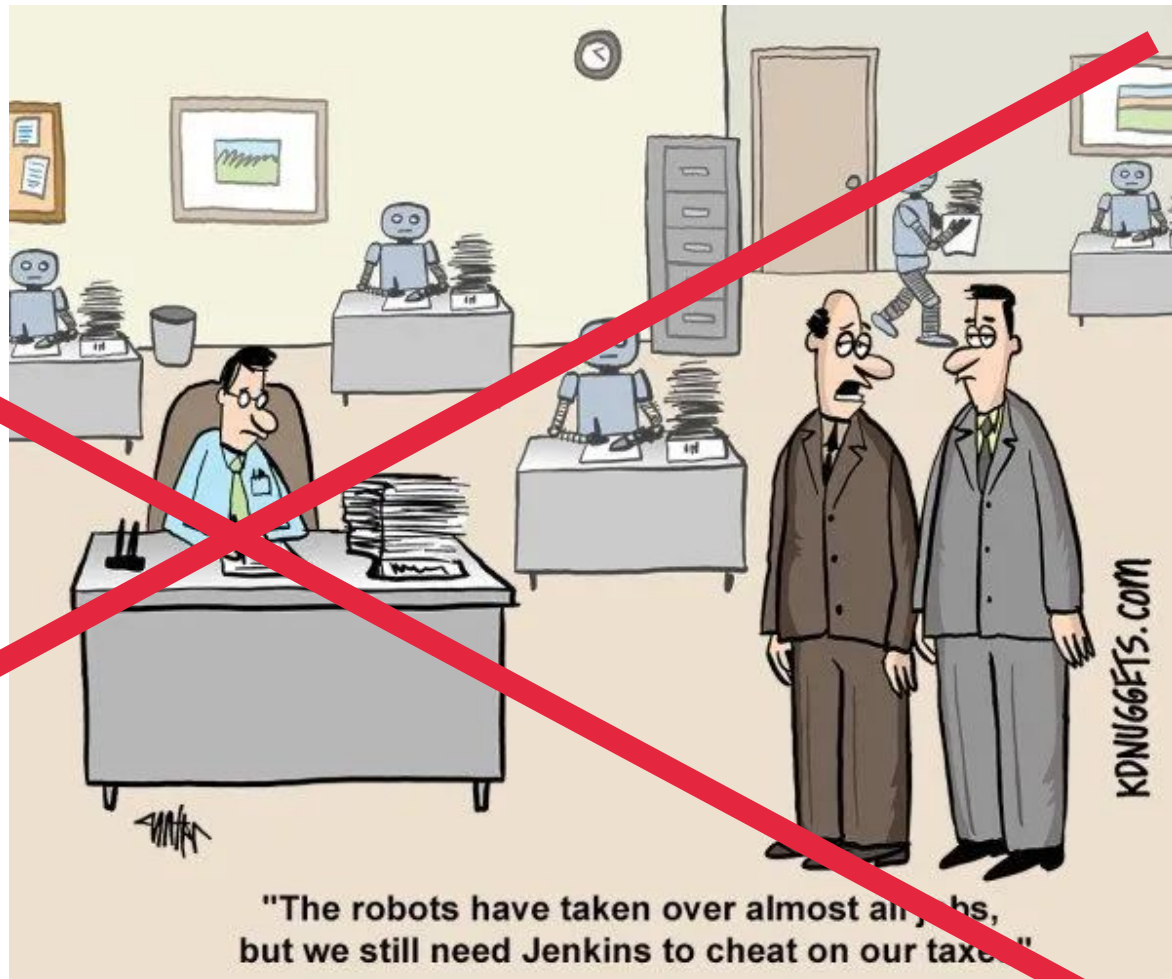


1,243

It is hard to miss the warnings. In the race to make computers more intelligent than us, humanity will summon a demon, bring it to the end of days, and code itself into oblivion. Instead of silicon assistants we'll build silicon assassins.

The doomsday story of an evil AI has been told a thousand times. But our fate at the hand of clever close robots may in fact be worse - to summon a class of eternally useless human beings.

At least that is the future predicted by **Yuval Noah Harari**, a lecturer at the Hebrew University in Jerusalem, whose new book says more of us will be pushed out of employment by intelligent robots and on to the economic scrap heap.





One machine can do the work of
fifty ordinary men. No machine can
do the work of one extraordinary
man.

— *Elbert Hubbard* —



**A GLOBAL COMPANY THAT IS CHANGING THE
FUTURE OF HOW WE LIVE, PLAY AND WORK**

