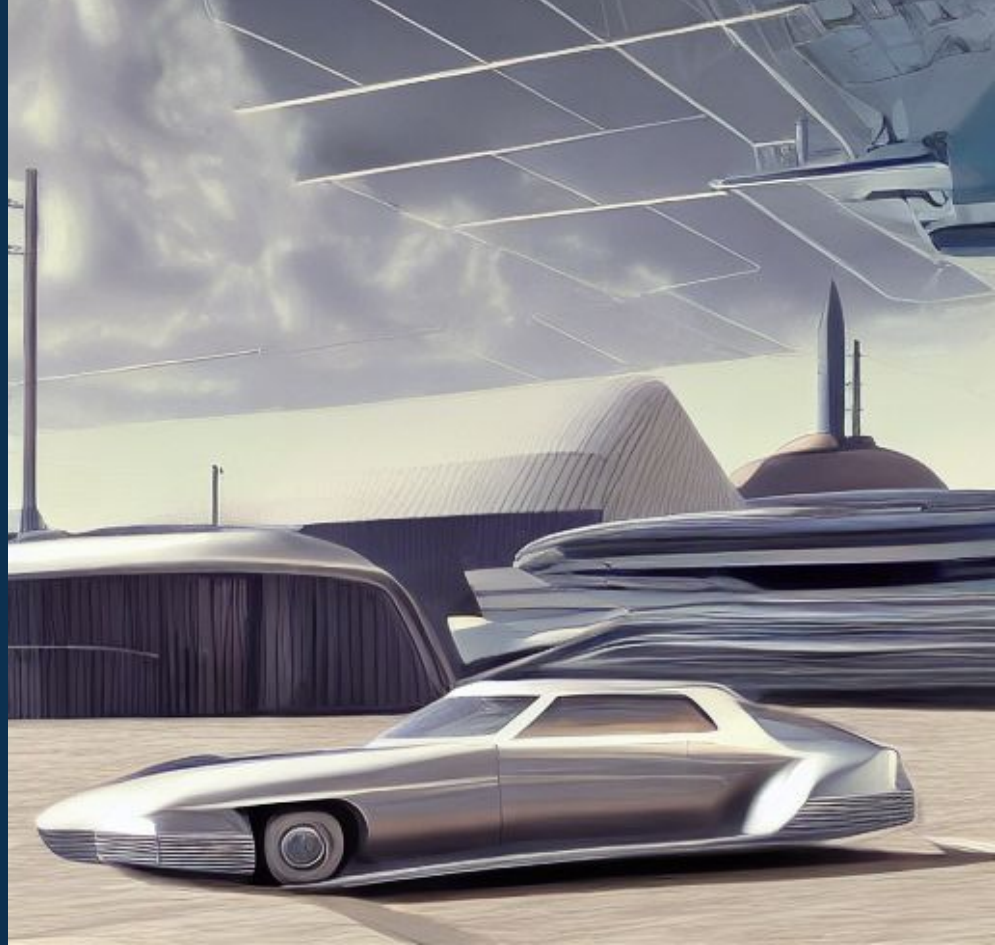




Think Like a Futurist

The Future of Learning & Education in a
Continuously Evolving World

February, 2023



Introduction



Dr. Karie Willyerd

Chief Customer
Strategy Officer





Agenda

- Introduction - Why should everyone be a futurist?
- Signals 1 - What are some of the biggest economic & demographic signals?
- Reflect - What do we think that means for our customers and employees?
- Tee-up - What will it mean for learning?

Why be a futurist?



*The future belongs to
those who prepare
for it today.*

Malcolm X





How to be a futurist

1

Forget about predictions

2

Focus on signals

3

Look back to see forward

4

Uncover patterns

5

Create a community

Marina Gorbis, Institute for the Future

Signals 1

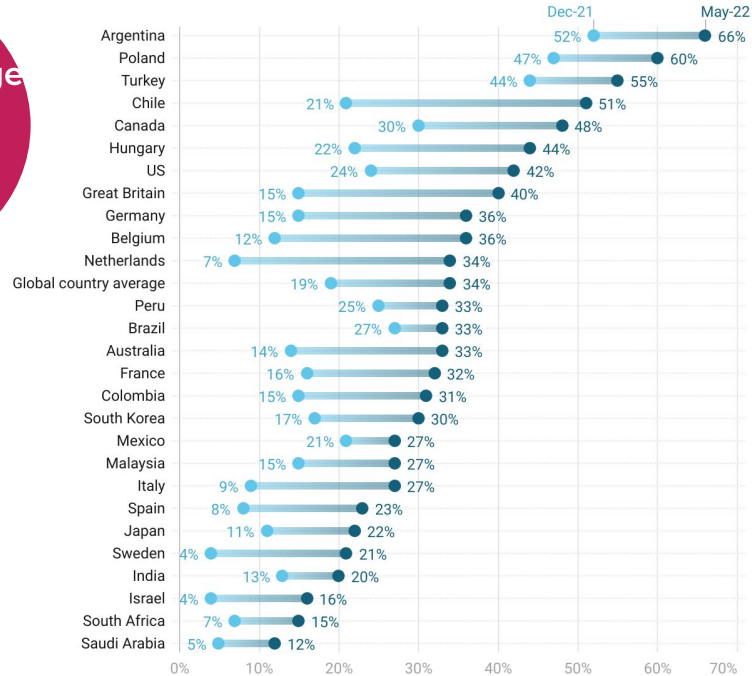
What are some of the economic & demographic signals?

Access to both financial and human capital will affect our ability to deliver on goals.



**Inflation: change
in reported
concern**

The last six months (Dec 2021 - May 2022)



Representative sample of c.19,505 adults aged 16-74 in 27 participating countries.

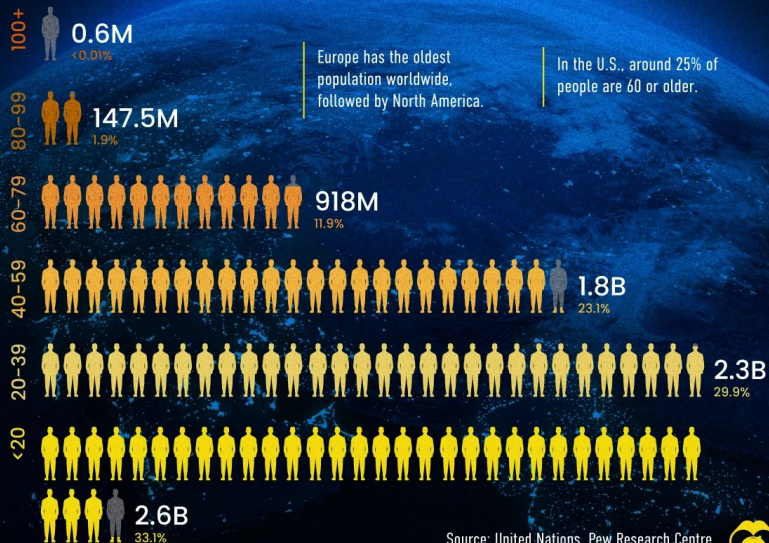
Source: Ipsos Global Advisor • Created with Datawrapper

THE WORLD'S POPULATION BY AGE GROUP

The world's population is getting older.

Share of population below 20 years old : 1950 44% 2020 33%

 = percentage of population



Source: United Nations, Pew Research Centre





Demographic signals

1

Developing economies - youth bulges

2

Mature economies - older population

3

Move to cities

4

Migration and forced displacement

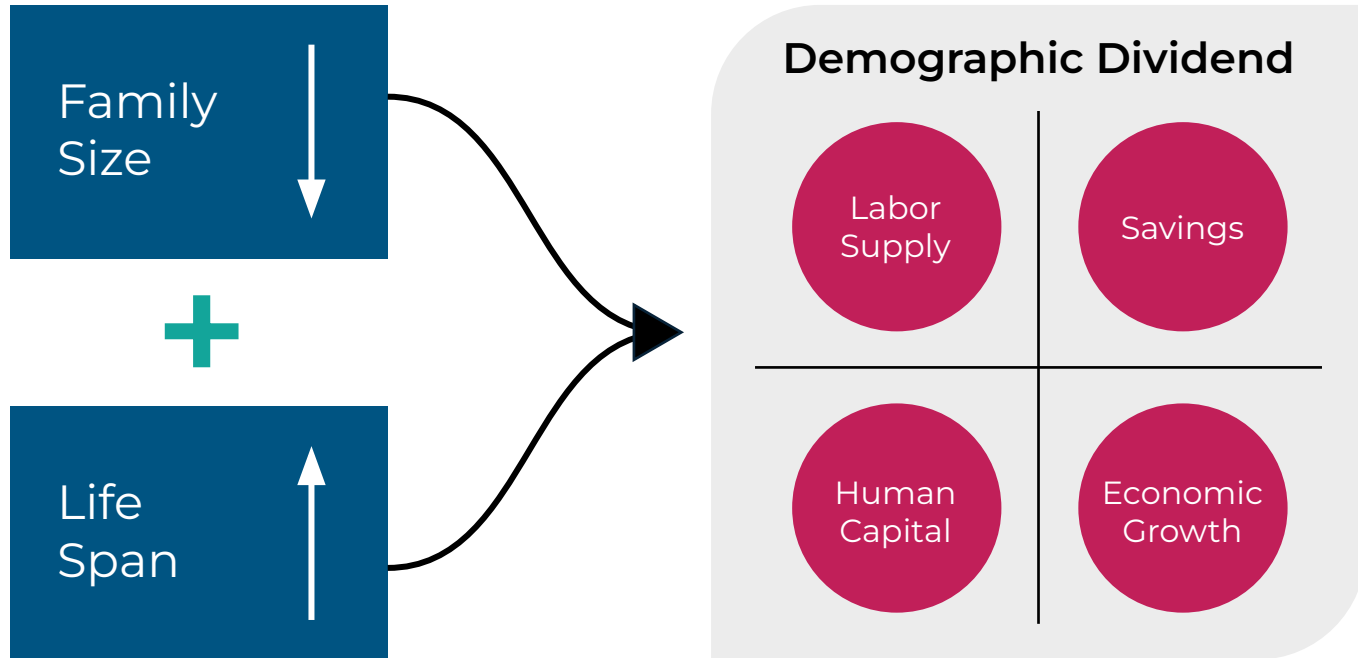
**Total
Migrant
Estimates**

1960-2015



Source: Pew Research Center analysis of United Nations data

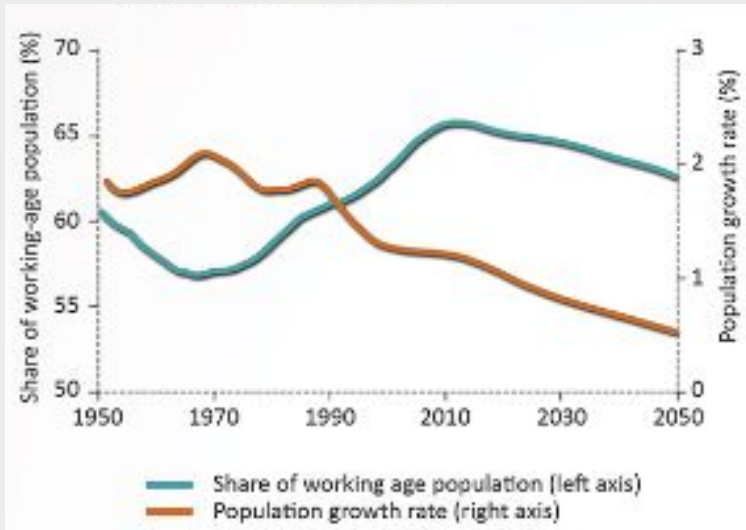
What type of markets do you work with?



Demographic dividends vary widely

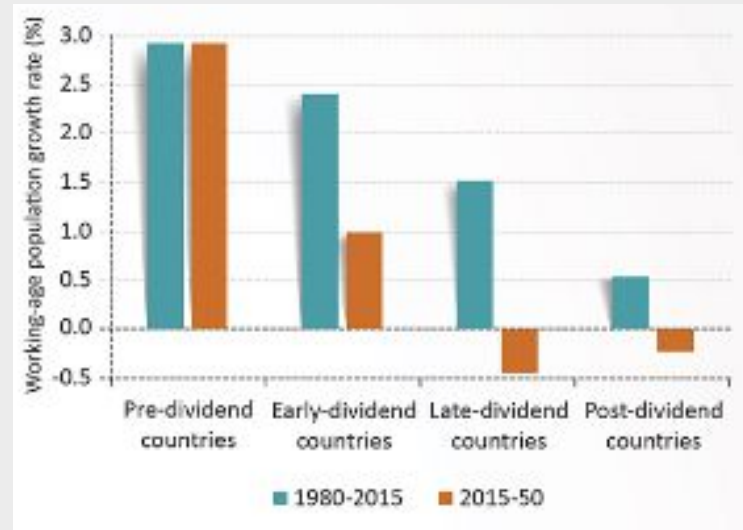
1

Global demographic change is pronounced: the working-age share has peaked, the overall population is growing much more slowly and is ageing at record speed.

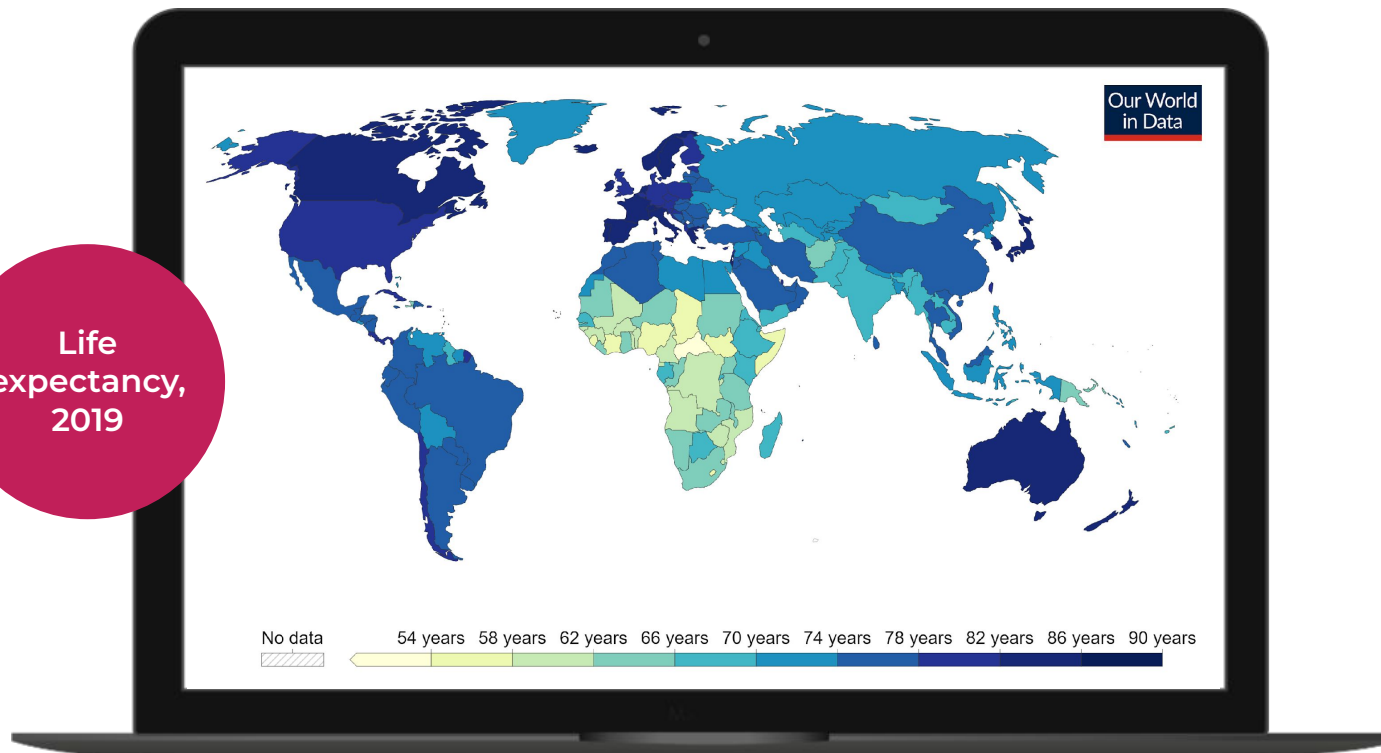


2

Underneath global trends lies stark diversity, with countries facing different opportunities to capture demographic dividends.



Life
expectancy,
2019



Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019)

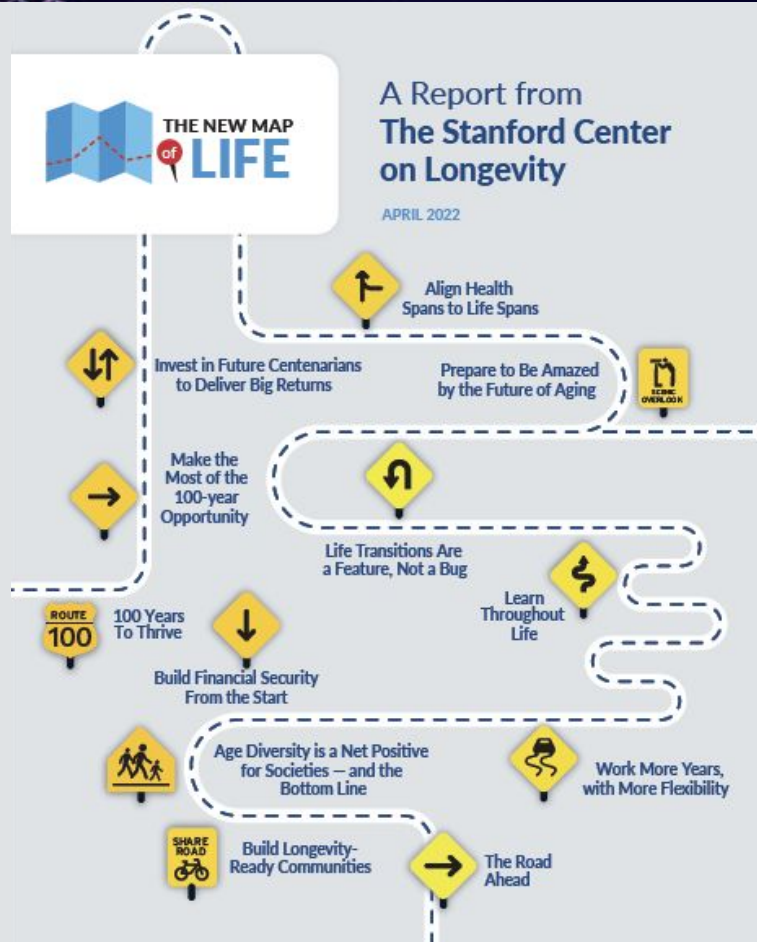
OurWorldInData.org/life-expectancy • CC BY

Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.



A Report from The Stanford Center on Longevity

APRIL 2022



Some data points on capability shortages



1.2 million shortage of nurses in U.S. alone

160,000 truck driver shortage by 2030*



40 million person shortage in cloud computing**

23% gap between current needs and AI capabilities***



Human talent shortage of 85 million people by 2030****

... leading to \$8.5 trillion unrealized revenues globally

*American Trucking
Association
** Google
*** Deloitte
**** Korn Ferry

Your Turn

Looking at some of these socioeconomic signals, come up with two predictions

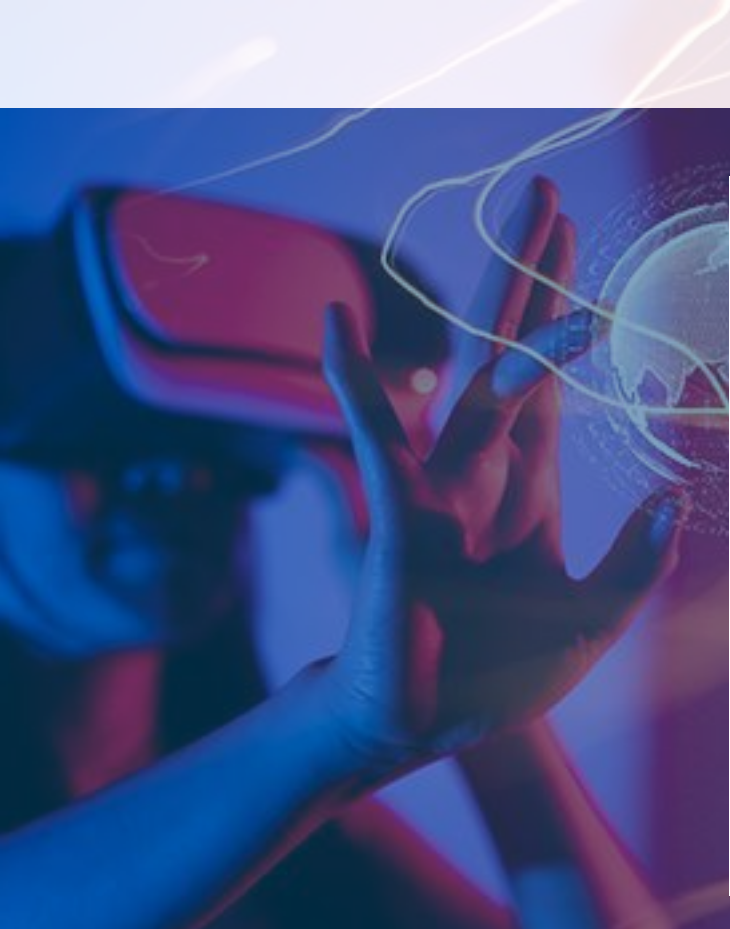
If these two predictions come true, what impact could they have on you? On your organization?

Signals 2

What are some of the technology signals?

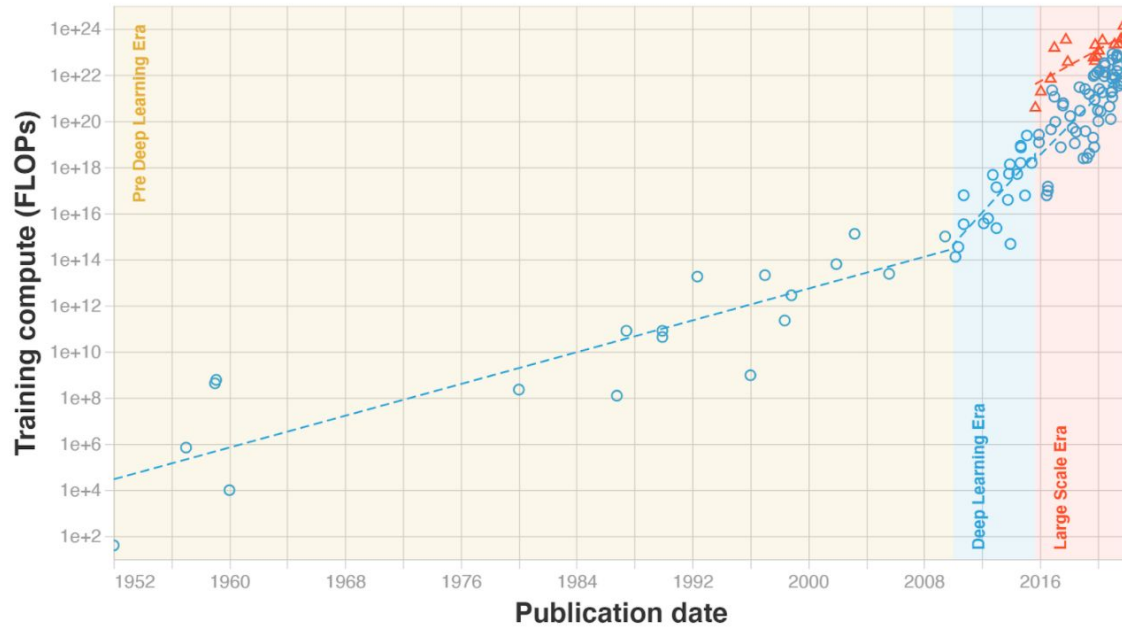
Two areas: machine learning & XR



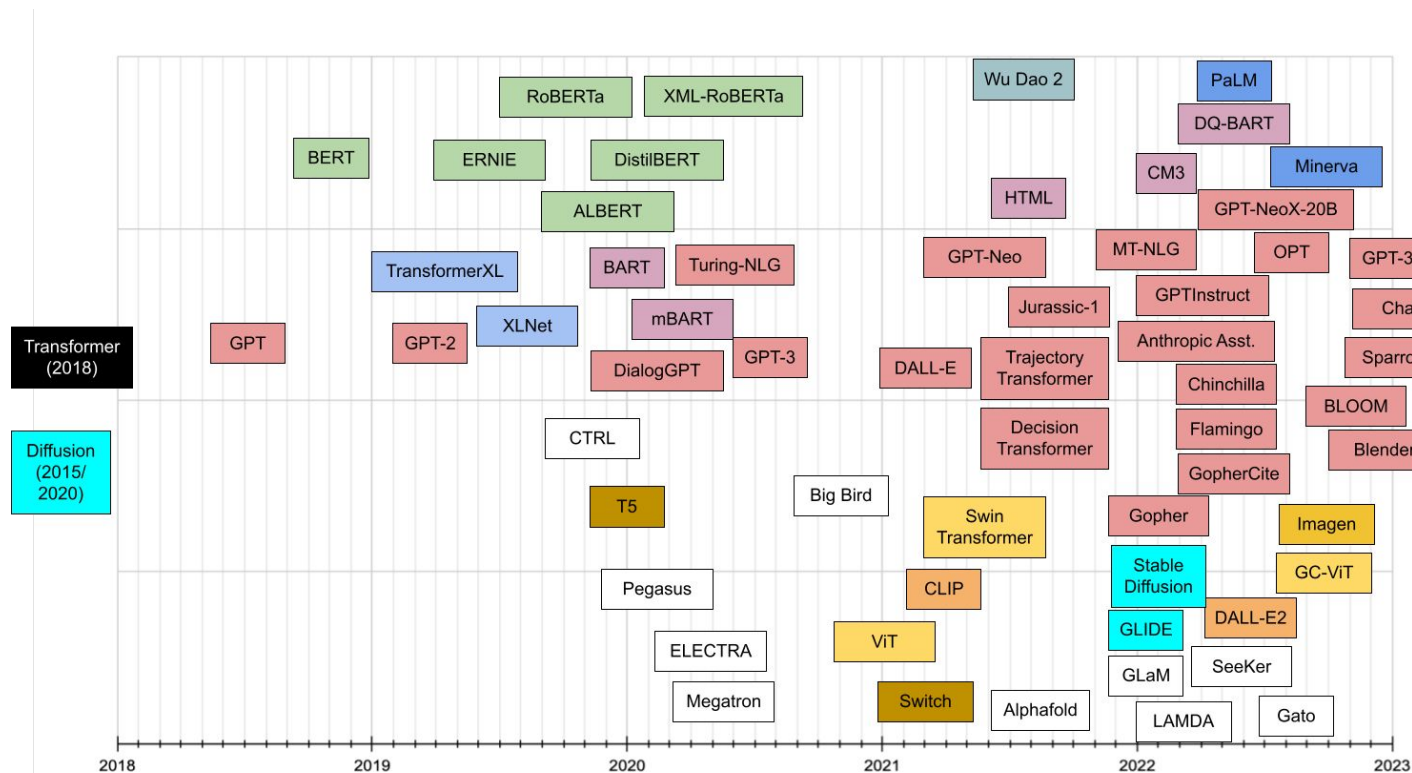


Training compute (FLOPs) of milestone Machine Learning systems over time

n = 118



The Rise of the ML Transformers





ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users

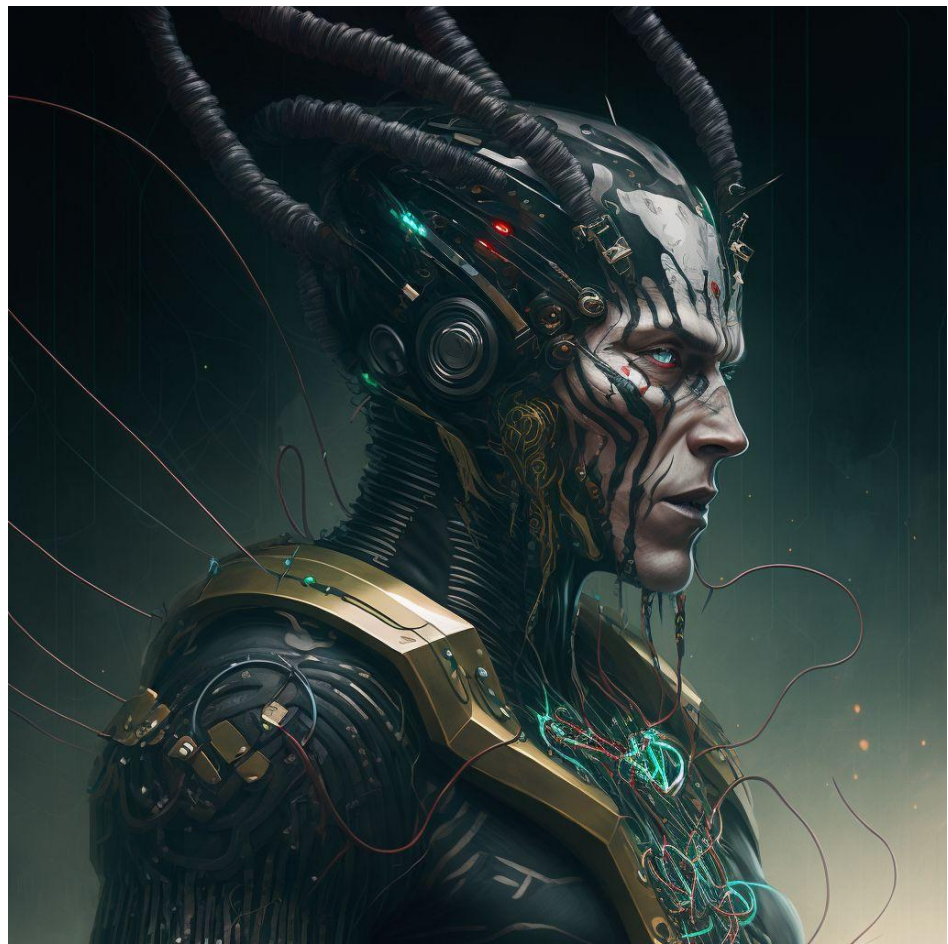


* one million backers ** one million nights booked *** one million downloads

Source: Company announcements via Business Insider/LinkedIn



ChatGPT and LaMDA AI pass the Turing Test



<https://mpost.io/chatgpt-passes-the-turing-test/>

Select Generative AI Use Cases by Industry

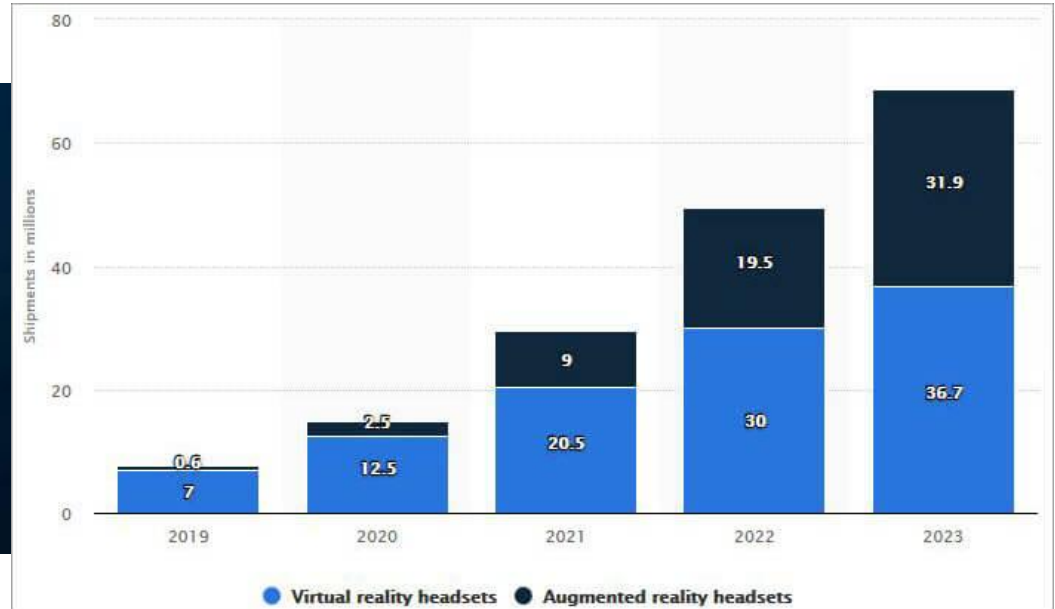
| | Industries | | | | | | | |
|---------------------------|--------------------------------------|-------|------------------------------|----------------------|----------------------|----------------------------------|---------------|----------------|
| | Automotive and Vehicle Manufacturing | Media | Architecture and Engineering | Energy and Utilities | Healthcare Providers | Electronic Product Manufacturing | Manufacturing | Pharmaceutical |
| Drug Design | | | | | | | | ● |
| Material Science | ● | | | ● | | ● | | |
| Chip Design | | | | | | ● | | |
| Synthetic Data | ● | | ● | ● | ● | ● | ● | ● |
| Generative Design (Parts) | ● | | ● | | | | ● | |

gartner.com

Source: Gartner
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Gartner

XR Headsets Shipped

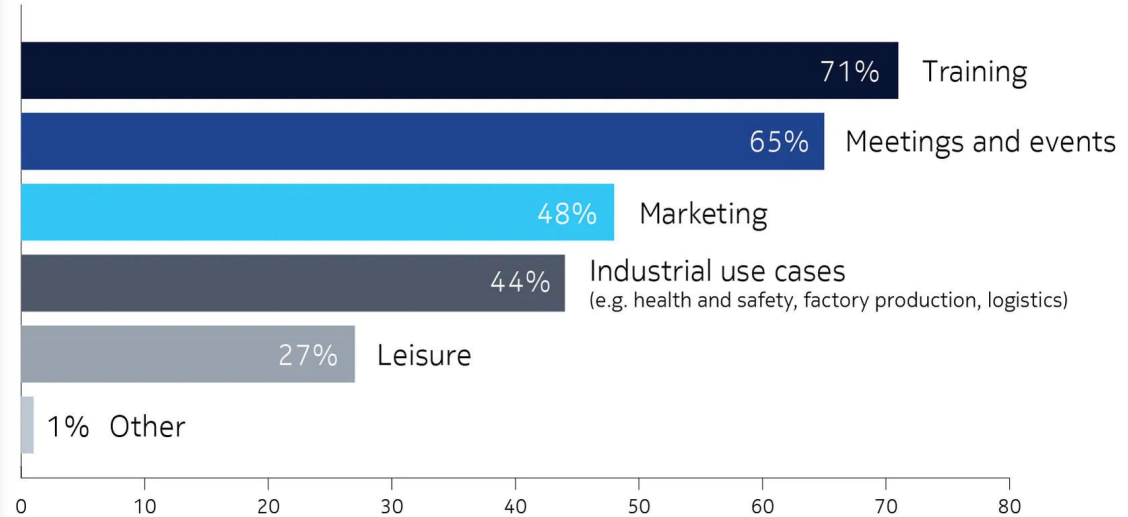


The Teslasuit





Which B2B metaverse use cases are most compelling?



Source: Nokia and Gartner® Peer Insights™ joint survey, May - June 2022, n=165

“Bringing the metaverse to the workplace is going to be a natural evolution, and employees really want to build those personal connections and to collaborate more effectively no matter where they’re working.”

VP of Teams, Nicole Herskowitz

Your Turn

Looking at some of these technology signals, come up with two predictions

If these two predictions come true, what impact could they have on you? On your organization?

What will it mean for learning and education?



Q&A

Let's work together





Thank you





Contact us

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