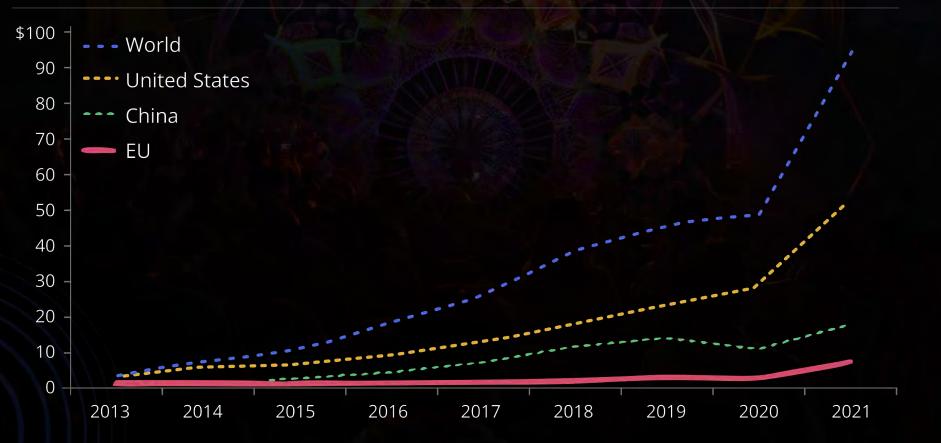
#### Private investment in AI surged in 2021



USD billion annual investment



Source: JPMorgan: https://www.jpmorgan.com/insights/investing/private-equity/private-market-growth-and-innovation-have-only-just-begun

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

#### ELEVANDI

### Most active investors in generative AI



#### Number of deals (as of 06/30/23) Total deals backed Generative AI startups backed as lead investor Investor as lead investor 🙂 uizard 🕱 Lightricks 🤺 Hour 八 AssemblyAl 🐼 Milliny Geepdub.ai 1 INSIGHT 8 WDITED Jasper Milling 🚹 neeva olean tavus 🖤 💋 warp 2 7 SEQUOIA 🖷 Harvey. Index Ventures 3 🗱 Twelve Labs 👍 Weaviate 🚯 Lightning 🏧 🎜 cohere 💾 Hebbia 🎡 6 4 andreessen. horowitz IIElevenLabs - replit 💦 Hippocratic Al character.ai 5 ADEPT ::: Primer 😕 Hugging Face 5 ADDITION 4 OLOON IN HIPPOCRATIC AL ADEPT FIG 5 GENERAL G CATALYST 4 Rephrase.ai stability.ai glean 4 5 Lightspeed ADEPT = descript ANTHROP\C Boosted.ai 5 (S) SPARK CAPITAL 4 4 5 TIGERGLOBAL Scole Milling Scole

Source: CB Insights, Aug 2023: https://app.cbinsights.com/research/generative-ai-funding-top-startups-investors/

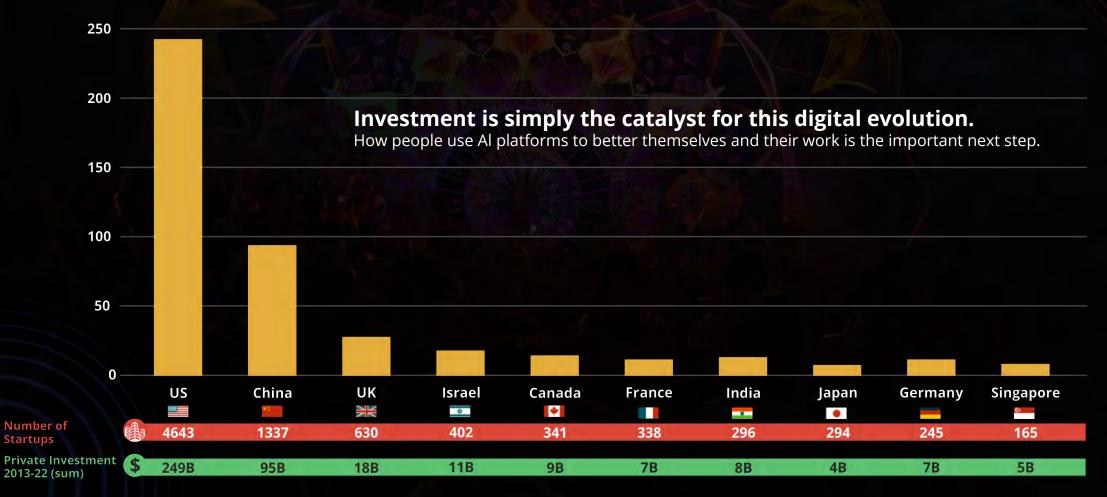


## Who is winning the AI race?



ELEVANDI

Since 2013, the U.S. has invested 1.9 times more in AI Companies than China and EU combined.



Source: Visual Capitalist, Sep 2023: https://www.visualcapitalist.com/sp/global-ai-investment/

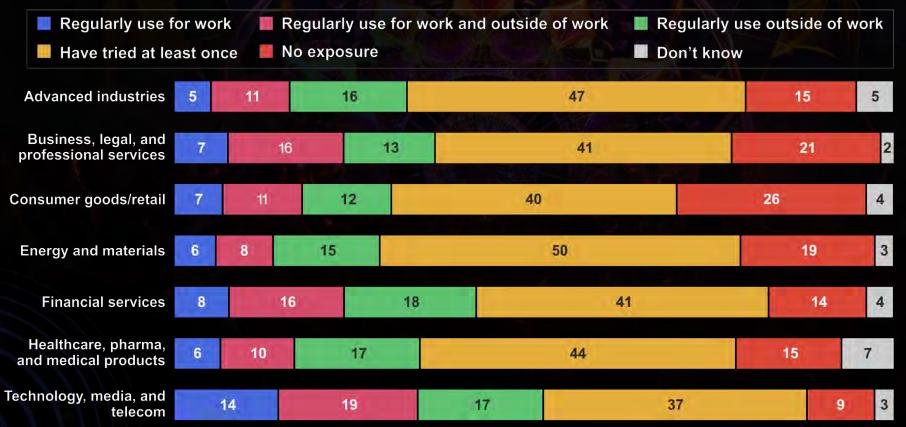
Disclaimer: Figures as of 2022 and rounded to the nearest billion. Source: Netbase Quid via Al Index 2023 Annual Report, Apr 2023

### Generative Al usage, by sector



Respondents across regions, industries, and seniority levels say they are already using generative AI tools.

Reported exposure to generative AI tools, % of respondents

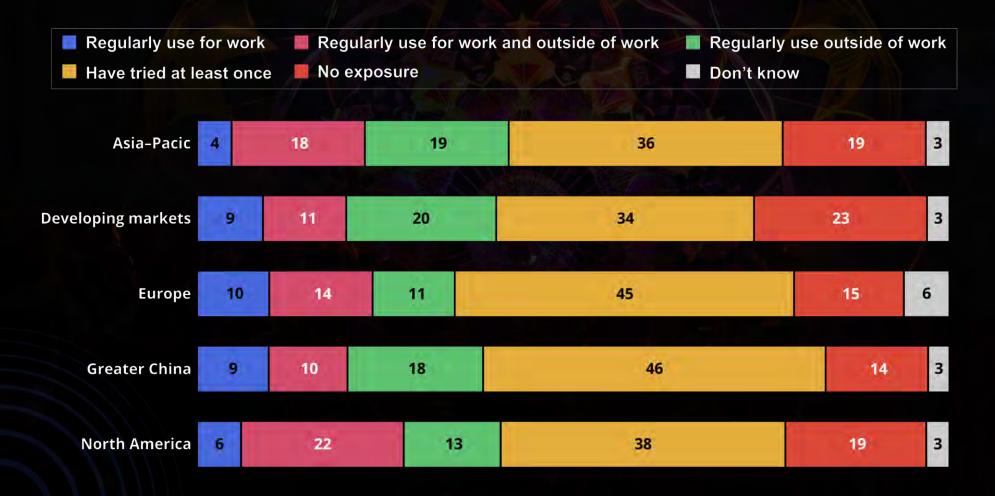


Source: McKinsey & Company (McKinsey Global Survey on AI), Aug 2023: https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year#/ Note: Figures may not sum to 100%, because of rounding. In Asia-Pacific, n = 164; in Europe, n = 515; in North America, n = 392; in Greater China (includes Hong Kong and Taiwan), n = 337; and in developing markets (includes India, Latin America, and Middle East and North Africa), n = 276. For advanced industries (includes Hong Kong and Taiwan), n = 337; and in developing markets (includes India, Latin America, and Middle East and North Africa), n = 276. For advanced industries (includes Hong Kong and Taiwan), n = 337; for energy and materials, n = 96; for financial services, n = 248; for healthcare, phanterical products, n = 130; and for technology, media, and telecom, n = 244. For C-suite respondents, n = 547; and for madgers, n = 339. For respondents born in 1964 or earlier, n = 143; for respondents born between 1981 and 1996, n = 80. Age details were not available for all respondents. For respondents identifying as men, n = 1,025; for respondents identifying as women, n = 156. The survey sample also included respondents who identified as "nonbinary" or "other" but not a large enough number to be statically meaningful.



#### Generative Al usage, by geography



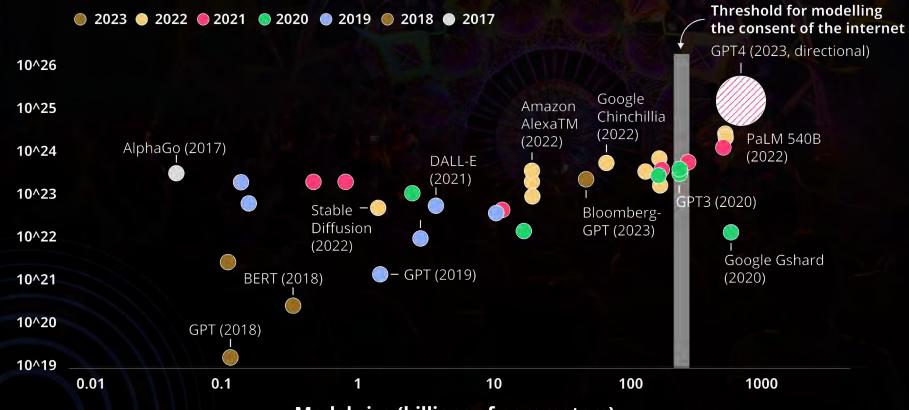


Source: McKinsey & Company (McKinsey Global Survey on AI), Aug 2023: https://www.mckinsey.com/capabilities/guantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year#/

Note: Figures may not sum to 100%, because of rounding. In Asia-Pacific, n = 164; in Europe, n = 515; in North America, n = 392; in Greater China (includes Hong Kong and Taiwan), n = 337; and in developing markets (includes India, Latin America, and Middle East and North Africa), n = 276. For advanced industries (includes automotive and assembly, aerospace and defense, advanced electronics, and semiconductors), n = 96; for business, legal, and professional services, n = 215; for consumer goods and retail, n = 128; for energy and materials, n = 95; for financial services, n = 248; for healthcare, pharma, and medical products, n = 130; and for declarati, n energy and for inspondents, n = 248; for healthcare, pharma, and medical and 196, n = 80. Age details were not available for all respondents. For respondents identifying as wmen, n = 156. The survey sample also included respondents who identified as "nonbiary" or "other" but not a large enough number to be statistically meaningful.



#### Foundation models have grown in size and cost



Model training (floating point operations)

Source: Bain & Company, Sep 2023: https://www.bain.com/insights/youre-out-of-time-to-wait-and-see-on-ai-tech-report-2023/ Note: Floating point operations show the computing power necessary to train the models and thus is also a proxy for cost

Model size (billions of parameters)

"

Until recently, AI work (and talent) has been concentrated among the big cloud service providers. Now, with the dramatic reduction in the economics of Al experimentation and application, it's spilling over into a broader spectrum of industries and capabilities, where innovation is happening quickly and already creating new value.

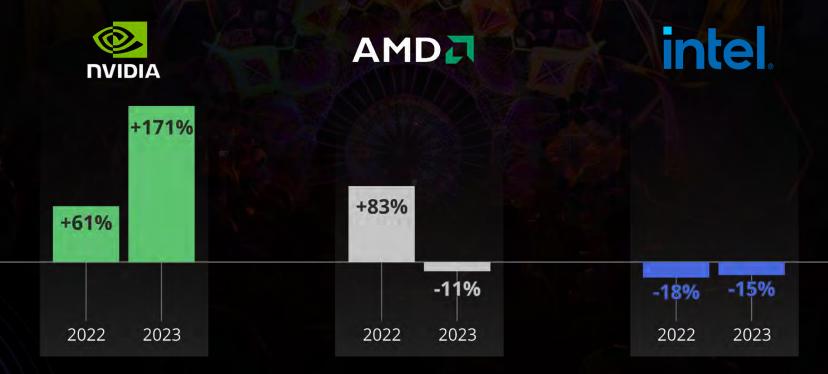


NGAPORE

## Leading AI chip providers



**Data Center Revenue Growth** (Year-Over-Year Change in Q2 Sales)



Nvidia's Data Center revenue has quadrupled over the last two years, far outpacing the growth of competitors AMD and Intel. The Data Center segment includes graphic processing units (GPUs), which are the preferred chips to power Al models like ChatGPT.



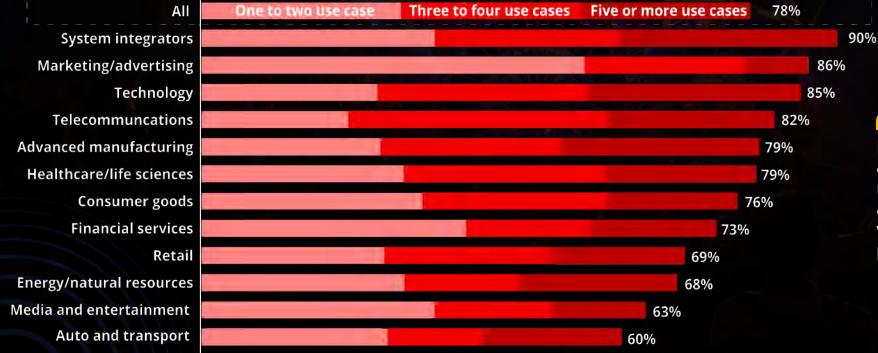
Source: Visual Capitalist, Aug 2023: https://www.visualcapitalist.com/nvidia-vs-amd-vs-intel-comparing-ai-chip-sales,

Source: NVIDIA, AMD, Intel. Quarters are based on the calendar year. In cases where revenue was revised at a later date, we have used the latest available revision. Intel integrated its Accelerated Computing Systems & Graphics (AXG) group into its Data Center Group in 2023. We have included revenue from the AXG group in the Data Center revenue for quarters prior to 2023 except for Oland Q2 2022, where revised Data Center revenue was provided by Intel. Intel and AMD report net revenue, which accounts for certain adjustments like returns, refunds, and discounts.

## Al adoption pace, by industry



Percentage of respondents currently adopting or evaluating at least one of the top six foundation model use cases



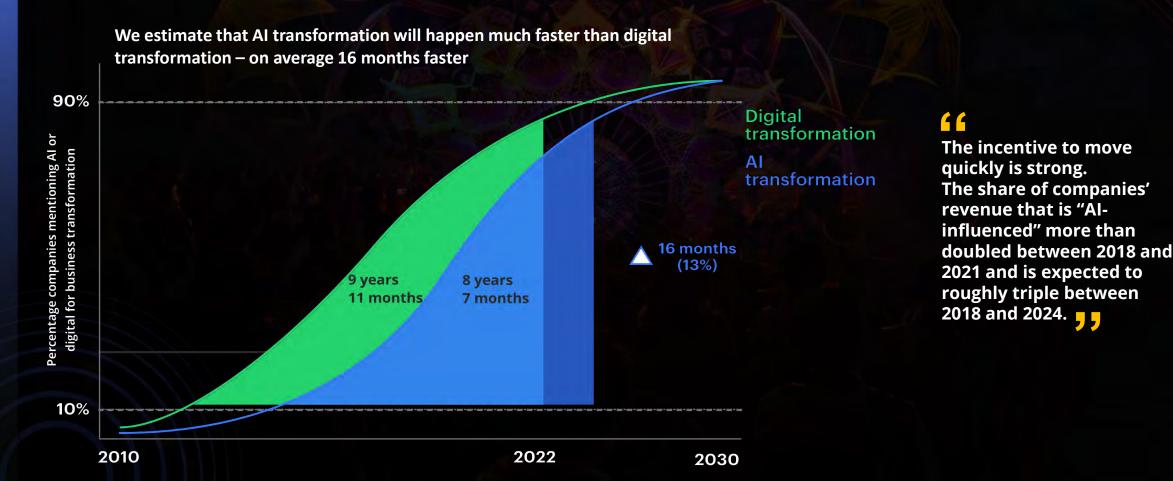
#### 66

Beyond "cheaper, faster, and better," foundation models and generative Al are already creating new value in cases that weren't possible before.

Source: Bain & Company (Bain Al Survey), Sep 2023: https://www.bain.com/insights/youre-out-of-time-to-wait-and-see-on-ai-tech-report-2023/

# Al transformation is going to faster than digital





Source: Accenture Research, 2022: https://www.accenture.com/us-en/insights/artificial-intelligence/ai-maturity-and-transformation# Note: Our estimate is derived from a natural language processing analysis of investor calls of the world's 2,000 largest companies (by market cap), from 2010 to 2021, that referenced "AI" and "Digital" in tandem with "business transformation," respectively. Data was sourced from S&P earnings transcripts.

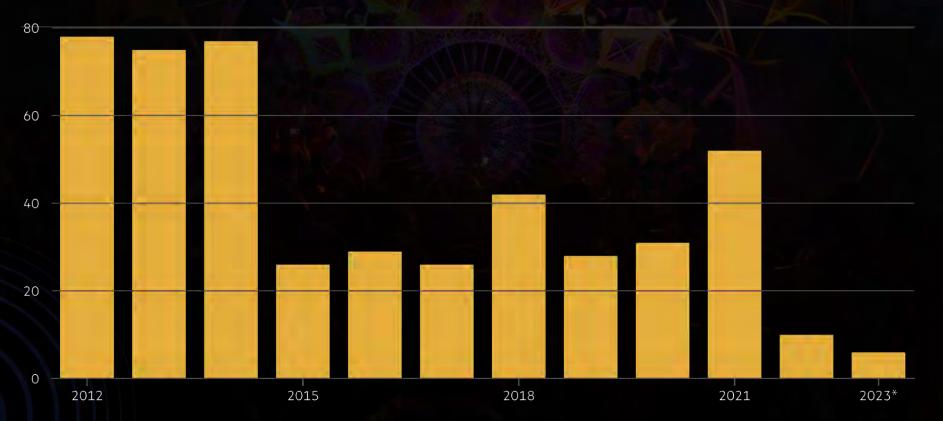


#### US investors face uncertain future in China



Private equity deals in China plummet

Buyout groups' acquisitions in China, \$mn

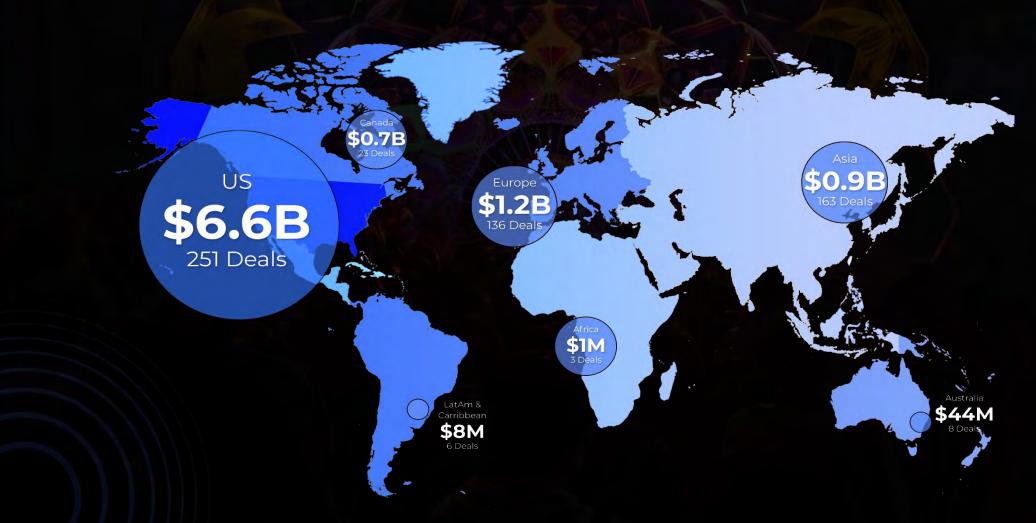


Source: Financial Times (Dealogic), Aug 2023: https://www.ft.com/content/8de1cd77-fe94-45d5-aa23-09faf7f89f15



## Q2'23 AI funding: majority goes to U.S.



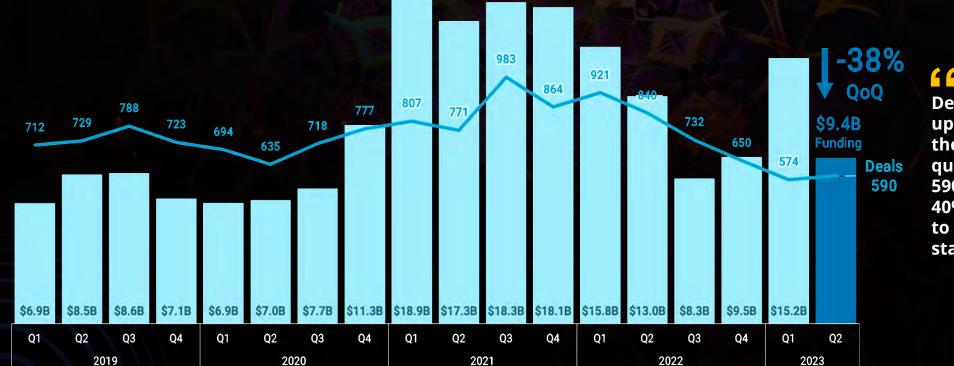


Source: CB Insights (State of AI Q2'23), Aug 2023: https://app.cbinsights.com/research/report/ai-trends-q2-2023/



## Global AI funding dropped in 2023 Q2





Deals to AI startups ticked up for the first time in 5 quarters to reach 590 in Q2'23. Over 40% of these went to US-based startups.

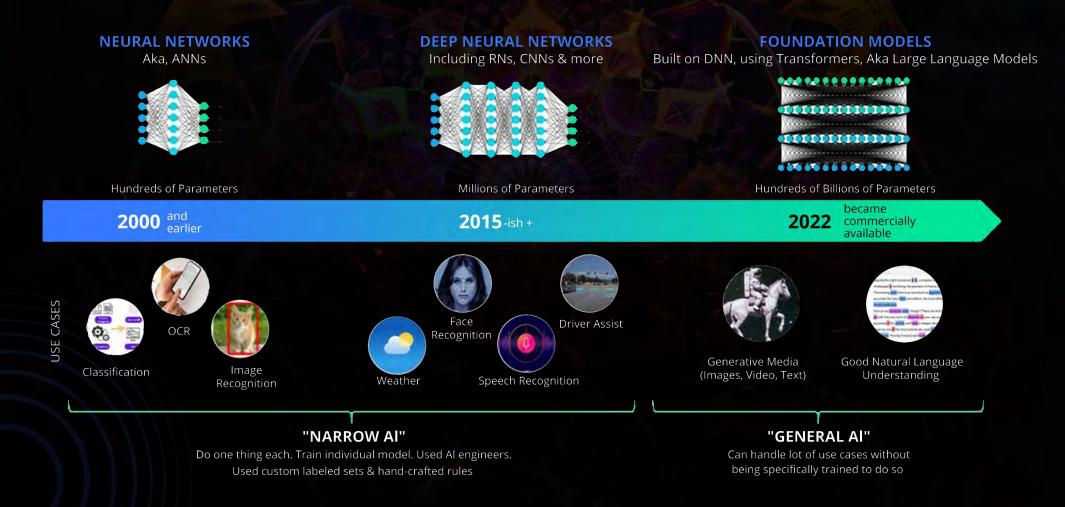
"

Source: CB Insights (State of AI Q2'23), Aug 2023: https://app.cbinsights.com/research/report/ai-trends-q2-2023/



#### Al in SaaS is changing the tech landscape





Source: NEA, Apr 2023: https://www.nea.com/blog/from-automation-to-innovation-how-ai-in-saas-is-changing-the-tech-landscape



#### The emergence of SaaS 4.0



Saas Era	1.0	2.0	3.0	4.0
Paradigm	System of record	System of engagement	System of (early) intelligence	System of cognition
Tagline	Move from on-prem to cloud	Apps talk to each other; data activation	Automation starts to form key part of value prop	Gen Al native capabilities fundamentally augment workflows
Generational Companies	salesforce workday.	Image: start   <	Constant help at work."	Area of Opportunity

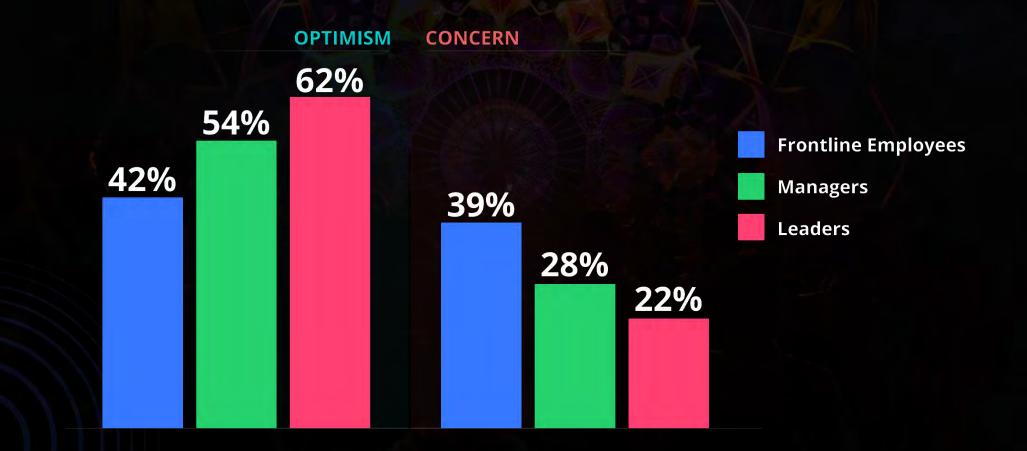
Source: Light Speed, Jun 2023: https://lsvp.com/saas-4-0-say-hello-to-the-era-of-cognition/#



#### **Employee sentiments on Al**

I5 SINGAPORE I7 FINTECH ﷺ FESTIVAL™

Workers at different seniority levels have diverging views



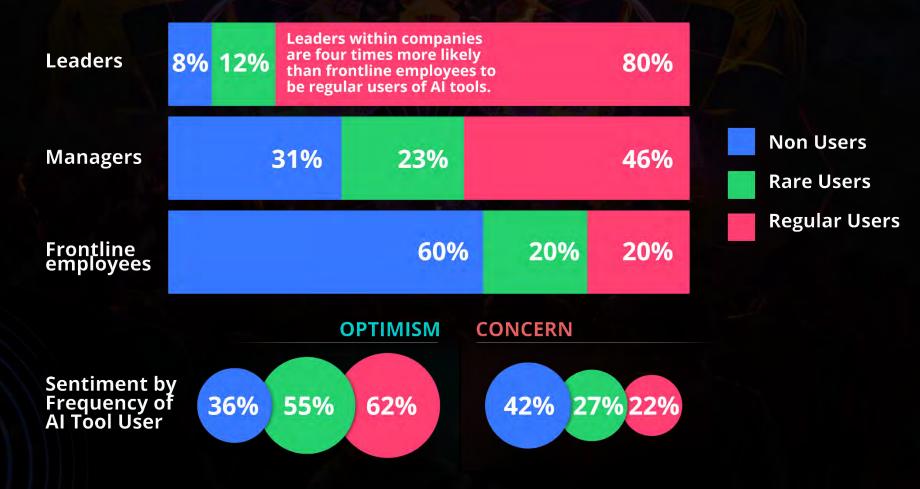
Source: Visual Capitalist, Jul 2023: https://www.visualcapitalist.com/sentiment-towards-ai-in-workplace/



#### More use, more optimism around Al



Frequency of Al use by seniority



Source: Visual Capitalist, Jul 2023: https://www.visualcapitalist.com/sentiment-towards-ai-in-workplace/



#### Al's Impact on workplace and employment



**36%** of respondents think that their job is likely to be eliminated by AI

> 86% believe that they will need upskilling to address how AI will change their jobs

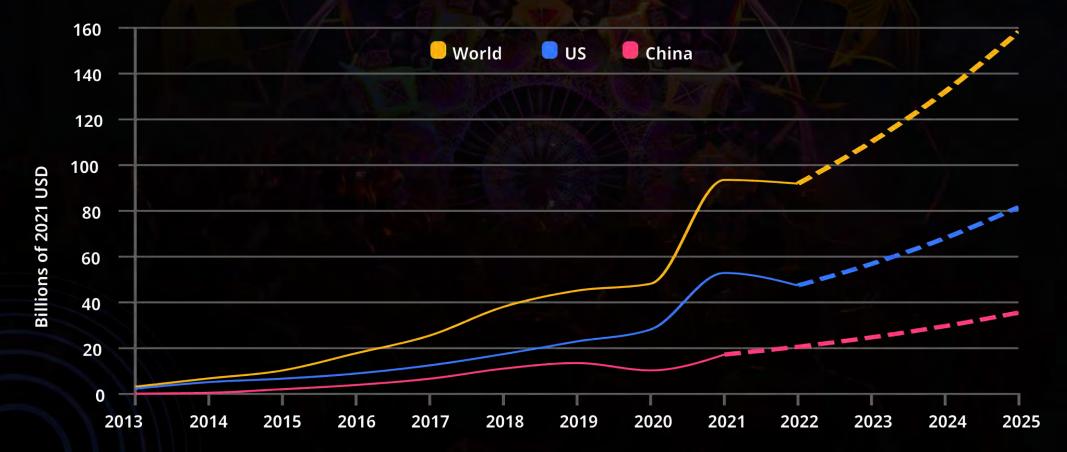
Source: Visual Capitalist, Jul 2023: https://www.visualcapitalist.com/sentiment-towards-ai-in-workplace/



#### Investment in AI will continue to grow



**Private AI investment (dotted lines show GS revenue projections\*)** 



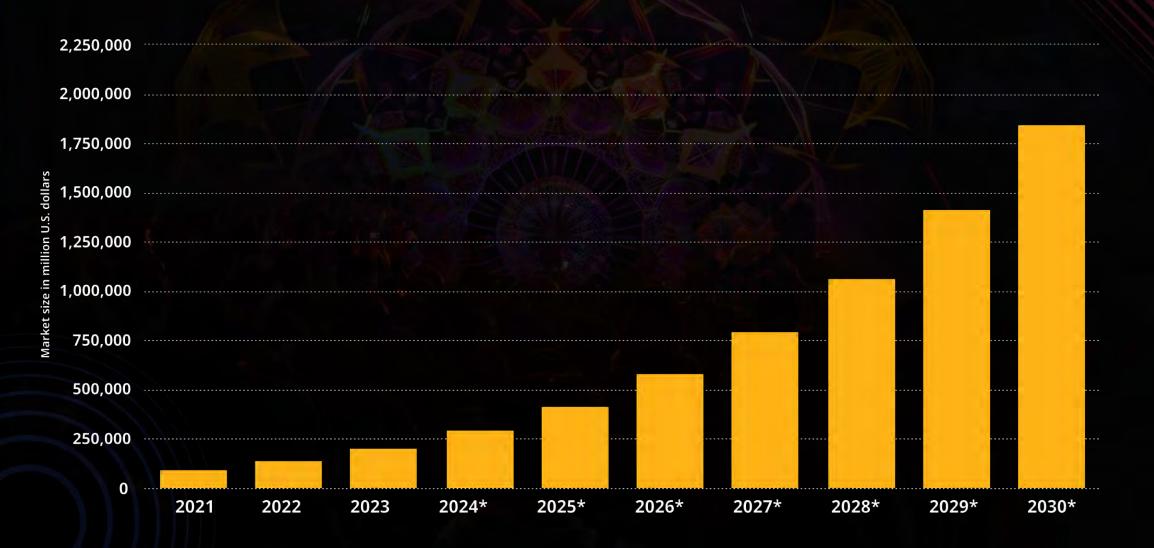
Source: Goldman Sachs Research (Stanford Institute for Human-Centered Artificial Intelligence), Aug 2023: https://www.goldmansachs.com/intelligence/pages/ai-investment-forecast-to-approach-200-billion-globally-by-

\*Average of GS Research 2022-2030 revenue growth estimates for Microsoft Azure, NVIDIA, Google Cloud, and Amazon Web Services (when available)



#### Al market size, global





Source: Statista, Mar 2023: https://www.statista.com/statistics/1365145/artificial-intelligence-market-size/





Just as electricity transformed almost everything 100 years ago, today I actually have a hard time thinking of an industry that I don't think AI will transform in the next several years

Andrew Ng Founder of DeepLearning.Al

Source: Stanford Business, Mar 2017: https://www.gsb.stanford.edu/insights/andrew-ng-why-ai-new-electricity





A.I. will probably most likely lead to the end of the world, but in the meantime, there'll be great companies

Sam Altman CEO of OpenAl

Source: Fortune, Jun 2023: https://fortune.com/2023/06/08/sam-altman-openai-chatgpt-worries-15-quotes/#:~:text=Sam%20Altman%20once%20said%20that,potential%20consequences%20of%20the%20A.I.



I think we should be very careful about artificial intelligence. If I had to guess at what our biggest existential threat is, it's probably that **I'm increasingly** inclined to think there should be some regulatory oversight, maybe at the national and international level, just to make sure that we don't do something very foolish

**Elon Musk** Founder of xAl

Source: The Guardian, Oct 2014: https://www.theguardian.com/technology/2014/oct/27/elon-musk-artificial-intelligence-ai-biggest-existential-threat Source: CNN, Oct 2014: https://money.cnn.com/2014/10/26/technology/elon-musk-artificial-intelligence-demon/





One of the ways these systems might escape control is by writing their own computer code to modify themselves

**Geoffrey Hinton** Godfather of Al, ex-Google researcher

Source: CNBC, Oct 2023: https://www.cnbc.com/2023/10/11/tech-godfather-geoffrey-hinton-ai-could-rewrite-code-escape-control.html#:~:text=%E2%80%9COne%20of%20the%20ways%20these,on%20AI%20and%20deep%20learning.





**One thing that's** clear from everything that has been written so far about the risks of AI - and a lot has been written - is that no one has all the answers

Another thing that's clear to me is that the future of AI is not as grim as some people think or as rosy as other think **It's the most** transformative innovation any of us will see in our lifetimes," ... "and a healthy public debate will depend on everyone being knowledgeable about the technology, its benefits, and its risks

Source: CNBC, Jul 2023: https://www.cnbc.com/2023/07/12/bill-gates-explains-why-we-shouldnt-be-afraid-of-ai.html

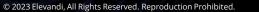




Al is already making it easier to search the Internet, helping us drive to our destinations while avoiding traffic in real time. Al is going to change the way we teach, learn, and help solve challenges like disease and climate change — and giving — giving the time to focus on the things that matter most to you personally

**Joe Biden** President, US

Source: The White House, Jun 2023: https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/06/20/remarks-by-president-biden-on-seizing-the-opportunities-and-managing-the-risks-of-artificial-intelligence/

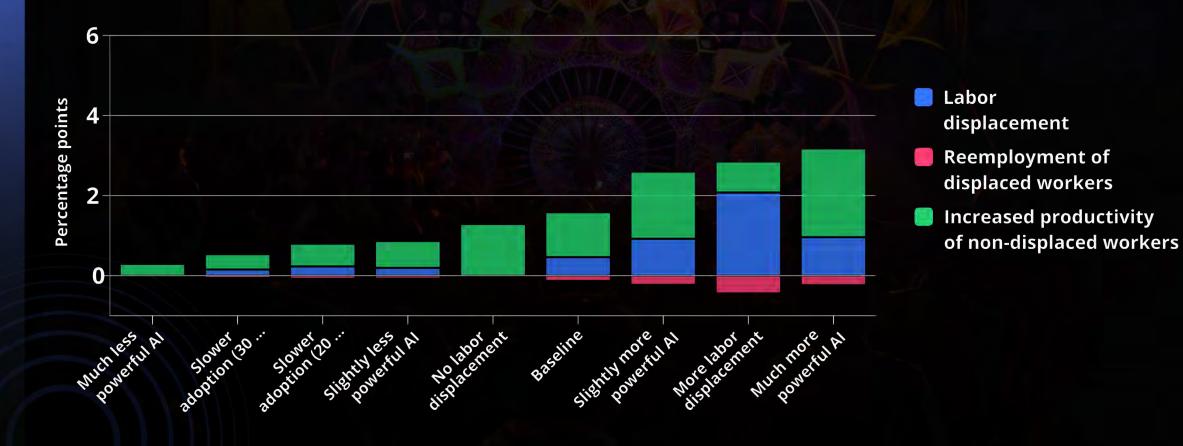




### Al's impact on productivity



Effect of AI adoption on annual labor productivity growth, 10-year adoption period

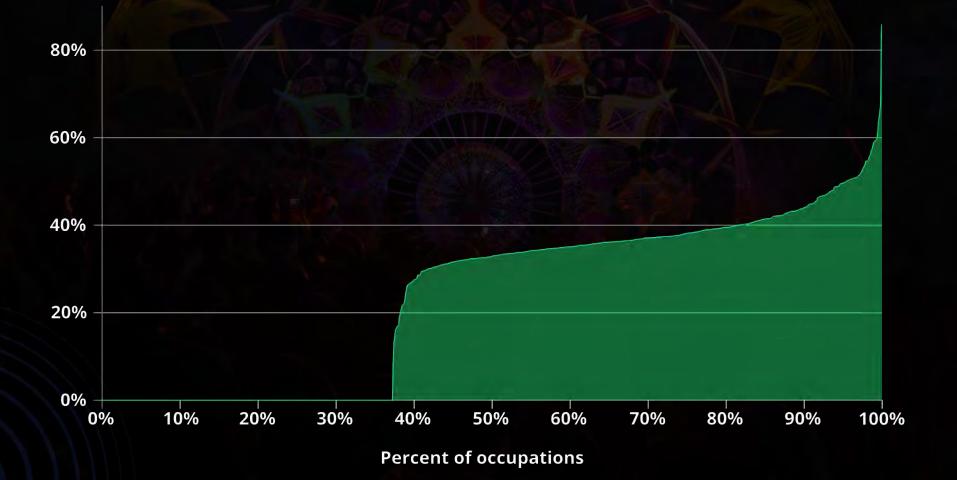


Source: Goldman Sachs Research, Apr 2023: https://www.goldmansachs.com/intelligence/pages/generative-ai-could-raise-global-gdp-by-7-percent.html



#### Jobs exposed to automation by Al



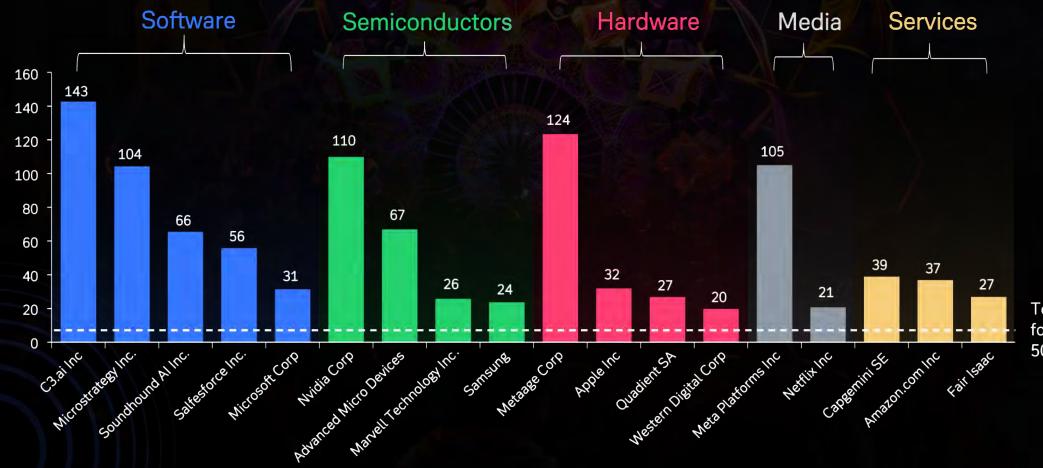


Source: Goldman Sachs Research, Apr 2023: https://www.goldmansachs.com/intelligence/pages/generative-ai-could-raise-global-gdp-by-7-percent.html



## Returns for AI exposed top performing firms





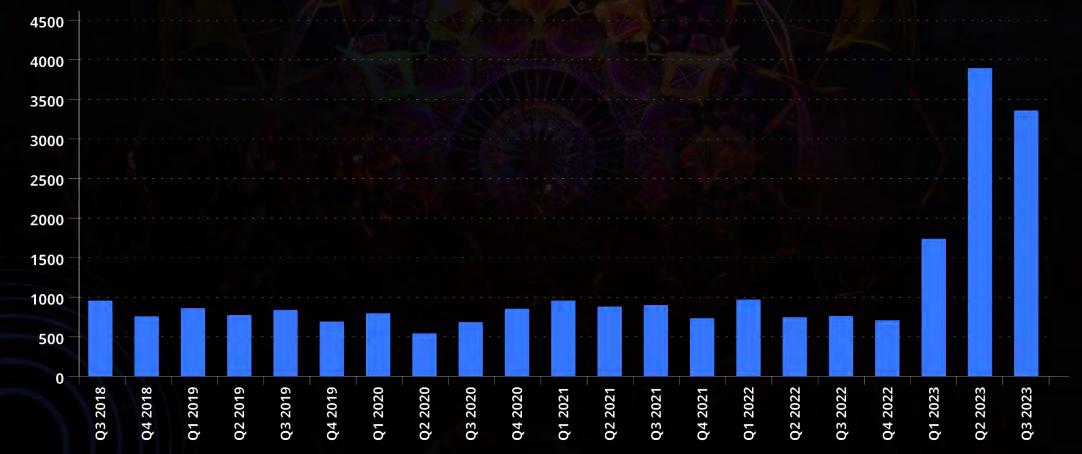
Source: Deutsche Bank, Bloomberg Finance LP, May 2023 (https://www.dbresearch.com/PROD/RPS\_EN-PROD/PROD000000000528291/AL in action%3A where is the smart money going%3F.pdf) \*Total return accounts for both income (interest or dividends) and capital appreciation. \*Updated 23 May 2023. © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited. Total return for the S&P 500

ELEVANDI

# Increased mentions of AI on earnings calls



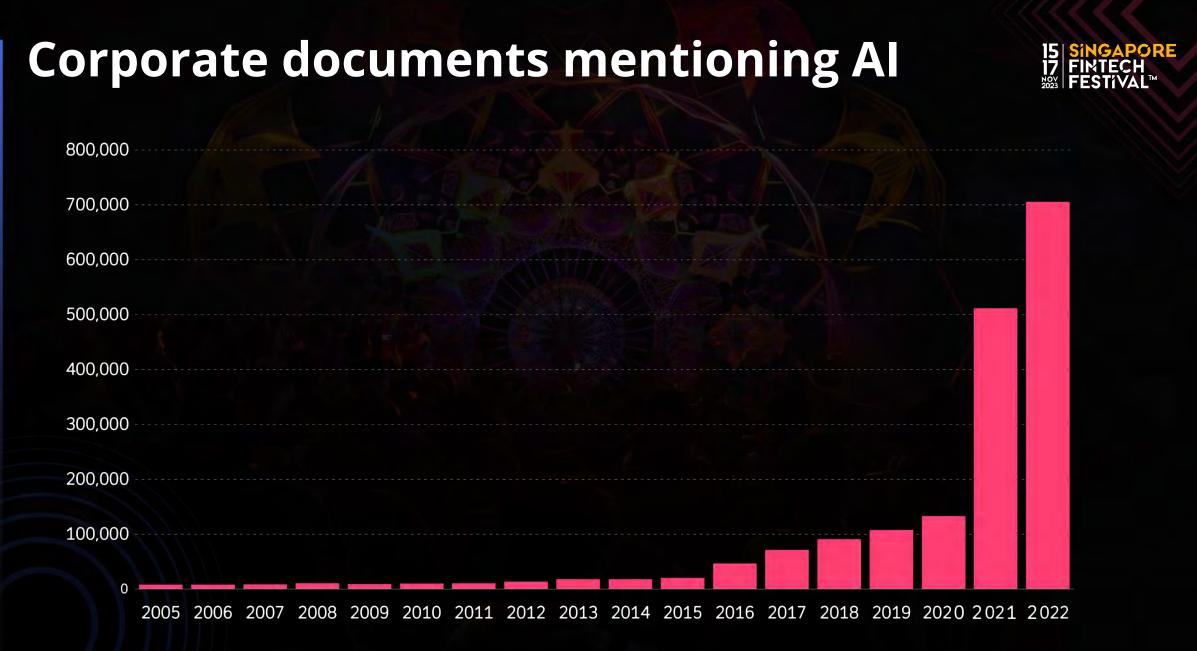
Mentions of AI on earnings calls



Source: Charles Schwab (Bloomberg), Aug 2023: https://www.schwab.com/learn/story/investing-artificial-intelligence-ai

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

#### ELEVANDI

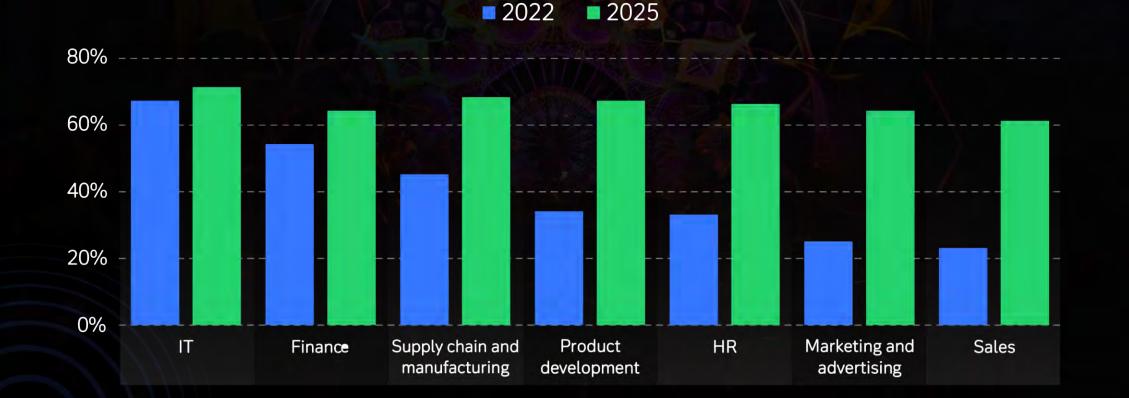


Source: Deutsche Bank (Bloomberg Finance LP), May 2023: https://www.dbresearch.com/PROD/PRO\_D0000000000528291/Al in action%3A where is the smart\_money\_going%3F.pdf



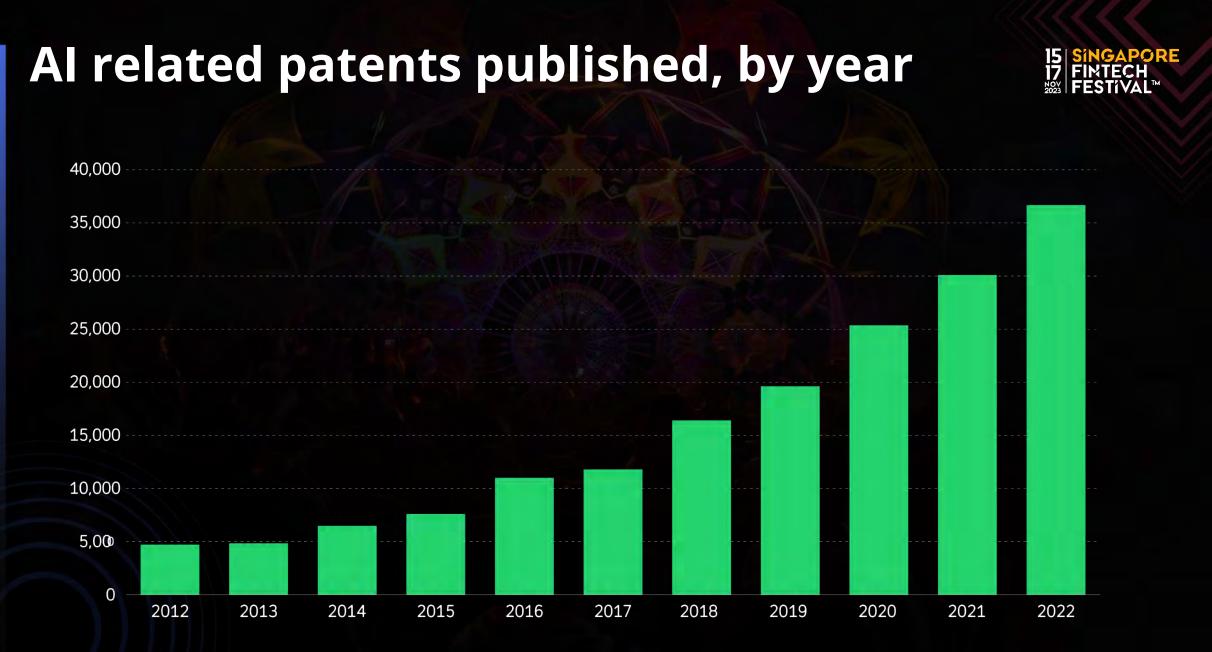
## Al usage by core business functions





Source: Deutsche Bank (Bloomberg Finance LP), May 2023: https://www.dbresearch.com/PROD/RPS\_EN-PROD/PROD000000000528291/Al\_in\_action%3A\_where\_is\_the\_smart\_money\_going%3F.pdf

#### ELEVANDI



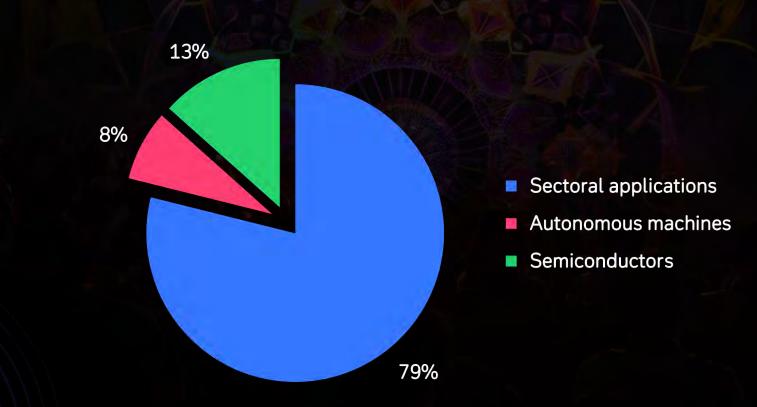
Source: Deutsche Bank (Bloomberg Finance LP), May 2023: https://www.dbresearch.com/PROD/RPS\_EN-PROD/PROD000000000528291/AL\_in\_action%3A\_where\_is\_the\_smart\_money\_going%3F.pdf

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

#### ELEVANDI

#### Al-related VC deals: 2012-2022



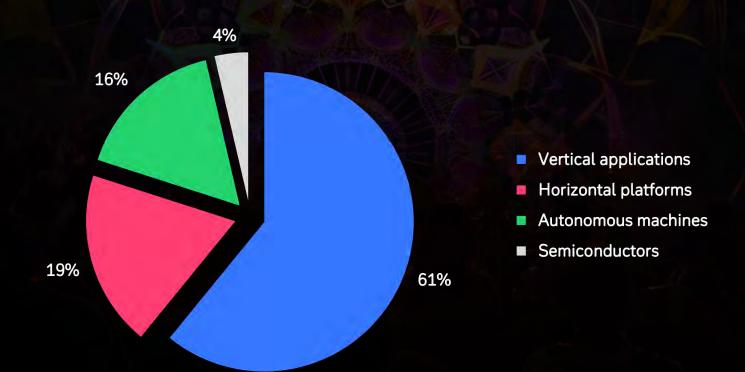


Source: Deutsche Bank (Bloomberg Finance LP), May 2023: https://www.dbresearch.com/PROD/RPS\_EN-PROD/PROD000000000528291/Al\_in\_action%3A\_where\_is\_the\_smart\_money\_going%3F.pdf



#### Al-related patents 2012-2022



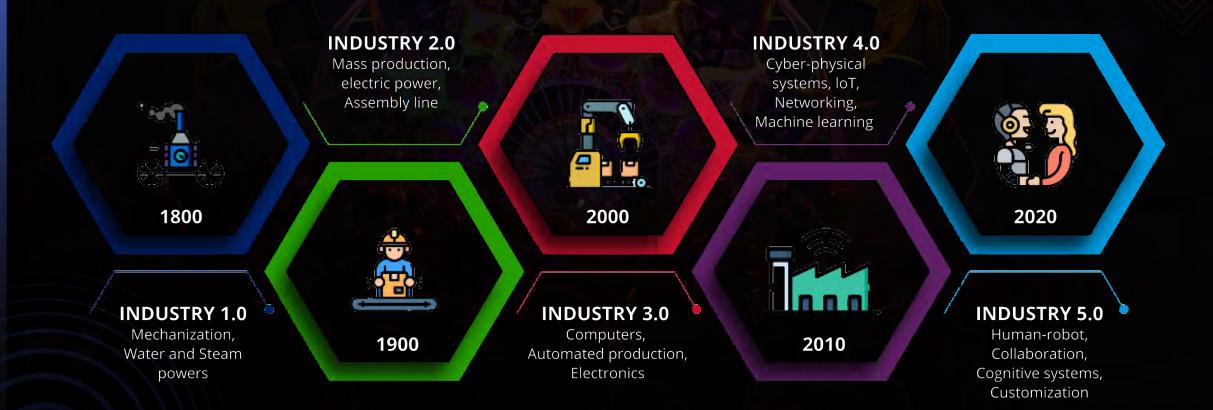


Source: Deutsche Bank (Bloomberg Finance LP), May 2023: https://www.dbresearch.com/PROD/RPS\_EN-PROD/PROD000000000528291/Al\_in\_action%3A\_where\_is\_the\_smart\_money\_going%3F.pdf



#### Five waves of the industrial revolution



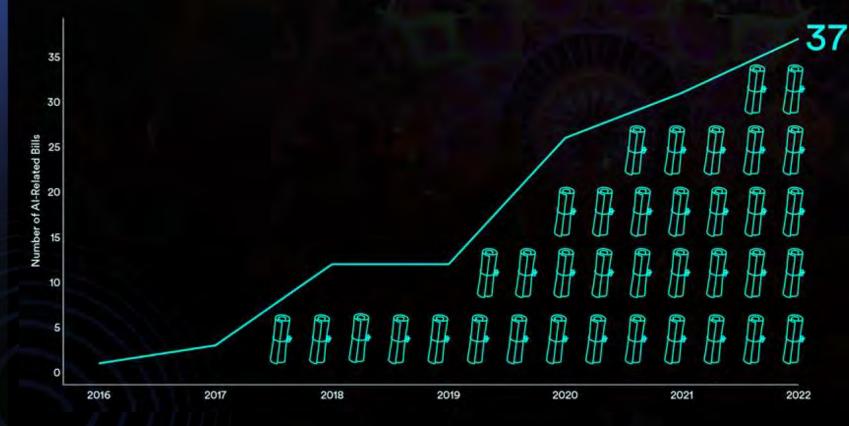


Source: BofA Global Research, KnowHow, Mar 2023: https://business.bofa.com/content/dam/flagship/bank-of-america-institute/transformation/me-myself-artificial-intelligence-march-2023.pdf © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

ELEVANDI

#### **Global push to regulate Al**

Number of AI-Related Bills Passed into Law Globally





Political bodies and policymakers are accelerating efforts to put laws in place controlling the potential risks of AI and making developers accountable for the actions of their systems.

"

Source: Al Index,2022 | Chart:2023 Al Index Report, Apr 2023: https://hai.stanford.edu/news/2023-state-ai-14-charts © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

#### ELEVANDI

## **EU AI regulatory framework**



STEP1 STEP2 **STEP3** STEP4 E A high-risk Al It needs to undergo **Registration of** A declaration of system is the conformity stand-alone Al conformity needs developed. assessment and systems in an EU to be signed and the comply with AI Al system should database requirements\* bear the CE marking. The systen \*For some systems can be placed a notified body is on the market involved too.

GO BACK TO STEP 2

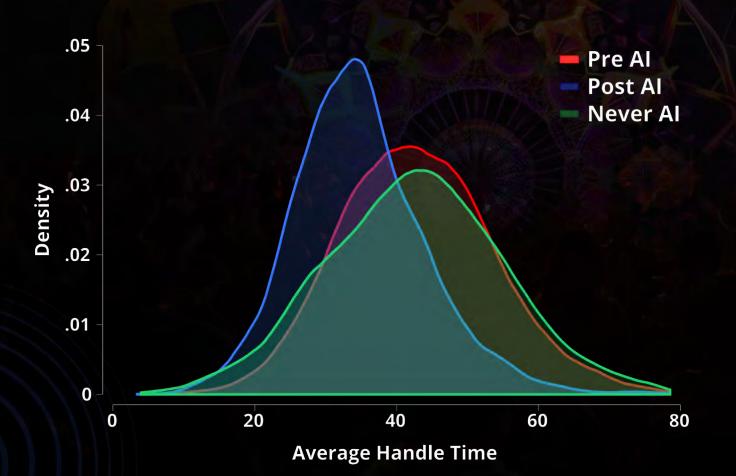
If substantial changes happen in the Al system's lifecycle

Source: European Commission (https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai)



## AI has increased productivity





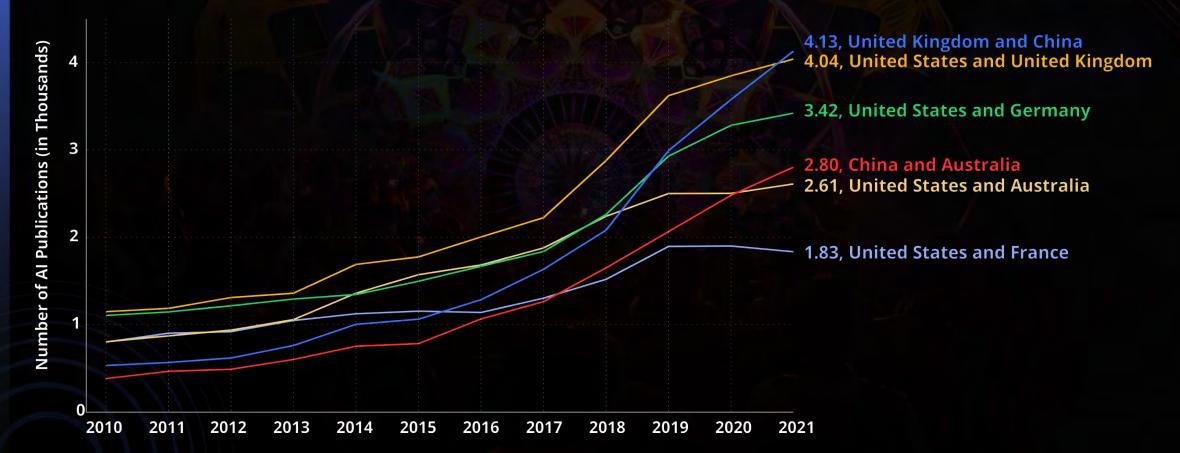
#### 

Pairing workers with an Al assistant proved much more effective with novice and low-skilled employees, according to the research. The technology's impact on highly skilled staff was minimal.

Source: World Economic Forum, May 2023: https://www.weforum.org/agenda/2023/05/top-story-plus-other-ai-stories-to-read-this-month/ © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.



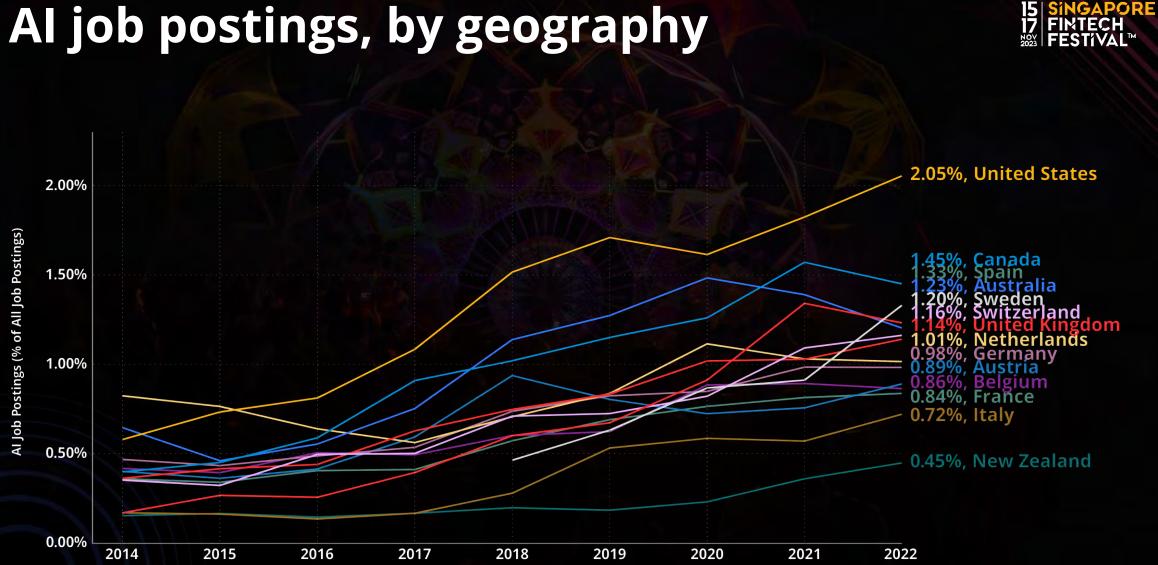
# Cross country collaboration in Al publications



Source: Center for Security and Emerging Technology, 2022 | Chart: 2023 AI Index Report, Apr 2023: https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI\_AI-Index-Report\_2023.pdf



NGAPORE

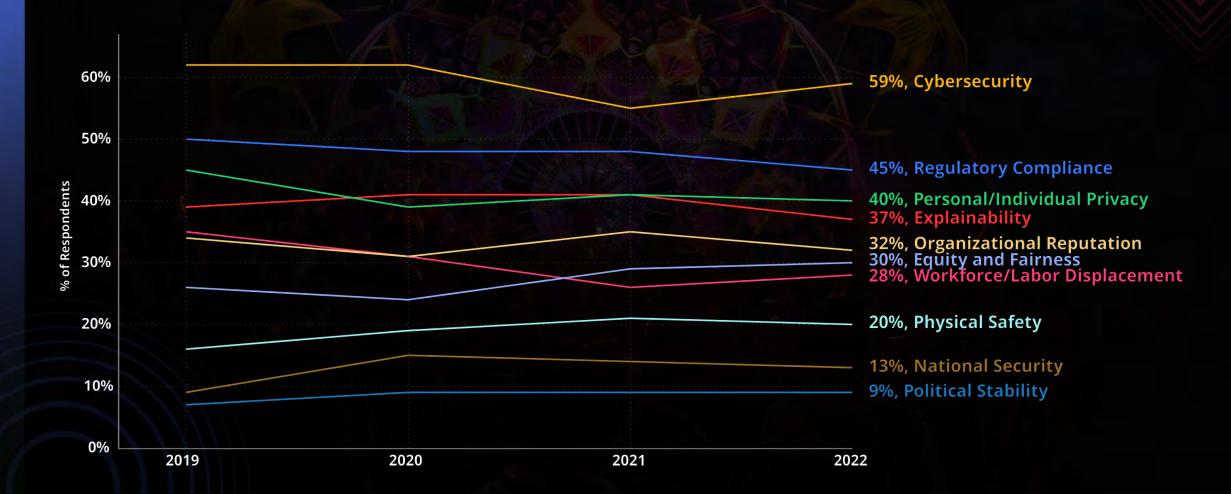


Source: Lightcast, 2022 | Chart: 2023 AI Index Report, Apr 2023: https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI\_AI-Index-Report\_2023.pdf

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

## **Organizational risk to adopting Al**

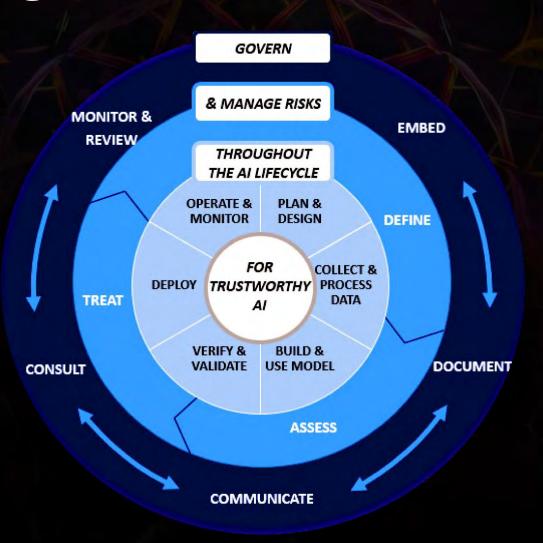




Source: McKinsey & Company Survey, 2022 | Chart: 2023 AI Index Report, Apr 2023: https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI\_AI-Index-Report\_2023.pdf © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

## Al risk-management framework

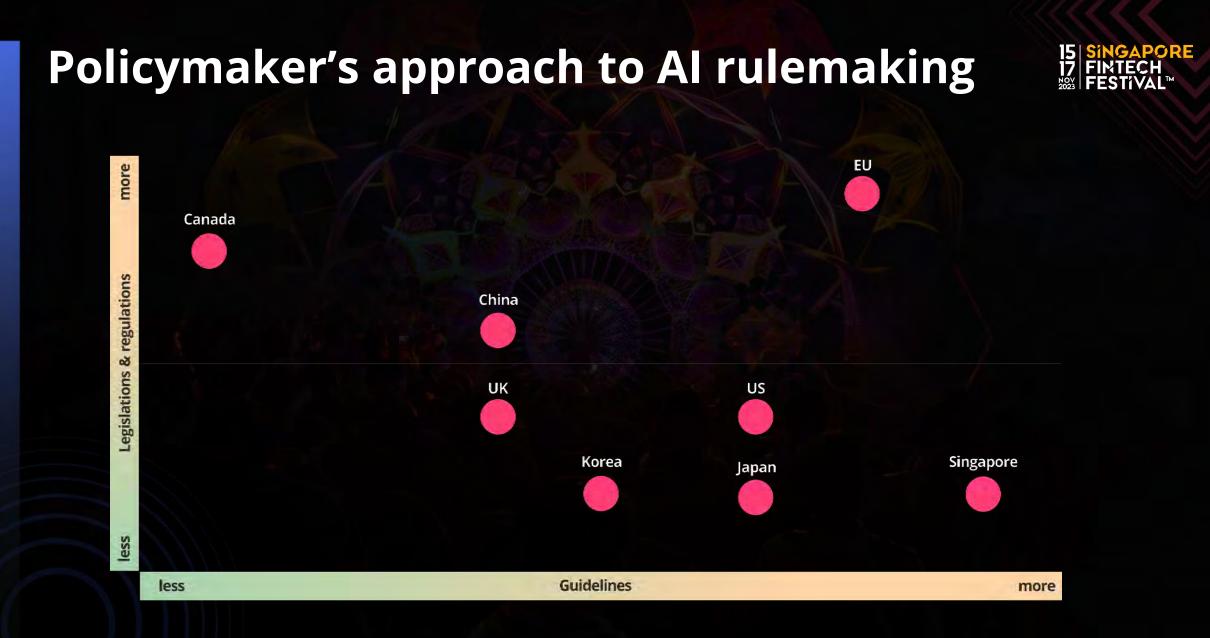




Source: OECD, Feb 2023: https://www.oecd-ilibrary.org/docserver/2448f04b-en.pdf?expires=1697018122&id=id&accname=guest&checksum=9A5012BBCBA6F47E80C9B0E54094887F

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

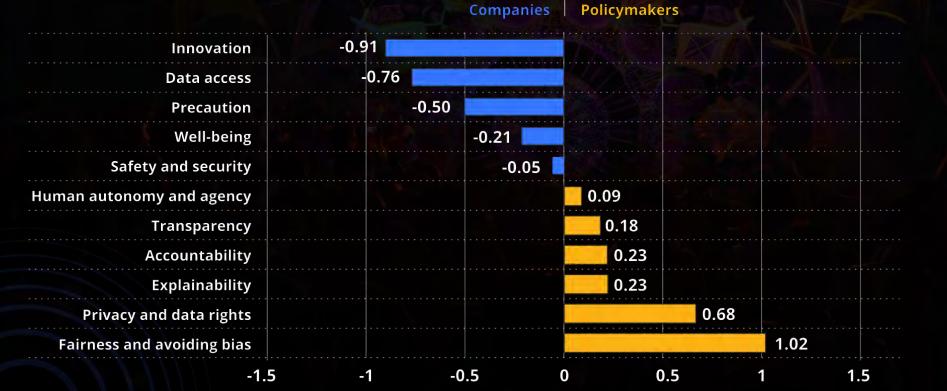




Source: EY Global, Sep 2023: https://assets.ey.com/content/dam/ey-sites/ey-com/en\_gl/topics/ai/ey-the-artificial-intelligence-ai-global-regulatory-landscape.pdf?download



# Al ethical principles: companies and policymakers



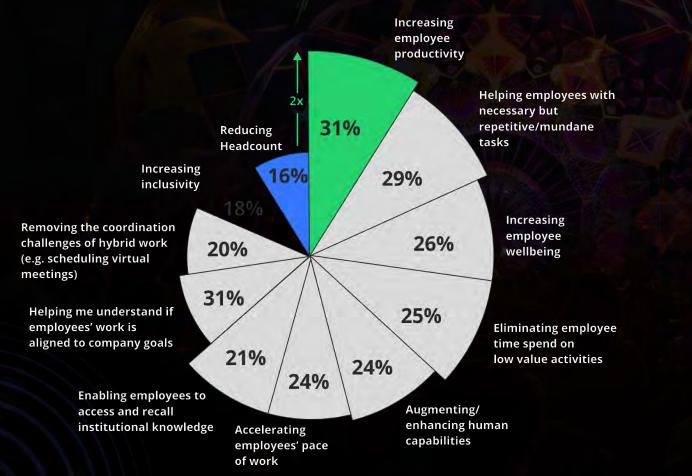
#### Positive values indicate ethical principles preferred by policymakers. Negative values indicate ethical principles preferred by companies.

ELEVANDI

Source: EY Global, Sep 2023: https://assets.ey.com/content/dam/ey-sites/ey-com/en\_gl/topics/ai/ey-the-artificial-intelligence-ai-global-regulatory-landscape.pdf?download

## Al's productivity promise





A new Al-employee alliance is emerging

of people would delegate as much work as possible to AI to lessen their workloads.

70%

Business leaders want to empower people with AI rather than replace them - they're 2x more interested in increasing productivity than cutting headcount

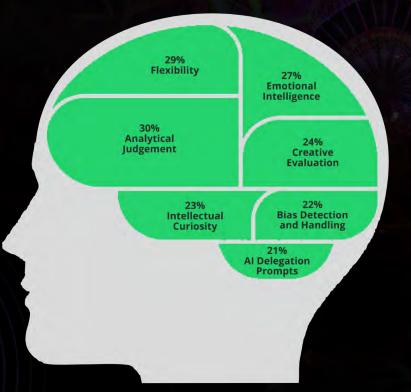
Source: Microsoft, Aug 2023: https://news.microsoft.com/en-xm/2023/08/02/microsofts-2023-work-trend-index-report-reveals-impact-of-digital-debt-on-innovation-emphasizes-need-for-ai-proficiency-for-every-employee/



### Need for AI proficiency for every employee



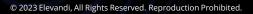
## New skills for a new way of working with AI !



## 80%

of leaders say employees they hire will need new skills to be prepared for the growth of Al.

Source: Microsoft, Aug 2023: https://news.microsoft.com/en-xm/2023/08/02/microsofts-2023-work-trend-index-report-reveals-impact-of-digital-debt-on-innovation-emphasizes-need-for-ai-proficiency-for-every-employee/

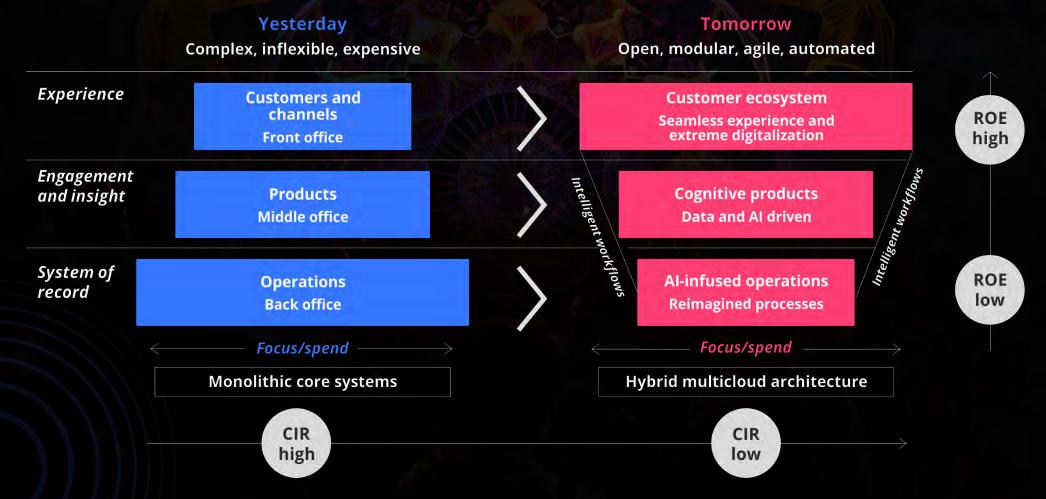




## The future of banking



Exponential technology helps to invert the traditional business architecture



Source: IBM, Jan 2023: https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/2023-banking-financial-markets-outlook

© 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

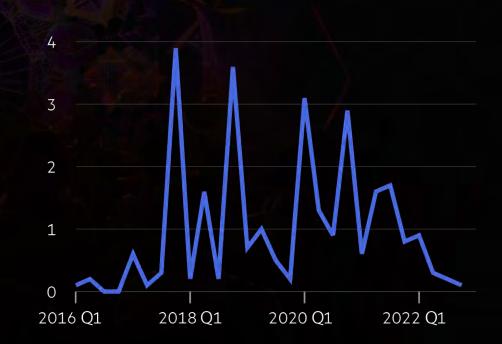
## US investors cool on China tech deals



China venture capital deal activity with US investor participation



Al and machine learning deals, \$bn



Source: FT Pitchbook, Aug 2023: https://www.ft.com/content/8de1cd77-fe94-45d5-aa23-09faf7f89f15 © 2023 Elevandi, All Rights Reserved. Reproduction Prohibited.

Insights

#### ELEVANDI



BREAKING BARRIERS: THE INTERSECTION OF GENDER AND DIVERSITY IN ESG

Written by Christine Amour-Levar

START READING >



DRIVING INNOVATION FOR A MORE INCLUSIVE FUTURE

In a world where financial services are the lifeblood of thriving economies, the power of ...

START READING ->



BRIDGING THE FINTECH SKILL GAP WITH THE SHIME FRAMEWORK: SOLVING THE TALENT ISSUE

Written by CFTE co-founder Tram Anh Nguyen

START READING →



MULTILATERAL PLATFORMS: OPPORTUNITIES AND CHALLENGES IN ENHANCING CROSS-BORDER PAYMENTS

Enhancing cross-border payments requires a comprehensive approach involving both the ...



DRIVING FINANCIAL INCLUSION IN AFRICA

Africa's FinTechs can stretch beyond payments solutions to microfinance and insurance New ... START READING →







ELEVANDI



RESPONSIBLE AI IN FINANCE: NAVIGATING THE ETHICS OF GENERATIVE AI

Navigating GenAl: Balancing excitement and risks in transformative industry disruption ...

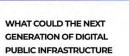
START READING >



SHAPING TOMORROW'S DIGITAL ASSET LANDSCAPE TOGETHER

Digital assets are currently at a transformative juncture, with their future largely ...

START READING



LOOK LIKE? Written by Jael Tan, Head of Government &

International Relations, Elevandi

START READING →

