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Generative AI

Productivity's Potential, From Macro to Micro

Key Points:

- **Surging use of Generative AI across a broad scope of industries and occupations highlights the potential to boost historically low Productivity.**
- **Nearly a third of each job's functions on average are exposed to AI. And with 67% adoption in 5 years, ~20% of each job could be leveraged to enhance Productivity with Generative AI by 2028.**
- **Introducing the Evercore AI Impact Navigator, estimating Generative AI exposure by company across S&P 500 stocks (p. 28-39).**

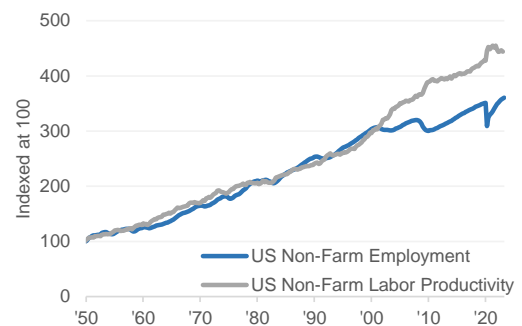
AI Everywhere. Surging interest in Generative AI has swept across Corporate America. Exponentially increasing compute power has enabled AI to become more accurate at performing complex tasks. From simple pattern recognition in the Post-War years, developments have enabled AI to now help debug code, summarize meetings, and aid drug discovery among countless other applications. Every job has at least some exposure to AI which could boost efficiency and improve the future of work (Figure 1).

Every job exposed. EVR ISI Strategy estimates Generative AI exposures across 800+ U.S. occupations, in 250+ subsectors and 20 broad industries. While every job has at least 10% exposure – highlighting the breadth of potential adoption – on average 32% of each job's functions are exposed to AI. Higher exposure in service sectors such as Finance and Tech could spur historically weak productivity growth. Especially pertinent as tight labor markets are likely to persist due to evolving [Demographics](#).

Base Case 67% AI Adoption in 5 years. Technological revolutions don't happen overnight. While the cellphone was invented in the early 70s, it took a decade+ for commercial viability. So too for the world wide web, invented in 1989, but yet to reach full adoption. Evercore ISI Strategy estimates 67% Generative AI adoption over the next 5 years, suggesting 21% of each job could be leveraged by AI by 2028. Accelerating digitization post-Pandemic could push adoption to a Bull case 88%. Conversely, increasing regulation and social/statistical bias could limit adoption to 15% in the Bear case.

Evercore's AI Impact Navigator. At the Micro level, EVR ISI Strategy estimates the Generative AI exposure for each company in the S&P 500 by modelling the breakdown of its labor force across AI exposed occupations (p. 30-39). For example, Starbucks' potential for AI leverage is lower than that of Verizon's given its workforce is highly concentrated in low-AI-exposed Food Prep occupations, while Verizon is more concentrated in Sales and Office related roles (p.29-30). **Please [email us](#), or your Evercore contact, if you would like a copy of [Evercore's AI Company Impact Navigator Model](#).**

Figure 1: The Future of Work: Jobs Growing Alongside Productivity



Source: Haver, Evercore ISI Research

EVERCORE ISI

AI Impact Navigator

THE MACRO FRAMEWORK

160M+ JOBS
250+ INDUSTRIES
800+ OCCUPATIONS

52 ABILITIES
41 ACTIVITIES

HEATMAP OF 52 ABILITIES FOR ONE OCCUPATION

Oral Comprehension	Dynamic Strength	Hear Vision	Trunk Strength	Inductive Reasoning	Arm-Hand Steadiness	Gross Body Equilibrium	Manual Dexterity
		Problem Sensitivity	Deductive Reasoning	Selective Attention	Visual Spatial Ability	Fluency of Ideas	Originality
Stamina	Explosive Strength		Speech Recognition	Perceptual Speed	Response Orientation	Speed of Limb	Catch
Oral Expression	Gross Body Coordination	Far Vision	Finger Dexterity	Visual Attention	Control Precision	Hand Steadiness	Dyslexia
		Speech Clarity	Information Processing	Written Expression	Reaction Time	Memory	Mathematics
Static Strength	Balance Flexibility	Multi-limb Coordination	Written Comprehension	Flexibility of Thought	Depth Perception	Visual Perception	Perceptual Speed

SOURCE: EVERCORE ISI RESEARCH

BOTTOM LINE...

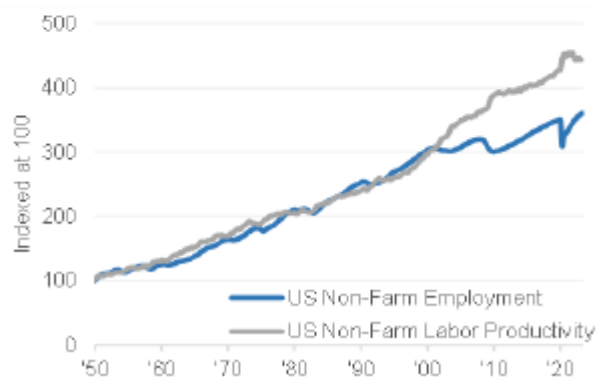
EVERY JOB IS AT LEAST
10% EXPOSED ...

32% OF JOB
FUNCTIONS ARE
EXPOSED TO AI
ON AVERAGE

...FEW HAVE GREATER
THAN 50% EXPOSURE

BUT THE ECONOMY IS NATURALLY DYNAMIC

- INNOVATION AND PRODUCTIVITY HAPPEN ALONGSIDE OF JOB GROWTH
- 85% OF ORGANIZATIONS BELIEVE ADOPTING NEW TECHNOLOGIES WILL DRIVE TRANSFORMATION
- 60% OF JOBS TODAY DID NOT EXIST IN 1940



SOURCE: HAVER, EVERCORE ISI RESEARCH

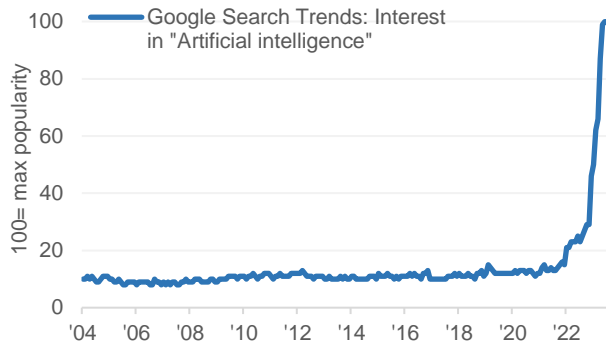
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AI – Everything, Everywhere, All at Once

The transformational impact of ChatGPT's launch late last year has kickstarted discussions ranging from the boardrooms of some, really all, of the largest global companies down to [Central Park Dogwalkers](#).

Figure 2: AI - Everything, Everywhere, All at Once

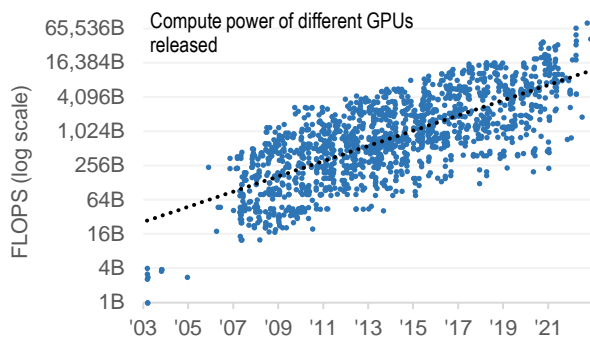


Interest in capturing the investing and economic upside from rising productivity set against the social caution evinced regarding the potential “Black Mirror” dystopia-type disruptive forces that could ensue have captivated everyone’s attention and imagination (Figure 2).

Source: Google Trends, Evercore ISI Research

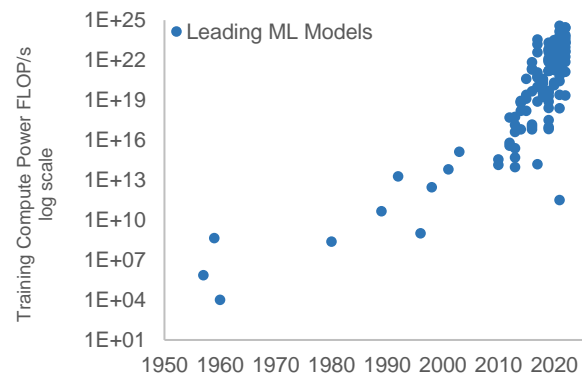
Exponentially increasing compute power (Figure 3) has enabled AI’s transformation. 60 years ago, machine learning models ran on less than 1,000 parameters and trained on under 500 million floating point operations (FLOP, a measure of performance for a computational device). Exponential growth in both have meant that some models today are now pushing 1 trillion parameters and around 1 septillion operations (a trillion trillions, Figure 4).

Figure 3: Moore’s Law – Exponential Growth in Computing Power



FLOPS are floating point operations per second.
Source: Stanford AI Index¹, Evercore ISI Research

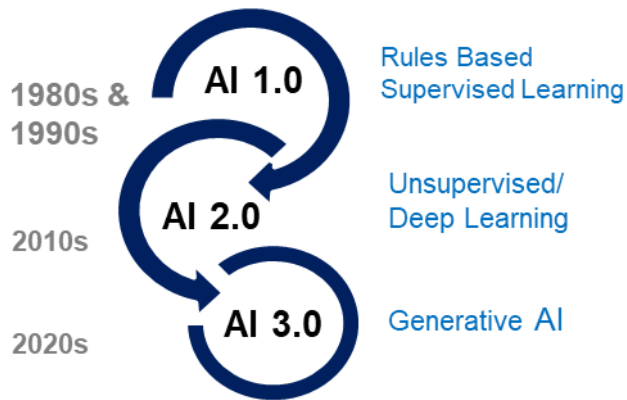
Figure 4: Significant Machine Learning Models are Using Exponentially More Compute Power



FLOPS are floating point operations per second. Source: Stanford AI Index, Evercore ISI Research

¹ a.Nestor Maslej, Loredana Fattorini, et al., “The AI Index 2023 Annual Report,” AI Index Steering Committee, Institute for Human-Centered AI, Stanford University, Stanford, CA, April 2023 (https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI_AI-Index-Report_2023.pdf) (“Stanford AI Index”).

Figure 5: AI's Transformation



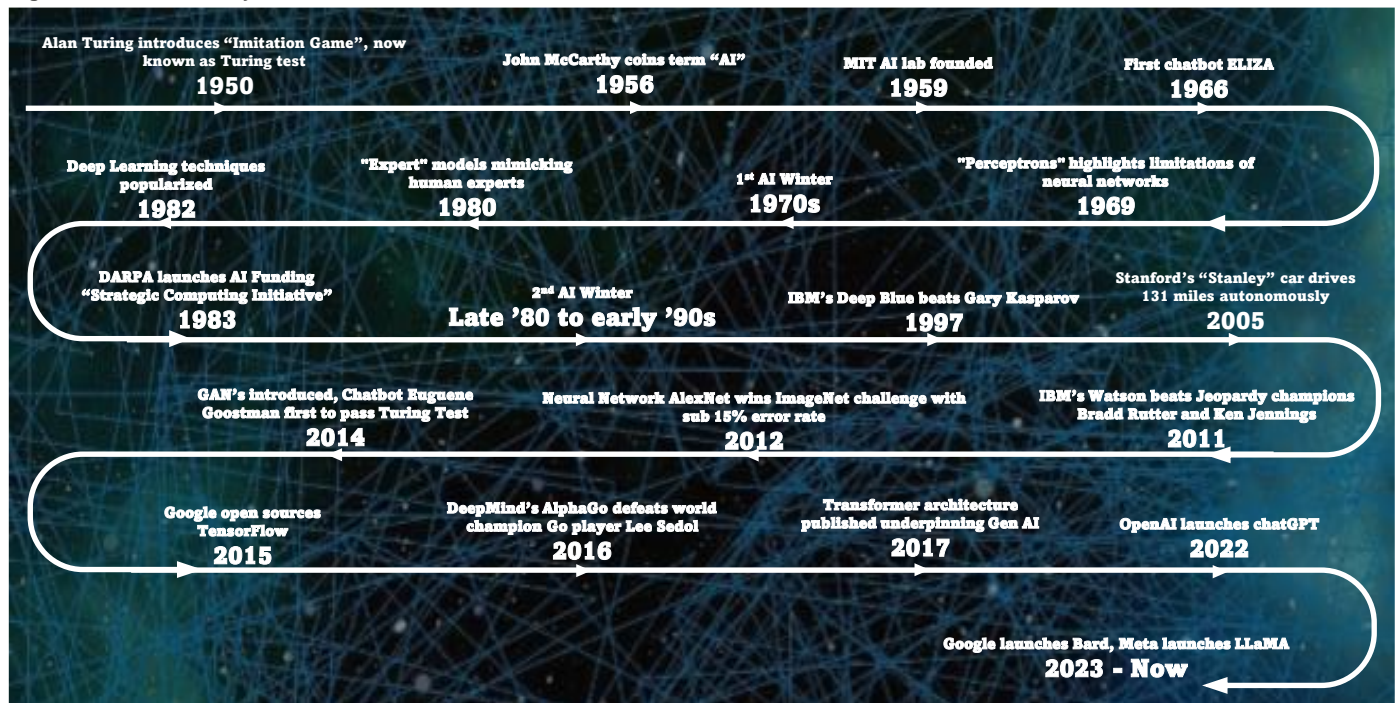
The development of rules-based, supervised, AI models since the 1950s eventually led to what David Shrier, Professor of Practice at Imperial College Business School, and Managing Member of VisionaryFuture and consultant to Evercore ISI views as being instrumental to the earliest AI 1.0 applications in the 1980s - 90s (Figure 5).

Source: VisionaryFuture, Evercore ISI Research

Shrier flags the important emergence of unsupervised learning techniques marking AI 2.0 in the 2010s, facilitated by deep learning and neural networks which have been the foundational building blocks of AI today. Deep learning accelerated the impact and adoption, particularly after Google open-sourced its TensorFlow library in 2015.

Underpinned by AI 2.0, increasingly accurate Generative AI 3.0 will have an even broader impact. The deployment of AI technology – through the emergence of Large Language Model (LLM) systems such as ChatGPT, Microsoft's new Bing, and Google Bard – do not require the same capital intensity, with adoption accelerating as these are integrated into other software such as search engines and office productivity systems.

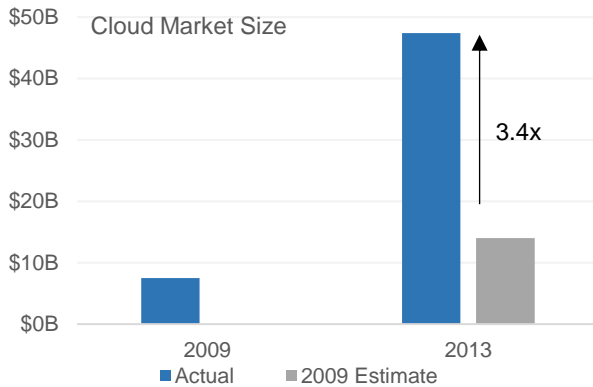
Figure 6: A Brief History of Notable AI Achievements



Source: Evercore ISI Research

Inherent in thinking about the emergence of AI 1.0, 2.0 and leading into 3.0 is the critical notion that, in David Shrier's research, Technology forecasting is inherently uncertain, with the range of outcomes proportionately wider as the evaluated time frame increases. Shrier cites Cloud adoption as a dramatic example of the pitfalls of underestimation. 5 year ahead forecasts for Cloud adoption in 2009 were expected to almost double to \$14.0B from 2009's \$7.5B.

Figure 7: Disruptive Technologies Can Deliver Unpredictable Market Outcomes."



The actual figure was \$47.4B (Figure 7). Put simply in Shrier's words, **'Disruptive technologies can deliver unpredictable market outcomes.'**

Source: Gartner, IDC, VisionaryFuture, Evercore ISI Research

It is therefore wholly unsurprising that interest in (and controversy around) the advent of AI 3.0, Generative AI, has been The Story of 2023.

AI's ability to perform enormously complex tasks increasingly successfully can now enable AI leveraged tools to improve productivity across a breadth of 800+ occupations in the U.S. economy.

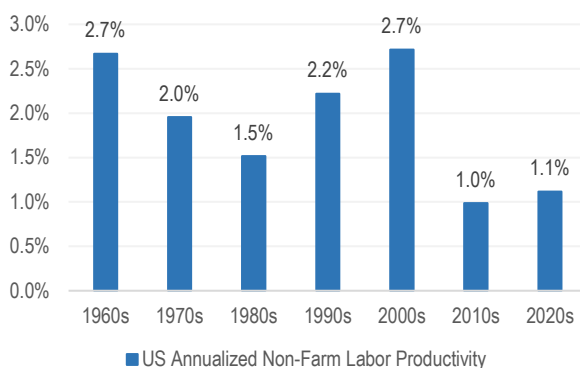
Using the U.S. Department of Labor's O*NET database, and methodology inspired by [Felten et. al \(2021\)](#)², EVR ISI Strategy estimates that Generative AI driven tools can leverage 32% of each job's function on average to improve efficiency.

32%

Of each job's functions on average across the U.S. economy is exposed to Generative AI

AI exposure skews to cognitive abilities such as Mathematical Reasoning and Written Expression as compared to Originality or physical attributes involved in manual labor such as Stamina or Gross Body Coordination.

Figure 8: Can Service Enhancing AI Lift Depressed Productivity?

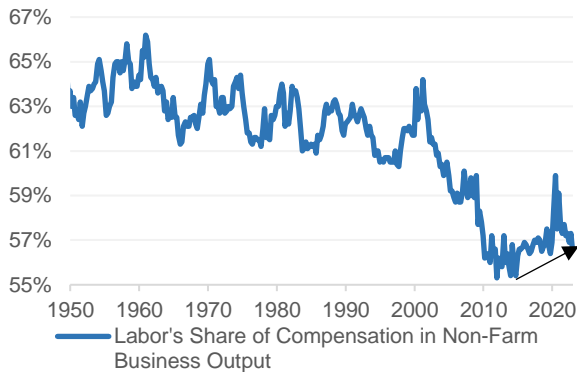


Effective implementation could enhance efficiency in the service sector which has historically been difficult to automate, potentially spurring productivity that has been depressed for more than a decade (Figure 8). Are the 2%+ annual productivity gains of the Internet Age ahead?

Source: Haver, Evercore ISI Research

² Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. *Strategic Management Journal*, 42 (12), 2195– 2217. <https://doi.org/10.1002/smj.3286>

Figure 9: Rising Workers' Bargaining Power After a Generation of Erosion Will Require Better Efficiency to Mitigate Rising Costs



Source: Haver, Evercore ISI Research

Generative AI's ability to drive productivity gains will be critical as the World deals with the imperatives of finding ways to mitigate secularly tighter labor markets in the decades ahead. Falling working age populations in the world's major economies, ageing societies, and labor's rising bargaining power (6/22, [Thematic Strategy: Global Demographics - Productivity & AI Investment Meet Labor Force Constraints](#), Figure 9) reinforce the concept that, while Demographics need not be (Slower Growth) Destiny, Generative AI is Demographic Destiny.

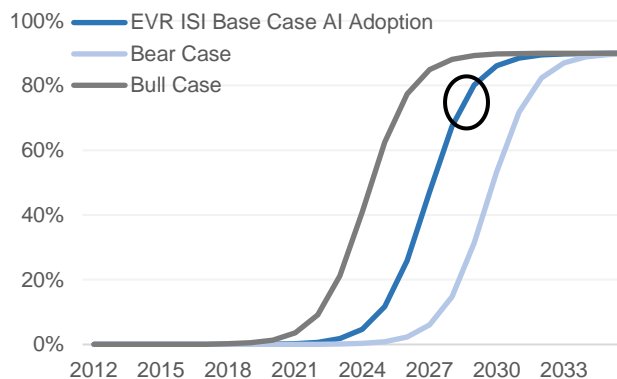
Technological transformations, though, rarely happen overnight. AI Adoption will take time and will be heavily influenced by the economic cycle, regulatory outlook, product commerciality, and overall diffusion across sectors.

Over the next five years, EVR ISI Strategy expects AI adoption to reach 67% in a Base case scenario, implying 21% of each job's function across the entirety of the U.S. Economy can be leveraged with Generative AI by 2028 (Figure 10 and 11).

A light regulatory "hand" and the psychology inherent in embracing the accelerating digitization since the Pandemic could push adoption to 88% under a Bull scenario, implying 28% AI leverage by 2028.

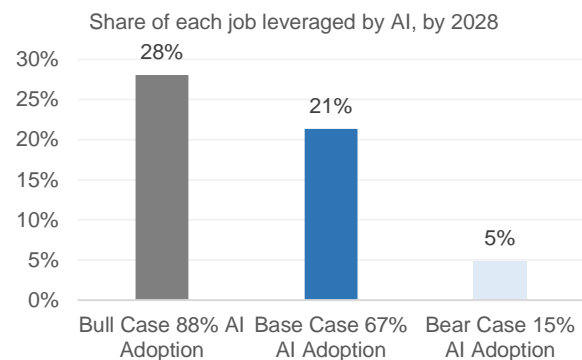
Conversely, increasing regulation amid IP disputes, deepfakes and the potential for disinformation alongside ingrained biases from past disruptive transformational periods could skew adoption lower to 15% by 2028 under EVR ISI Strategy's Bear case, which would suggest AI could be leveraged to only 5% of job functions on average.

Figure 10: 30+ Years On, The Internet Has Yet to Reach Full Adoption



Source: PewReserach, Evercore ISI Research

Figure 11: In EVR ISI Strategy's Base Case: About a Fifth of Each Job's Functions Could be Leveraged with AI by 2028

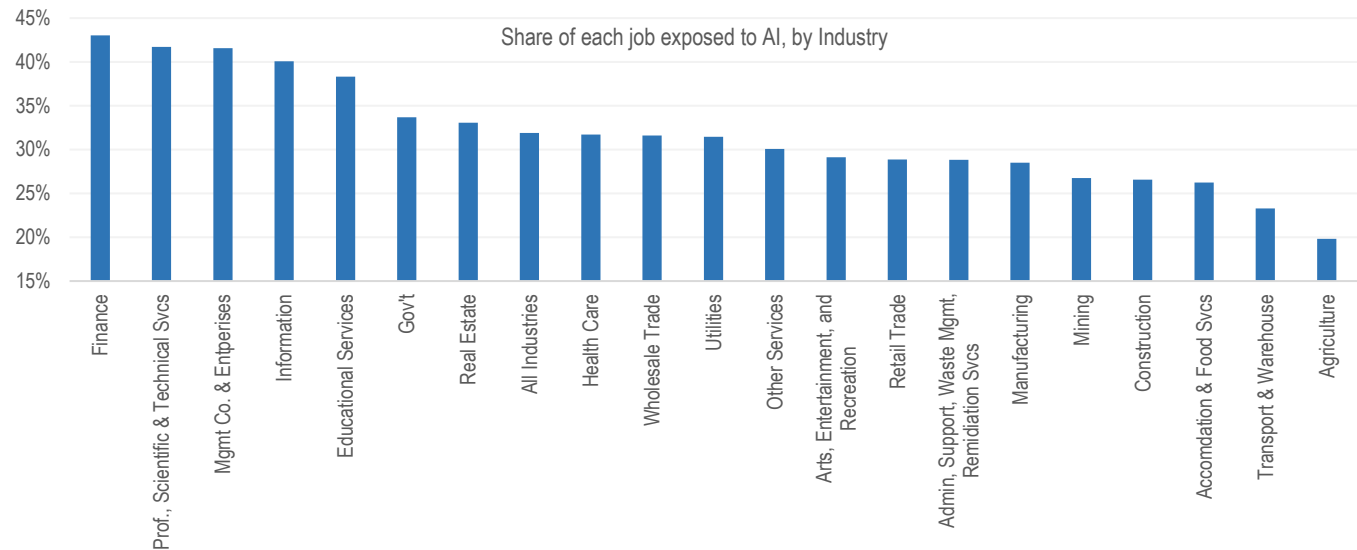


Source: Evercore ISI Research

Each company though can have highly variable AI exposures and differing adoption timelines. Unique business models rarely reflect those of the "average" business within the U.S. economy.

For example, manufacturing companies in sectors with lower AI exposure may be unable to leverage AI as much as some companies in the Financial Industry (Figure 12) even as these same manufacturers are fully committed to ever increasing Industrial Automation, which is distinct from Generative AI.

Figure 12: Share of each job's functions exposed to AI, by Industry



Source: O*NET, Bureau of Labor Statistics ("BLS"), Census Bureau, Felten et al. (2021), Evercore ISI Research

And within the broad Manufacturing industry, Chemicals, Semiconductors and Pharmaceuticals all have varying degrees of exposure based on the occupations they employ and abilities each person uses to perform their work activities.

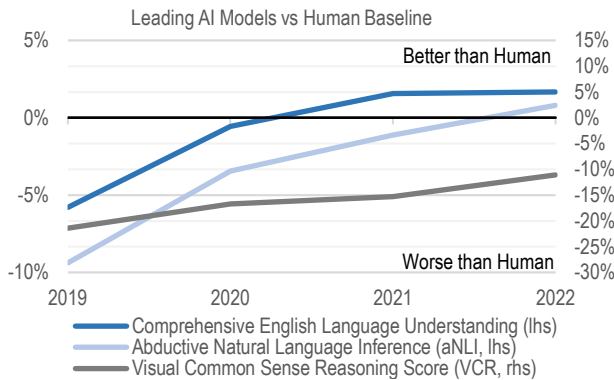
Using EVR ISI Strategy's proprietary framework, and estimating the breakdown of the underlying workforce for each firm, Generative AI exposures can be estimated for U.S. companies across 250+ NAICS subsectors. Examples for VZ and SBUX are shown on p.28-29 while a comprehensive list of the entire S&P 500 begins on p. 30.

AI Exposure Across the Economy

In 1950 Alan Turing introduced the “Imitation Game”, known today as the Turing Test. At its core, it questioned whether a conversation with a machine could be indiscernible from that with a human. Could machines imitate intelligent behavior?

Fast forward 73 years, the question is still asked. Structurally, Artificial Intelligence is still mostly artificial. It relies on estimating a set of probabilities to minimize error and arrive at “successful” responses. ChatGPT even opined, “As an AI language model, I don’t possess intelligence in the way humans do. My responses are the result of algorithms and patterns, not true understanding or consciousness.” Such a response drives both comfort and concern.

Figure 13: Artificial Intelligence Exceeds the Human Baseline in Some Tasks

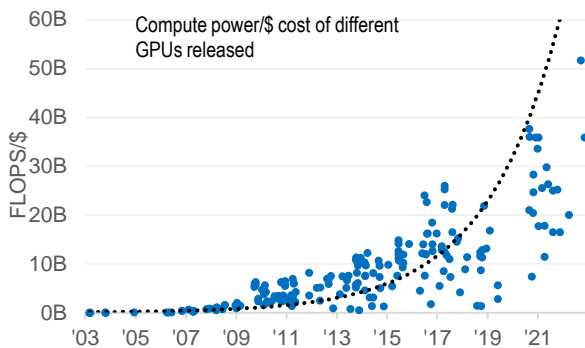


Note: aNLI is a form of natural language inference where conclusions must be drawn from a set of limited and uncertain premises. VCR is the ability to understand context for what is happening from just a picture. Source: Stanford AI Index, Evercore ISI Research

Intelligent or not, AI is an incredibly useful tool - imitating human behavior, as Alan Turing would describe, relatively well, and for some models better than most people (Figure 13).

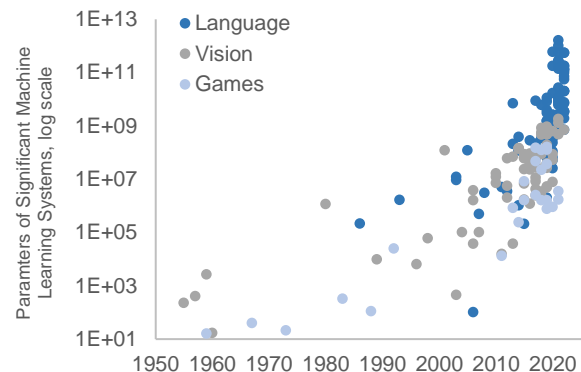
Improving costs has enabled exponentially more compute power per dollar. That has allowed for the development of increasingly more complex, and now language dominated, machine learning models (Figures 14 and 15).

Figure 14: Increasingly Affordable Compute Power...



FLOPS are floating point operations per second. Source: Stanford AI Index, Evercore ISI Research

Figure 15: ... Has Enabled Increasingly Complex Machine Learning Models



Source: Stanford AI Index, Evercore ISI Research

At their simplest level, AI tools can help draft human-like memos, debug code, and aid content creators, but at more complex levels, assist in writing computer programs, diagnosing diseases, improving predictive analytics and accelerating scientific development among countless other areas (many of which have yet to be identified). The ability to perform enormously complex tasks increasingly successfully can enable AI leveraged tools to improve productivity across a breadth of 800+ occupations in the U.S. economy.

Estimating AI Exposure

Using the U.S. Department of Labor's O*NET database, and methodology inspired by [Felten et. al \(2021\)](#)³, EVR ISI Strategy estimates AI driven tools can leverage 32% of each job's function on average to improve productivity.

In estimating this, each of the U.S. economy's 800+ occupations are broken down according to the 52 AI exposed abilities (Memorization, Information Ordering, Inductive Reasoning, Stamina, etc) people use to perform 41 work activities (Processing Information, Analyzing Data, Assisting/Caring for Others, Establishing/Maintaining Interpersonal Relationships, etc) in their jobs.

Jobs range from CEOs and Mathematicians who rely heavily on cognitive abilities to Dancers and Athletes who depend more on physical abilities to perform their job. Figure 16 below shows that 8.3% of a Mathematician's job requires Mathematical Reasoning (their most critical ability). On the other end of the spectrum, Oral Comprehension accounts for 3.6% of Athletes' job, alongside various strength-based characteristics.

Figure 16: AI Exposure for Select Jobs, based on Abilities and Activities

Occupation Breakdown By Job-Ability and Social/Physical Activities, % total						
Job Ability Rank	Mathematicians		Retail Salespersons		Athletes and Sports Competitors	
	Job Ability	Ability, % Total Job Requirements	Job Ability	Ability, % Total Job Requirements	Job Ability	Ability, % Total Job Requirements
1	Mathematical Reasoning	8.3%	Oral Expression	5.9%	Oral Comprehension	3.6%
2	Number Facility	6.5%	Oral Comprehension	5.4%	Stamina	3.6%
3	Deductive Reasoning	6.0%	Speech Recognition	5.0%	Oral Expression	3.4%
4	Oral Comprehension	5.9%	Speech Clarity	4.3%	Static Strength	3.4%
5	Inductive Reasoning	5.7%	Problem Sensitivity	3.9%	Dynamic Strength	3.3%
6	Written Comprehension	5.5%	Written Comprehensic	3.4%	Explosive Strength	3.3%
7	Oral Expression	5.4%	Written Expression	3.4%	Gross Body Coordination	3.2%
8	Information Ordering	5.2%	Near Vision	3.4%	Extent Flexibility	2.9%
9	Written Expression	4.9%	Information Ordering	3.3%	Near Vision	2.8%
10	Fluency of Ideas	4.9%	Deductive Reasoning	3.3%	Problem Sensitivity	2.7%
A	Abilities Exposed to AI	60%		46%		30%
B	Social & Physical Activities, % Total Activities	12%		34%		31%
A*(1-B)	Job Exposure to AI	53%		31%		21%

Source: O*NET, Felten et al. (2021), Evercore ISI Research

The share of abilities exposed to AI for each job are estimated by a weighted sum of each of the job's 52 abilities and their related AI exposure based on [Felten et. al \(2021\)](#) estimates using extensive survey data (Figure 17, next page). Jobs with higher levels of cognitive abilities tend to have a higher AI exposure. Physical abilities more exposed to industrial automation rather than specifically AI, and social ability Oral Expression, (28/52 O*NET Abilities) are set to an AI exposure score of 0%.

Ability-based AI exposures (Row A, Figure 16) are then adjusted lower by the degree of social and physical activities (Row B, Figure 16 above) inherent in every job. In doing so, we assume parts of jobs that involve highly social and physical tasks such as Resolving Conflicts and Negotiating with Others, Handling and Moving Objects or Coaching and Developing Others (a total 13/41 O*NET activities) are unlikely to be exposed to Generative AI.

While 60% of the abilities Mathematicians use in their job is exposed to AI, 12% of Mathematicians' jobs on average involve highly sociable/physical activities. As such EVR ISI Strategy expects 53% of a Mathematician's total job to be exposed to AI, among the highest across 800+ occupations.

Athletes meanwhile have a lower AI exposure given the nature of their jobs, being more exposed to 1) strength-based abilities and 2) a higher degree of social//physical work activities. (Rows A & B in Figure 16 above).

³ Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. *Strategic Management Journal*, 42 (12), 2195– 2217. <https://doi.org/10.1002/smj.3286>

Figure 17: Each Occupation's Ability, Ranked by Exposure to AI

AI Exposure	AI Rank	Ability	Description
<div>High</div> <div>↓</div> <div>Low</div>	1	Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
	2	Memorization	The ability to remember information such as words, numbers, pictures, and procedures.
	3	Speed of Closure	The ability to quickly make sense of, combine, and organize information into meaningful patterns.
	4	Flexibility of Closure	The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.
	5	Category Flexibility	The ability to generate or use different sets of rules for combining or grouping things in different ways.
	6	Perceptual Speed	The ability to quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.
	7	Selective Attention	The ability to concentrate on a task over a period of time without being distracted.
	8	Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.
	9	Speech Recognition	The ability to identify and understand the speech of another person.
	10	Inductive Reasoning	The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
	11	Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
	12	Auditory Attention	The ability to focus on a single source of sound in the presence of other distracting sounds.
	13	Time Sharing	The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).
	14	Speech Clarity	The ability to speak clearly so others can understand you.
	15	Written Comprehension	The ability to read and understand information and ideas presented in writing.
	16	Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
	17	Mathematical Reasoning	The ability to choose the right mathematical methods or formulas to solve a problem.
	18	Number Facility	The ability to add, subtract, multiply, or divide quickly and correctly.
	19	Written Expression	The ability to communicate information and ideas in writing so others will understand.
	20	Visualization	The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.
	21	Hearing Sensitivity	The ability to detect or tell the differences between sounds that vary in pitch and loudness.
	22	Fluency of Ideas	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
	23	Sound Localization	The ability to tell the direction from which a sound originated.
	24	Originality	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
	25	Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
	26	Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
	27	Depth Perception	The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object.
	28	Dynamic Flexibility	The ability to quickly and repeatedly bend, stretch, twist, or reach out with your body, arms, and/or legs.
	29	Dynamic Strength	The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue.
	30	Explosive Strength	The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object.
	31	Extent Flexibility	The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.
	32	Far Vision	The ability to see details at a distance.
	33	Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
	34	Glare Sensitivity	The ability to see objects in the presence of glare or bright lighting.
	35	Gross Body Coordination	The ability to coordinate the movement of your arms, legs, and torso together when the whole body is in motion.
	36	Gross Body Equilibrium	The ability to keep or regain your body balance or stay upright when in an unstable position.
	37	Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
	38	Multilimb Coordination	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.
	39	Near Vision	The ability to see details at close range (within a few feet of the observer).
	40	Night Vision	The ability to see under low light conditions.
	41	Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
	42	Peripheral Vision	The ability to see objects or movement of objects to one's side when the eyes are looking ahead.
	43	Rate Control	The ability to time your movements or the movement of a piece of equipment in anticipation of changes in the speed and/or direction of a moving object or scene.
	44	Reaction Time	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.
	45	Response Orientation	The ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.
	46	Spatial Orientation	The ability to know your location in relation to the environment or to know where other objects are in relation to you.
	47	Speed of Limb Movement	The ability to quickly move the arms and legs.
	48	Stamina	The ability to exert yourself physically over long periods of time without getting winded or out of breath.
	49	Static Strength	The ability to exert maximum muscle force to lift, push, pull, or carry objects.
	50	Trunk Strength	The ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing.
	51	Visual Color Discrimination	The ability to match or detect differences between colors, including shades of color and brightness.
	52	Wrist-Finger Speed	The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.

Source: O*NET, Felten et al. (2021), Evercore ISI Research

Put together, every job in the U.S. has at least 10% of its functions exposed to AI, but barely any have an exposure of more than 50% (Figure 18), suggesting both the breadth of implication increasing AI adoption could have on the future of work but also the limitations of fully replacing workers.

100%

Of the jobs in the U.S. have at least 10% of their functions exposed to AI

60%

Of the jobs today did not exist in 1940, (Autor 2022)

Over 85% of the organizations surveyed in [World Economic Forum's Future of Work 2023 Report](#) mentioned that increasing adoption of new technologies and broadening digitization will drive transformation. As the nature of the growth continually changes, so will the demand for new skills as “old” jobs both evolve and “new” previously unimagined careers are created.

Indeed, the economy is naturally dynamic.

Photographers can now capture photos digitally, and increasingly on their smartphones, rather than on film. That has meant that they need know how to both take pictures in different environments but also better use software to edit or reimagine photos for specific purposes.

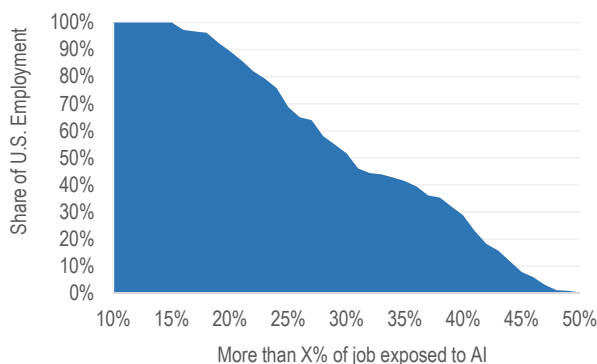
Fitness trainers and coaches can also increasingly use AI to develop personalized workout routines, track clients' progress and advise on goal-oriented diets.

Bank tellers now provide more personalized services to help customers assess, understand, and ultimately recommend the increasingly tech-enabled financial services many banks offer.

Social media influencers, drone operators, cybersecurity analysts, clean energy technicians, AI ethicists, and E-sports players and coaches are also a few of the many other jobs created over the past few years.

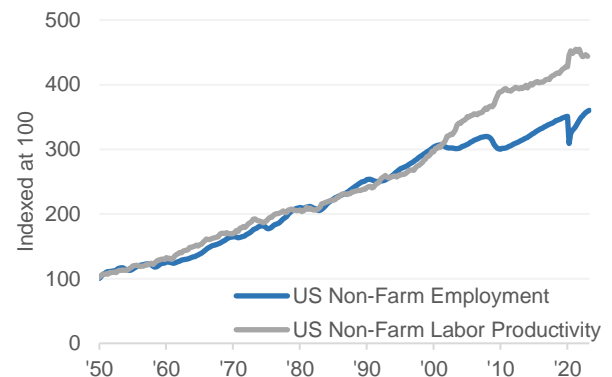
Estimates by [Autor \(2022\)](#) suggest that about 60% of the job titles today did not exist in 1940. Indeed, innovation and the four-fold increase in U.S. labor productivity gain since 1950 has happened alongside continued job growth (Figure 19).

Figure 18: Every Job in the U.S. Has at Least a 10% Exposure to AI, A Select Few Have More Than 50%



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

Figure 19: The Future of Work: Jobs Grow Alongside Productivity



Source: Haver, Evercore ISI Research

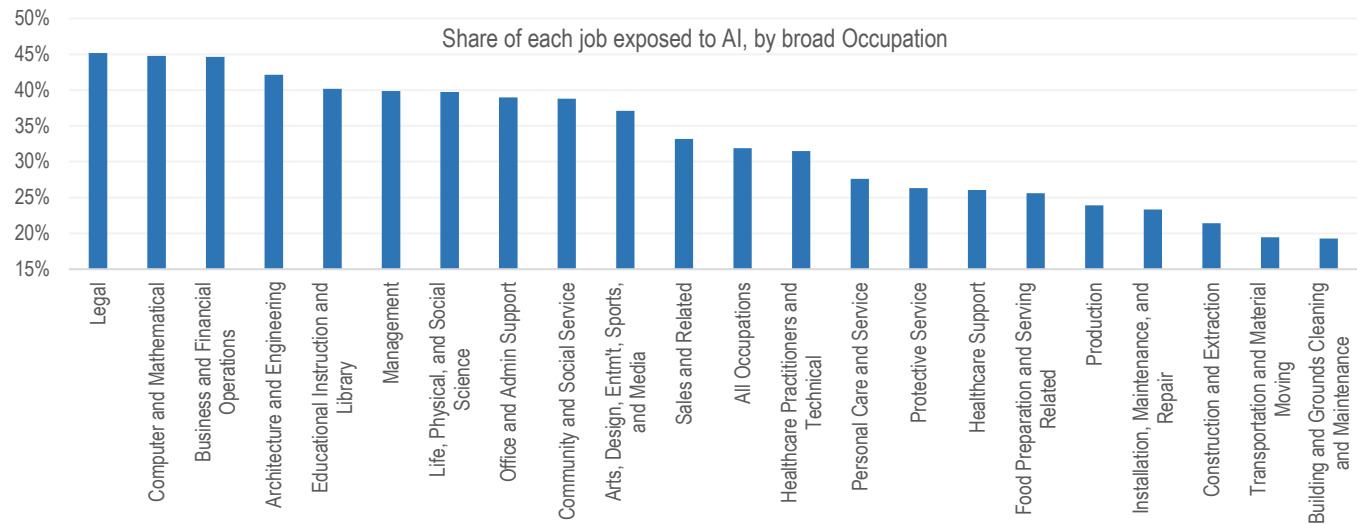
On the whole, EVR ISI Strategy estimates Generative AI driven tools can leverage 32% of each job's function on average across the entirety of the U.S. economy to improve productivity.

32%

Of each job's functions on average are exposed to AI

AI exposure is high in value-added service sector jobs such as Legal, Computer and Mathematical as well as Business and Financial Operations occupations, while low in more manufacturing sectors (Figure 20).

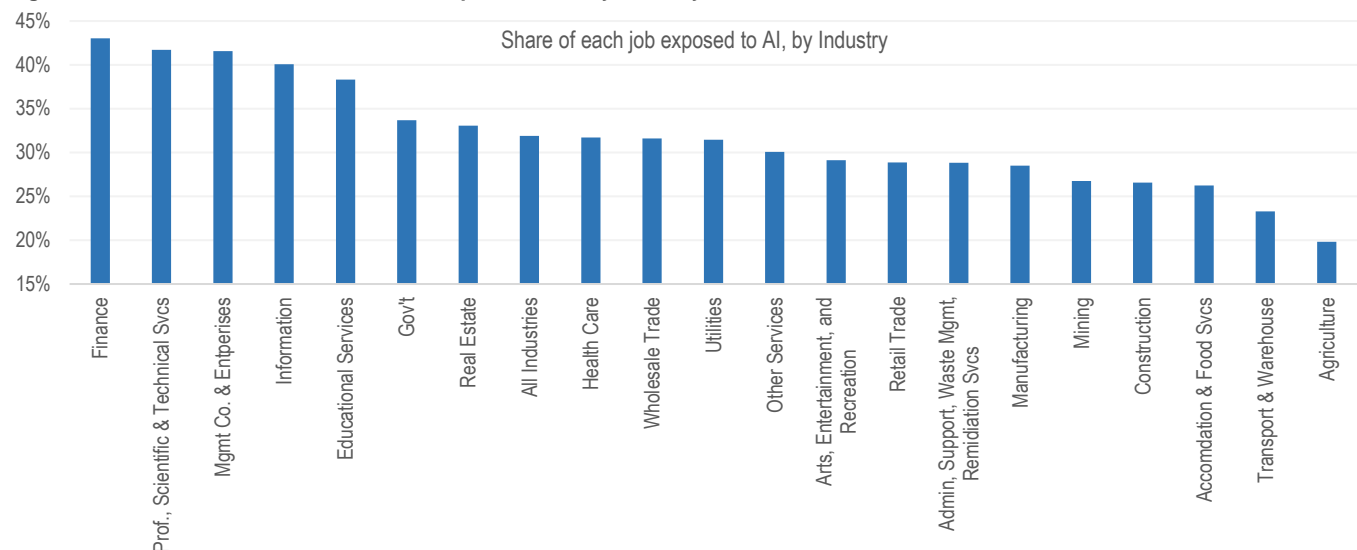
Figure 20: Share of Each Job's Functions Exposed to AI, by Industry



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

AI exposure is highest in industries such as Finance, Professional/Scientific and Technical Services (Accounting, Consulting, Software) as jobs with high AI exposure such as Computer/Mathematical, Legal, Business/Financial and Office & Admin fields are highly representative. Labor-intensive companies in Agriculture, Transport and Hospitality (Accommodation/Food Services) have the lowest AI exposures (Figure 21).

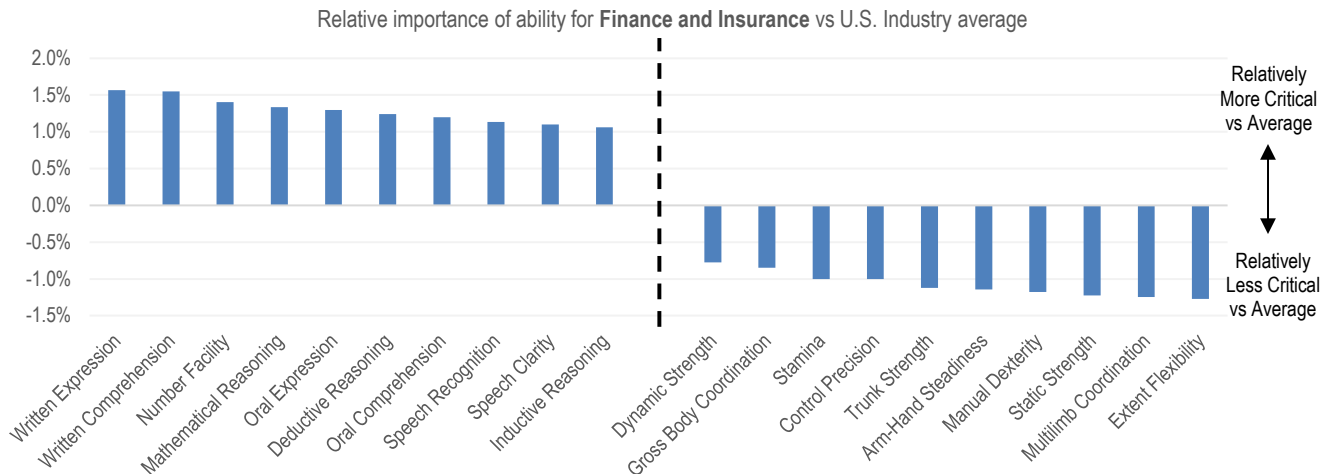
Figure 21: Share of Each Job's Functions Exposed to AI, by Industry



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

Written Expression and Comprehension, Number Facility (the ability to add, subtract, multiply or divide quickly) and Mathematical Reasoning are relatively more critical abilities in Finance compared to the overall economy (Figure 22). AI's demonstrated ability to excel in such abilities can then be applied to improve productivity.

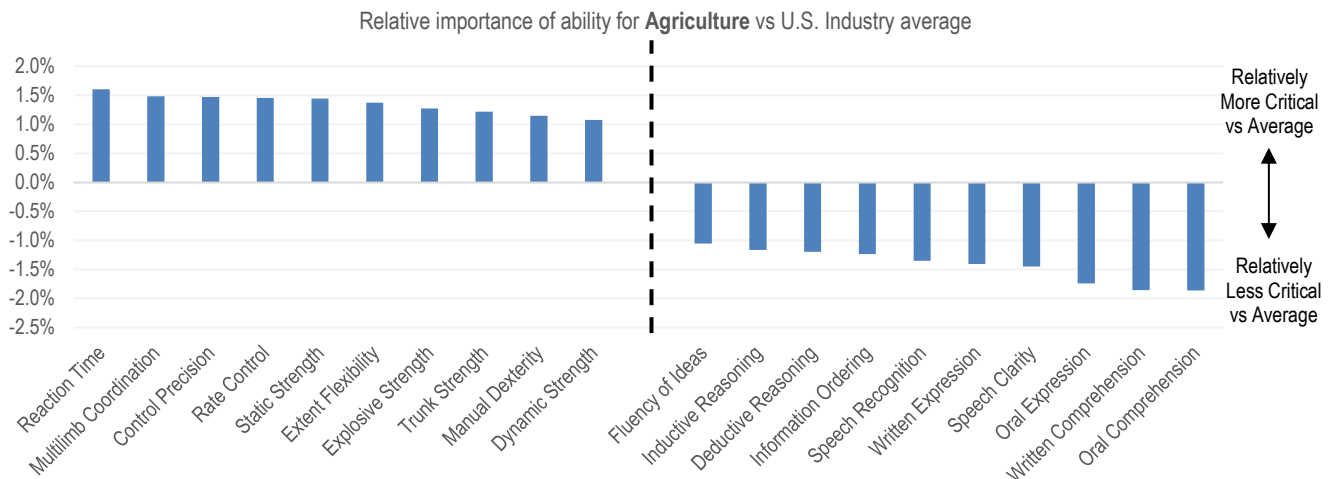
Figure 22: Written Expression and Comprehension Most Critical Abilities for Finance/Insurance Relative to U.S. Industry Average



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

At the same time, Agriculture is among least exposed industries to Generative AI. Reliance on coordination, precision and reaction times are highly important in agriculture jobs (Figure 23) – abilities that are more exposed to industrial automation rather than AI.

Figure 23: Reaction Time and Multi-limb Coordination Most Critical Abilities for Agriculture Relative to U.S. Industry Average



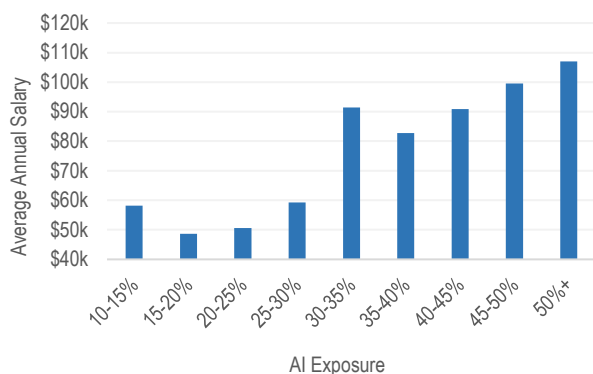
Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

Productivity Critical as Labor Supply Strained

The increasing complexity of GPTs and their ability to excel at higher cognitive abilities has resulted in AI exposure skewed to higher wage earners (Figure 24) and jobs requiring highly cognitive skills in information processing, decision making, forecasting and coordination among others.

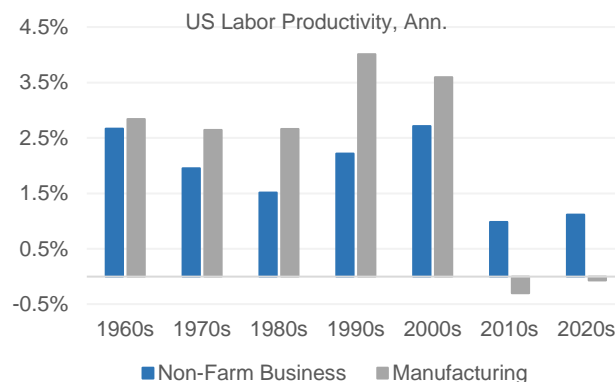
Effective implementation could enhance efficiency in the service sector which has historically been difficult to automate, spurring productivity growth in service-heavy non-farm businesses (Figure 25). Could 2%+ annual productivity gains last seen during the late 1990's Internet boom be in store once more?

Figure 24: Higher Income Earners Have a Greater Exposure to AI



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

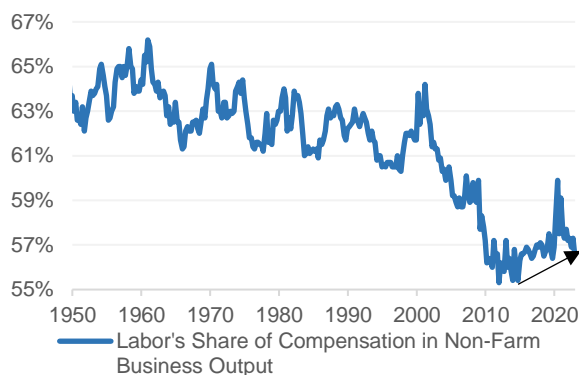
Figure 25: AI Could Benefit Services Heavy Non-Farm Business' Productivity



Source: Haver, Evercore ISI Research

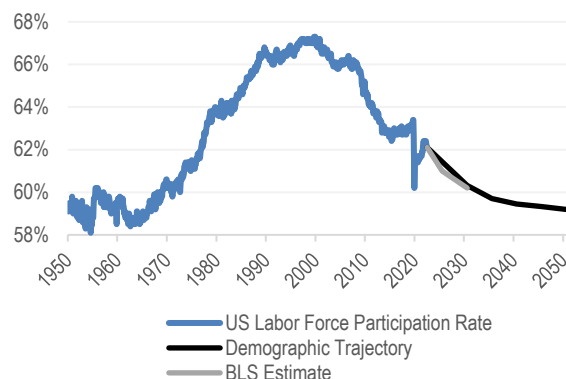
Investing in productivity would also mitigate the risks to margins from labor's rising bargaining power (Figure 26) as working age populations decline in Developed Markets and China, labor force participation rates structurally fall (Figure 27) and age-old dependencies rise (6/22, [Thematic Strategy: Global Demographics - Productivity & AI Investment Meet Labor Force Constraints](#)). Demographics need not be Destiny in a population constrained, wage pressured 21st Century, but to ensure a global growth future, Generative AI will increasingly be Demographic Destiny.

Figure 26: Can Productivity Quell Workers' Rising Bargaining Power?...



Source: Haver, Evercore ISI Research

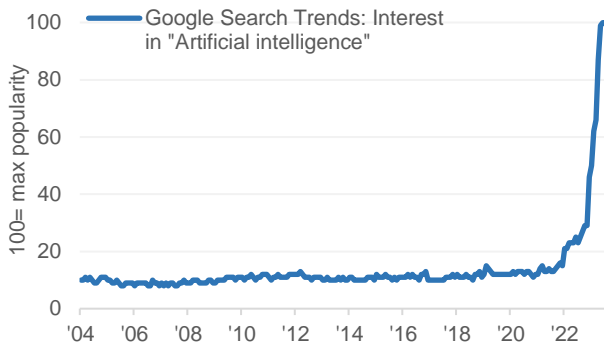
Figure 27: ... Especially as Labor Force Participation Rates are Pressured Lower



Source: Census Bureau, Evercore ISI Research

AI Adoption – 5 Year Bull, Base, Bear Case Scenarios.

Figure 28: AI - Everything, Everywhere, All at Once



Generative AI has kickstarted discussions ranging from the boardrooms of some of the largest global companies down to [central park dogwalkers](#). Interest in capturing the upside from rising productivity and the caution needed regarding the potential dystopian “Black Mirror-type” disruptions that can ensue have captivated everyone (Figure 28).

Source: Google Trends, Evercore ISI Research

But technological revolutions do not happen overnight.

While AI has already shown unprecedented capabilities, impressive early performance does not necessitate immediate integration. Even after proof of concept and feasibility, economic viability and commerciality play crucial factors in determining adoption.

History is replete with many examples.

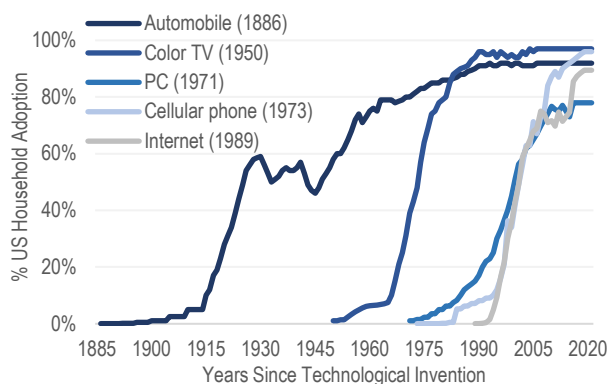
The first portable cell phone was invented in 1973 by Marty Cooper at Motorola. It had 30 minutes of talk time, needed 10 hours to fully charge, and cost around \$10k in today's prices. The commercial version though was only introduced in the early 1980s and adoption did not really kick off until the 1990s.

The world's first personal computer was released in 1971, but it wasn't until 1976 and 1981 that Apple and IBM respectively launched more commercially viable products that were able to kick-start mass adoption.

The World Wide Web (www.) was first “invented” in 1989. But the first website <http://info.cern.ch/> was only launched in 1991 and made publicly available in 1993.

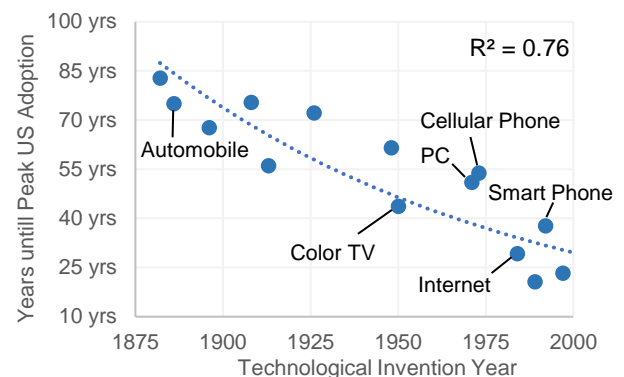
In many cases, adoption tends to proceed slowly for long stretches, then all at once (Figure 29). Adoption has also been shown to be taking place increasingly faster. After Karl Benz invented the first “Motorwagen” in 1886, it took 75 years for autos to reach peak adoption, Color TV 45 years and the Internet (World Wide Web) 22 years (Figure 30).

Figure 29: A History of Some Critical Inventions



Note: Internet is World Wide Web. Source: Our World In Data, FRED, PewResearch, Evercore ISI Research

Figure 30: Innovation Adoption Time Decreases at the Speed of Light, Squared



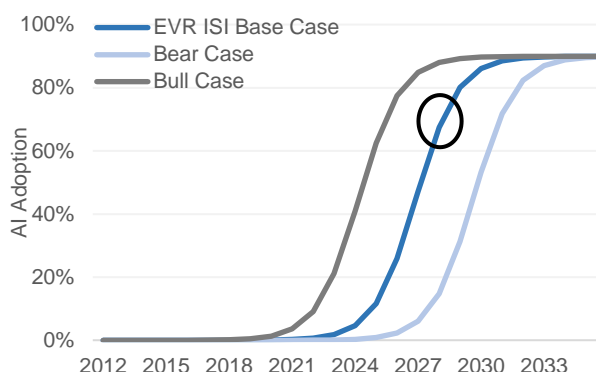
Note: Internet is World Wide Web. Source: Our World In Data, FRED, PewResearch, Evercore ISI Research

While a successful innovation in 1900 would be expected to take 80 years from launch to peak adoption, increasingly tech-focused innovations could now take 22 years to reach peak adoption, perhaps fewer.

As such, EVR ISI Strategy's Bull, Base, and Bear case scenarios for Generative AI adoption leverage fitted sigmoidal curves (Figure 31) based on:

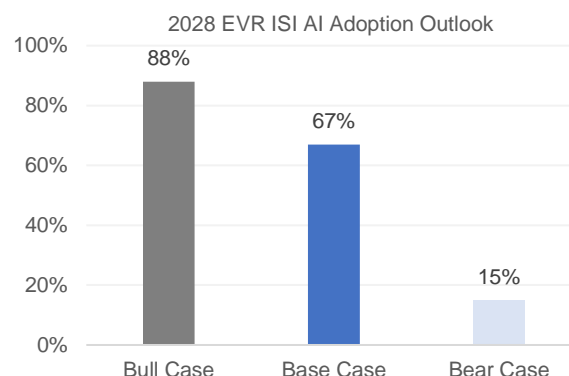
- The historical adoption curves of 15 core technologies in the past (Automobile, Color TV, Internet etc.)
- Increasingly faster adoption curves for newer innovations

Figure 31: Adoption Happens Slowly (2012-2022), Then All At Once (2023)



Source: Evercore ISI Research

Figure 32: EVR ISI Strategy 5-Year AI Adoption Scenarios



Source: Evercore ISI Research

Our Base, Bull and Bear Case scenarios for AI over the next five years are detailed below.

Base Case – Generative AI 67% Adoption by 2028

In our base case, AI adoption is expected to reach 67% by 2028 (Figure 32).

2012 marks our base-case “launch” date for Generative AI when a significant breakthrough was made in the field of computer vision during the 2012 ImageNet Large Scale Visual Recognition Challenge (ILSVRC), which has had a profound impact on the development of AI.

ImageNet is a large-scale, organized image database, and the annual ImageNet Large Scale Visual Recognition Challenge was a competition where research teams designed and competed with algorithms in the tasks of image classification and object detection for hundreds of object categories and millions of images.

The pivotal moment in 2012 was when a team from the University of Toronto submitted a model called AlexNet (a Convolutional Neural Network, CNN) that dramatically outperformed, being the first team to ever crack below a 25% error rate with a score of 15.3%.

AlexNet's success demonstrated CNNs could deliver state-of-the-art performance on complex image-based tasks and offered new solutions to the bottlenecks produced by models of this size, like introducing GPU training.

After the 2012 ILSVRC, CNNs became a dominant approach in the field of Computer Vision, sparking a wave of research and industrial applications. From autonomous vehicles to medical imaging, the technology has found applications seemingly everywhere.

Figure 33: DALLE: “Cat on top of a dog, in the style of Van Gogh”



Source: DALLE, Evercore ISI Research

A decade of ensuing research has now moved the AI industry beyond designing discriminative algorithms like AlexNet that answer: “Is this picture a dog or a cat?”, towards generative algorithms like ChatGPT or DALLE that respond to “Cat on top of a dog, in the style of Van Gogh” (Figure 33).

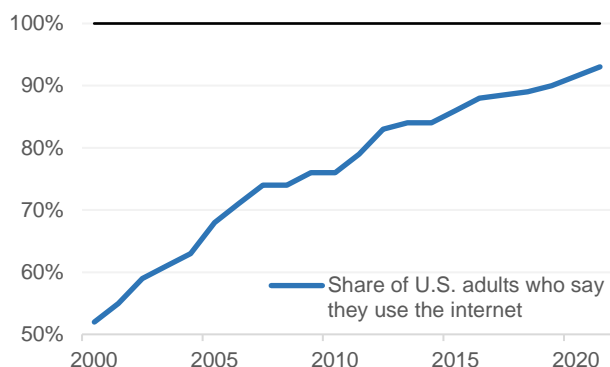
We believe AI will reach peak adoption by 2035 but cap the final adoption rate at 90%. Even the internet hasn't reached full adoption yet. More than 30 years since the World Wide Web's invention, only 93% of U.S. adults say they use the web, according to Pew Research survey data (Figure 34).

Importantly when using sigmoidal adoption curves, varying AI “launch dates” introduces significant variability to base case assumptions. A 2011 launch date based on when IBM Watson used NLPs to beat the best “human” Jeopardy player could imply 80% adoption by 2028.

Conversely, in 2014 the framework for General Adversarial Networks (GANs) which could create realistic images was introduced. And in 2017 the Transformer AI architecture was published by Google engineers which now underpins NLPs and Generative AI. If those were in fact the “true launch” dates for Generative AI, 2028 adoption could be lower than currently expected.

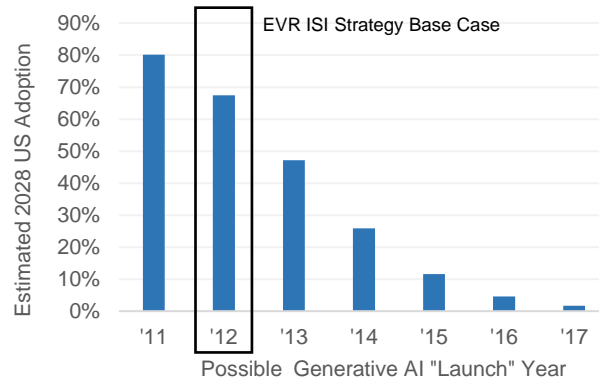
Put together, 2028 AI adoption rates can vary widely, ranging between 2% if the hypothetical AI launch date was in 2017 to 80% if the AI launch date happened earlier in 2011 (Figure 35).

Figure 34: 30+ Years On, The Internet Has Yet to Reach Full Adoption



Source: PewResearch, Evercore ISI Research

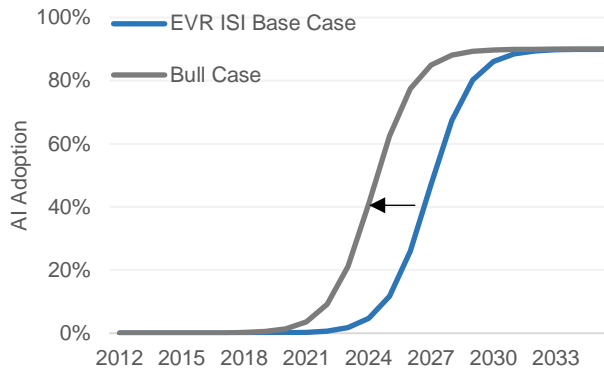
Figure 35: 2012 Expected to have Jumpstarted Generative AI, but Different Assumptions Add Variability to Adoptions Rates



Source: Evercore ISI Research

Bull Case – Generative AI 88% Adoption by 2028

Figure 36: “Welcome to the AI Gold Rush” -ChatGPT, Dec '22



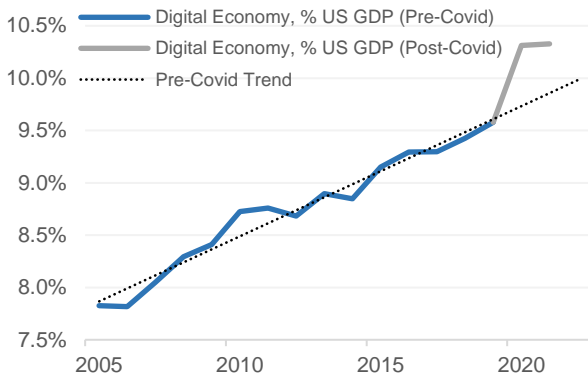
AI adoption could reach 88% over the next five years in EVR Strategy's Bull Case (Figure 36).

Source: Evercore ISI Research

Critically, the Pandemic's effects on increasing digitization across industries could support an even faster AI adoption outlook. Acceleration across the digital economy was especially evident in Software and Cloud Services as solutions were required to make hybrid work possible.

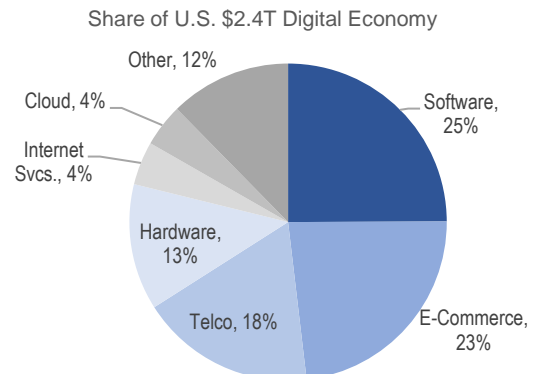
Indeed, growth in the digital economy has annualized 7.6% since 2019, well above the prior 6.4% trend (Figure 37). The Digital Economy now accounts for more than 10% of the U.S. economy, exposed heavily to Software and E-commerce (Figure 38).

Figure 37: The Pandemic Induced a Trend Change in Digitization



Source: Bureau of Economic Analysis ("BEA"), Haver, Evercore ISI Research

Figure 38: Software and E-commerce Account for Nearly Half of the U.S. Digital Economy



Source: BEA, Haver, Evercore ISI Research

Our Bull Case scenario also assumes AI implementation trickles down quickly from large cap industry leaders familiar with how to implement new processes in older economy incumbents.

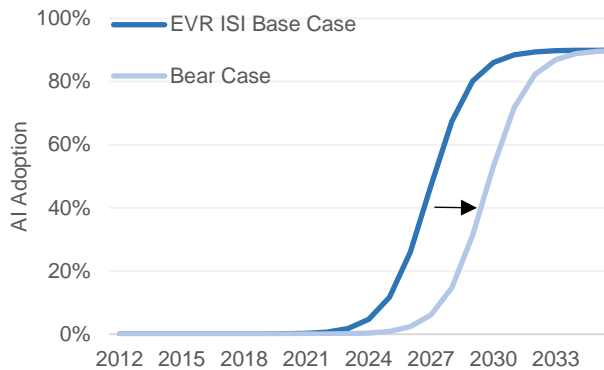
Critically, the AI regulatory framework is also expected to remain “lite” under our bull case scenario, with obstacles to implementation remaining relatively insignificant.

Bear Case – Generative AI 15% Adoption by 2028

"My worst fears, are that we cause significant - we the field, the technology, the industry - cause significant harm to the world... If this technology goes wrong, it can go quite wrong and we want to be vocal about that."

- Sam Altman, OpenAI CEO at U.S. Congressional Hearing on Oversight of AI.

Figure 39: Sailing Against the Wind - Black Boxes meet US Regulators

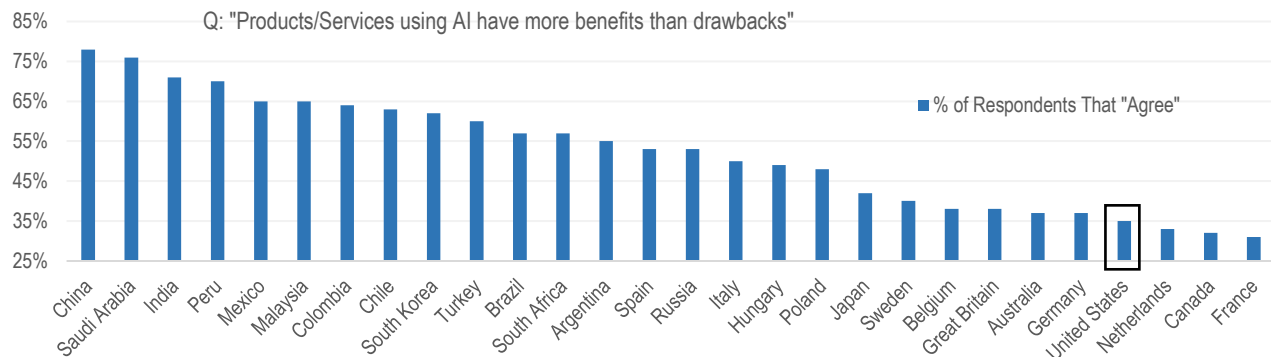


Under our bear case assumption, AI adoption will only reach 15% over the next five years (Figure 39).

Source: Evercore ISI Research

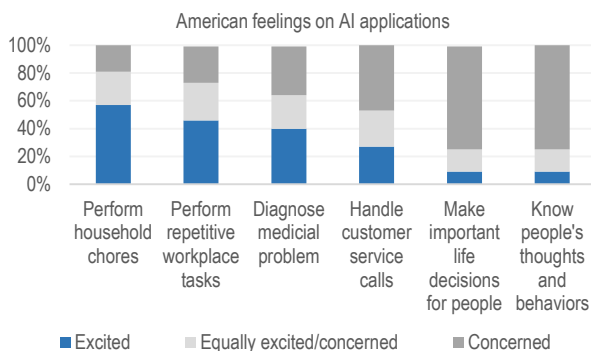
Regulation can play a key factor in inhibiting AI adoption as sentiment in the U.S. and among Developed Markets tend to skew more negatively (Figure 40). A minority of people in the U.S. feel that products or services using AI had more benefits than drawbacks.

Figure 40: U.S. and Developed Markets are More Cautious in Implementing AI



Source: IPSOS, Stanford AI Index, Evercore ISI Research

Figure 41: Automating Household Chores is One Thing. Knowing Our Thoughts is Another



Indeed, while Americans tend to view the automation of household chores and repetitive work tasks positively, 75% of Americans are concerned about AI making important life decisions and knowing their thoughts and behaviors (Figure 41).

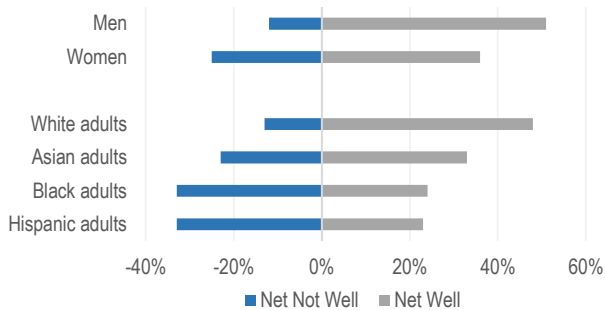
Source: PewResearch, Evercore ISI Research

Regulation addressing intellectual property, deepfakes or the non-permitted use of “digital likeness” – at the core of once-in-a-generation simultaneous Hollywood strikes with actors *and* writers – could also hamper adoption particularly given those professions’ conduit into U.S. culture and society.

A rise in the government’s role of regulating the technology is already taking place. The FTC opened an investigation into Open AI “engag[ing] in unfair or deceptive practices relating to risks of harm to consumers, including reputational harm.” The Biden administration is also seeking public input as it seeks a national strategy in forming an AI Bill of Rights (6/23, [10 Key Takeaways on the AI Regulatory Outlook, from Our Webinar with Guest Expert Marc Aidinoff](#)).

Figure 42: Removing Biases Will be Critical to Successful Adoption

Share of US Adults who believe the people who design AI take into account the experience/views of....



At the same time, Americans believe AI may be biased – not taking into full account the views of women or minorities in the U.S. (Figure 42). That poses not only regulatory/social and legal risks for predictive models but also hampers their applicability to certain demographic groups.

Source: PewResearch, Evercore ISI Research

Biases in the collection of training data is a critical issue that directly impacts the accuracy and fairness of AI systems. Data biases arise when the distribution of data used to train the model differs from the distribution of data input during inference.

Threats posed by training data biases can intensify as the rate of AI adoption accelerates and the power of these models grows. Examples of these biases can be found in Pulse Oximeters, Facial Recognition Systems, and Automated Recruiting Programs – all tools exposed to the risk of biased training data or improper handling of sensitive attributes leading to discriminatory outcomes.

This is a complex problem that requires continually monitoring changes in the distribution of data the model performs inference on. Data scientists, developers, companies, and policymakers all have a role to play in reducing these biases and ensuring a fair and ethical deployment of these AI systems.

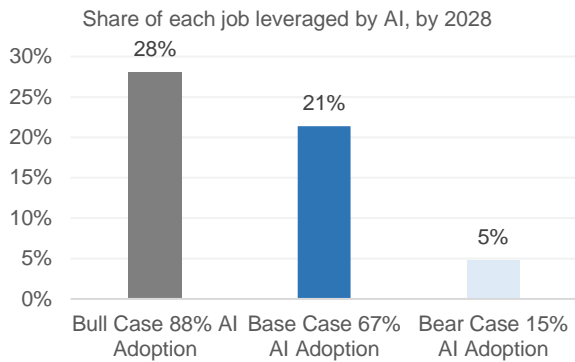
Aside from regulation and biases, accuracy could be changing as the “black-box” nature of some of Generative AI models could be inducing “model-drift”. In a [Stanford paper](#) comparing Chat GPT 3.5 and 4 in June 2023 vs March 2023, significant decreases in accuracy were observed in the GPT-4 version, but not in the 3.5 model.

Specifically, in March ChatGPT 4.0 answered the question “Is 17,077 a prime number?” correctly 97.6% of the time, the accuracy in June 2023 fell to 2.4%. At the same time the GPT-3.5 model has seen its accuracy improve. Continuously, and cost effectively, updating, evaluating, assessing and fixing these discrepancies across the broad scope of Generative AI applications will be critical.

The ability, or inability, to do so, can impact credibility and ultimately future adoption.

EVR ISI Strategy Automation Scenarios Across the Economy

Figure 43: In EVR ISI Strategy's Base Case, About a Fifth of Each Job's Functions Could be Leveraged with AI by 2028



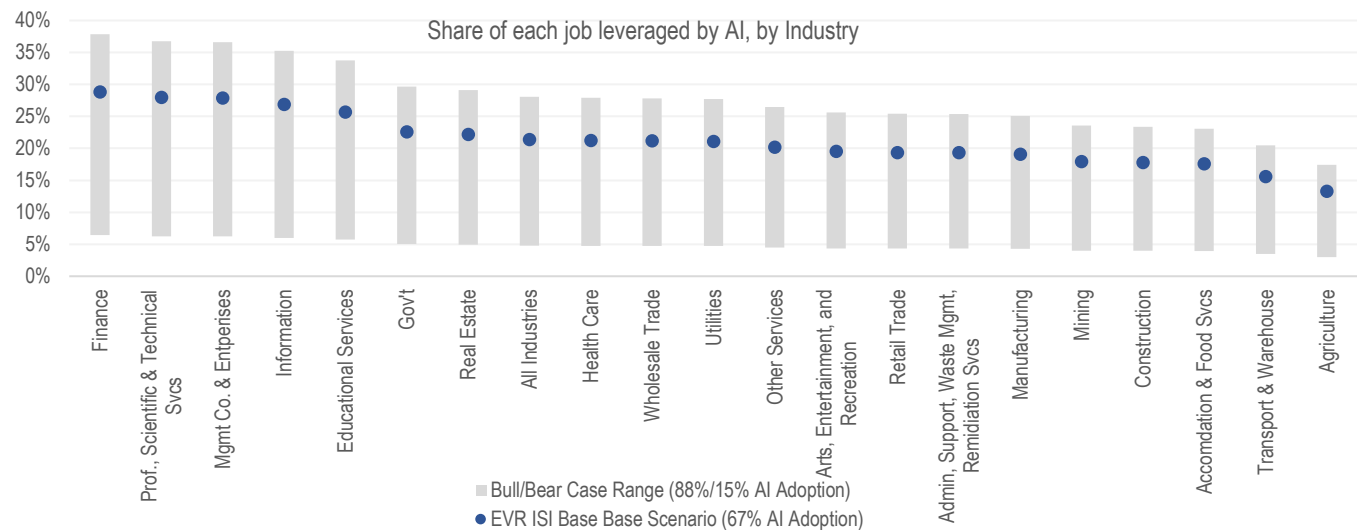
Under EVR ISI Strategy's 67% adoption base case by 2028, AI tools can be used to leverage 21% of each job's functions to improve efficiency over the next five years (Figure 43).

Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

Increased regulation, high biases, higher-than-expected barriers to implementation and difficult-to-solve "model-drift" could skew automation significantly lower to 5% by 2028. "Laissez-faire" regulation and accelerating digitization after the Pandemic on the other hand could see automation from AI rise to 28% over the next 5 years.

Across sectors that could suggest that under a base case scenario, 31% of each job's function in Finance could be automated by Generative AI. That could fall to as low as 14% in Agriculture. (Figure 44).

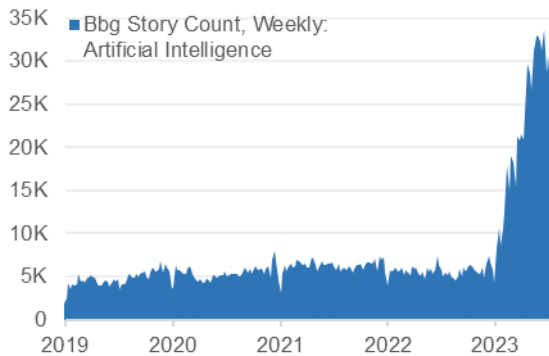
Figure 44: Share of Each Job's Functions Leveraged by AI, by Industry



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

Macro to Micro: Estimating Company Level AI Exposure

Figure 45: AI Headlines Almost Write Themselves



The introduction of AI, specifically Generative AI, into the Public consciousness in late 2022 sparked an unprecedented wave of “cultural buzz” with regards to the potential for profound technological innovation (Figure 45).

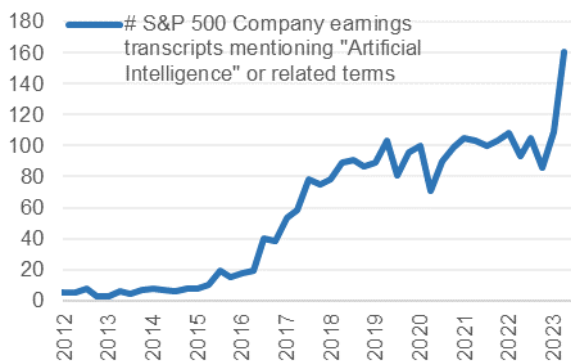
Source: Bloomberg, Evercore ISI Research

ChatGPT subsequently shattered user growth records, reaching 100 million monthly active users just 2 months after its launch.

Interest in AI has also been reflected on Wall Street. Most visible have been the stock reactions in companies providing AI enhanced products, or those enabling the infrastructure to power them.

Aside from the initial investor reception, there has also been a material increase – if not more, measured relative to Public interest – in conversations around AI at a more strategic level in Corporate America.

Figure 46: Real Talk About “Artificial Intelligence” on the Rise in Corporate America



The number of S&P 500 company earnings transcripts referencing “artificial intelligence” or related terms has risen substantially in calendar 2Q 2023 from the prior 5 years’ (stable) average of 95, a 68% increase (Figure 46). Mentions were almost nonexistent in 2012, the year we attribute to Generative AI’s effective “launch date”.

Transcript count, calendar quarters. Current S&P 500 constituents.
Source: AlphaSense, Company Transcripts, Evercore ISI Research

A selection of specific examples from calendar 2Q23 earnings transcripts demonstrates the range of possibilities discussed (Figure 47):

Figure 47: A World of Possibilities – Select excerpts from earnings call transcripts containing “Artificial Intelligence”

Company	Industry	Transcript Date	Excerpt
DXC Technology Co. (DXC)	IT Services	5/18/2023	[...] the first use case is we use AI to predict when hardware is going to fail. [...] The <u>cost savings</u> example is, we don't need as many people now, because the other AI algorithm that we've written in [...] literally takes a failure point, and we basically map that to the [...] library of bots that we can deploy when something goes wrong. So when something goes wrong, AI looks at it, understands the issue. It <u>predicts and takes the right bot</u> . We implement the right bot and the thing gets fixed with <u>no human intervention</u> [...]
Kellogg Co. (K)	Packaged Foods	5/4/2023	Our <u>supply chains</u> have all been challenged to a degree they never have before. They've become more agile, but they've also used and utilized new technologies. We're deploying technologies like artificial intelligence, machine learning. We're getting better and <u>better at predictive, really end-to-end</u> .
NVIDIA Corp. (NVDA)	Semiconductors	5/24/2023	Generative AI is <u>driving exponential growth in compute requirements</u> and a fast transition to NVIDIA accelerated computing, which is the most versatile, most energy-efficient and the lowest TCO approach to train and deploy AI. Generative AI drove significant upside in demand for our products creating opportunities and broad-based global growth across our markets.
Paypal Holdings Inc. (PYPL)	Transactions & Payment Processing	5/8/2023	AI is going to impact almost every function inside of PayPal, whether it be our <u>front office, back office, marketing, legal, engineering</u> , you name it. AI will have an impact and <u>allow us to not just lower costs, but have higher performance and do things better</u> . This is <u>not about trade-offs. It's about doing both in there</u>
Ralph Lauren Corp. (RL)	Textile, Apparel & Luxury Goods	5/23/2023	In addition to the AI machine learning capabilities, we've been utilizing for areas such as <u>inventory optimization, forecasting and consumer engagement</u> , we've started to leverage our early learnings to test generative AI across multiple areas of our business <u>from copy editing and graphics to computer programming</u> .
Yum! Brands Inc. (YUM)	Restaurants	5/3/2023	<u>Recommended ordering</u> is an AI module that recommends the quantity of product a restaurant manager should order each week. It <u>reduces the time</u> restaurant managers spend ordering product, <u>improves forecast accuracy and reduces waste and time-consuming off-cycle orders and cross-store transfers</u> . At Taco Bell, we have seen a 70% reduction in off-cycle orders and store transfers which frees up our managers to focus on delivering great guest experiences.

DXC (Not Rated); K (In Line, \$79 PT, Palmer); NVDA (Outperform, \$550 PT, Muse); PYPL (In Line, \$65 PT, Togut); RL (Not Rated); YUM (Outperform, \$160 PT, Palmer)

Source: AlphaSense, Company Transcripts, Evercore ISI Research

These discussions notably extend beyond first order benefits to providers of AI products and infrastructure to other ways the technology can be implemented to create value for stakeholders – including customer engagement, supply chain management, streamlining operating processes, cost reduction, and everything in between.

The argument can be made that the productivity enhancing benefits of AI – greater output per worker – will create as much, and even more, value for the economy and companies as those directly to the providers of AI technology and infrastructure further upstream.

In the prior sections a bottom-up Macro framework for quantifying AI Exposure was outlined, in the following section we outline how we estimate each company's AI exposure.

Introducing the Evercore AI Impact Navigator

This Macro model serves as the basis for estimating AI Exposures at the company level.

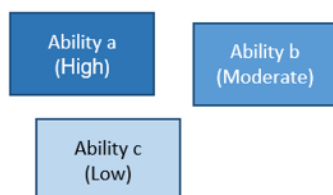
A worker's exposure to AI in the context of a specific firm and the breakdown of Occupations within an organization – key inputs in the Macro model – are not as transparent and difficult to quantify at the Micro level.

We adapt the Macro framework to create Sector Benchmarks to serve as a company level guide, which can be adjusted to more closely reflect each unique situation.

Figure 48: Macro to Micro – Ability AI Exposure Assumptions Remain the Same

1 Assess Abilities' exposures to AI (50+ Abilities)

Individual Abilities



Note: AI Exposures of Individual Abilities assumed constant across Jobs, Occupations, and Sectors/Sub-Sectors.

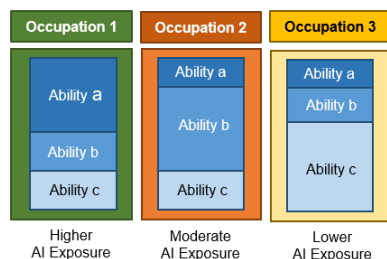
The assumptions for AI Exposures of individual Abilities remain the same in both the Macro and Micro frameworks (Figure 48).

Source: Evercore ISI Research

The importance of Abilities to an Occupation and the weights of Occupations in a sector are then calibrated to a substantially more granular 250+ Sub-Sector NAICS hierarchy (Figure 49), with the objective of arriving at a more accurate Benchmark for a given company. To put into context, a Chemical producer likely has a very different Abilities “mix” and Occupation breakdown than a Semiconductor manufacturer both of which are classified into the broad Manufacturing industry – and within Chemicals, a Pharmaceuticals maker will further differ from a Basic Chemical manufacturer.

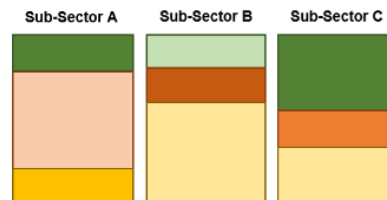
Figure 49: Macro to Micro – Clarity Through Granularity, Occupation Exposures and Weightings Calibrated to 250+ Sub-Sectors

2 Determine Abilities' importance to each of the 800+ U.S. Occupations



Note: Jobs (not shown in illustration for simplicity) aggregate into Occupations. The mix of Jobs within an Occupation varies by Sub-Sector – by extension, the AI Exposure of an Occupation varies by Sub-Sector.

3 Determine weights of Occupations in Sub-Sectors (250+ Sub-Sectors)



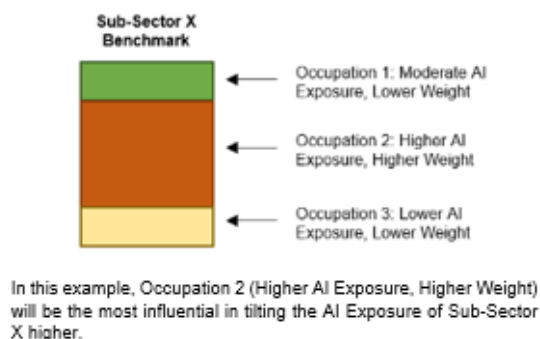
Occupation weight in Sub-Sector represented by size of bar. Larger size is higher weighting.

Darker shading represents higher AI Exposure of Occupation in Sub-Sector. Lighter shading represents lower AI Exposure of Occupation in Sub-Sector.

Source: Evercore ISI Research

Figure 50: Macro to Micro – Estimating Exposures

4 Estimate Sub-Sector Benchmark AI Exposures driven by Occupation AI Exposures and weights in each Sub-Sector



Source: Evercore ISI Research

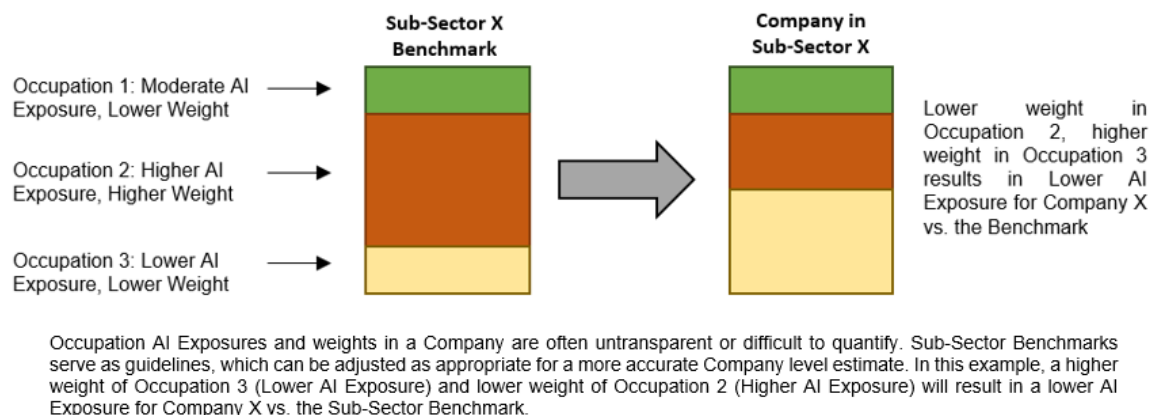
From AI Exposures of Occupations based on their underlying Abilities and Occupations' weights in a Sub-Sector, we estimate the hypothetical AI Exposure of the Sector Benchmark (Figure 50).

The realized productivity enhancements from AI will also be subject to the ultimate penetration and speed of adoption – we build Base (67% of potential adoption over 5 years), Bull (88% of potential adoption over 5 years), and Bear (15% adoption over 5 years) scenarios into the model.

Every company though is unique, even within its own sector. The Sub-Sector Benchmarks are intended to serve as a starting points and a guide for AI Exposure and its drivers – Occupation AI exposures, their weightings in a Sub-Sector, and adoption rates – in the absence of full information, and adjusted on a case by case basis.

Figure 51: Macro to Micro – Final Touches, Adjust Benchmark Assumptions to Reflect Company

5 Estimate Company AI Exposure by adjusting from Sub-Sector Benchmark as appropriate

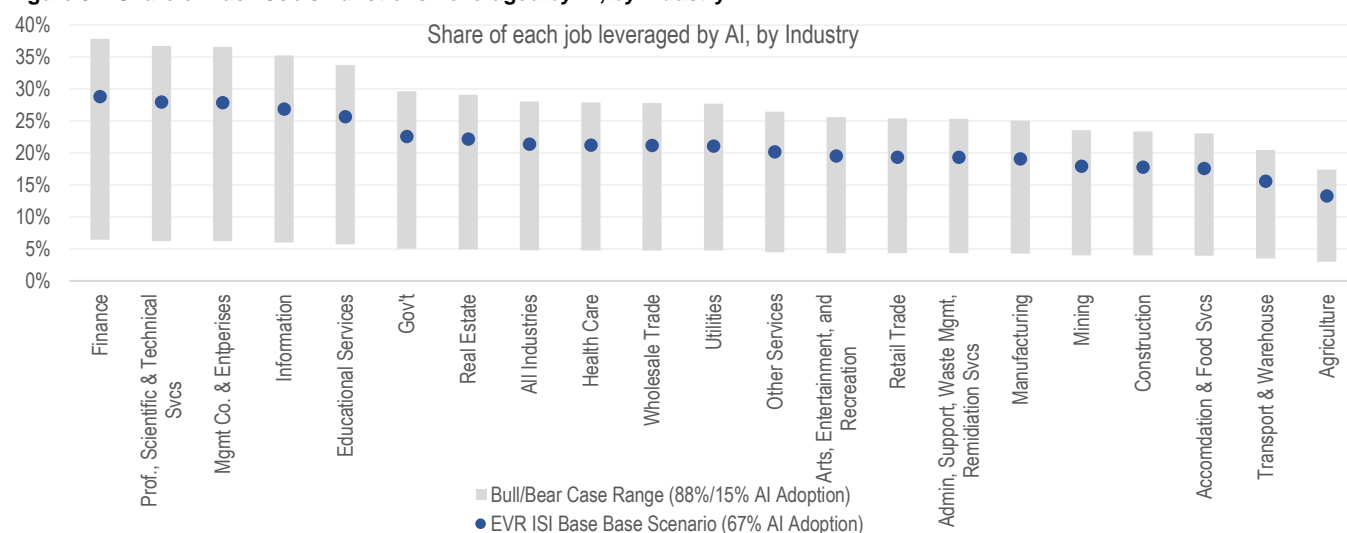


Source: Evercore ISI Research

Regarding the drivers of AI Exposure, the implications of Occupation exposures and their Sub-Sector weightings are presumably relatively straightforward concepts.

However, there may be some nuance around adoption rates at the Sector and company levels. For instance, AI Exposures vary materially among Sectors (Figure 52), and it is conceivable that a company with a lower Exposure will prioritize projects outside of AI determined to have a higher return on investment. This could result in slower and possibly lower adoption relative to the broader economy – for such a company the adoption scenario may more closely resemble a Bear case even if overall implementation is more generally tracking at a higher rate.

Figure 52: Share of Each Job's Functions Leveraged by AI, by Industry



Source: O*NET, BLS, Census Bureau, Felten et al. (2021), Evercore ISI Research

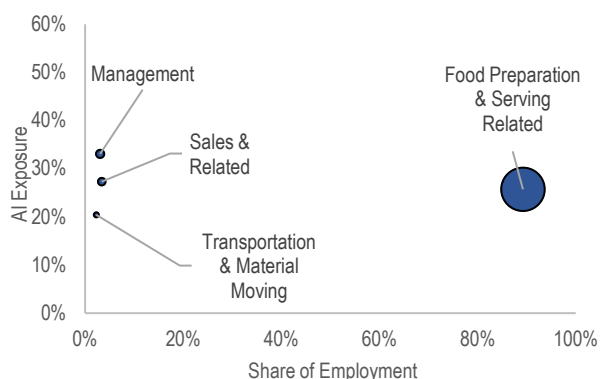
Critically, company exposures produced by the framework represent potential productivity gains from Generative AI. While much media attention has been given to the possibility of technology “replacing” workers, and our own framework is rooted in employment data, how companies realize these benefits is likely to be much more varied and nuanced – even the handful of earnings transcript excerpts in Figure 47 demonstrates a range of possibilities. Factors influencing these decisions include managerial style and priorities, company specific circumstances, and even the state of the economy.

Please email us or your Evercore contact if you would like a copy of [Evercore's AI Company Impact Navigator Model](#).

We conclude by collaborating with EVR ISI fundamental analysts to estimate the AI Exposures of select companies, demonstrating this Micro framework in action and overlaying the individual nuance that will be critical in executing any Generative AI Productivity enhancing strategies successfully.

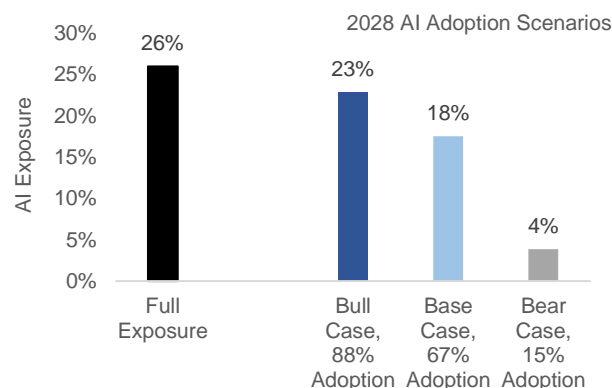
Starbucks – (SBUX, Outperform, \$125 PT, Palmer)

Figure 53: Starbucks - Share of Employment vs AI exposures



Source: Evercore ISI Research

Figure 54: Starbucks – 5 Year Bull/Base/Bear Case AI Adoption Scenario



Source: Evercore ISI Research

Starbucks employee composition, heavily skewed toward Food Preparation and Serving Related positions (89%), provides that its total exposure to Generative AI at 26%, is below the Economy-wide average of 32%.

And while Starbucks by virtue of its business may be well suited to benefit from implementation of Automation initiatives more broadly at its storefronts, the social aspects of what drives a successful store – Doesn't everyone have a personal relationship with their favorite Starbucks barista? – are less ideally suited to Productivity boosts from Generative AI.

EVR ISI Strategy's base case 67% Generative AI adoption scenario is based on generalized, economy wide exposures.

In conversation with David Palmer, lead analyst in the Restaurants and Food Producers categories, his personal "base case" for Generative AI adoption among the Restaurant category more broadly is around 25-40% over a 5 to 10 year time horizon.

While less applicable to Starbucks, Palmer notes that 40% of restaurants are non-chain mom and pop stores, which may be slower at adopting technology than the overall economy and large cap tech. Moreover, roughly half of restaurant employment is in full-service restaurants. High-touch and important customer interaction would also limit the ability for automation's penetration and Generative AI specifically.

Initiatives to first increase productivity from storefronts can drive automation investment, albeit less in Generative AI applications. Indeed, adoption and ultimate exposure to AI will hinge on the effectiveness of AI solutions.

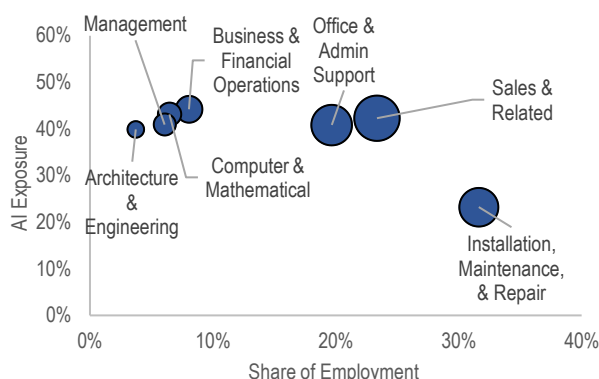
Moreover, voice accuracy and speech to text transcription, which can be used to automate customer orders at fast food restaurants, lags human transcribers. Tail risks from incorrect orders, even in a minority of instances, and some biases in speech to text recognition could negatively impact certain demographics, posing risks to overall customer retention and revenue.

Indeed, when AI goes wrong, results can be severe. The need to continuously monitor and assess AI output by store and corporate managers, and the associated costs, could also hamper full adoption. Moreover, privacy concerns around identification at drive-thrus or with deliveries could also limit AI adoption in managing order efficiency.

Overall, assuming Palmer's view on adoption at 25-40%, and including progress made in equipment tech rather than generative AI, potential for productivity increases of 20%+ at leading technology-forward chains could be achieved over the 5 -10 year time horizon.

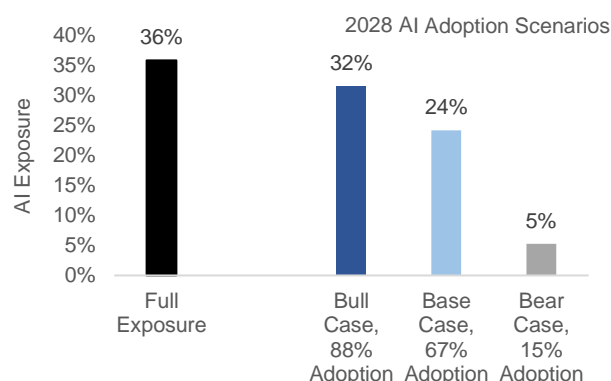
Verizon – (VZ, In Line, \$36 PT, Jayant)

Figure 55: Verizon - Share of Employment vs AI exposures



Source: Evercore ISI Research

Figure 56: Verizon – 5 Year Bull/Base/Bear Case AI Adoption Scenario



Source: Evercore ISI Research

Verizon (VZ, In-Line, \$36PT, Jayant) is a Telecommunications company whose employment profile sums to a Generative AI exposure at 36%, above that of the U.S. Economy's 32%.

The occupational distribution tilts to Office and Admin support, Computer and Mathematical positions and Business and Financial Operations. EVR ISI Analysts Vijay Jayant and Kutgun Maral note that the Employment breakdown for Verizon is slightly different than the Telecommunications sub-sector. Specifically, Verizon has approximately 10 percentage points fewer jobs (as % total) in strictly Computer and Mathematical Occupations, with the difference being equally split between Sales and Related Occupations as well as Office and Administrative Support Occupations.

Because of the relatively similar job-related exposures to AI, the overall impact at the company level was unchanged at 36%, yielding a Base Case adoption scenario of 24% 5 years hence, in 2028.

On the following page, we apply the micro model to each of the companies in the S&P 500. Coupled with EVR ISI Strategy's economy wide 67% AI adoption-based case over the next 5 years, the share of job functions that can be leveraged by AI tools for each company by 2028 is also presented.

Figure 57: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
MMM	3M Co	Manufacturing	--	--	20%
AOS	A. O. Smith	Manufacturing	--	--	20%
ABT	Abbott Laboratories	Manufacturing	Vijay Kumar	Outperform	21%
ABBV	AbbVie	Manufacturing	Gavin Clark-Gartner	Outperform	22%
ACN	Accenture	Prof., Scientific & Technical Svcs	David Togut	Outperform	30%
ATVI	Activision Blizzard	Information	--	--	30%
ADBE	Adobe	Information	Kirk Materne	Outperform	30%
AAP	Advance Auto Parts	Retail Trade	Greg Melich	In Line	18%
AES	AES	Utilities	Durgesh Chopra	Outperform	21%
AFL	Aflac	Finance	Thomas Gallagher	In Line	29%
A	Agilent Technologies	Manufacturing	Vijay Kumar	In Line	25%
APD	Air Products & Chemicals	Manufacturing	Stephen Richardson	In Line	20%
AKAM	Akamai Technologies	Information	Amit Daryanani	Outperform	29%
ALK	Alaska Air Group	Transport & Warehouse	Duane Pfennigwerth	Outperform	19%
ALB	Albemarle	Manufacturing	Stephen Richardson	Outperform	20%
ARE	Alexandria Real Estate	Finance	Steve Sakwa	Outperform	28%
ALGN	Align Technology	Manufacturing	Elizabeth Anderson	Outperform	21%
ALLE	Allegion	Manufacturing	--	--	18%
LNT	Alliant Energy	Utilities	--	--	21%
ALL	Allstate	Finance	David Motemaden	In Line	29%
GOOGL	Alphabet	Information	Mark Mahaney	Outperform	30%
MO	Altria Group	Manufacturing	--	--	18%
AMZN	Amazon.com	Retail Trade	Mark Mahaney	Outperform	19%
AMCR	Amcor	Manufacturing	--	--	17%
AMD	AMD	Manufacturing	--	--	23%
AEE	Ameren	Utilities	Durgesh Chopra	Outperform	21%
AAL	American Airlines Group	Transport & Warehouse	Duane Pfennigwerth	In Line	19%
AEP	American Electric Power	Utilities	Durgesh Chopra	In Line	21%
AXP	American Express	Finance	John Pancari	In Line	29%
AMT	American Tower	Finance	--	--	28%
AWK	American Water Works	Utilities	Durgesh Chopra	Outperform	20%
AMP	Ameriprise Financial	Finance	Thomas Gallagher	Outperform	30%
ABC	AmerisourceBergen	Wholesale Trade	Elizabeth Anderson	Outperform	23%
AME	AMETEK	Manufacturing	--	--	20%
AMGN	Amgen	Manufacturing	Umer Raffat	Outperform	22%
APH	Amphenol	Manufacturing	Amit Daryanani	Outperform	23%
ADI	Analog Devices	Manufacturing	C.J. Muse	Outperform	23%
ANSS	ANSYS	Information	--	--	30%
AON	Aon Plc	Finance	David Motemaden	In Line	29%
APA	APA	Mining	Stephen Richardson	Outperform	22%
AAPL	Apple	Manufacturing	Amit Daryanani	Outperform	24%
AMAT	Applied Materials	Manufacturing	C.J. Muse	Outperform	20%
APTV	Aptiv	Manufacturing	Chris McNally	Outperform	18%
ACGL	Arch Cap Grp	Finance	--	--	29%
ADM	Archer Daniels Midland	Agriculture	--	--	13%
ANET	Arista Networks	Manufacturing	Amit Daryanani	Outperform	27%
AJG	Arthur J Gallagher Co	Finance	David Motemaden	Outperform	29%
AIZ	Assurant	Finance	--	--	29%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 58: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd, 2/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
T	AT&T	Information	Vijay Jayant	In Line	24%
ATO	Atmos Energy	Utilities	--	--	21%
ADSK	Autodesk	Information	--	--	30%
ADP	Automatic Data Processing	Information	David Togut	Underperform	29%
AZO	AutoZone	Retail Trade	Greg Melich	Outperform	18%
AVB	AvalonBay Communities	Finance	Steve Sakwa	Outperform	28%
AVY	Avery Dennison	Manufacturing	--	--	17%
AXON	Axon Enterprise	Manufacturing	--	--	19%
BKR	Baker Hughes	Mining	James West	Outperform	17%
BALL	Ball Corp	Manufacturing	--	--	18%
BAC	Bank of America	Finance	Glenn Schorr	Outperform	29%
BK	Bank of New York Mellon	Finance	Glenn Schorr	In Line	30%
BBWI	Bath & Body Works	Retail Trade	Warren Cheng	In Line	21%
BAX	Baxter Intl	Manufacturing	Vijay Kumar	Outperform	21%
BDX	Becton, Dickinson	Manufacturing	Vijay Kumar	Outperform	21%
BRK.B	Berkshire Hathaway	Finance	--	--	29%
BBY	Best Buy Co	Retail Trade	Greg Melich	In Line	22%
BIIB	Biogen	Manufacturing	Umer Raffat	Outperform	22%
BIO	Bio-Rad Laboratories	Manufacturing	--	--	25%
TECH	Bio-Techne	Manufacturing	--	--	22%
BLK	BlackRock	Finance	Glenn Schorr	Outperform	30%
BA	Boeing	Manufacturing	--	--	24%
BKNG	Booking Holdings	Admin, Support, Waste Mgmt, Remediation Svcs	Mark Mahaney	Outperform	27%
BWA	BorgWarner	Manufacturing	Chris McNally	In Line	20%
BXP	Boston Properties	Finance	Steve Sakwa	Outperform	28%
BSX	Boston Scientific	Wholesale Trade	Vijay Kumar	Outperform	25%
BMJ	Bristol-Myers Squibb	Manufacturing	Umer Raffat	Rating Suspended	22%
AVGO	Broadcom	Manufacturing	C.J. Muse	Outperform	23%
BR	Broadridge Financial Sol	Information	David Togut	Outperform	29%
BRO	Brown & Brown	Finance	--	--	29%
BF.B	Brown-Forman	Manufacturing	--	--	18%
BG	Bunge	Agriculture	--	--	13%
CHRW	C.H. Robinson Worldwide	Transport & Warehouse	Jonathan Chappell	In Line	23%
CDNS	Cadence Design Systems	Information	--	--	30%
CZR	Caesars Entertainment	Accommodation & Food Svcs	--	--	18%
CPT	Camden Property Trust	Real Estate	Steve Sakwa	In Line	23%
CPB	Campbell Soup	Manufacturing	David Palmer	In Line	18%
COF	Capital One Financial	Finance	John Pancari	Outperform	29%
CAH	Cardinal Health	Wholesale Trade	Elizabeth Anderson	In Line	23%
KMX	CarMax	Retail Trade	Michael Montani	In Line	20%
CCL	Carnival (US)	Transport & Warehouse	--	--	21%
CARR	Carrier Global	Manufacturing	--	--	20%
CTLT	Catalent	Manufacturing	--	--	22%
CAT	Caterpillar	Manufacturing	David Raso	Outperform	20%
CBOE	Cboe Global Markets	Finance	--	--	30%
CBRE	CBRE Group	Real Estate	Steve Sakwa	Outperform	23%
CDW	CDW	Prof., Scientific & Technical Svcs	Amit Daryanani	Outperform	30%
CE	Celanese	Manufacturing	Stephen Richardson	In Line	20%
CNC	Centene	Finance	--	--	29%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 59: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 3/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
CNP	CenterPoint Energy	Utilities	Durgesh Chopra	Outperform	21%
CDAY	Ceridian	Information	--	--	30%
CF	CF Industries	Manufacturing	--	--	20%
CRL	Charles River Labs Intl	Prof., Scientific & Technical Svcs	Elizabeth Anderson	Outperform	28%
SCHW	Charles Schwab	Finance	--	--	30%
CHTR	Charter Communications	Information	Vijay Jayant	Outperform	24%
CVX	Chevron	Mining	Stephen Richardson	Outperform	22%
CMG	Chipotle	Accommodation & Food Svcs	David Palmer	Outperform	18%
CB	Chubb	Finance	David Motemaden	Outperform	29%
CHD	Church & Dwight	Manufacturing	Javier Escalante	In Line	19%
CI	Cigna	Finance	--	--	29%
CINF	Cincinnati Financial	Finance	--	--	29%
CTAS	Cintas	Real Estate	--	--	20%
CSCO	Cisco Systems	Manufacturing	Amit Daryanani	Outperform	24%
C	Citigroup	Finance	Glenn Schorr	In Line	29%
CFG	Citizens Financial Group	Finance	John Pancari	In Line	29%
CLX	Clorox	Manufacturing	Javier Escalante	Underperform	19%
CME	CME Group	Finance	--	--	30%
CMS	CMS Energy	Utilities	Durgesh Chopra	In Line	21%
KO	Coca-Cola	Manufacturing	Robert Ottenstein	Outperform	18%
CTSH	Cognizant Tech	Prof., Scientific & Technical Svcs	David Togut	In Line	30%
CL	Colgate-Palmolive	Manufacturing	Robert Ottenstein	Outperform	19%
CMCSA	Comcast	Information	Vijay Jayant	Outperform	24%
CMA	Comerica	Finance	John Pancari	In Line	29%
CAG	Conagra Brands	Manufacturing	David Palmer	Outperform	17%
COP	ConocoPhillips	Mining	Stephen Richardson	Outperform	22%
ED	Consolidated Edison	Utilities	Durgesh Chopra	In Line	21%
STZ	Constellation Brands	Manufacturing	Robert Ottenstein	Outperform	18%
CEG	Constellation Energy	Utilities	Durgesh Chopra	Outperform	21%
COO	Cooper Companies	Manufacturing	--	--	21%
CPRT	Copart	Retail Trade	--	--	20%
GLW	Corning	Manufacturing	--	--	17%
CTVA	Corteva	Manufacturing	--	--	20%
CSGP	CoStar Group	Information	--	--	28%
COST	Costco Wholesale	Retail Trade	Greg Melich	Outperform	19%
CTRA	Coterra Energy	Mining	--	--	22%
CCI	Crown Castle	Real Estate	--	--	23%
CSX	CSX	Transport & Warehouse	Jonathan Chappell	Outperform	17%
CMI	Cummins	Manufacturing	David Raso	In Line	20%
CVS	CVS Health	Retail Trade	Elizabeth Anderson	In Line	21%
DHR	Danaher	Manufacturing	Vijay Kumar	Outperform	25%
DRI	Darden Restaurants	Accommodation & Food Svcs	David Palmer	In Line	18%
DVA	DaVita	Health Care	--	--	24%
DE	Deere	Manufacturing	David Raso	Outperform	20%
DAL	Delta Air Lines	Transport & Warehouse	Duane Pfennigwerth	Outperform	19%
XRAY	DENTSPLY SIRONA	Manufacturing	Elizabeth Anderson	Outperform	21%
DVN	Devon Energy	Mining	Stephen Richardson	In Line	22%
DXCM	DexCom	Manufacturing	--	--	21%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 60: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 4/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
FANG	Diamondback Energy	Mining	Stephen Richardson	Outperform	22%
DLR	Digital Realty Trust	Real Estate	Irvin Liu	Outperform	23%
DFS	Discover Financial	Finance	John Pancari	In Line	29%
DG	Dollar General	Retail Trade	Michael Montani	Outperform	19%
DLTR	Dollar Tree	Retail Trade	Michael Montani	In Line	19%
D	Dominion Energy	Utilities	Durgesh Chopra	In Line	21%
DPZ	Domino's Pizza	Accommodation & Food Svcs	David Palmer	Outperform	18%
DOV	Dover Corp /IL	Manufacturing	--	--	20%
DOW	Dow	Manufacturing	Stephen Richardson	In Line	20%
DHI	DR Horton	Construction	Stephen Kim	Outperform	20%
DTE	DTE Energy	Utilities	Durgesh Chopra	Outperform	21%
DUK	Duke Energy	Utilities	Durgesh Chopra	In Line	21%
DD	DuPont de Nemours	Manufacturing	--	--	20%
DXC	DXC Technology	Information	--	--	29%
EMN	Eastman Chemical	Manufacturing	Stephen Richardson	In Line	20%
ETN	Eaton	Manufacturing	David Raso	Outperform	20%
EBAY	eBay	Retail Trade	Mark Mahaney	In Line	19%
ECL	Ecolab	Manufacturing	Stephen Richardson	In Line	20%
EIX	Edison International	Utilities	Durgesh Chopra	In Line	21%
EW	Edwards Lifesciences	Manufacturing	Vijay Kumar	Outperform	21%
EA	Electronic Arts	Information	--	--	30%
ELV	Elevance Health	Finance	--	--	29%
LLY	Eli Lilly & Co	Manufacturing	Umer Raffat	In Line	22%
EMR	Emerson Electric	Manufacturing	--	--	25%
ENPH	Enphase Energy	Manufacturing	James West	Outperform	23%
ETR	Entergy	Utilities	Michael Lonegan	In Line	21%
EOG	EOG Resources	Mining	Stephen Richardson	Outperform	22%
EPAM	EPAM Systems	Prof., Scientific & Technical Svcs	--	--	30%
EQT	EQT (US)	Mining	Stephen Richardson	Outperform	22%
EFX	Equifax	Admin, Support, Waste Mgmt, Remediation Svcs	David Togut	In Line	27%
EQIX	Equinix	Real Estate	Irvin Liu	Outperform	23%
EQR	Equity Residential	Finance	Steve Sakwa	Outperform	28%
ESS	Essex Property Trust	Real Estate	Steve Sakwa	In Line	23%
EL	Estee Lauder	Manufacturing	Robert Ottenstein	Outperform	22%
ETSY	Etsy	Retail Trade	Shweta Khajuria	Outperform	19%
EG	Everest Group	Finance	--	--	29%
EVRG	Eversource Energy	Utilities	Durgesh Chopra	In Line	21%
ES	Eversource Energy	Utilities	Durgesh Chopra	Outperform	21%
EXC	Exelon	Utilities	Durgesh Chopra	Outperform	21%
EXPE	Expedia Group	Admin, Support, Waste Mgmt, Remediation Svcs	Mark Mahaney	In Line	27%
EXPD	Expeditors	Transport & Warehouse	--	--	23%
EXR	Extra Space Storage	Real Estate	Steve Sakwa	In Line	23%
XOM	Exxon Mobil	Mining	Stephen Richardson	Outperform	22%
FFIV	F5	Information	Amit Daryanani	In Line	30%
FDS	FactSet	Information	--	--	29%
FICO	Fair Isaac	Information	--	--	30%
FAST	Fastenal	Wholesale Trade	--	--	21%
FRT	Federal Realty Investment	Finance	Steve Sakwa	In Line	28%
FDX	FedEx	Transport & Warehouse	Jonathan Chappell	Outperform	14%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 61: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 5/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
FIS	Fidelity National Info	Information	David Togut	Outperform	30%
FITB	Fifth Third Bancorp	Finance	John Pancari	In Line	29%
FSLR	First Solar	Manufacturing	Sean Morgan	In Line	23%
FE	FirstEnergy Corp	Utilities	Michael Lonegan	Outperform	21%
FI	Fiserv	Information	David Togut	Outperform	30%
FLT	FLEETCOR Technologies	Finance	Sheriq Sumar	Outperform	29%
FMC	FMC	Manufacturing	--	--	20%
F	Ford Motor	Manufacturing	Chris McNally	In Line	17%
FTNT	Fortinet Inc	Information	Irvin Liu	Outperform	30%
FTV	Fortive	Manufacturing	Amit Daryanani	Outperform	25%
FOX	Fox	Information	--	--	28%
BEN	Franklin Resources	Finance	Glenn Schorr	Underperform	30%
FCX	Freeport-McMoRan	Mining	--	--	17%
GRMN	Garmin	Manufacturing	--	--	24%
IT	Gartner	Information	--	--	27%
GEHC	GE Healthcare	Manufacturing	Vijay Kumar	Outperform	22%
GEN	Gen Digital	Information	Peter Levine	Outperform	30%
GNRC	Generac	Manufacturing	--	--	20%
GD	General Dynamics	Manufacturing	--	--	24%
GIS	General Mills	Manufacturing	David Palmer	In Line	18%
GM	General Motors	Manufacturing	Chris McNally	Outperform	17%
GPC	Genuine Parts	Wholesale Trade	Greg Melich	In Line	19%
GILD	Gilead Sciences	Manufacturing	Umer Raffat	Outperform	22%
GPN	Global Payments	Information	David Togut	In Line	30%
GL	Globe Life	Finance	Thomas Gallagher	In Line	29%
GS	Goldman Sachs Group	Finance	Glenn Schorr	Outperform	30%
HAL	Halliburton	Mining	James West	Outperform	17%
HIG	Hartford Financial Services	Finance	David Motemaden	In Line	29%
HAS	Hasbro	Manufacturing	--	--	20%
HCA	HCA Healthcare	Health Care	--	--	22%
PEAK	Healthpeak Properties	Real Estate	Steve Sakwa	Outperform	23%
HSIC	Henry Schein	Wholesale Trade	Elizabeth Anderson	In Line	25%
HSY	Hershey	Manufacturing	David Palmer	In Line	18%
HES	Hess	Mining	Stephen Richardson	Outperform	22%
HPE	Hewlett Packard Enterp	Manufacturing	Amit Daryanani	In Line	27%
HLT	Hilton World	Accommodation & Food Svcs	Duane Pfennigwerth	Outperform	18%
HOLX	Hologic	Manufacturing	Vijay Kumar	In Line	25%
HD	Home Depot	Retail Trade	Greg Melich	Outperform	19%
HON	Honeywell International	Manufacturing	--	--	24%
HRL	Hormel Foods	Manufacturing	--	--	15%
HST	Host Hotels & Resorts	Real Estate	Duane Pfennigwerth	Outperform	23%
HWM	Howmet Aerospace	Manufacturing	--	--	24%
HPQ	HP	Manufacturing	Amit Daryanani	In Line	27%
HUM	Humana	Finance	--	--	29%
HBAN	Huntington Bancshares	Finance	John Pancari	In Line	29%
HII	Huntington Ingalls	Manufacturing	--	--	17%
IBM	IBM	Prof., Scientific & Technical Svcs	Amit Daryanani	In Line	30%
IEX	IDEX	Manufacturing	--	--	20%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 62: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 6/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
IDXX	IDEXX Laboratories Inc	Manufacturing	--	--	22%
ITW	Illinois Tool Works	Manufacturing	David Raso	In Line	20%
ILMN	Illumina	Manufacturing	Vijay Kumar	Outperform	25%
INCY	Incyte	Manufacturing	Gavin Clark-Gartner	In Line	22%
IR	Ingersoll Rand	Manufacturing	David Raso	Outperform	20%
PODD	Insulet	Manufacturing	--	--	21%
INTC	Intel	Manufacturing	C.J. Muse	In Line	23%
ICE	Intercontinental Exchange	Finance	--	--	30%
IFF	International Flavors	Manufacturing	--	--	18%
IPG	Interpublic Group	Prof., Scientific & Technical Svcs	--	--	28%
IP	Intl Paper	Manufacturing	--	--	16%
INTU	Intuit	Information	Kirk Materne	Outperform	30%
ISRG	Intuitive Surgical	Manufacturing	Vijay Kumar	In Line	21%
IVZ	Invesco	Finance	Glenn Schorr	In Line	30%
INVH	Invitation Homs	Real Estate	Steve Sakwa	In Line	23%
IQV	IQVIA Holdings	Prof., Scientific & Technical Svcs	Elizabeth Anderson	Outperform	28%
IRM	Iron Mountain	Finance	--	--	28%
SJM	J.M. Smucker	Manufacturing	--	--	17%
JKHY	Jack Henry & Associates	Information	David Togut	In Line	30%
J	Jacobs Solutions	Information	--	--	29%
JBHT	JB Hunt Transport Svcs	Transport & Warehouse	Jonathan Chappell	Outperform	15%
JNJ	Johnson & Johnson	Manufacturing	--	--	22%
JCI	Johnson Ctr Int	Manufacturing	--	--	25%
JPM	JPMorgan Chase	Finance	Glenn Schorr	Outperform	29%
JNPR	Juniper Networks	Manufacturing	Amit Daryanani	Outperform	24%
K	Kellogg	Manufacturing	David Palmer	In Line	18%
KDP	Keurig Dr Pepper	Manufacturing	Robert Ottenstein	In Line	18%
KEY	KeyCorp	Finance	John Pancari	Outperform	29%
KEYS	Keysight Tech	Manufacturing	--	--	25%
KMB	Kimberly-Clark	Manufacturing	Javier Escalante	In Line	20%
KIM	Kimco Realty	Real Estate	Steve Sakwa	In Line	23%
KMI	Kinder Morgan	Transport & Warehouse	--	--	21%
KLAC	KLA	Manufacturing	C.J. Muse	In Line	25%
KHC	Kraft Heinz	Manufacturing	David Palmer	In Line	18%
KR	Kroger	Retail Trade	Michael Montani	Outperform	18%
LHX	L3Harris Technologies	Manufacturing	--	--	25%
LH	Laboratory Corp	Health Care	--	--	22%
LRCX	Lam Research	Manufacturing	C.J. Muse	Outperform	20%
LW	Lamb Weston Holdings	Manufacturing	--	--	17%
LVS	Las Vegas Sands	Accomdation & Food Svcs	--	--	18%
LDOS	Leidos	Manufacturing	--	--	25%
LEN	Lennar	Construction	Stephen Kim	Outperform	20%
LNC	Lincoln National	Finance	Thomas Gallagher	In Line	29%
LIN	Linde	Manufacturing	Stephen Richardson	Outperform	20%
LYV	Live Nation Entertainment	Arts, Entertainment, and Recreation	Ashton Welles	In Line	22%
LKQ	LKQ	Wholesale Trade	--	--	19%
LMT	Lockheed Martin	Manufacturing	--	--	25%
L	Loews Corp	Finance	--	--	29%
LOW	Lowe's Companies	Retail Trade	Greg Melich	In Line	19%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 63: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 7/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
LYB	LyondellBasell Inds NV	Manufacturing	Stephen Richardson	In Line	20%
MTB	M&T Bank	Finance	John Pancari	In Line	29%
MRO	Marathon Oil	Mining	Stephen Richardson	Outperform	22%
MPC	Marathon Petroleum	Manufacturing	--	--	20%
MKTX	MarketAxess	Finance	--	--	30%
MAR	Marriott International	Accommodation & Food Svcs	Duane Pfennigwerth	In Line	18%
MMC	Marsh & McLennan	Finance	David Motemaden	Outperform	29%
MLM	Martin Marietta Materials	Mining	--	--	15%
MAS	Masco	Manufacturing	Stephen Kim	In Line	19%
MA	Mastercard	Finance	David Togut	Outperform	29%
MTCH	Match Group	Information	Shweta Khajuria	Outperform	27%
MKC	McCormick	Manufacturing	--	--	18%
MCD	McDonald's	Accommodation & Food Svcs	David Palmer	Outperform	18%
MCK	McKesson	Wholesale Trade	Elizabeth Anderson	Outperform	23%
MDT	Medtronic	Manufacturing	Vijay Kumar	Outperform	25%
MRK	Merck & Co	Manufacturing	Umer Raffat	Outperform	22%
META	Meta Platforms	Information	Mark Mahaney	Outperform	29%
MET	MetLife	Finance	Thomas Gallagher	Outperform	29%
MTD	Mettler-Toledo	Manufacturing	Vijay Kumar	In Line	25%
MGM	MGM Resorts	Accommodation & Food Svcs	--	--	18%
MCHP	Microchip Technology	Manufacturing	--	--	23%
MU	Micron Technology	Manufacturing	C.J. Muse	Outperform	23%
MSFT	Microsoft	Information	Kirk Materne	Outperform	30%
MAA	Mid-America Apartment Communities	Real Estate	--	--	23%
MRNA	Moderna	Prof., Scientific & Technical Svcs	--	--	28%
MHK	Mohawk Industries	Manufacturing	Stephen Kim	In Line	16%
MOH	Molina Healthcare	Finance	--	--	29%
TAP	Molson Coors Beverage	Manufacturing	Robert Ottenstein	Outperform	18%
MDLZ	Mondelez International	Manufacturing	David Palmer	Outperform	18%
MPWR	Monolithic Power Systems	Manufacturing	--	--	23%
MNST	Monster Beverage	Manufacturing	Robert Ottenstein	Outperform	18%
MCO	Moody's	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	27%
MS	Morgan Stanley	Finance	Glenn Schorr	Outperform	30%
MOS	Mosaic	Manufacturing	--	--	20%
MSI	Motorola Soltn	Manufacturing	--	--	24%
MSCI	MSCI Inc	Information	--	--	29%
NTAP	NetApp	Manufacturing	Amit Daryanani	In Line	27%
NFLX	Netflix	Information	Mark Mahaney	Outperform	29%
NWL	Newell Brands	Manufacturing	--	--	20%
NEM	Newmont Corp	Mining	--	--	17%
NWS	News	Information	--	--	27%
NEE	NextEra Energy	Utilities	Durgesh Chopra	In Line	21%
NKE	NIKE	Manufacturing	--	--	21%
NI	NiSource	Utilities	Durgesh Chopra	Outperform	21%
NDSN	Nordson	Manufacturing	--	--	20%
NSC	Norfolk Southern	Transport & Warehouse	Jonathan Chappell	Outperform	17%
NTRS	Northern Trust	Finance	Glenn Schorr	In Line	30%
NOC	Northrop Grumman	Manufacturing	--	--	24%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 64: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 8/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
NCLH	Norwegian Cruise Line	Transport & Warehouse	--	--	21%
NRG	NRG Energy	Utilities	Durgesh Chopra	In Line	21%
NUE	Nucor	Manufacturing	--	--	17%
NVDA	NVIDIA	Manufacturing	C.J. Muse	Outperform	23%
NVR	NVR	Construction	--	--	20%
NXPI	NXP Semiconductors	Manufacturing	C.J. Muse	Outperform	23%
OXY	Occidental Petroleum	Mining	Stephen Richardson	Underperform	17%
ODFL	Old Dominion Freight Line	Transport & Warehouse	Jonathan Chappell	Outperform	15%
OMC	Omnicom	Prof., Scientific & Technical Svcs	--	--	28%
ON	ON Semiconductor	Manufacturing	--	--	23%
OKE	ONEOK	Transport & Warehouse	--	--	21%
ORCL	Oracle	Information	Kirk Materne	In Line	30%
ORLY	O'Reilly Automotive	Retail Trade	Greg Melich	Outperform	18%
OGN	Organon	Manufacturing	Umer Raffat	Outperform	22%
OTIS	Otis Worldwide	Manufacturing	--	--	20%
PCAR	PACCAR	Manufacturing	David Raso	In Line	17%
PKG	Packaging of America	Manufacturing	--	--	17%
PANW	Palo Alto Networks	Information	Irvin Liu	Outperform	30%
PARA	Paramount Global	Information	Vijay Jayant	In Line	28%
PH	Parker-Hannifin	Manufacturing	David Raso	Outperform	20%
PAYX	Paychex	Prof., Scientific & Technical Svcs	David Togut	In Line	30%
PAYC	Paycom Software	Information	--	--	30%
PYPL	PayPal Holdings	Finance	David Togut	In Line	29%
PNR	Pentair	Manufacturing	--	--	21%
PEP	PepsiCo	Manufacturing	Robert Ottenstein	In Line	18%
PFE	Pfizer	Manufacturing	Umer Raffat	Outperform	22%
PCG	PG&E	Utilities	Durgesh Chopra	Rating Suspended	21%
PM	Philip Morris	Manufacturing	--	--	18%
PSX	Phillips 66	Manufacturing	--	--	20%
PNW	Pinnacle West Capital	Utilities	Michael Loneyan	Underperform	21%
PXD	Pioneer Natural Resources	Mining	Stephen Richardson	In Line	22%
PNC	PNC Financial Services Group	Finance	John Pancari	Outperform	29%
POOL	Pool	Wholesale Trade	--	--	21%
PPG	PPG Industries	Manufacturing	Stephen Richardson	Outperform	19%
PPL	PPL	Utilities	Durgesh Chopra	Outperform	21%
PFG	Principal Fincl Group	Finance	Thomas Gallagher	Underperform	30%
PG	Procter & Gamble	Manufacturing	Robert Ottenstein	Outperform	20%
PGR	Progressive	Finance	David Motemaden	Outperform	29%
PLD	Prologis	Real Estate	Steve Sakwa	Outperform	23%
PRU	Prudential Financial	Finance	Thomas Gallagher	Underperform	29%
PTC	PTC	Information	--	--	30%
PEG	Public Service Enterprise	Utilities	Durgesh Chopra	Outperform	21%
PSA	Public Storage	Finance	Steve Sakwa	In Line	28%
PHM	Pulte Home	Construction	Stephen Kim	Outperform	20%
QRVO	Qorvo	Manufacturing	--	--	23%
QCOM	QUALCOMM	Manufacturing	C.J. Muse	In Line	23%
PWR	Quanta Services	Construction	--	--	18%
DGX	Quest Diagnostics	Health Care	Elizabeth Anderson	In Line	22%
RL	Ralph Lauren	Manufacturing	--	--	18%

Note: Base case AI leverage is based on 67% AI adoption by 2028. PEP AI exposure is based 60% exposure to Other Food Manufacturing and 40% exposure to Beverage Manufacturing. Source: Evercore ISI Research

Figure 65: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 9/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
RJF	Raymond James Financial	Finance	--	--	30%
O	Realty Income	Finance	--	--	28%
REG	Regency Centers	Finance	Samir Khanal	In Line	28%
REGN	Regeneron Pharmaceuticals	Manufacturing	--	--	22%
RF	Regions Financial	Finance	John Pancari	Outperform	29%
RSG	Republic Services	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	16%
RMD	ResMed	Manufacturing	--	--	25%
RVTY	Revvity	Manufacturing	Vijay Kumar	In Line	25%
RHI	Robert Half	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	19%
ROK	Rockwell Automation	Manufacturing	--	--	25%
ROL	Rollins	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	15%
ROP	Roper Technologies	Information	--	--	30%
ROST	Ross Stores	Retail Trade	--	--	21%
RCL	Royal Caribbean	Transport & Warehouse	--	--	21%
RTX	RTX	Manufacturing	--	--	24%
SPGI	S&P Global	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	27%
CRM	Salesforce	Information	Kirk Materne	Outperform	30%
SBAC	SBA Communications	Finance	--	--	28%
SLB	Schlumberger	Mining	James West	Outperform	17%
STX	Seagate Technology Holdings	Manufacturing	C.J. Muse	In Line	27%
SEE	Sealed Air	Manufacturing	--	--	18%
SRE	Sempra	Utilities	Durgesh Chopra	Outperform	21%
NOW	ServiceNow	Information	Kirk Materne	Outperform	30%
SHW	Sherwin-Williams	Manufacturing	Greg Melich	Outperform	19%
SPG	Simon Property Group	Finance	Steve Sakwa	In Line	28%
SWKS	Skyworks Solutions	Manufacturing	--	--	23%
SNA	Snap-On	Manufacturing	--	--	19%
SEDG	SolarEdge Tech	Manufacturing	--	--	20%
SO	Southern	Utilities	Durgesh Chopra	In Line	21%
LUV	Southwest Airlines	Transport & Warehouse	Duane Pfennigwerth	Outperform	19%
SWK	Stanley Black & Decker	Manufacturing	--	--	20%
SBUX	Starbucks	Accommodation & Food Svcs	David Palmer	Outperform	18%
STT	State Street	Finance	Glenn Schorr	Outperform	30%
STLD	Steel Dynamics	Manufacturing	--	--	17%
STE	STERIS	Manufacturing	--	--	21%
SYK	Stryker	Manufacturing	Vijay Kumar	Outperform	21%
SYF	Synchrony Finl	Finance	John Pancari	Outperform	29%
SNPS	Synopsys	Information	--	--	30%
SYU	Sysco	Accommodation & Food Svcs	--	--	18%
TROW	T. Rowe Price Group	Finance	Glenn Schorr	In Line	30%
TTWO	Take-Two Interactive	Information	--	--	30%
TPR	Tapestry	Retail Trade	--	--	21%
TRGP	Targa Resources	Utilities	--	--	21%
TGT	Target	Retail Trade	Greg Melich	In Line	19%
TEL	TE Connectivity	Manufacturing	Amit Daryanani	Outperform	23%
TDY	Teledyne Technologies	Manufacturing	--	--	25%
TFX	Teleflex	Manufacturing	--	--	21%
TER	Teradyne	Manufacturing	C.J. Muse	Outperform	25%
TSLA	Tesla	Manufacturing	Chris McNally	In Line	17%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

Figure 66: S&P 500 Stocks and their Potential AI Automation in 5 years under EVR ISI Base Case Assumptions (Cont'd. 10/10)

Ticker	Name	NAICS Level 1 Industry	EVR ISI Analyst	EVR ISI Rating	5Yr Base Case AI Automation Potential
TXN	Texas Instruments	Manufacturing	C.J. Muse	In Line	23%
TXT	Textron	Manufacturing	--	--	24%
TMO	Thermo Fisher Scientific	Manufacturing	Vijay Kumar	Outperform	25%
TJX	TJX Cos	Retail Trade	--	--	21%
TMUS	T-Mobile US	Information	Vijay Jayant	Outperform	24%
TSCO	Tractor Supply	Retail Trade	Oliver Wintermantel	Outperform	18%
TT	Trane Technologies	Manufacturing	--	--	20%
TDG	TransDigm Group	Manufacturing	--	--	24%
TRV	Travelers Companies	Finance	David Motemaden	Outperform	29%
TRMB	Trimble	Information	--	--	30%
TFC	Truist Financial	Finance	John Pancari	In Line	29%
TYL	Tyler Technologies	Information	Kirk Materne	In Line	30%
TSN	Tyson Foods	Manufacturing	--	--	15%
USB	U.S. Bancorp	Finance	John Pancari	In Line	29%
UDR	UDR	Real Estate	Steve Sakwa	In Line	23%
ULTA	Ulta Beauty	Retail Trade	--	--	21%
UNP	Union Pacific	Transport & Warehouse	Jonathan Chappell	Outperform	17%
UAL	United Airlines Holdings	Transport & Warehouse	Duane Pfennigwerth	In Line	19%
UPS	United Parcel Service	Transport & Warehouse	Jonathan Chappell	In Line	14%
URI	United Rentals	Real Estate	David Raso	Outperform	20%
UNH	UnitedHealth Group	Finance	--	--	29%
UHS	Universal Health Services	Health Care	--	--	22%
VLO	Valero Energy	Manufacturing	--	--	20%
VTR	Ventas	Real Estate	Steve Sakwa	In Line	23%
VRSN	VeriSign	Prof., Scientific & Technical Svcs	--	--	30%
VRSK	Verisk Analytics	Information	David Togut	In Line	29%
VZ	Verizon Communications	Information	Vijay Jayant	In Line	24%
VRTX	Vertex Pharmaceuticals	Manufacturing	Liisa Bayko	Outperform	22%
VFC	VF	Manufacturing	--	--	18%
VTRS	Viatis	Manufacturing	Umer Raffat	Outperform	22%
VICI	VICI Properties	Real Estate	Steve Sakwa	Outperform	23%
V	Visa	Finance	David Togut	Outperform	29%
VMC	Vulcan Materials	Mining	--	--	15%
WRB	W. R. Berkley	Finance	David Motemaden	Outperform	29%
WAB	Wabtec	Manufacturing	--	--	19%
WBA	Walgreens Boots Alliance	Retail Trade	Elizabeth Anderson	In Line	21%
WMT	Walmart	Retail Trade	Greg Melich	Outperform	19%
DIS	Walt Disney	Information	Vijay Jayant	Outperform	24%
WBD	Warner Bros. Discovery	Information	Vijay Jayant	Outperform	24%
WM	Waste Management	Admin, Support, Waste Mgmt, Remediation Svcs	--	--	16%
WAT	Waters	Manufacturing	Vijay Kumar	In Line	25%
WEC	WEC Energy Group	Utilities	Durgesh Chopra	In Line	21%
WFC	Wells Fargo	Finance	John Pancari	Outperform	29%
WELL	Welltower	Real Estate	Steve Sakwa	In Line	23%
WST	West Pharmaceutical	Manufacturing	--	--	21%
WDC	Western Digital	Manufacturing	C.J. Muse	Outperform	27%
WRK	WestRock	Manufacturing	--	--	17%
WY	Weyerhaeuser	Finance	--	--	28%
WHR	Whirlpool	Manufacturing	--	--	20%
WMB	Williams Cos	Transport & Warehouse	--	--	21%
WTW	Willis Towers Watson	Finance	David Motemaden	In Line	29%
GWV	WW Grainger	Wholesale Trade	--	--	21%
WYNN	Wynn Resorts	Accommodation & Food Svcs	--	--	18%
XEL	Xcel Energy	Utilities	Durgesh Chopra	Outperform	21%
XYL	Xylem	Manufacturing	--	--	20%
YUM	Yum! Brands	Accommodation & Food Svcs	David Palmer	Outperform	18%
ZBRA	Zebra Technologies	Manufacturing	--	--	27%
ZBH	Zimmer Biomet Holdings	Manufacturing	Vijay Kumar	Outperform	21%
ZION	Zions Bancorp	Finance	John Pancari	Outperform	29%
ZTS	Zoetis	Manufacturing	--	--	22%

Note: Base case AI leverage is based on 67% AI adoption by 2028. Source: Evercore ISI Research

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