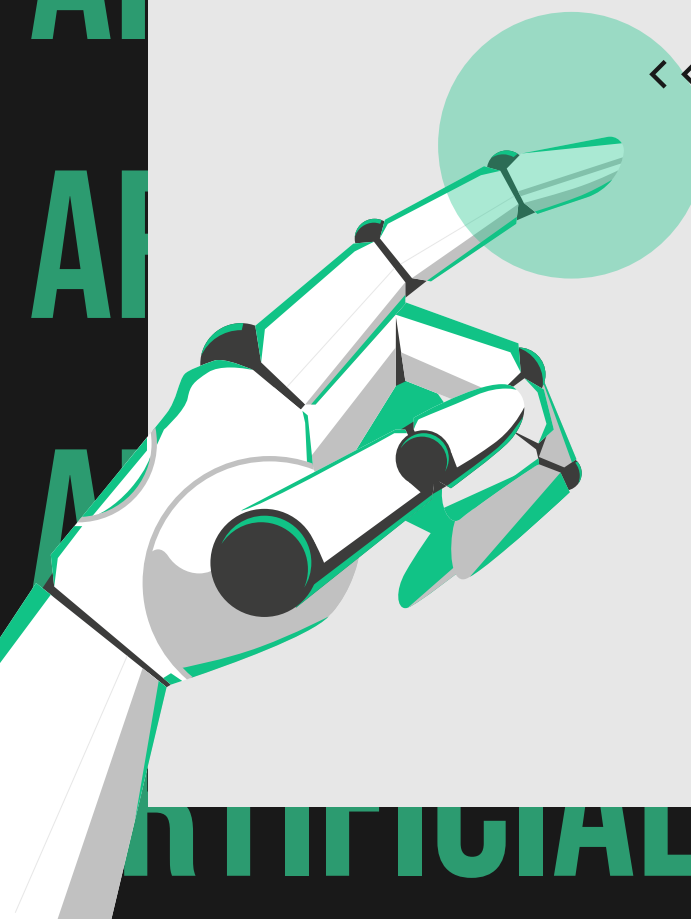
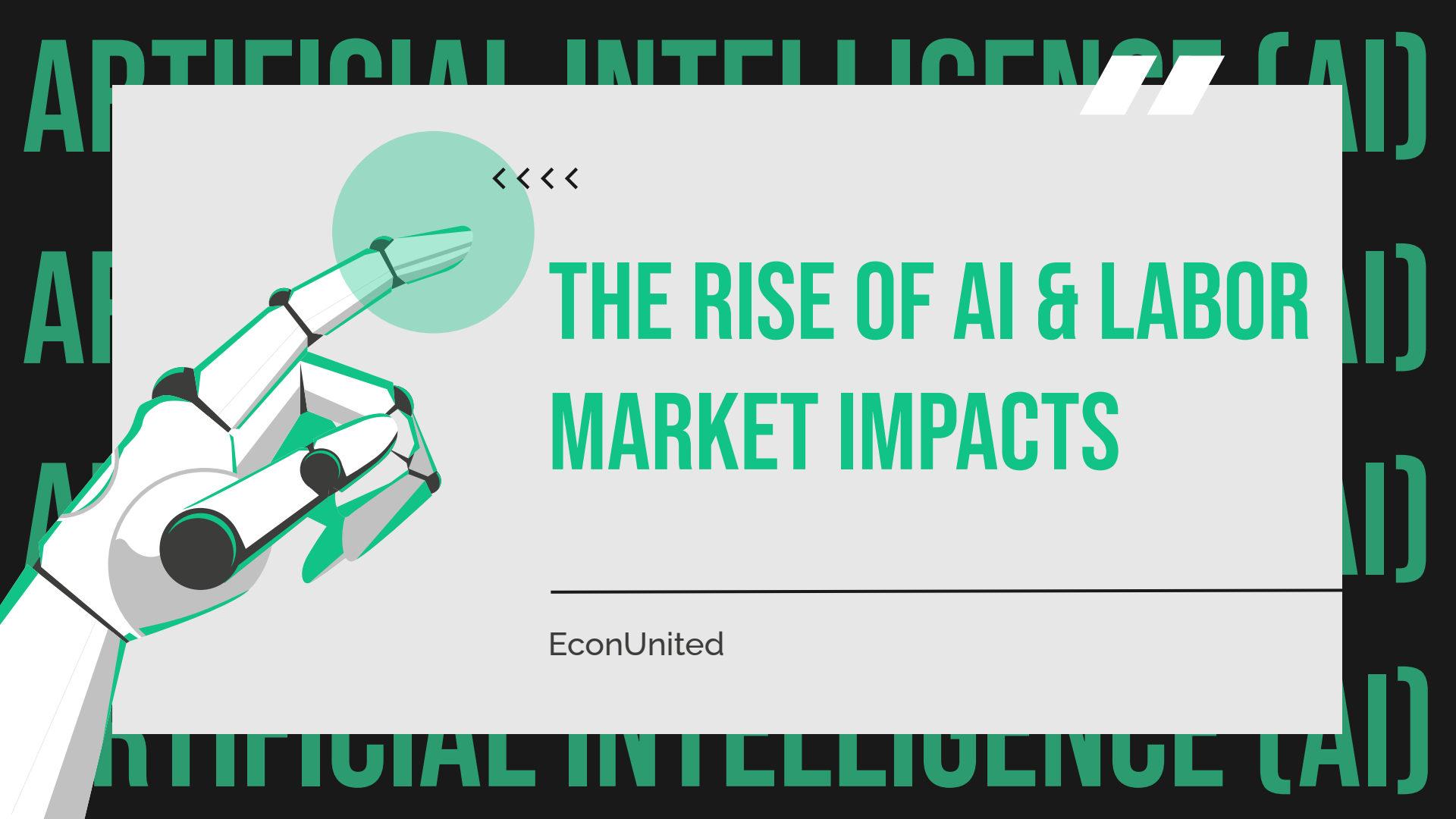




THE RISE OF AI & LABOR MARKET IMPACTS

EconUnited

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ARTIFICIAL INTELLIGENCE (AI)



01.

INTRO TO AI

What is Artificial Intelligence?



WHAT IS AI?

Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy

AI is a series of nested or derivative concepts that have emerged over more than 70 years

<<<<

ARTIFICIAL
INTELLIGENCE
(AI)

QUICK HISTORY OF AI



1950s: Computing machines functioned as large scale calculators. Organizations such as NASA used these machines for specific calculations on rocket launches

1980s: The “AI Winter” continued to grow as new inventions such as the first driverless car in Germany emerged

2010s: The renewed interest in AI led to significant growth such as *Kismet*, a social robot, Siri & Alexa, & NASA rovers on Mars

2020s: The surge in AI has led to development in Generative AI & the release in ChatGPT

1950's	 Artificial intelligence (AI) <i>Human intelligence exhibited by machines</i>		
	1980's	 Machine learning <i>AI systems that learn from historical data</i>	
	2010's	 Deep learning <i>Machine learning models that mimic human brain function</i>	
	2020's	 Generative AI (Gen AI) <i>Deep learning models (foundation models) that create original content</i>	

AI Winter: a period of decreased funding, interest, and progress in artificial intelligence research and development, caused by overblown promises, unrealistic public expectations, and technological limitations that lead to disillusionment and a slowdown in investment

AI IN YOUR DAILY APPS



School & Learning: Grammarly, ChaptGPT, Quizlet

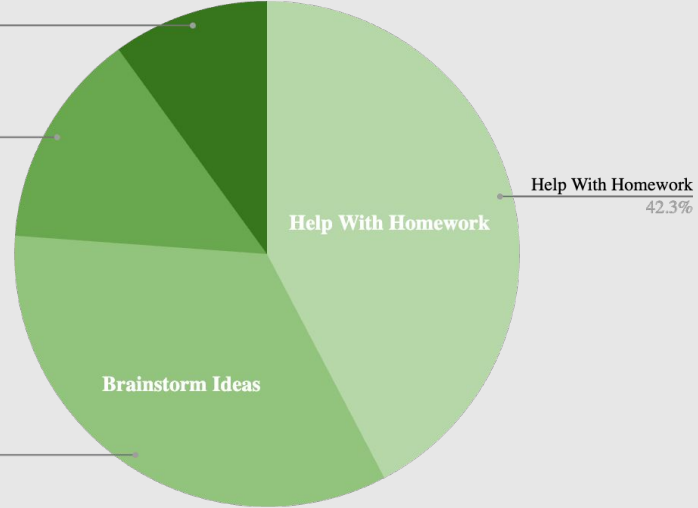
Social Media: Snapchat, Instagram, TikTok

There are many apps that you may be using that you don't know are powered by AI!

Keep Me Company
10.0%

Get Advice On A P...
13.8%

Brainstorm Ideas
33.8%



TYPES OF AI



NARROW AI

- Also known as Weak AI
- Can be trained to perform a single task
- Examples: Siri & Alexa



GENERAL AI

- Also known as Strong AI
- Can use previous learnings to accomplish new tasks
- Can perform any task a human can



SUPER AI

- Strictly theoretical
- Could evolve to feel emotions of their own
- Can make judgments that passes the ones of human beings

WHY DOES AI MATTER?

Creation of New Jobs: AI related jobs pay 11% more than non-AI related jobs

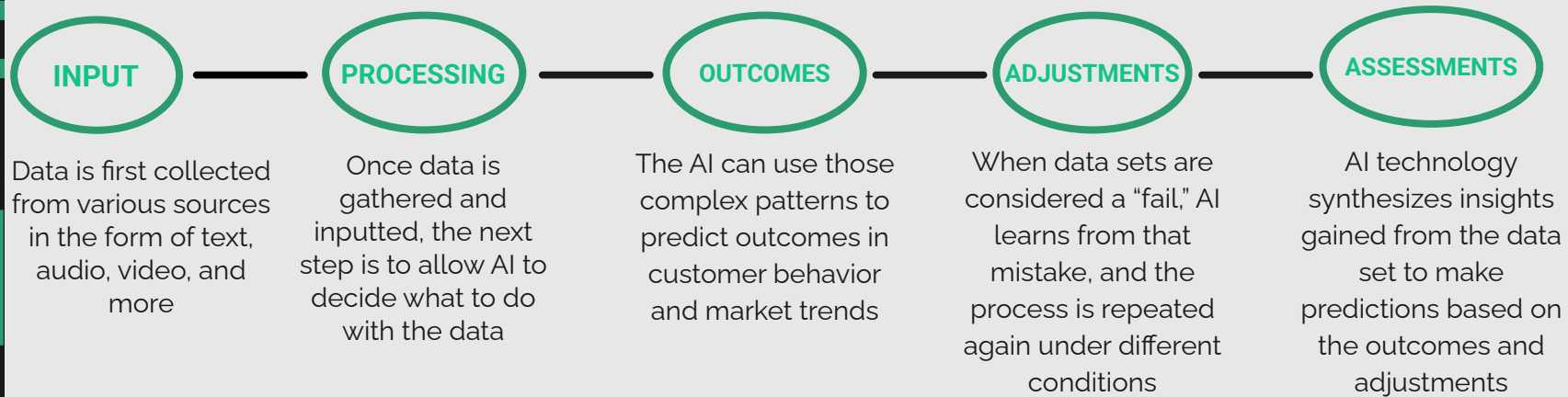
Automates Non-routine Tasks: AI can model climate change predictions & help you reduce your household energy

Critical For Professionals: Over 90% of employers plan to implement AI by 2028

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ARTIFICIAL
INTELLIGENCE
(AI)

HOW DOES AI WORK



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QUICK ACTIVITY



QUESTION

Where do you think you use AI
the most everyday (specific
app, for fun, etc)?

Comment your answer into
the Google Chat!

ANSWER

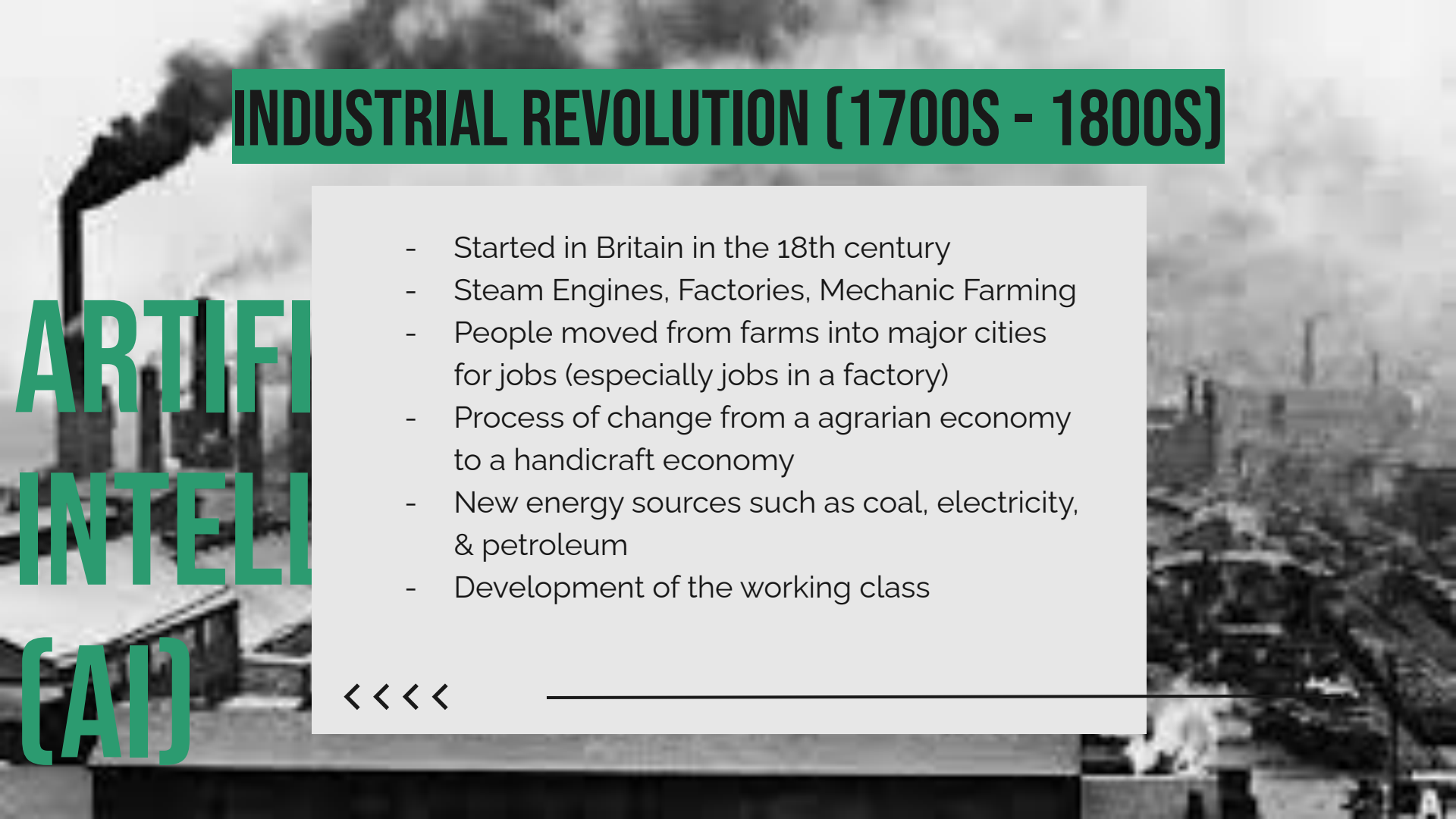


ARTIFICIAL INTELLIGENCE (AI)

02.

QUICK HISTORY OF TECHNOLOGY

Industrial Revolution to the Internet Age

A black and white photograph of a large industrial factory complex with multiple tall chimneys emitting thick plumes of dark smoke into a cloudy sky. The scene depicts the scale of industrial production during the 18th and 19th centuries.

INDUSTRIAL REVOLUTION (1700S - 1800S)

- Started in Britain in the 18th century
- Steam Engines, Factories, Mechanic Farming
- People moved from farms into major cities for jobs (especially jobs in a factory)
- Process of change from a agrarian economy to a handicraft economy
- New energy sources such as coal, electricity, & petroleum
- Development of the working class



ARTIFICIAL INTELLIGENCE (AI)

MASS PRODUCTION (1800S - 1900S)

- By the 1800s, machines were knitting sweatshirts & stitching shirts & dresses
- Mechanization reduced production into workers doing only a single tasks
- Factory managers forced workers to work long hours
- Labor unions began to form



ARTIFICIAL INTELLIGENCE (AI)

THE COMPUTER AGE (MID 1900S)

- Experimental computers were first developed in the 1940s
- Integrated circuits created in the 1950s allowed for the development of minicomputers
- In 1971, microprocessors allowed for the cost to create a computer to decrease dramatically
- Rise of the World Wide Web



MOBILE & SOCIAL (2000S - 2010S)

- The first smartphone was created in 1992 but launched in 1994
- The first social media platform, Six Degrees, was launched in 1996
- Facebook is created in 2004 & instagram is created in 2010
- Instant messaging was first created in 1971 by Murray Turoff
- Technology is becoming a center tool for information

EFFECTS OF TECHNOLOGY

As technology continues to become more and more developed, it has led to both negative & positive effects

- Increase in the rate of obesity
- Leads to lower self-esteem
- Decreased the average attention span to 8 seconds
- Increase in screen time



QUICK ACTIVITY



QUESTION

What age did you receive
your first electronic device
(phone, tablet, computer,
etc)?

Comment your answer into
the Google Chat!

ANSWER



ARTIFICIAL INTELLIGENCE (AI)

03.

ECONOMICS OF AI

The role of automation

INTRO TO AI AND AUTOMATION

AI: machines performing tasks that need human-like intelligence

Automation: use of technology to complete tasks with minimal human input

How does this reshape economies?

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ARTIFICIAL
INTELLIGENCE
(AI)

ECONOMIC BENEFITS

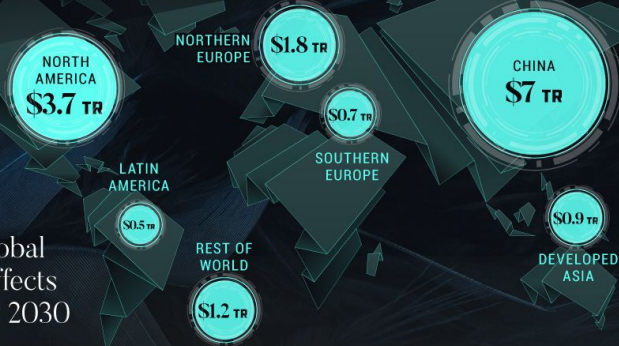
Increases productivity: faster, more accurate output

Cuts costs for businesses, raises profit margins

Creates new industries (AI tools, robotics, data services)

THE ECONOMIC IMPACT OF ARTIFICIAL INTELLIGENCE

Projected Global
Economic Effects
of AI by 2030



Source: PwC

ECONOMIC CHALLENGES

Job losses in repetitive sectors
(manufacturing, admin)

Widening income gap:
high-skill vs low-skill jobs

High adoption costs for small
and mid-sized companies



OVERALL ECONOMIC IMPACT

Short-term: disruption in traditional jobs

Long-term: potential for stronger economic growth

Policy and education crucial to balance gains

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ARTIFICIAL
INTELLIGENCE
(AI)

QUICK ACTIVITY



QUESTION

What do you think has the biggest impact, the short term or long term impacts?

Comment your answer into the Google Chat!

ANSWER



ARTIFICIAL INTELLIGENCE (AI)

04. SKILLS FOR THE AI ECONOMY

Skills you need to stand out

OVERVIEW OF LABOR MARKET SHIFTS

Automation and AI changing skill demands

Remote work and digital tools expanding globally

Some roles vanish while others grow

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ARTIFICIAL
INTELLIGENCE
(AI)

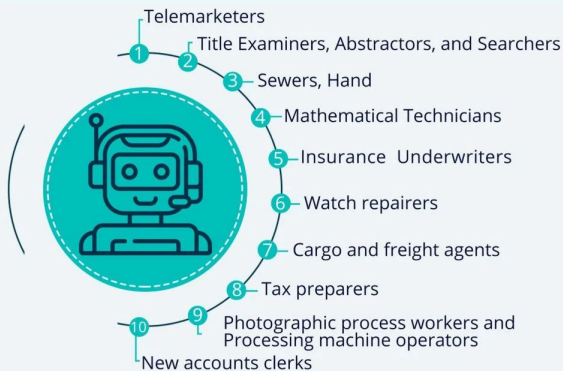
JOBS AT RISK

Routine jobs: manufacturing, retail cashiers, basic data entry

Tasks easily automated: repetitive, rule-based

Mid-skill roles more vulnerable than highly creative or manual roles

Top 10 Jobs Likely to Be Automated



Source: The University of Oxford

Research.com

JOBS ON THE RISE

Tech: AI engineers,
cybersecurity, data analysts

Human-focused: healthcare,
education, creative industries

Green economy: renewable
energy, sustainability experts



PREPARING FOR THE FUTURE

Upskill in digital and analytical skills

Focus on creativity, problem-solving, teamwork

Governments and companies offering retraining programs

<<<<

ARTIFICIAL
INTELLIGENCE
(AI)

QUICK ACTIVITY



QUESTION

What do you think is an important skill to have?

Comment your answer into
the Google Chat!

ANSWER



ARTIFICIAL INTELLIGENCE (AI)

05. SHIFTS IN THE LABOR MARKET



How will the labor market be impacted?

AI AND THE LABOR MARKET

WHAT IS AI'S ROLE?

- General-purpose technology (like electricity/internet)
- Automates tasks, analyzes data, makes predictions
- Already embedded in daily life and various industries

<<<<

WHY IT MATTERS FOR WORK

- Reshapes how jobs are done
- Impacts *all* industries: healthcare, finance, logistics, education
- Can replace, disrupt, or transform human roles

<<<<

THE BIG QUESTION

- Will AI mostly replace jobs?
- Or create new ones and boost productivity?
-

Reality: AI won't necessarily replace every single job but it will disrupt every industry and sector

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SECTORS AT HIGH RISK OF LOSS



MANUFACTURING

assembly line robotics, quality control
scanners

RETAIL & CUSTOMER SERVICE

chatbots, self-checkout, virtual assistants

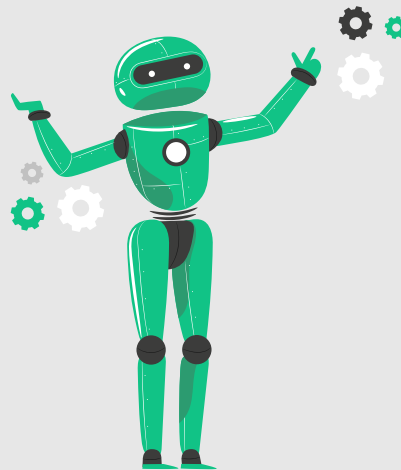
TRANSPORTATION

Enhances autonomous vehicles, delivery
drones

LOWER LEVEL OFFICE WORK

Used for data entry, payroll, routine reporting

Rule of thumb: Routine & repetitive tasks are most vulnerable, however; AI often replaces specific tasks, not the entire job in a sector.



AL
EN
AD

THE CHANGING PARADIGM

CHANGING ROLES

AI is taking over repetitive tasks, shifting jobs toward higher-value, strategic work.

HUMAN + AI COLLABORATION

AI can act as co-pilots, working along with people to complete tasks

HUMAN SKILLS RISING

Creativity, critical thinking, and emotional intelligence are becoming more critical in the workforce than basic technical skills

NEW HYBRID CAREERS

Careers require knowledge of AI literacy as well as traditional skills



WHAT IS THE LONG TERM IMPACT?



WORKFORCE TRAINING

Governments and businesses must invest in reskilling and upskilling programs.

CHANGES IN EDUCATION

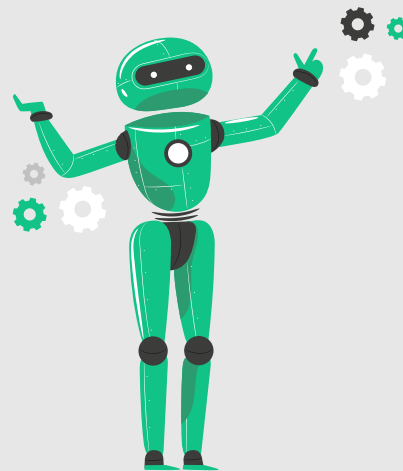
Growing focus on AI literacy, STEM, and critical thinking to prepare future workers.

SOCIAL SAFETY NETS

Debates on universal basic income (UBI), wage subsidies, and stronger unemployment benefits.

REGULATION & ETHICS

It is crucial that Policies help ensure fairness, transparency, and protection for workers.



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EN
AD

QUICK ACTIVITY



QUESTION

Do you think AI mainly supports or harms the labor market?

Comment your answer into the Google Chat!

ANSWER



ARTIFICIAL INTELLIGENCE (AI)



06.



POLICY & ETHICS

Regulations and Policy

/CAN



WHY POLICY & ETHICS MATTER

AI adoption is moving fast and regulations could be needed to smooth out the edges.

ARTI

ARTI

[AI]

[AI]

WORKFORCE & ECONOMIC POLICY

We know that AI can boost productivity, lower costs, and create entirely new industries, offering major opportunities for economic growth. But policies should encourage companies to adopt AI responsibly in a way that can enrich current jobs and maintain growth in job opportunities. At the same time, governments must prepare for risks such as worker displacement, and wage inequality.



ETHICAL CHALLENGES OF AI

BIAS & FAIRNESS

AI can reinforce discrimination if trained on biased data.

ACCOUNTABILITY

Responsibility is ambiguous when AI makes mistakes or causes harm.

PRIVACY & SURVEILLANCE

Mass data collection risks personal freedom and misuse.

POWER & CONTROL

Risk of AI dominance by a few big companies or governments.



STANCE OF MAJOR GLOBAL ACTORS



USA

Innovation-led, lighter regulation, private sector driven growth. Focus is on leading globally and avoiding stifling innovation.



CHINA

State-driven, rapid AI growth, focus on security & surveillance.



EU

Strict rules (AI Act), more regulatory frameworks but also supports growth. (Innovation lags behind US and China)

QUICK ACTIVITY



QUESTION

In your opinion would you
prioritize innovation or safety
in the growing AI market?

Comment your answer into
the Google Chat!

ANSWER



ARTIFICIAL INTELLIGENCE (AI)

THANKS



Do you have any questions?
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REFERENCES



Guide, S. (n.d.). *The Negative Effects of Technology on Children* | NU. National University. Retrieved August 30, 2025, from <https://www.nu.edu/blog/negative-effects-of-technology-on-children-what-can-you-do/>

The History of AI: A Timeline of Artificial Intelligence. (2025, May 23). Coursera. Retrieved August 30, 2025, from <https://www.coursera.org/articles/history-of-ai>

How Does AI Work? Basics to Know. (2025, June 10). Coursera. Retrieved August 30, 2025, from <https://www.coursera.org/articles/how-does-ai-work>

Industrial Revolution | Definition, History, Dates, Summary, & Facts. (2025, August 23). Britannica. Retrieved August 30, 2025, from <https://www.britannica.com/event/Industrial-Revolution>

6.8: The Computer Age. (2021, January 11). K12 LibreTexts. Retrieved August 30, 2025, from https://k12.libretexts.org/Bookshelves/Science_and_Technology/Engineering%3A_An_Introduction_for_High_School/06%3A_A_Brief_History_of_Engineering/6.08%3A_The_Computer_Age

Types of Artificial Intelligence. (2023, October 12). IBM. Retrieved August 30, 2025, from <https://www.ibm.com/think/topics/artificial-intelligence-types>

What Is Artificial Intelligence (AI)? (2024, August 9). IBM. Retrieved August 30, 2025, from <https://www.ibm.com/think/topics/artificial-intelligence>

Why is Artificial Intelligence (AI) So Important? (2025, February 6). CSU Global. Retrieved August 30, 2025, from <https://csuglobal.edu/blog/why-ai-important>

Work in the Late 19th Century | Rise of Industrial America, 1876-1900 | U.S. History Primary Source Timeline | Classroom Materials at the Library of Congress | Library of Congress. (n.d.). The Library of Congress. Retrieved August 30, 2025

Desjardins, Jeff. "Visualizing the Massive \$15.7 Trillion Impact of AI." Visual Capitalist, 21 Aug. 2017. www.visualcapitalist.com/economic-impact-artificial-intelligence-ai/.