

AI - Nepal's **Last Opportunity?**



By Gaurav Pandey

Today's Agenda

1. Learning from Past Industrial Revolution

2. Is AI Hype?

3. What are we doing in Nepal and in our Office



This presentation is **About?**

*Why I think AI is a **Generational Opportunity** and
why Nepal should invest aggressively*





GAURAV PANDEY

 **NAS-IT - President**



Nepal Government AI Regulation Council - Member

 **- CEO**



My Industry Experience

- 🔍 **12 + yrs in China/US** experience in different capacity delivering system for global companies.
- 🔍 **11+ yrs in Nepal** - Worked with top Nepalese Companies helped some of them design their system and processes
- 🔍 Worked with 100s of Global Companies across Industry and helped them design their **systems**



Himalayan Everest
Insurance Limited



.....



What People with Most Resource say about **AI**

1



Jeff Bezos

Founder, Amazon

"It's hard to overstate how big an impact AI will have on society over the next 20 years."

2



Elon Musk

CEO, Tesla & SpaceX

"AI will be the best or worst thing ever for humanity."

3



Bill Gates

Co-founder, Microsoft

"AI is the most important technology advance in decades."

4

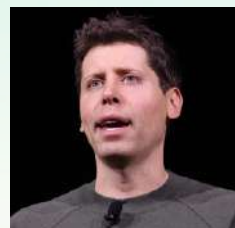


Jensen Huang

CEO, NVIDIA

"AI is the most powerful technology force of our time."

5



Sam Altman

CEO, OpenAI

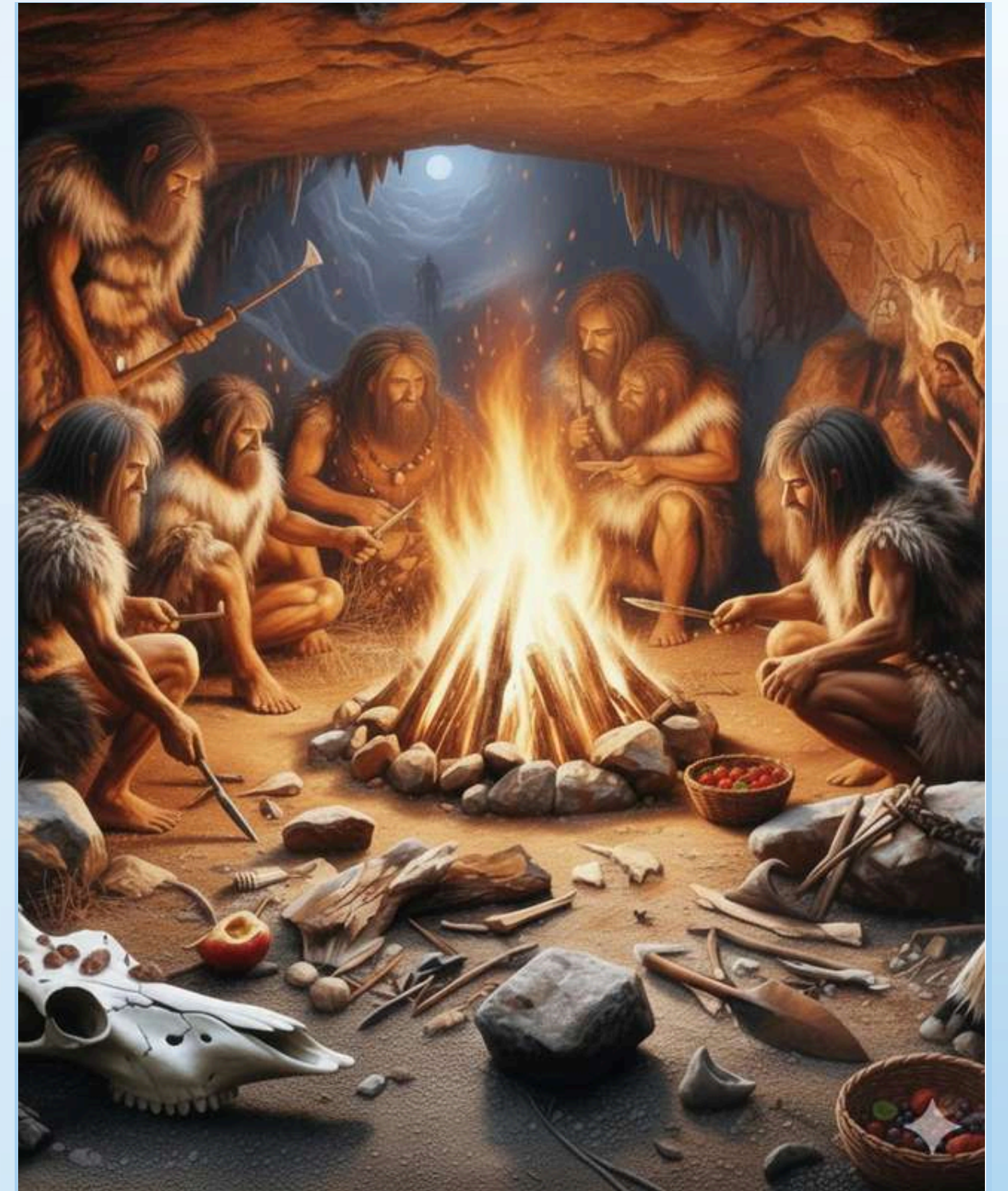
"AI will be the most transformative technology ever."



Is AI biggest Invention Ever?

- Our Ancestor Learned to control fire 1.1 million years ago
- Able to control fire completely Changed evolution trajectory of our ancestors
- Till Date Fire is the biggest Invention Humans have made i.e with most impact

I think AI is biggest Invention Ever, on par or better than Fire or Electricity



Lets see impact of :-

Industrial Revolutions



Industry 1.0

End of 18th century

Steam engine



Industry 2.0

Beginning of 20th Century

Electricity and
moving assembly line



Industry 3.0

1960s - 1980s

Intergrated Circuit and
Chipset



Industry 4.0

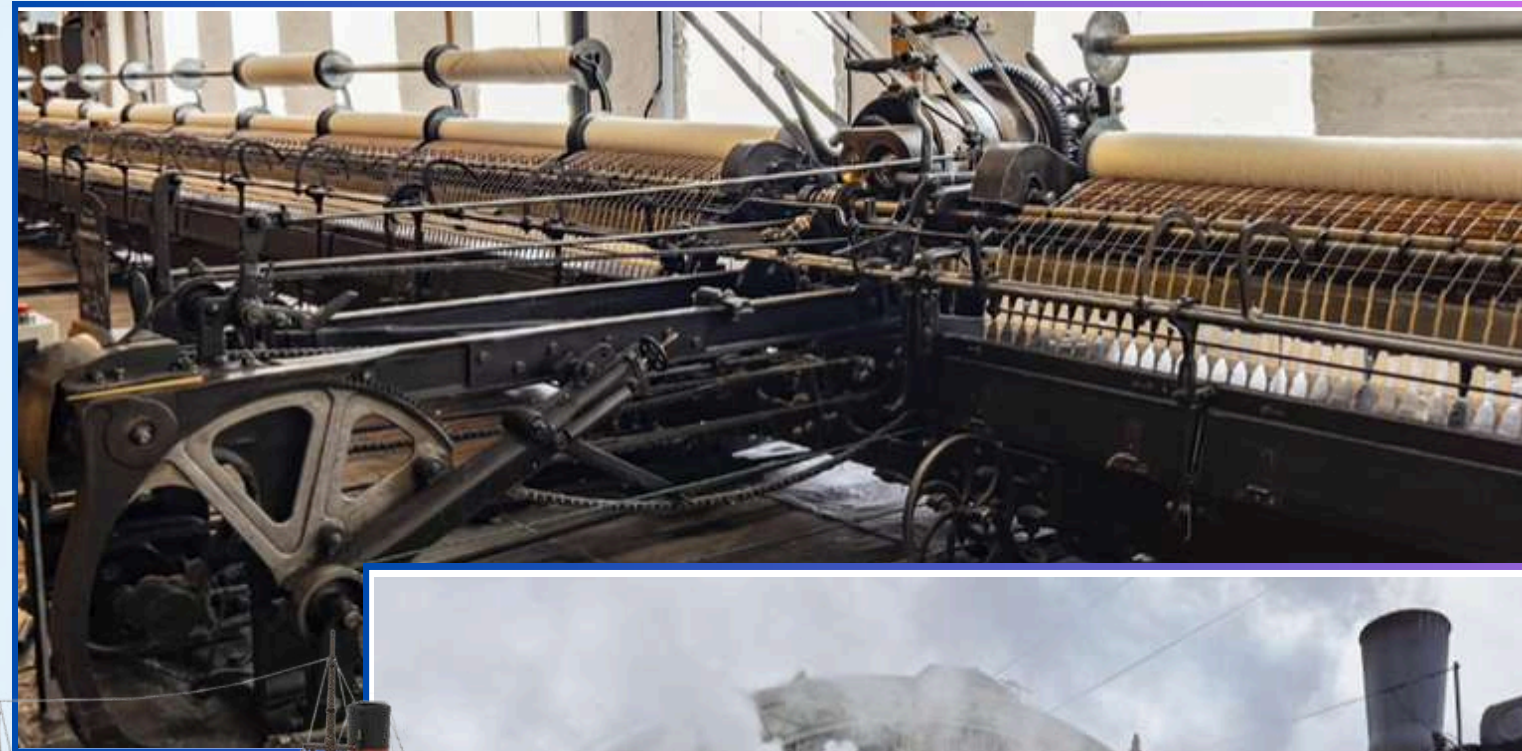
Today

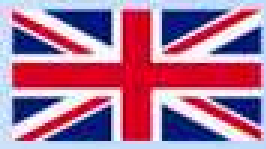
Big Data, Smart factory,
Artificial Intelligence



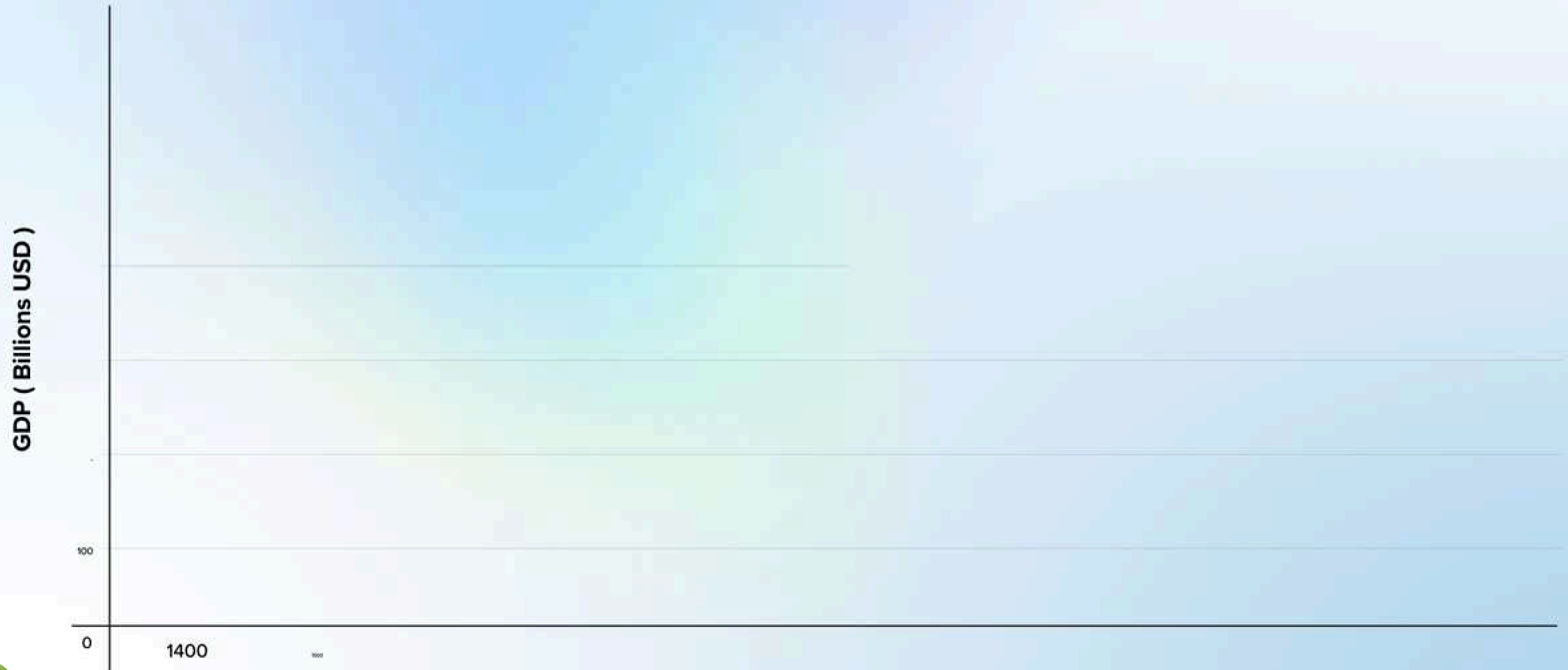
Industrial Revolution 1.0

- In 1769, James Watt patented his **improved steam engine**
- The steam engine powered **factories, locomotives, and ships**, enabling Britain to build the largest empire in history.
- By 1850, Britain produced over **50%** of the world's manufactured goods.
- UK Dominated the world for almost **200 yrs**



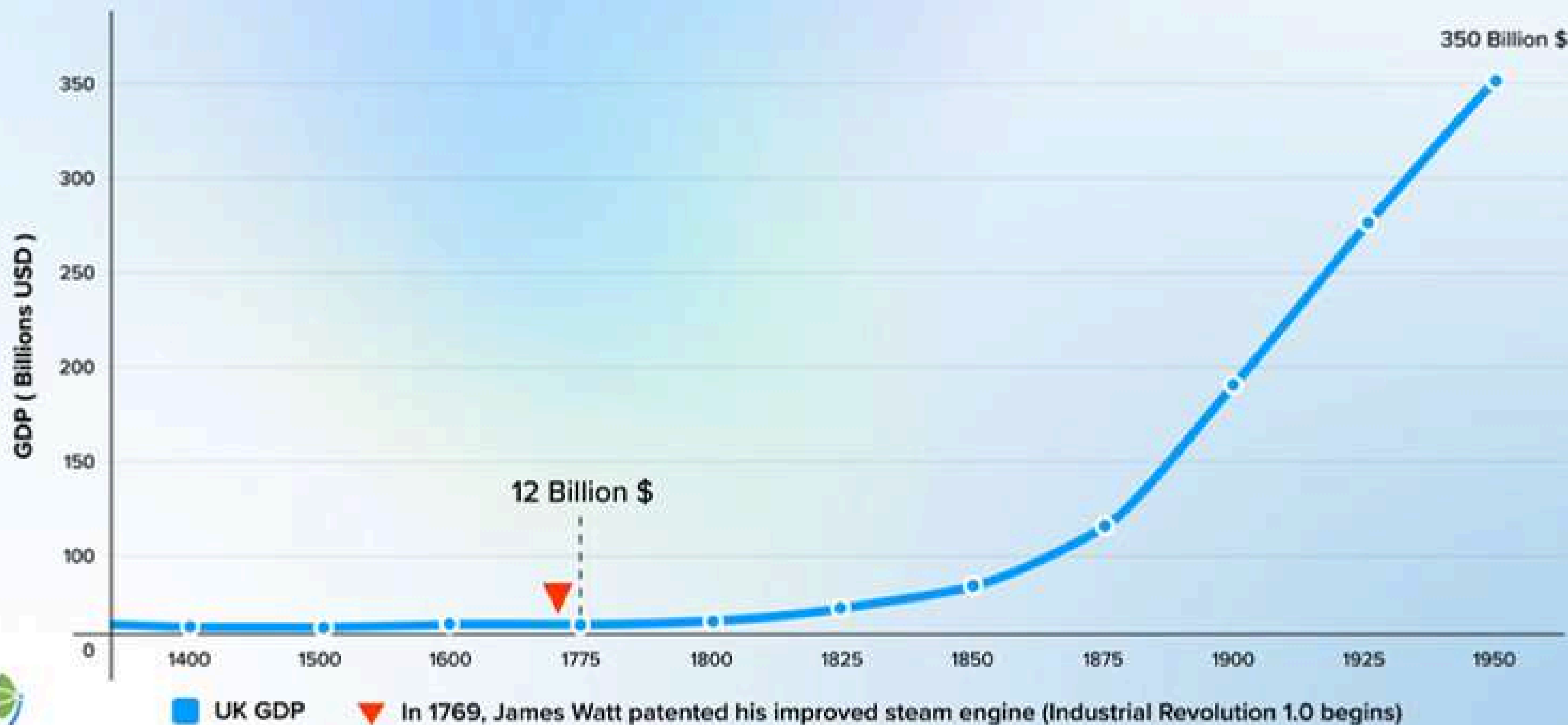


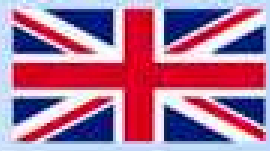
UK GDP: A Millennium of Economic Growth



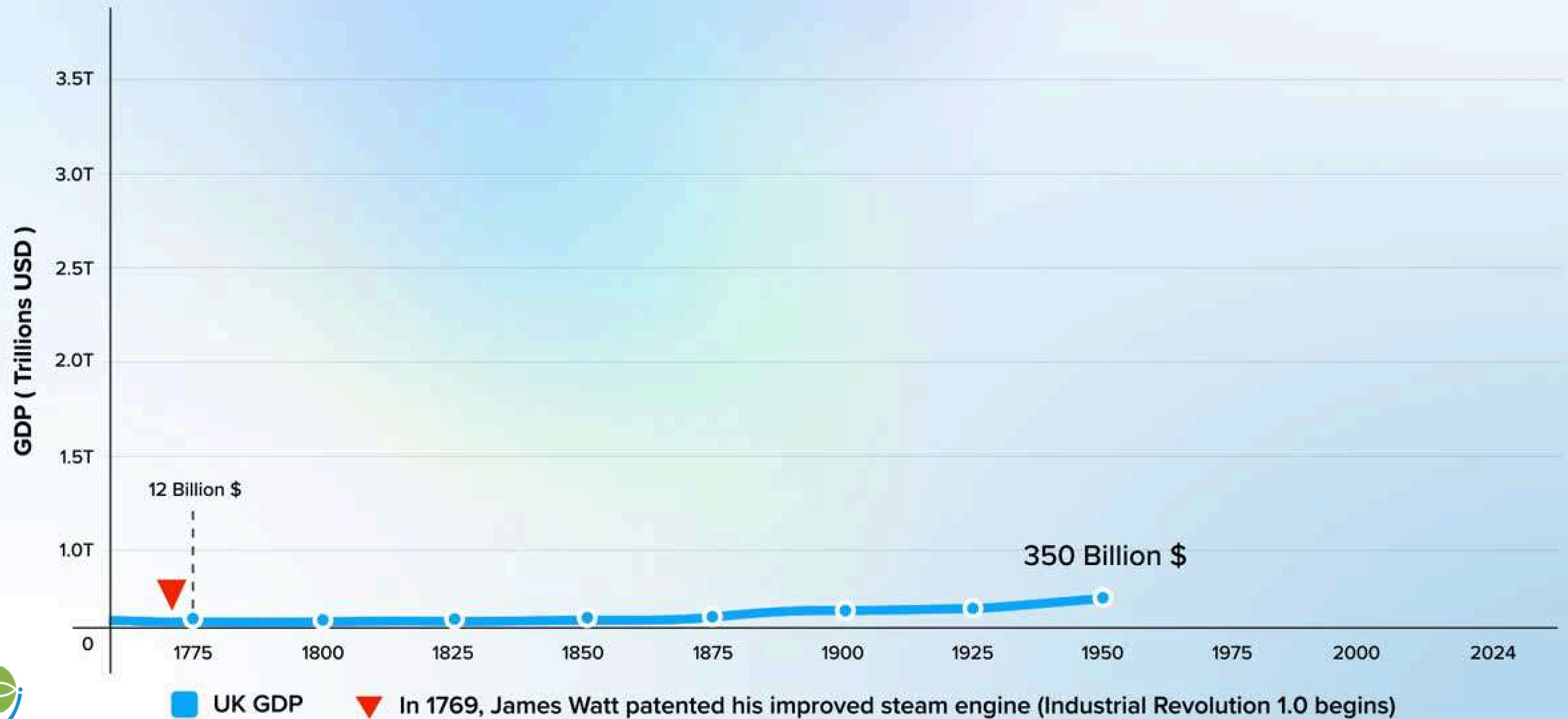


UK GDP: A Millennium of Economic Growth



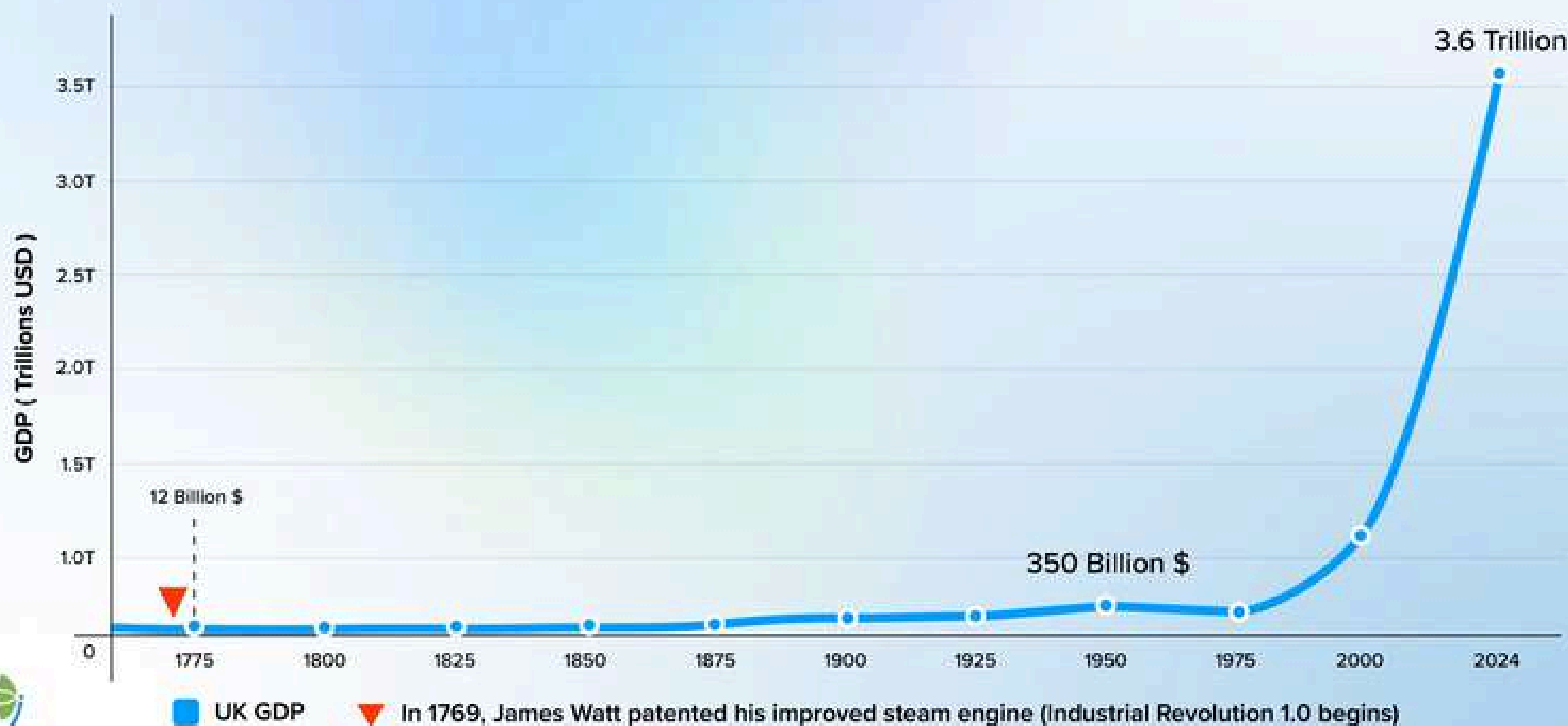


UK GDP: A Millennium of Economic Growth





UK GDP: A Millennium of Economic Growth



Industrial Revolution 2.0



- In 1913, **Henry Ford** introduced the moving **assembly line**.
- Model T production time dropped from 12+ hours to **93 minutes**.
- Price fell from \$850 to **\$260**, making cars accessible to ordinary Americans.
- Mass production gave the US decisive advantage in both World Wars.
- By **1945**, the US produced more than half of all manufactured goods worldwide, emerging as the dominant global superpower.



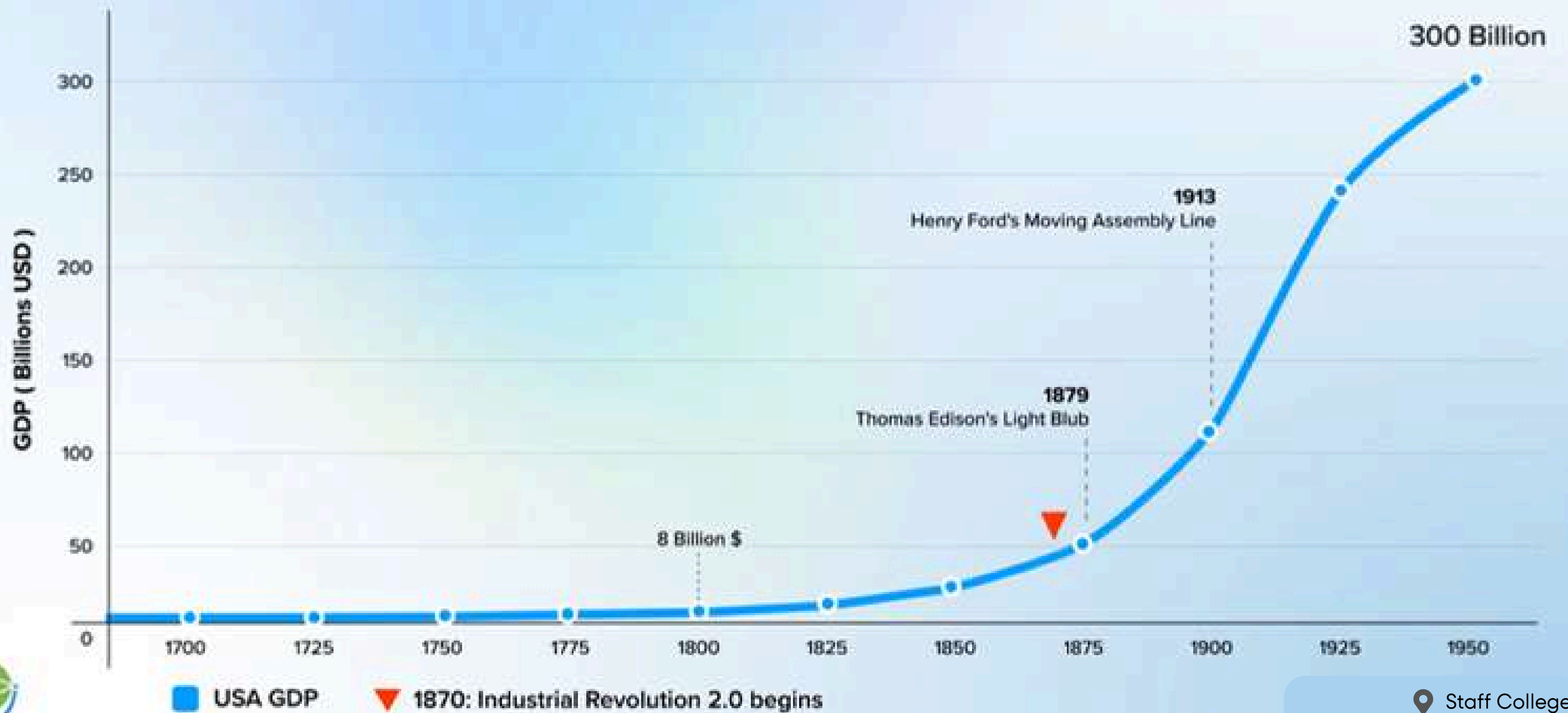
GDP (Billions USD)



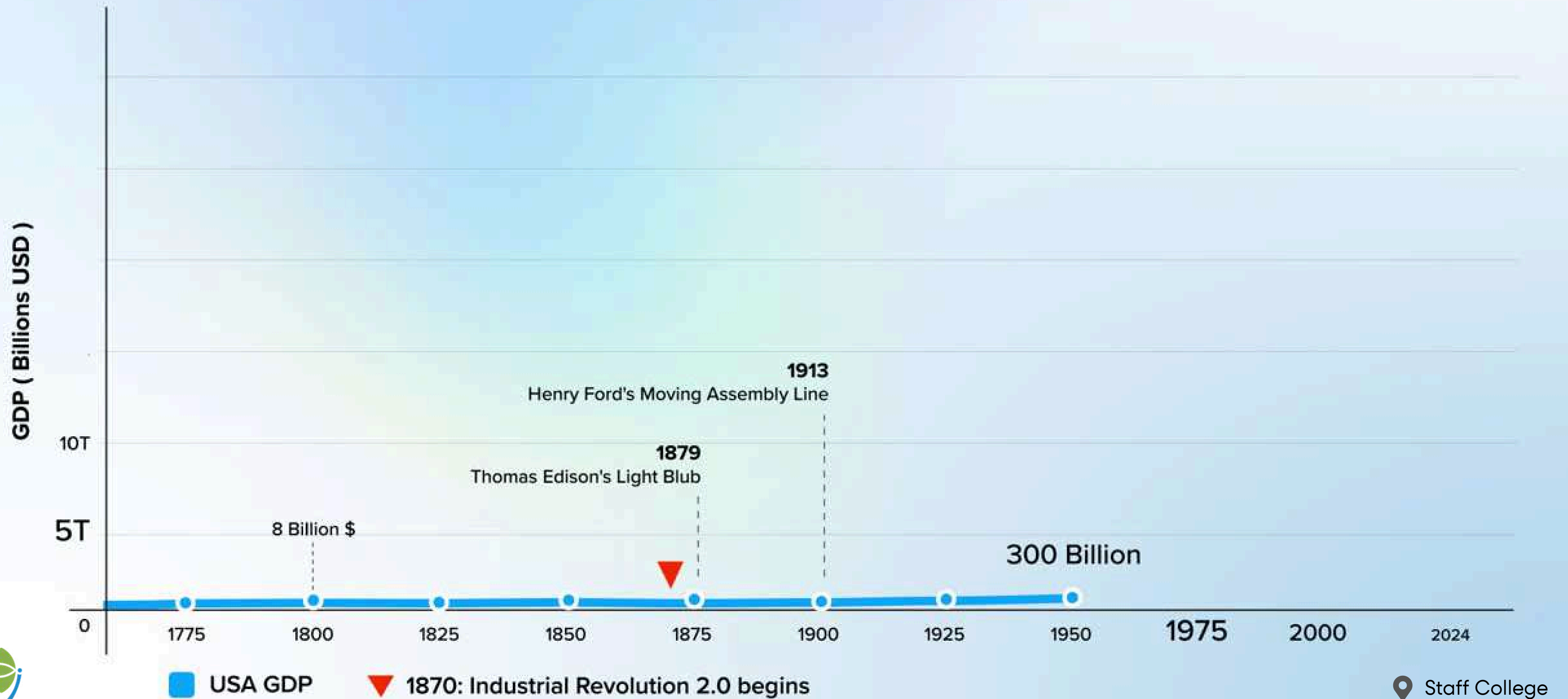
USA GDP



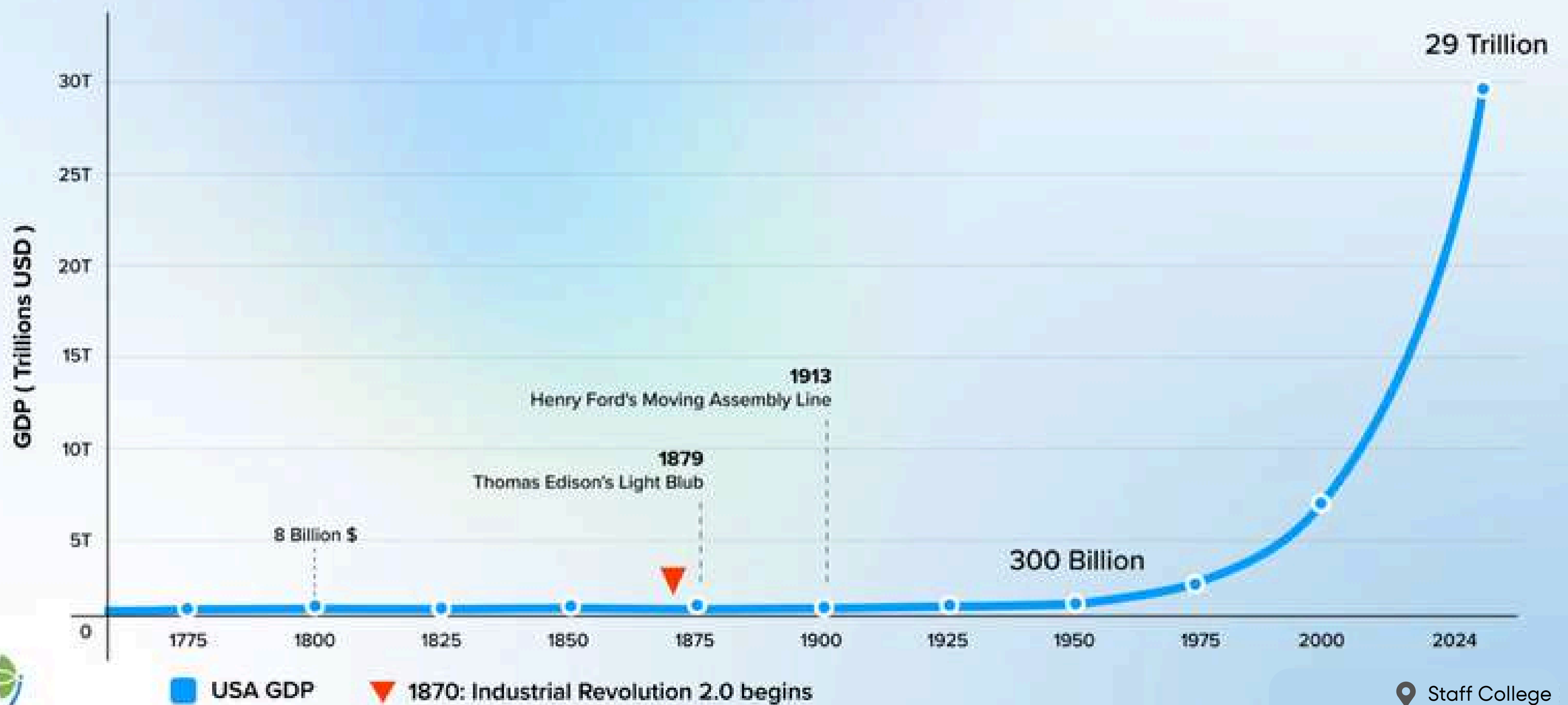
USA GDP



USA GDP

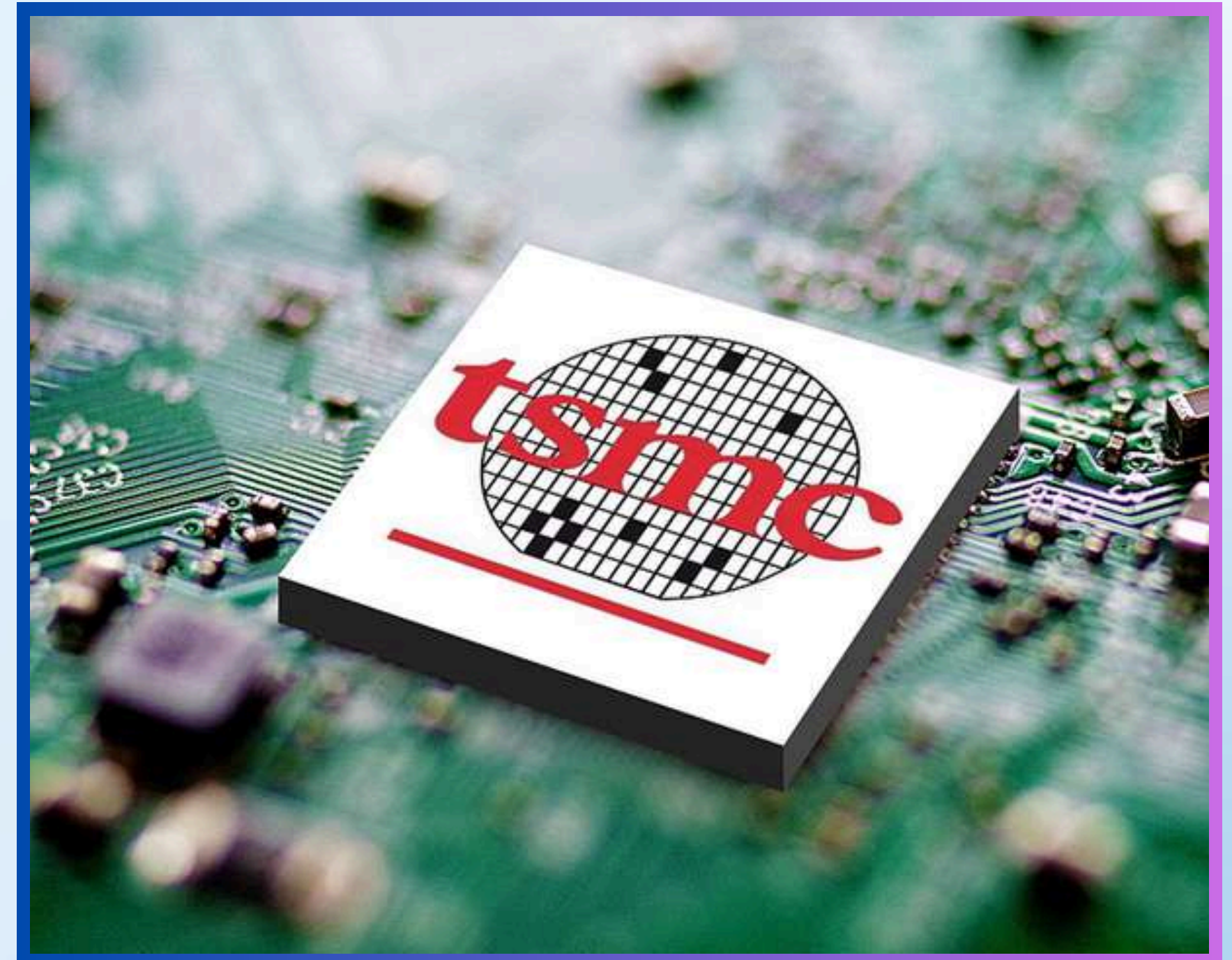


USA GDP



Industrial Revolution 3.0

- In 1976, Japan launched the VLSI (Very Large Scale Integration) Project, uniting **Fujitsu, Hitachi, NEC, Mitsubishi**, and **Toshiba**. Government invested \$300M.
- Korea (1982): Launched the National Semiconductor R&D Project, coordinating **Samsung, Hyundai**, and **LG** with ~\$400M government investment to compete in **DRAM**.
- Taiwan (1976): Established ERSO (Electronics Research and Service Organization) under ITRI and negotiated RCA (Radio Corporation of America) technology transfer, with ~\$50M government funding, eventually spinning off **TSMC** in 1987.

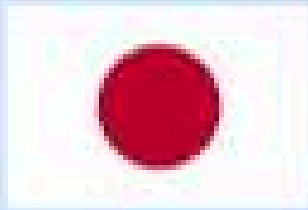




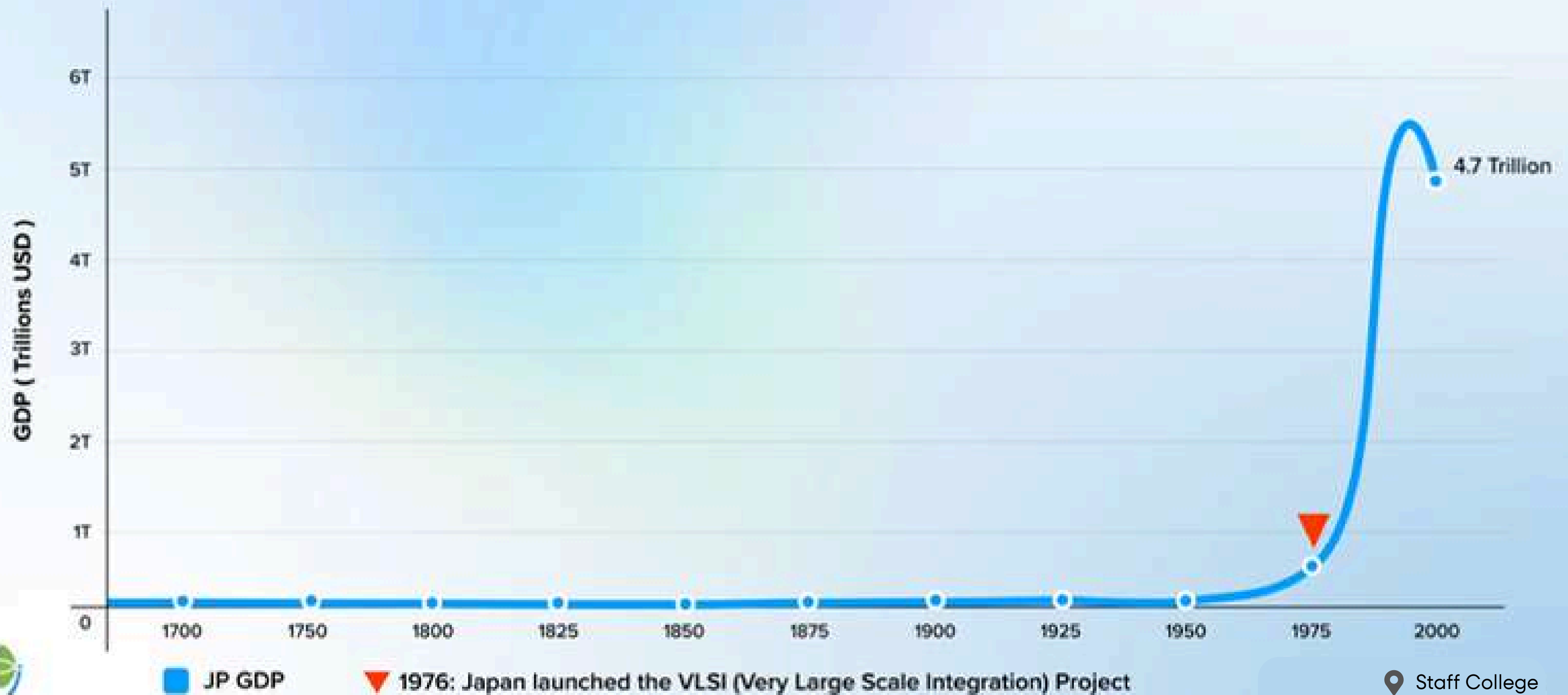
Japan GDP: The Semiconductor Revolution

GDP (Trillions USD)



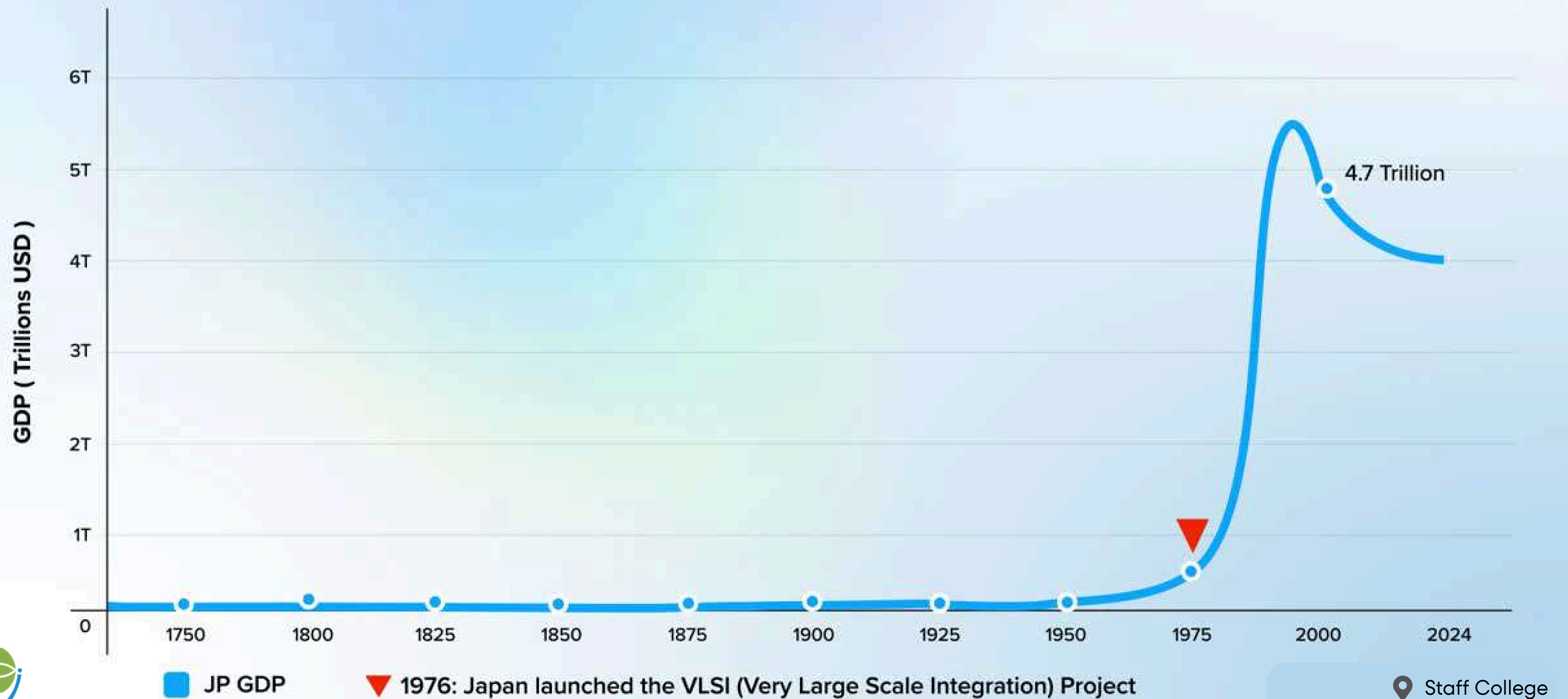


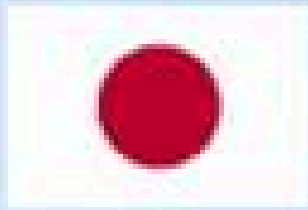
Japan GDP: The Semiconductor Revolution



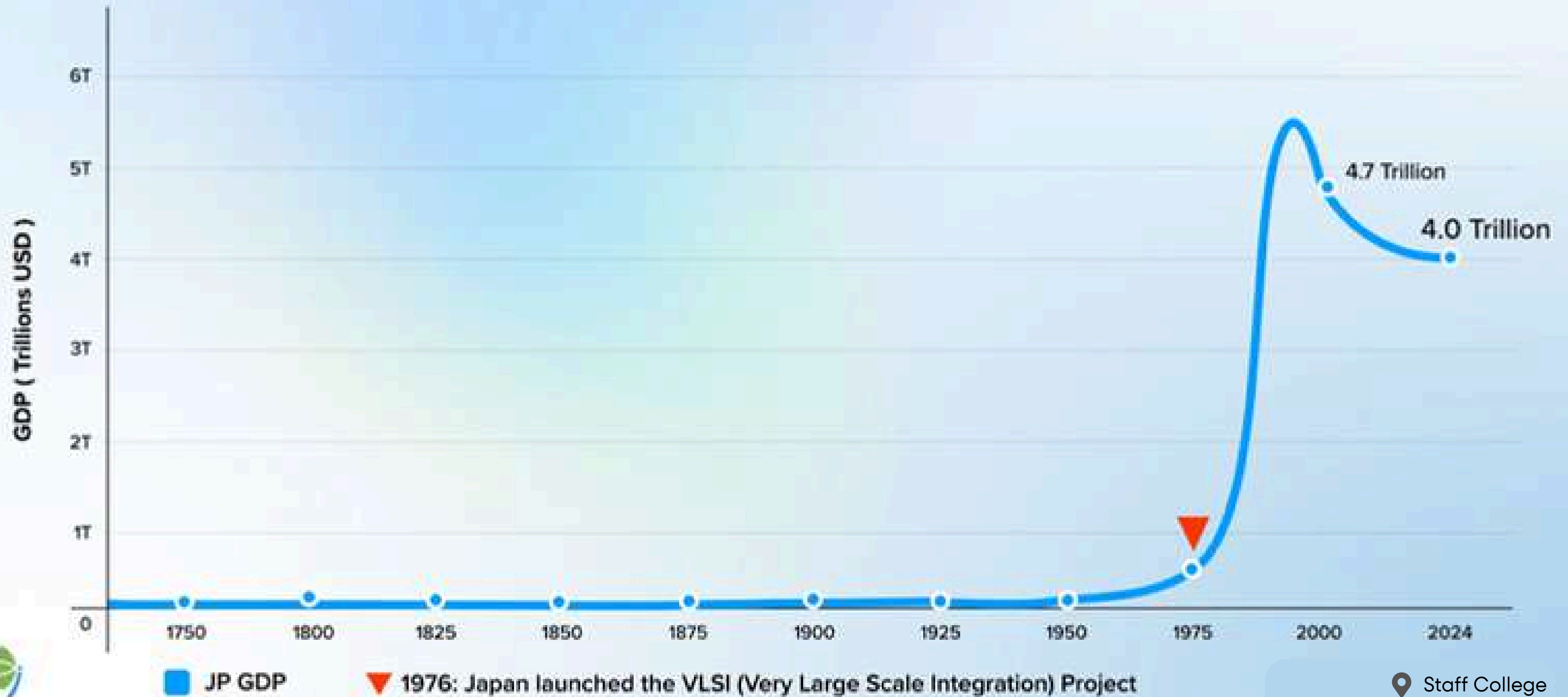


Japan GDP: The Semiconductor Revolution





Japan GDP: The Semiconductor Revolution



China's Entry into Modern World Economy

- In 1978, Deng Xiaoping launched "**Reform and Opening Up**" shifting from central planning to a socialist market economy.
- **Special Economic Zones** in **Shenzhen, Zhuhai**, and others attracted foreign investment, turning fishing villages into manufacturing powerhouses.
- China became the "**World's Factory**" — by 2010, it overtook the US as the largest manufacturing nation, producing over **30%** of global manufactured goods.
- GDP grew from **\$150B** to **\$18T** in four decades — lifting 800 million people out of poverty.

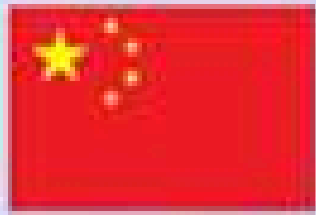




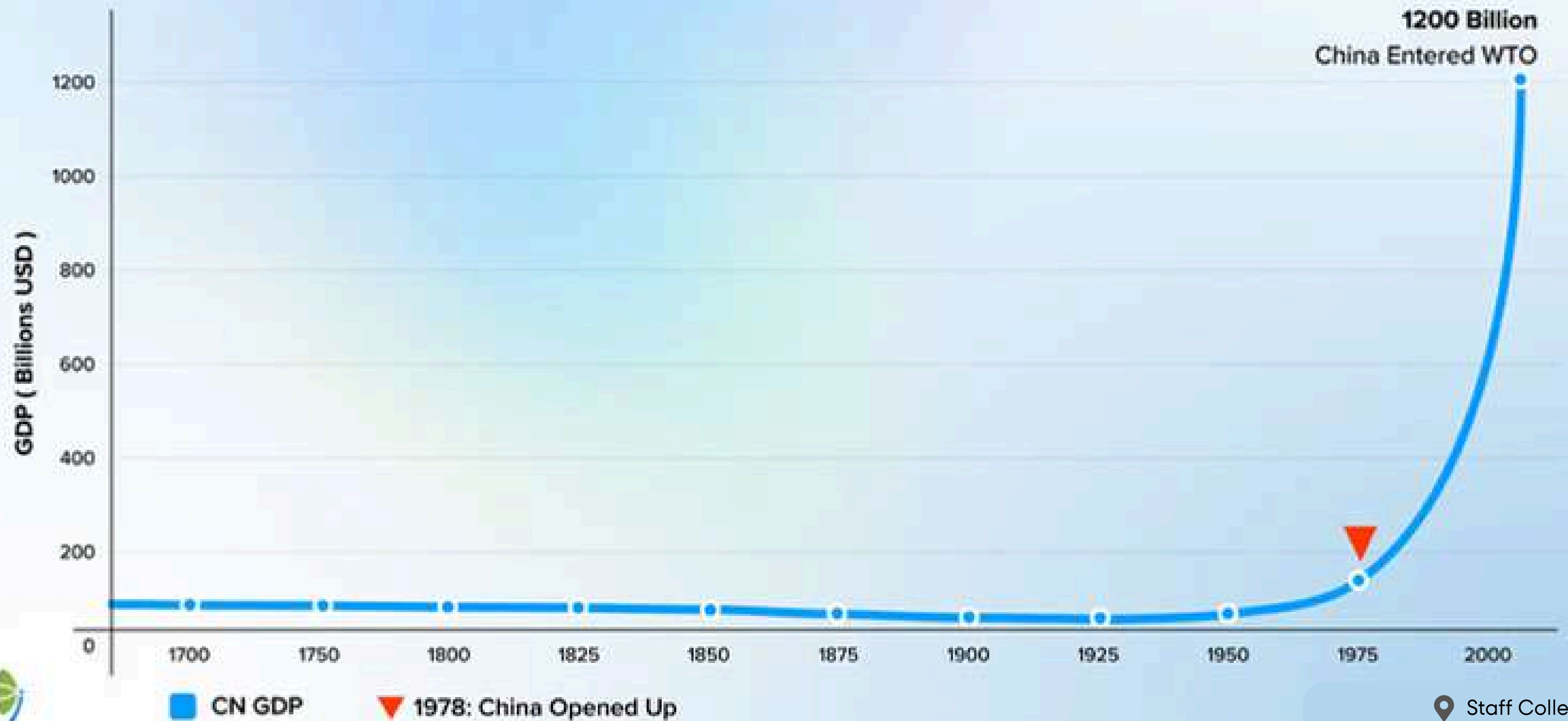
China's Entry into Modern World Economy

GDP (Billions USD)



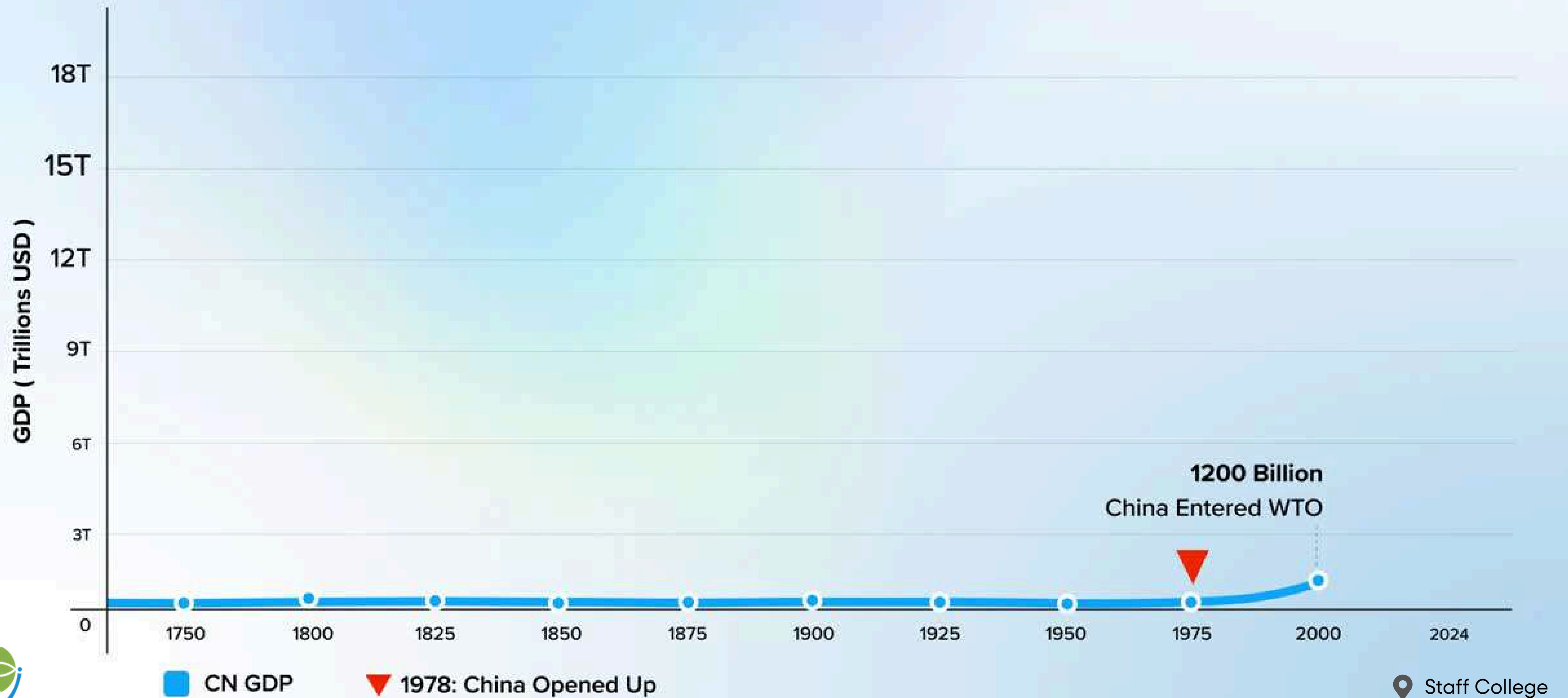


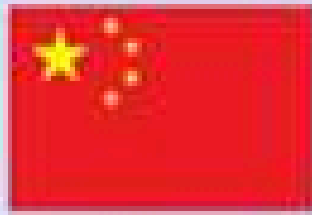
China's Entry into Modern World Economy



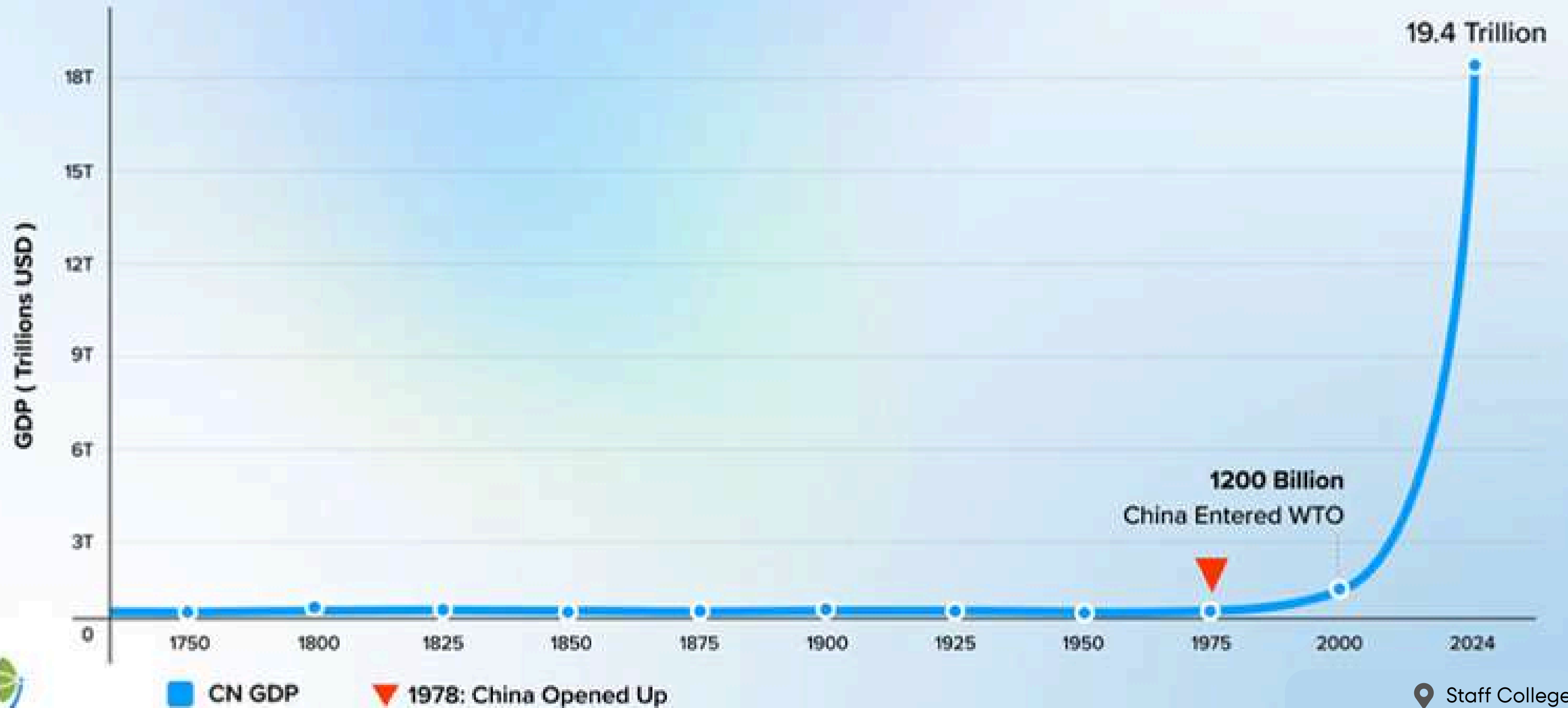


China's Entry into Modern World Economy



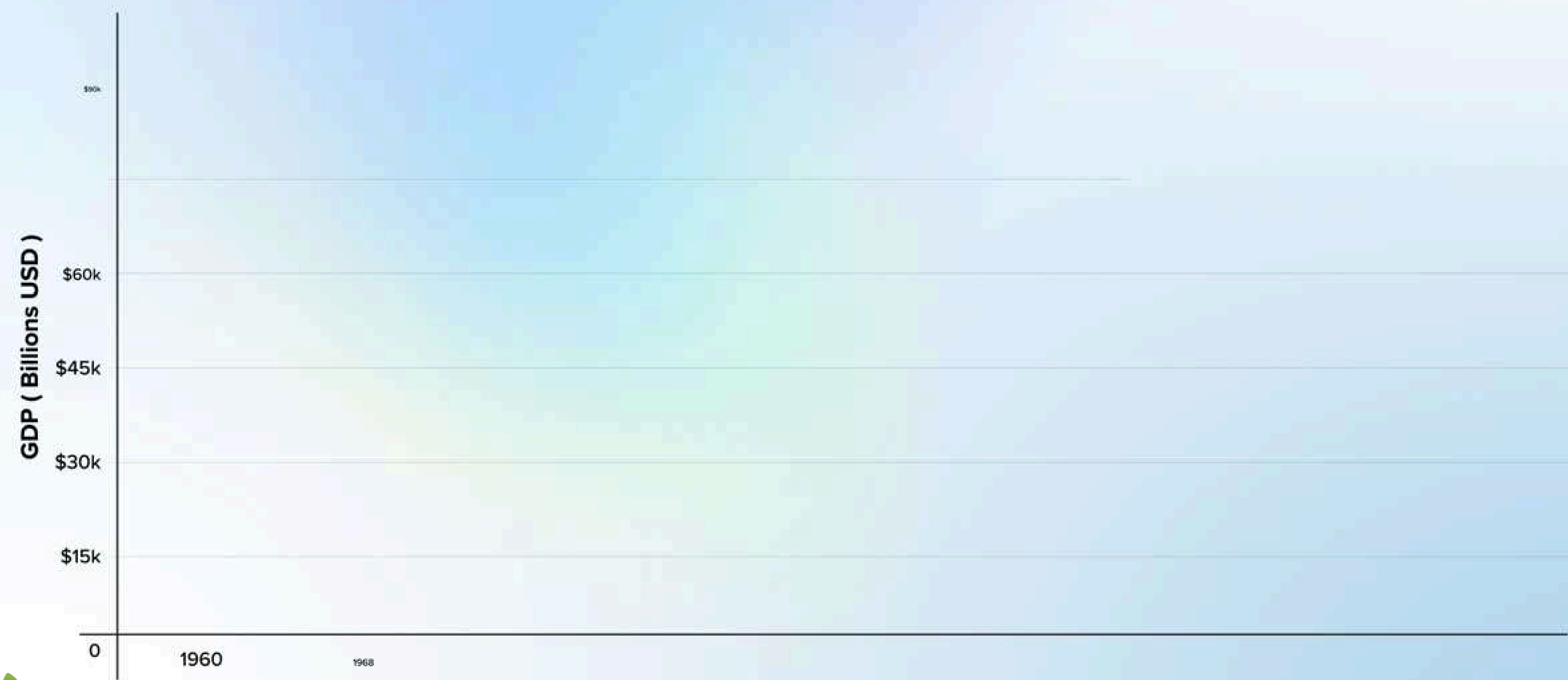


China's Entry into Modern World Economy



GDP per Capita (Current U\$)of All above Countries

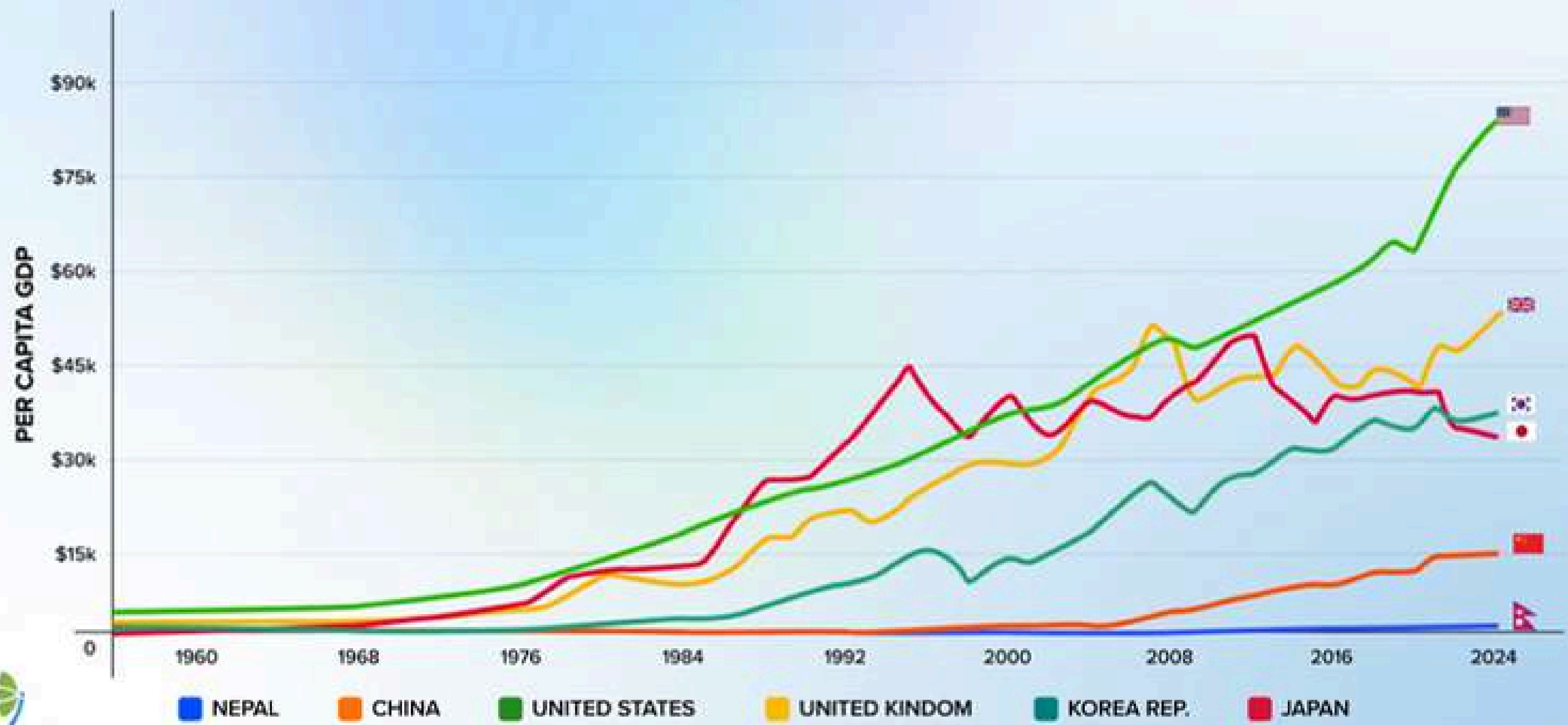
United States, Japan, Korea, Rep., Nepal, China, United Kingdom, 1960-2024



*World Bank Data (online)

GDP per Capita (Current U\$) of All above Countries

United States, Japan, Korea, Rep., Nepal, China, United Kingdom, 1960-2024



How are these 6 economies investing in **AI**

Country		Total AI Investment (2015-2025)
 USA		~\$630 billion
 China		~\$125-130 billion
 UK		~\$33-36 billion
 Japan		~\$7-8 billion
 South Korea		~\$7-9 billion
 Taiwan		~\$2-3 billion

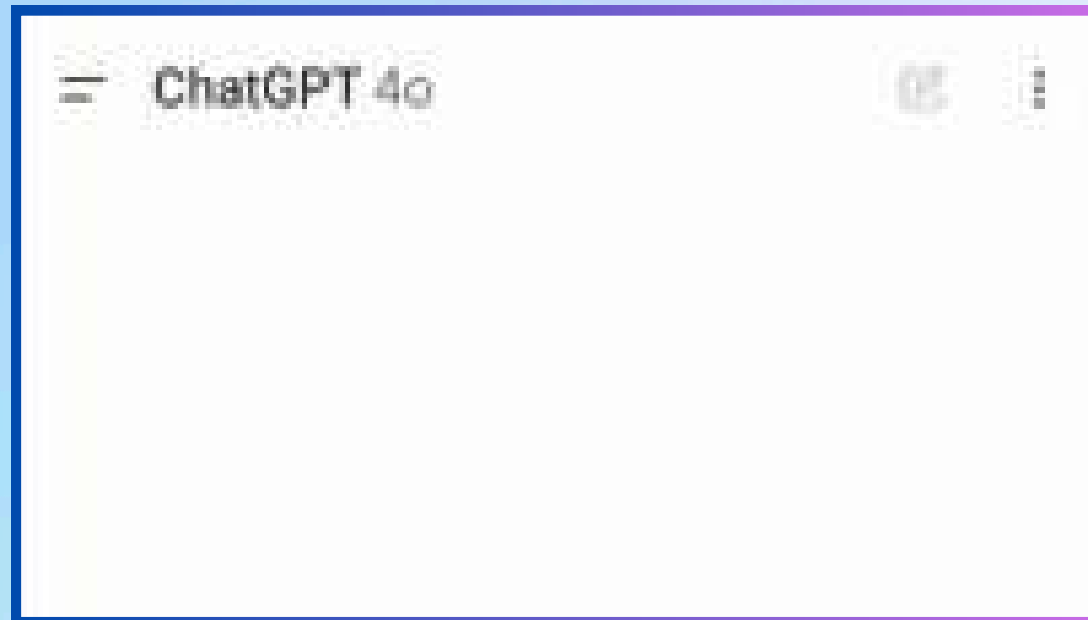
- 🔍 Global total private AI investment (2015-2025) was approximately **\$950 Billion**,
- 🔍 Total for these 6 economies:
~\$805-816 Billion
- 🔍 These 6 economies account for roughly **~85%** of all global AI investment.



So, What are **common**
people using **AI** for?



What are **common people** using **AI** for ?



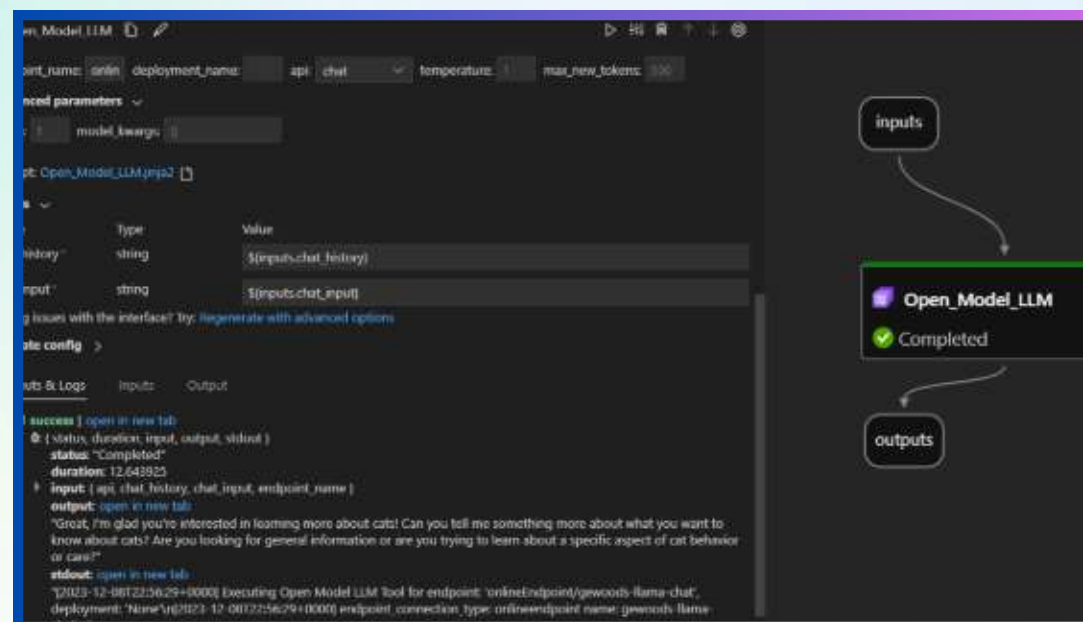
Chat



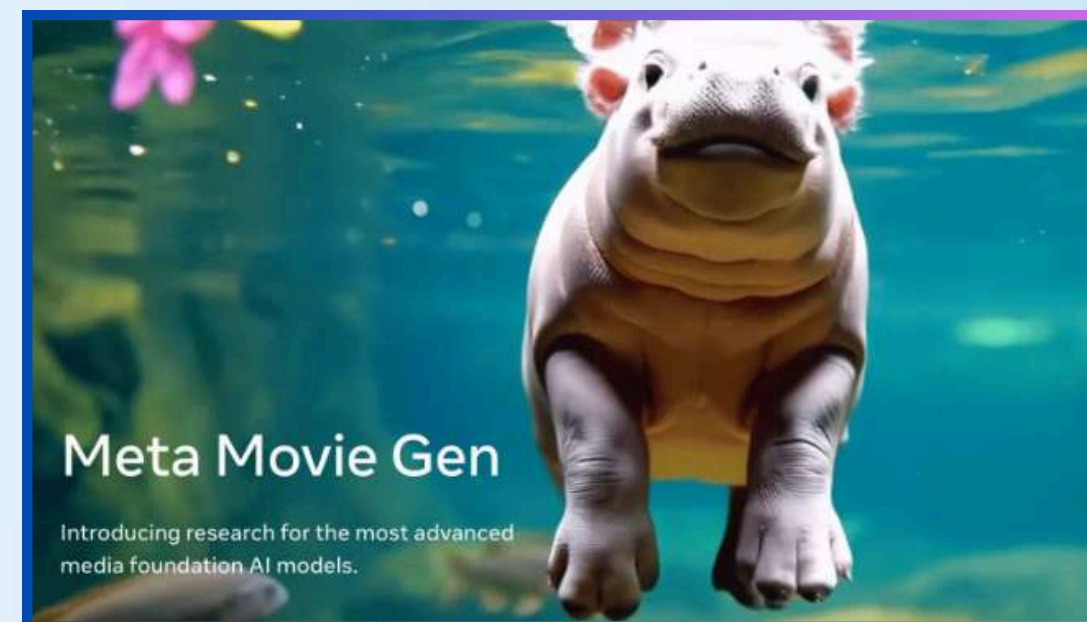
Image Generation



Visual understanding and Retrieval



Code Generation



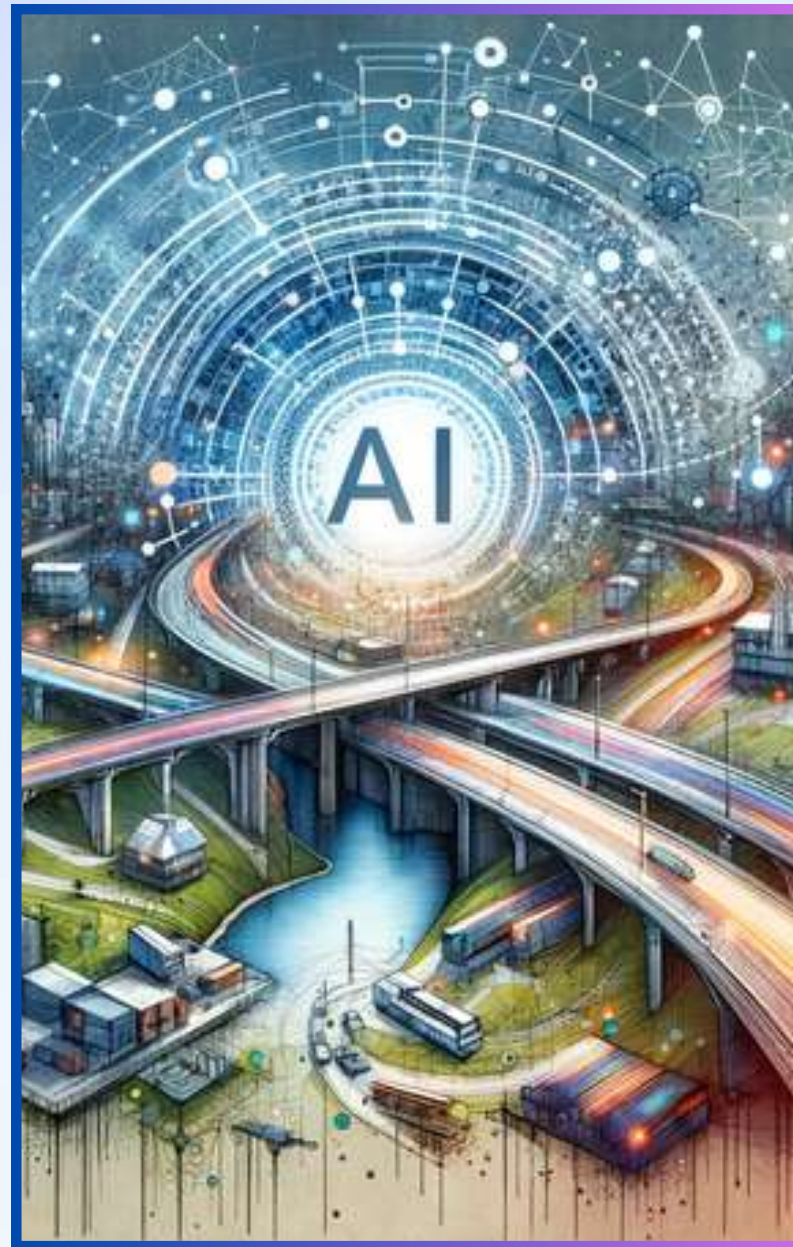
Video Generation



Immediate **Future AI** Application



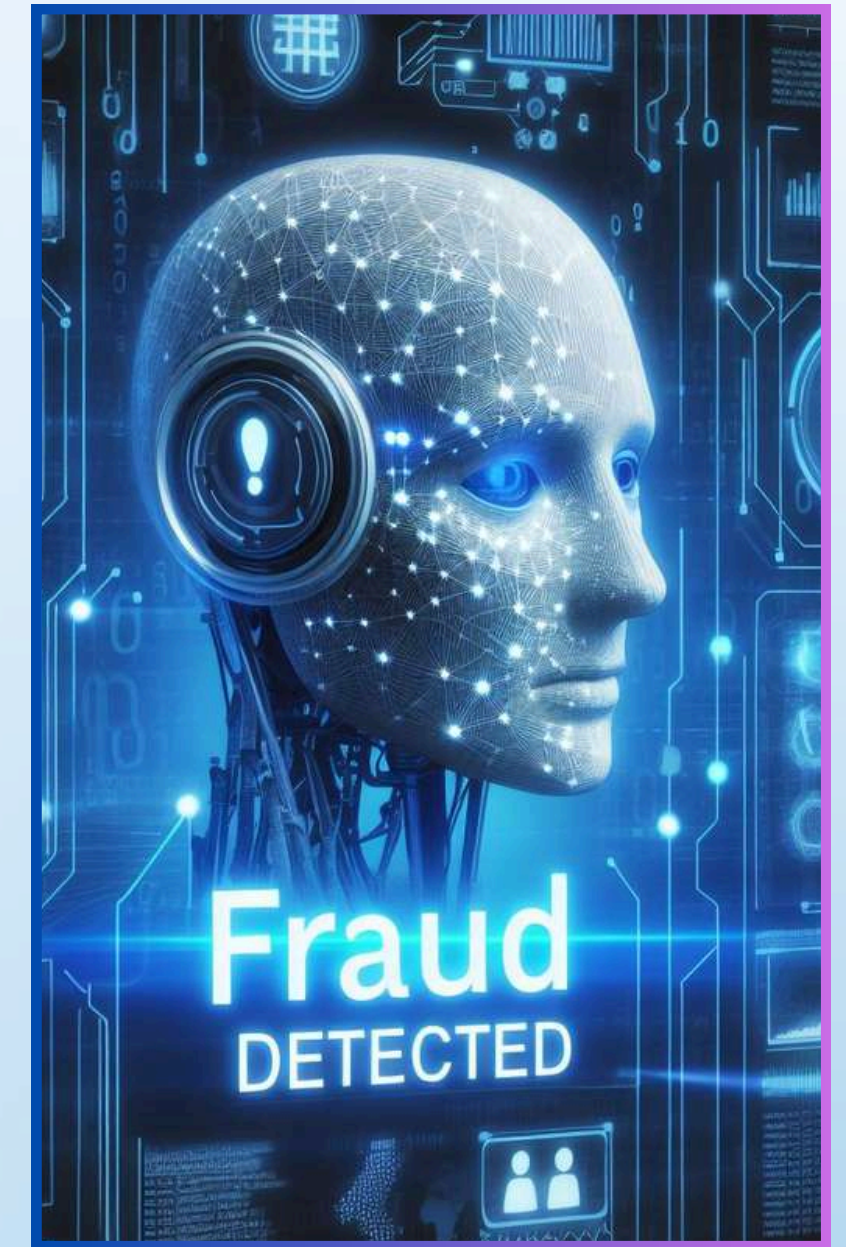
AI Radiologist



Structural Designer



Agriculture Bot



Fraud Detection





China's current (2026) **AI Implementation**



Dark Factories



Driverless bus



Driverless Heavy Truck



Drone Delivery



If our country & companies **doesn't** invest
and go **ALL-IN** in **AI Immediately**, we will
be left behind for **generations**

This Window of Opportunity is for next **5 ~ 10 years**,
by end of 10th year other countries will be far far ahead



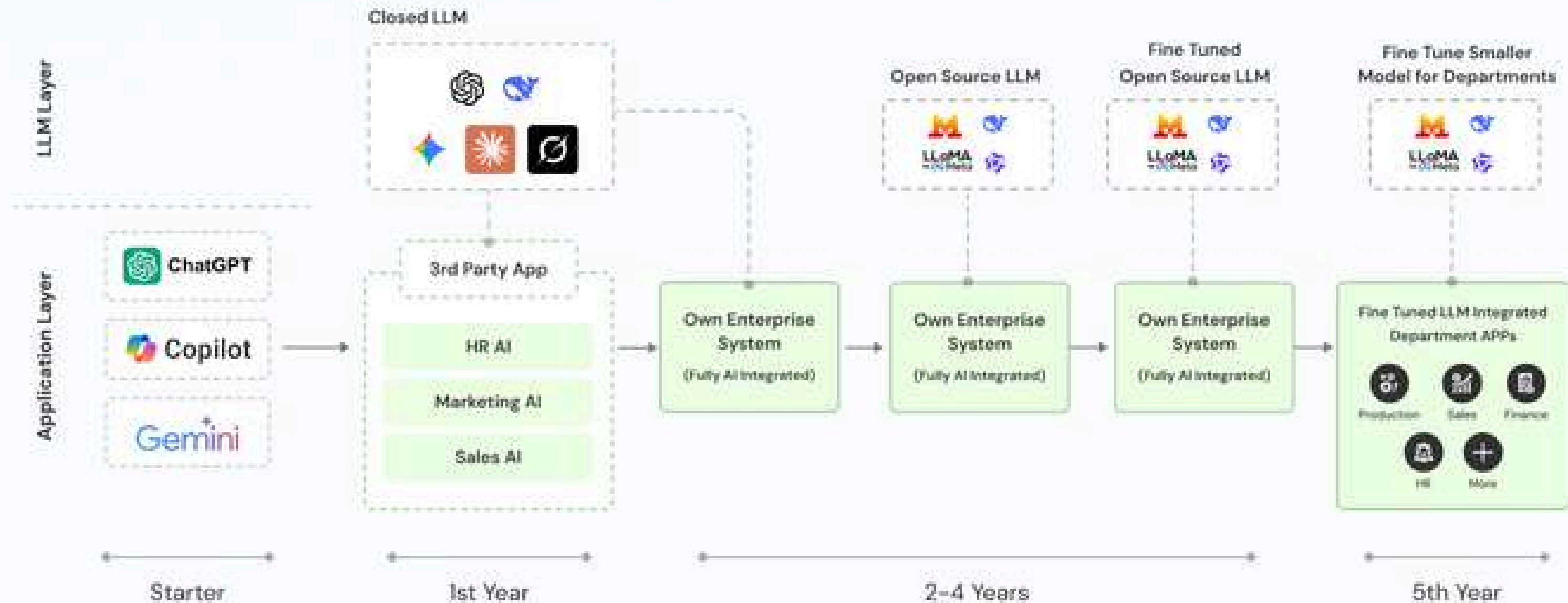
How Should **Nepal Government** and **Nepalese** Companies Tackle **AI**

- Invest in AI as if your nations and company's future depends upon this
- This has to be long term vision (7~10 + yrs or more)
- Motivate Current staff to use AI as much as possible , upskill and retrain them in AI
- Engage more with local companies work with them so whole ecosystem is empowered
- Convince Government , Regulators why investment in AI is must for growth of Nepal



ENTERPRISE AI IMPLEMENTATION JOURNEY

3-5 YEARS



THANK YOU!

