

Strategy Implications of AI

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BYU

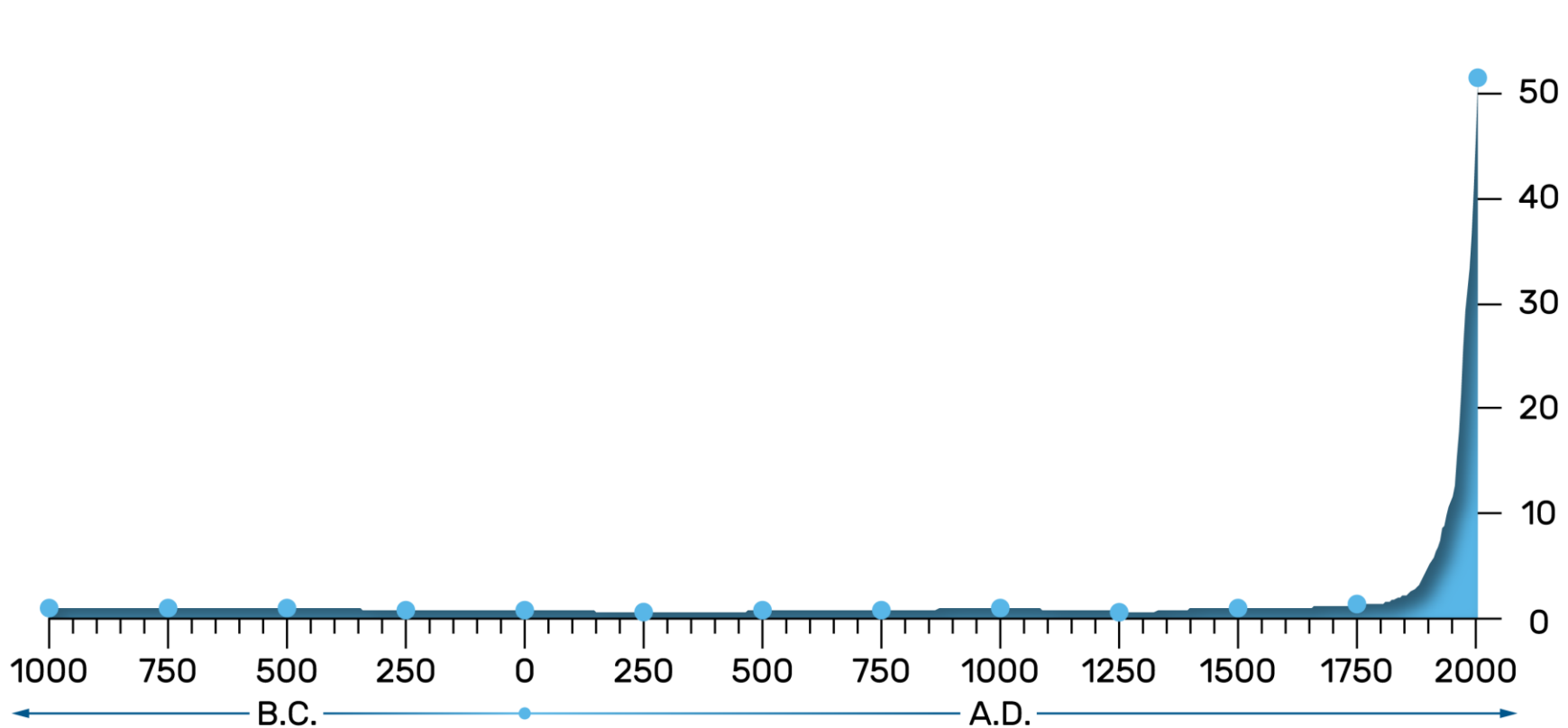
Bill Wade
Bain & Company

Nathan Winn
Pattern

Dawn of the Machine Age



GDP per person* — 60





A Second Machine Age

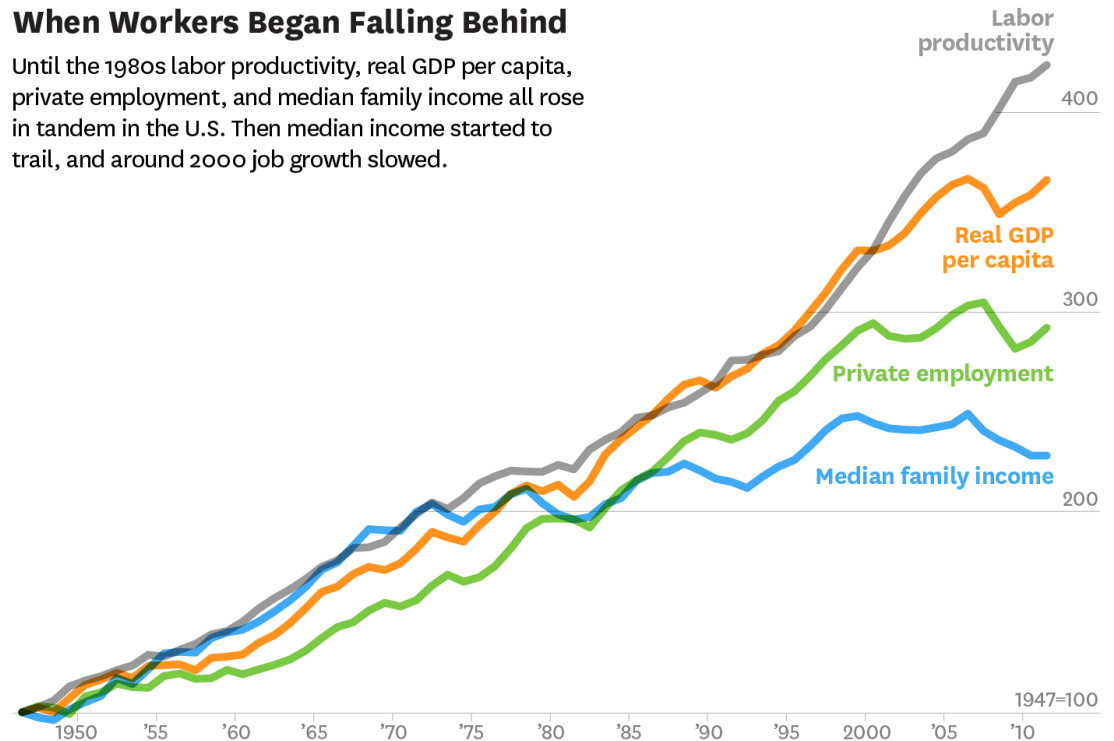
- Information age. Technologies of information. Digitization of the economy.
- The Second Machine Age is playing out differently than the First Machine Age, continuing the long-term trend of material abundance but not of ever-greater labor demand.

A Second Machine Age

- A phenomenon of the Great Decoupling. The two halves of the cycle of prosperity are no longer married: Economic **abundance**, as exemplified by GDP and productivity, has remained on an upward trajectory, but the **income** and job prospects for typical workers have faltered.

When Workers Began Falling Behind

Until the 1980s labor productivity, real GDP per capita, private employment, and median family income all rose in tandem in the U.S. Then median income started to trail, and around 2000 job growth slowed.



SOURCE FEDERAL RESERVE BANK OF ST. LOUIS; ERIK BRYNJOLFSSON AND ANDREW MCAFFEE
FROM "THE GREAT DECOUPLING," JUNE 2015

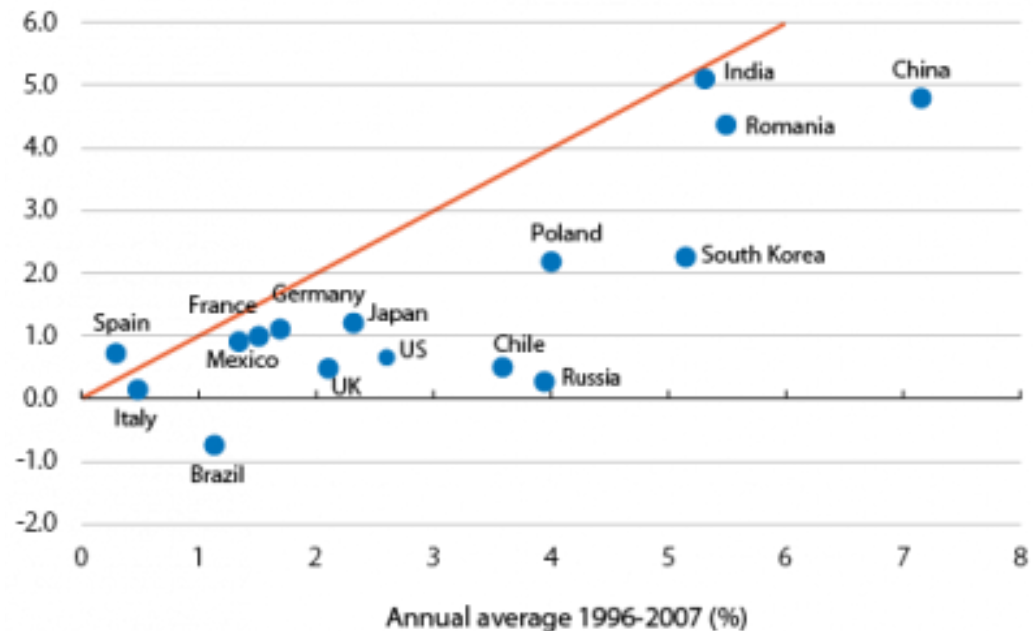
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McAfee

- Technologies such as payroll-processing and inventory-control software, factory automation, computer-controlled machining centers, and scheduling tools have **replaced** workers on the shop floor and in clerical tasks and rote information processing. By contrast, big data, analytics, and high-speed communications have enhanced the output of people with engineering, creative, and design skills and **made them more valuable**. **The net effect has been to decrease the demand for low-skilled information workers while increasing the demand for highly skilled ones.**

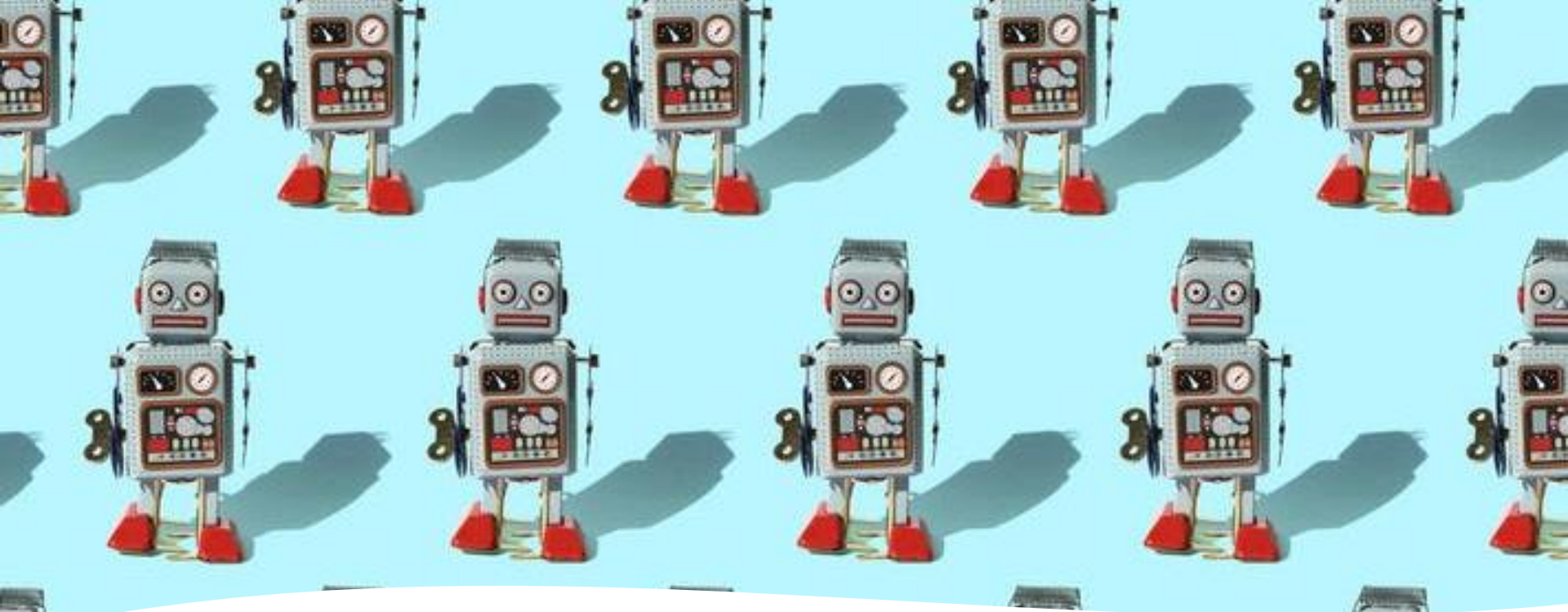
Labour productivity growth *

Annual average 2013-2017 (%)



*Note: * Labour productivity is defined as the gross value added per hour worked for all countries except China, Poland and Romania, where it is the gross value added per employee.*

Source: CaixaBank Research, based on data from The Conference Board Total Economy Database.



Winners Takes Most

- In many industries, the widening wage gap between people with and without a college education has been dwarfed by bigger changes among the highest income brackets. **From 2002 to 2007, the top 1% reaped two-thirds of all the gains from the growth in the U.S. economy.**
- Where are the 1%? Well, they aren't all on Wall Street. The University of Chicago economist Steve Kaplan [has found](#) that they're also entrepreneurs, senior executives, and the icons of media, entertainment, sports, and law. If the top 1% are stars of a sort, they look up to superstars who have seen even bigger increases. **While the top 1% earned about 19% of all income in the United States, the top 0.01% saw their share of national income double, from 3% to 6%, from 1995 to 2007.** It's hard to get reliable data at income levels higher than that, but the evidence suggests that the divergence in incomes continues to grow with a fractal-like quality, with each subset of superstars watching an even smaller group of uber-superstars pulling away.



The Growing Divide

- The average S&P 500 executive's compensation has increased \$500,000 a year for the last 10 years to a whopping \$18.3 million. In contrast, the average employee's compensation has increased just \$1,303 over the same 10-year period to \$58,260. The average S&P 500 CEO made 324 times more than the median employee.

McAfee

- We'll continue to **see the middle class hollowed out** and will see **growth at the low and high ends. Really good executives,** entrepreneurs, investors, and novelists—they will all reap rewards. Yo-Yo Ma won't be replaced by a robot anytime soon, but financially, I wouldn't want to be the world's 100th-best cellist.

AI and Jobs

**AI Won't Replace Humans —
But Humans With AI Will Replace
Humans Without AI**



Karim Lakhani

An Example of AI and Strategy

James Oldroyd

Nikki Kepford

Riley Gage

Quiz Question 1

Option A

“Our strategy is to make every day easier for busy families, operate with discipline, sharpen our culture and become more digital, and make trust a competitive advantage.”

Option B

“Our strategy spans the retail industry, offering low-cost, convenient, and diverse products. Our resources include an extensive supply chain, scale economies, and technological advancements. We sustain our competitive edge through cost leadership, innovation, and e-commerce growth. Data-driven insights enhance customer experiences and enable adaptation to changing market trends.”

Quiz Question 2

Option A

“Our strategic approach focuses on the fast-food pizza market, emphasizing affordability. We provide two-for-one value, maintain operational efficiency, and rely on a simple menu. By sustaining our competitive advantage through consistency and adaptation to changing consumer needs, we continue to appeal to a wide customer base.”

Option B

“Quality: Our pizza is made with fresh, quality ingredients. Convenience: We are consistently innovating to make our customer’s lives easier. Value: Busy parents, students, millennials, anybody who wants to get the best tasting pizza at an incredible value is a customer. Technology: heated self-service mobile order pickup station is the first in industry.”

Can we use Chat
GPT to articulate
strategy?

Strategy Articulation is Important

- *“71% of employees cannot recognize their own company’s strategy in a multiple choice question.”*
- *(Harvard Business Review, 2013)*
- *5% of employees are aware of and/or understand their company’s strategy.*
- *(Harvard Business Review, 2005)*
- *At companies that have clearly defined and communicated how they create value, 63% of employees say they’re motivated, versus 31% at other companies; 65% say they’re passionate about their work, versus 32% at other companies. More than 90% of them deliver growth and profits at or above the industry average, according to*
- *Strategy& research and analyses.*

Prompt

4 KEY STRATEGIC QUESTIONS

MARKETS

What markets (industries and geographic) the company will pursue in search of a high return on invested capital.

UNIQUE VALUE

What unique value to offer customers in those markets. The firm's value proposition: cost or differentiation

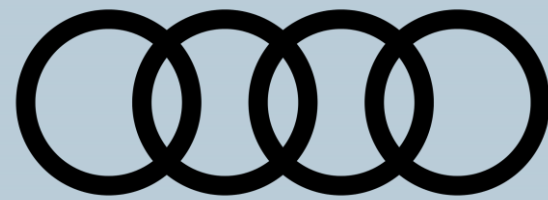
RESOURCES & CAPABILITIES

What resources (assets, brands, etc.) and capabilities (processes) will allow the firm to deliver a superior value proposition to customers.

BARRIERS TO IMITATION

What will prevent imitation of the company strategy by competitors.

Give me [companies]
strategy in 150 words.



Audi Strategy

We will be expanding our e-portfolio in the next five years: by 2027, we want to offer an all-electric vehicle in our portfolio in all core segments. Then, according to current product planning, we will have more than 20 e-models in our range. That is our clear goal. We are thus demonstrating that we are continuing to systematically advance the transformation to electric mobility. And we are doing so in a way that is typical for Audi – with technological strength and innovative power. At the same time, we are using synergies within the Volkswagen Group to further optimize the cost-effectiveness of our electric models. The new Premium Platform Electric, or PPE for short, which we developed together with Porsche, is based precisely on these principles. It is the basis for the next generation of fully electric Audi models with an 800-volt system, a charging capacity of up to 270 kW and a highly attractive design. With the PPE, we are also bringing the new E³ electronics architecture, developed in collaboration with CARIAD, into series production. Among the new features on board are processors with significantly improved computing power, 5G connectivity, a standardized infotainment platform with a third-party app store, an extensive range of new driver assist systems and, of course, over-the-air updates. The second half of the year will see PPE start at Audi with the Q6 e-tron model series.

“Audi's strategy focuses on the global luxury automotive market, offering premium vehicles that combine cutting-edge technology and design. Their differentiation and innovation-driven approach relies on significant R&D investments to maintain a competitive edge. Audi's commitment to advanced features and technology sustains their position as a leading luxury car manufacturer.”

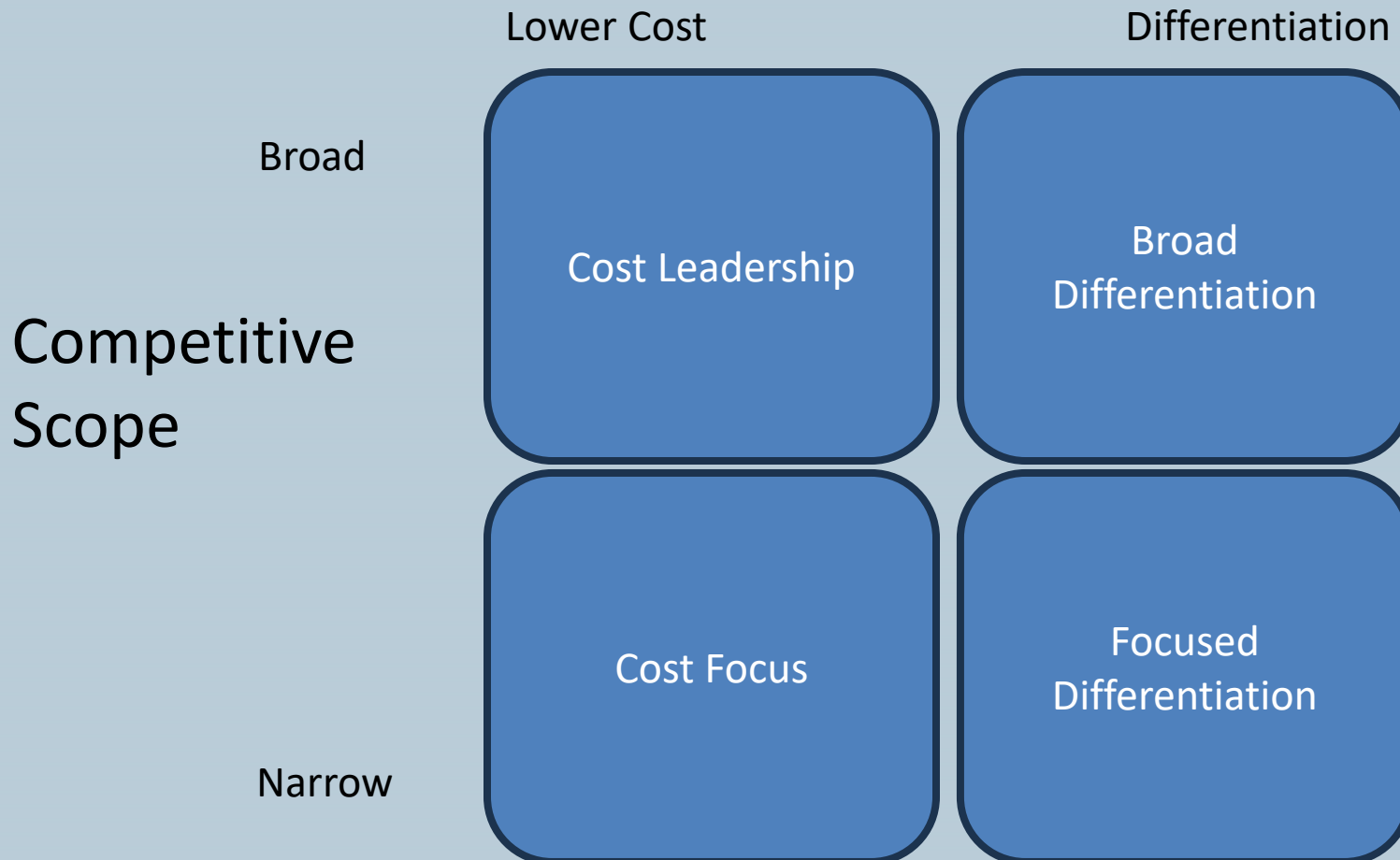
GPT's Strategy for Sawtooth

“Data-Driven Market Leadership” - Compete globally in market research and analytics. Offer differentiation through cutting-edge AI-driven analytics for larger clients and cost leadership for smaller businesses. Invest in advanced data analytics, maintain innovation, and build strong client relationships for long-term competitive advantage.”



Generic Business Strategies

Competitive
Advantage



AI will lead to:

Significantly lower costs

Fundamentally new ways of
differentiation