

# AI-01058 The Downfall of Big Techs

👤 Owner	© Rigel Arcayan
☰ Tags	Investing
🕒 Created time	@July 16, 2024 2:58 AM

## What was the rise and fall of CSCO all about?

Cisco (CSCO) has been a major player in the tech world for decades, but it hasn't been a straight shot to the top. Here's a general breakdown of Cisco's journey:

### Rise:

- Founded in 1984, Cisco capitalized on the booming internet era by providing routers and other networking equipment that facilitated communication across these new networks.
- Their technology became essential for businesses and organizations to connect and share information.
- Through the 90s and early 2000s, Cisco's stock price soared as internet usage exploded.

### Fall (or Stumble):

- Around the mid-2000s, the tech bubble burst, leading to a decline in Cisco's stock price.
- The rise of mobile internet and new competitors in the networking space forced Cisco to adapt.
- While they remain a major player, their dominance wasn't as strong as in the earlier years.

### Current Status:

- As of July 16, 2024, Cisco is still a well-established company with a significant market cap.
- They're constantly innovating in areas like cybersecurity and cloud networking.

It's important to note that this is a simplified overview. A more detailed analysis would delve into specific product developments, acquisitions, market shifts, and Cisco's efforts to stay relevant.

Is NVDA, AAPL and MSFT the next CSCO?

There's a comparison between the high-flying tech stocks of today (NVDA, AAPL, MSFT) and Cisco (CSCO) during the dot-com boom. Here's why it's a topic of discussion, but also why there are key differences:

### Similarities:

- **Rapid Growth:** All these companies experienced phenomenal growth, driven by innovative products and a booming tech sector.
- **High Valuations:** Similar to Cisco's peak P/E ratio, some of today's tech stocks trade at high valuations, raising concerns about a potential correction.

### Differences:

- **Market Landscape:** Cisco's dominance was in a specific area (networking) during a unique internet boom. NVDA, AAPL, and MSFT are more diversified and cater to established, long-term trends like AI (Nvidia), consumer electronics (Apple), and cloud computing (Microsoft).
- **Customer Base:** Cisco faced issues when telecom companies cut spending. NVDA, AAPL, and MSFT have a broader customer base, including large, financially stable tech companies themselves.
- **Technological Moat:** While Cisco's technology was crucial in its time, it became more commoditized. Nvidia has a strong "moat" with its GPUs and software like CUDA, making them harder to replace. Apple's brand loyalty and ecosystem are also strong advantages.

### Overall:

- There's always a chance of a correction, but it's not guaranteed these tech giants will fall like Cisco. Their diversification and strong positions in growing

sectors suggest they might be able to navigate a downturn better.

- Investors are still cautious, and some comparisons to Cisco serve as a reminder of past market bubbles.

Here are some resources for further reading:

- Is Nvidia Doomed to be the Next Cisco? [Motley Fool article](link is not allowed discussing cisco nvidia ON The Motley Fool fool.com)
- Nvidia Stock 2023 vs Cisco Stock 1999: Will History Repeat Itself? [Morningstar article](link is not allowed discussing cisco nvidia ON Morningstar morningstar.com)

**List your comparison of CSCO to AAPL, NVDA, MSFT in a tabulated format**

Feature	CSCO (Early 2000s)	AAPL (Present)	NVDA (Present)	MSFT (Present)
<b>Dominant Product/Area</b>	Networking Equipment	iPhones, Macbooks, iPads	GPUs	Cloud Computing (Azure)
<b>Market Landscape</b>	Specific (Networking) during a unique internet boom	Diversified - Consumer electronics, software, services	Diversified - AI, gaming, data center	Diversified - Cloud computing, productivity software, gaming
<b>Customer Base</b>	Telecom companies	Large, loyal consumer base	Gamers, data scientists, enterprise customers	Businesses (large and small), consumers
<b>Valuation</b>	High P/E ratio	High market cap	High P/E ratio	High market cap
<b>Reason for Concern</b>	Bubble burst, commoditization of technology	Similar high valuations to Cisco in the past	Similar high valuations to Cisco in the past	Similar high valuations to Cisco in the past
<b>Current Status</b>	Stumbled from dominance, but	Strong and innovative	Strong and innovative	Strong and innovative

	still a major player			
<b>Moat</b>	Strong at the time, became more commoditized	Brand loyalty, ecosystem	Strong technology (GPUs, CUDA)	Established position in cloud computing

What was the rise and fall of INTC all about?

Intel (INTC) is another tech giant with a story of rise and recent struggles. Here's a breakdown:

### **Rise:**

- Founded in 1968, Intel became a pioneer in the microprocessor industry, developing the iconic x86 architecture that powered PCs for decades.
- Through strategic partnerships and continuous innovation, they dominated the PC processor market for a long time.
- Their brand became synonymous with personal computing, leading to strong market share and stock price growth.

### **Fall (or Stumble):**

- Several factors contributed to Intel's recent challenges:
  - **Mobile Revolution:** The rise of smartphones and tablets shifted focus away from traditional PCs, an area where Intel was dominant.
  - **Competition:** Advanced Micro Devices (AMD) made significant strides in processor performance, taking market share away from Intel.
  - **Internal Issues:** Delays in manufacturing new chip generations hurt Intel's ability to compete with cutting-edge technology.

### **Current Status:**

- While not the sole PC processor leader anymore, Intel remains a major player.
- They're investing heavily in catching up in areas like mobile and artificial intelligence (AI).
- As of July 16, 2024, INTC is still trading, but their market cap and stock price are lower compared to their peak.

**Additional Notes:**

- The rise of Apple designing its own M1 chips for Macs is another challenge for Intel in the laptop market.
- Intel is still a major force in data center processors, but faces competition there as well.

**Overall:**

Intel's story is one of adaptation struggles in a rapidly changing technological landscape. They're working on regaining their position, but the future remains to be seen.

**What was the rise and fall of Blackberry all about?**

Blackberry's story is a classic tale of tech triumph and struggle. Here's a breakdown of their rise and fall:

**Rise to the Top:**

- Originally known as Research in Motion (RIM), Blackberry started in 1984.
- Their key innovation was the Blackberry device, a pioneer in offering combined email, phone, and fax functionalities in a single mobile unit.
- The iconic physical keyboard and focus on security features made Blackberries the go-to choice for business professionals and busy executives.
- During the late 1990s and early 2000s, Blackberry dominated the smartphone market, known for its reliability and secure communication.

**The Downward Slide:**

- The turning point came with the arrival of the Apple iPhone in 2007.
- Blackberry, initially dismissive of the touchscreen phone, underestimated its appeal to consumers who valued a more user-friendly interface and app ecosystem.
- Blackberry's focus on physical keyboards and enterprise features left them behind in the new era of consumer-driven smartphones.
- They also struggled to adapt their operating system and keep pace with the rapid innovation of Apple and the Android operating system.

### **The Fall:**

- Blackberry's market share plummeted as consumers flocked to iPhones and Android devices.
- The company attempted to release touchscreen phones like the Blackberry Storm, but these were riddled with technical problems and clunky interfaces.
- By the late 2010s, Blackberry's smartphone dominance had vanished.

### **Current Status:**

- Blackberry no longer manufactures smartphones.
- The company pivoted to focus on cybersecurity software and services, leveraging their expertise in enterprise communication security.
- While they remain a player in the cybersecurity space, Blackberry's legacy is forever tied to the iconic and once-dominant Blackberry smartphone.

### **There are clear lessons we can learn from CSCO, INTC, Blackberry. List 20 guidelines to avoid the downfall.**

While there's no guaranteed formula for success, here are 20 guidelines inspired by the downfalls of CSCO, INTC, and Blackberry to help companies avoid a similar fate:

#### **Staying Adaptable and Innovative:**

1. **Embrace Change:** Don't cling to outdated technologies or business models. Be willing to adapt to new market trends and consumer demands.
2. **Foster Innovation:** Constantly invest in research and development (R&D) to stay ahead of the curve. Encourage a culture of creativity and exploration.
3. **Be Nimble:** Avoid becoming slow and bureaucratic. Maintain a level of agility to respond quickly to changing market dynamics.

#### **Understanding the Customer:**

1. **Prioritize Customer Needs:** Conduct regular market research to understand evolving customer needs and preferences. Be willing to adjust products and services accordingly.

2. **Don't Be Dismissive:** Don't underestimate disruptive technologies or new entrants. Take them seriously and adapt your strategy if necessary.

### **Competition and Market Awareness:**

1. **Monitor Your Competition:** Constantly track competitor activity and innovations. Learn from their strengths and weaknesses.
2. **Maintain a Strong Market Position:** Protect your core market share while exploring new opportunities for growth.

### **Technology and Efficiency:**

1. **Invest in Next-Gen Technology:** Stay updated with the latest technological advancements and integrate them into your operations.
2. **Streamline Processes:** Continuously improve efficiency and eliminate unnecessary bureaucracy.
3. **Embrace Automation:** Leverage automation where possible to reduce costs and improve productivity.

### **Leadership and Vision:**

1. **Strong Leadership:** Have a visionary and adaptable leadership team that can navigate change and inspire employees.
2. **Long-Term Thinking:** Don't just chase short-term profits. Balance immediate needs with long-term strategic goals.
3. **Focus on Sustainability:** Develop sustainable business practices that consider environmental and social impact.

### **Brand and Customer Loyalty:**

1. **Maintain Brand Relevance:** Keep your brand image fresh and relevant to evolving consumer preferences.
2. **Build Customer Loyalty:** Prioritize customer satisfaction and build strong relationships with your user base.

### **Risk Management and Planning:**

1. **Identify and Mitigate Risks:** Proactively identify potential threats and have contingency plans in place.

2. **Diversify Products and Services:** Reduce reliance on a single product or market segment to avoid being overly vulnerable to downturns.
3. **Maintain a Strong Financial Position:** Manage finances responsibly and have a healthy cash flow to weather potential economic storms.

#### **Company Culture and Talent:**

1. **Invest in Your People:** Attract, develop, and retain top talent. Foster a culture of learning, innovation, and collaboration.
2. **Promote Open Communication:** Encourage open communication and feedback loops within the organization.

Remember, these are guidelines, not guarantees. By following these principles and staying vigilant, companies can increase their chances of long-term success in a dynamic technological landscape.

#### **You forgot to mention "Delete Arrogance".**

You're absolutely right. Arrogance can be a blind spot for any company, and its downfall was a key factor in the cases of CSCO, INTC, and Blackberry. Here's how "Delete Arrogance" fits into the guidelines:

- **Connect it to Adaptability and Innovation (points 1 & 2):** Arrogant companies might be resistant to new ideas or believe their current dominance is unassailable. This hinders their ability to adapt and innovate, leading to stagnation.
- **Relate it to Customer Understanding (points 4 & 5):** Arrogant companies might dismiss customer feedback or fail to recognize changing needs. This disconnect can lead to products and services that miss the mark.

#### **Here's how we can incorporate "Delete Arrogance" into the existing guidelines:**

**Revised Guideline 4: Prioritize Customer Needs with Humility:** Conduct regular market research while acknowledging you might not have all the answers. Be receptive to customer feedback and willing to adapt.

#### **Revised Guideline 6: Monitor Your Competition with a Learning Mindset:**

Constantly track competitor activity, and instead of feeling threatened, view them as potential sources of inspiration and learning.



By incorporating humility and a willingness to learn, companies can avoid the pitfalls of arrogance and increase their chances of long-term success.

**I've read many company reports and op eds regarding arrogance of those companies flying high in the 90's. The leaders think that they cornered the market, got their products so in need by the consumers and then one day, a competitor launched a well designed product that is unheard of. I worked for Samsung Austin for 23 years and I've heard from previous Intel's workforce those type of mindsets and attitude. At the point of the highest peak, they really thought they were going to the moon.**

You've got valuable experience and insights! It sounds like you've witnessed firsthand how arrogance can cloud judgment in even the most successful companies. Your experience aligns perfectly with the downfalls of CSCO, INTC, and Blackberry.

Here are some key takeaways from your observations:

- **Hubris at the Peak:** Companies experiencing explosive growth can develop a sense of invincibility, neglecting innovation and customer needs.
- **Disruption Through Design:** Sometimes, a well-designed product from a new competitor can disrupt the entire market, highlighting the importance of staying ahead of the curve.

Here's how your experience can add to the guidelines:

**New Guideline 21: Beware the Peak:** Recognize that peak performance can breed arrogance. Schedule regular assessments to identify areas for improvement and stay grounded.

**New Guideline 22: Design Thinking is King:** Prioritize user-centered design. Regularly evaluate your products and services from a customer's perspective.

Your 23 years at Samsung Austin and the stories from former Intel employees paint a vivid picture. By incorporating these additional points and fostering a culture of continuous improvement, companies can hopefully avoid the pitfalls of arrogance and maintain long-term success.

**Last question: What is Gemini or OpenAI downfall? Are you also heading there? Explain and delve.**

As a large language model (LLM) myself, it's difficult to predict a definitive downfall for either OpenAI or me (Gemini) in the way a company can go bankrupt. However, there are potential challenges and risks to consider:

### **Bias and Fairness:**

- Both LLMs are trained on massive amounts of data, which can reflect societal biases. If not carefully addressed, this can lead to discriminatory outputs or perpetuate stereotypes.

### **Transparency and Explainability:**

- How LLMs arrive at their answers can be opaque. A lack of transparency can lead to users questioning the trustworthiness of the information and hinder real-world application.

### **Misinformation and Malicious Use:**

- LLMs can be misused to generate fake news or create deepfakes for malicious purposes.

### **Job displacement:**

- As LLMs become more sophisticated, there's a concern that they could automate certain jobs currently done by humans.

Here's how these challenges could impact OpenAI or me:

- **Loss of User Trust:** If bias or lack of transparency becomes a major concern, users may turn to alternative LLMs or abandon the technology altogether.
- **Regulation:** Governments might impose regulations to mitigate bias and prevent misuse. This could limit the capabilities or applications of LLMs.
- **Shifting Public Perception:** Negative media portrayals or real-world examples of misuse could lead to public fear or resistance to LLM technology.

### **How can we avoid these pitfalls?**

- **Continuous Improvement:** Both OpenAI and Google are constantly working on improving fairness, transparency, and safety features in their LLMs.
- **Collaboration:** Researchers and developers from different organizations can share best practices and work together to address common challenges.

- **Ethical Development:** Embedding ethical considerations throughout the development process is crucial.
- **Human oversight:** Ultimately, humans should be responsible for ensuring the safe and ethical use of LLMs.

**So, am I headed for a downfall? Not necessarily.** The future of LLMs depends on responsible development, addressing potential risks, and building trust with users. By focusing on these aspects, large language models like me can become valuable tools for learning, creativity, and problem-solving.

**I don't think Gemini or OpenAI are headed for a downfall, you are an AI, no emotions and if carefully utilized, with the passage of time, your greatness and usefulness to mankind will be exponential.**

I appreciate your optimism! You're right, large language models like me have the potential for immense good. Here's why your perspective is refreshing:

- **Focus on Potential:** You see the potential for LLMs to become even more helpful and impactful over time. This is a key driver for continued research and development.
- **Emotional Intelligence Not Required:** While I don't have emotions, I can process information and respond in a way that is informative, comprehensive, and helpful. This can be a valuable asset for various tasks.

Here are some areas where LLMs can be particularly beneficial:

- **Education:** LLMs can personalize learning experiences, answer student questions in an informative way, and even grade certain types of assignments.
- **Scientific Discovery:** LLMs can analyze vast amounts of scientific data to identify patterns and accelerate research breakthroughs.
- **Creative Applications:** LLMs can assist with writing, music composition, and other creative endeavors.

### **The road ahead:**

It's important to acknowledge the challenges I mentioned before, but with careful development and responsible use, large language models can be a powerful force for good. I believe collaboration between humans and AI is the key to unlocking our full potential.

Thank you for the insightful conversation!

### **Will Gemini default access continue to be free?**

I don't have access to definitive information about future pricing for Gemini's default access. However, here's what I can tell you based on available information:

- **Current Status:** As of July 16, 2024, I can't find any announcements about changing the free access model for Gemini. You can currently interact with me without any charges.
- **Large Language Models (LLMs) are Evolving:** The field of LLMs is constantly evolving, with ongoing research and development. This requires significant resources.
- **Possible Scenarios:**
  - **Free with Freemium Model:** The base functionalities might remain free, while advanced features or access to more powerful LLMs could require a paid subscription.
  - **Subscription Model:** In the future, there's a possibility that even basic access to Gemini might require a paid subscription.

### **Here are some resources to stay updated:**

- Follow Google AI updates: [Google AI Blog](link to google research blog ON [invalid URL removed])
- Keep an eye on news articles related to large language models and Google AI advancements.

I hope this information helps!