

AI. Sooner than You Can Imagine!

—

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Always Assess Using 3 Criteria

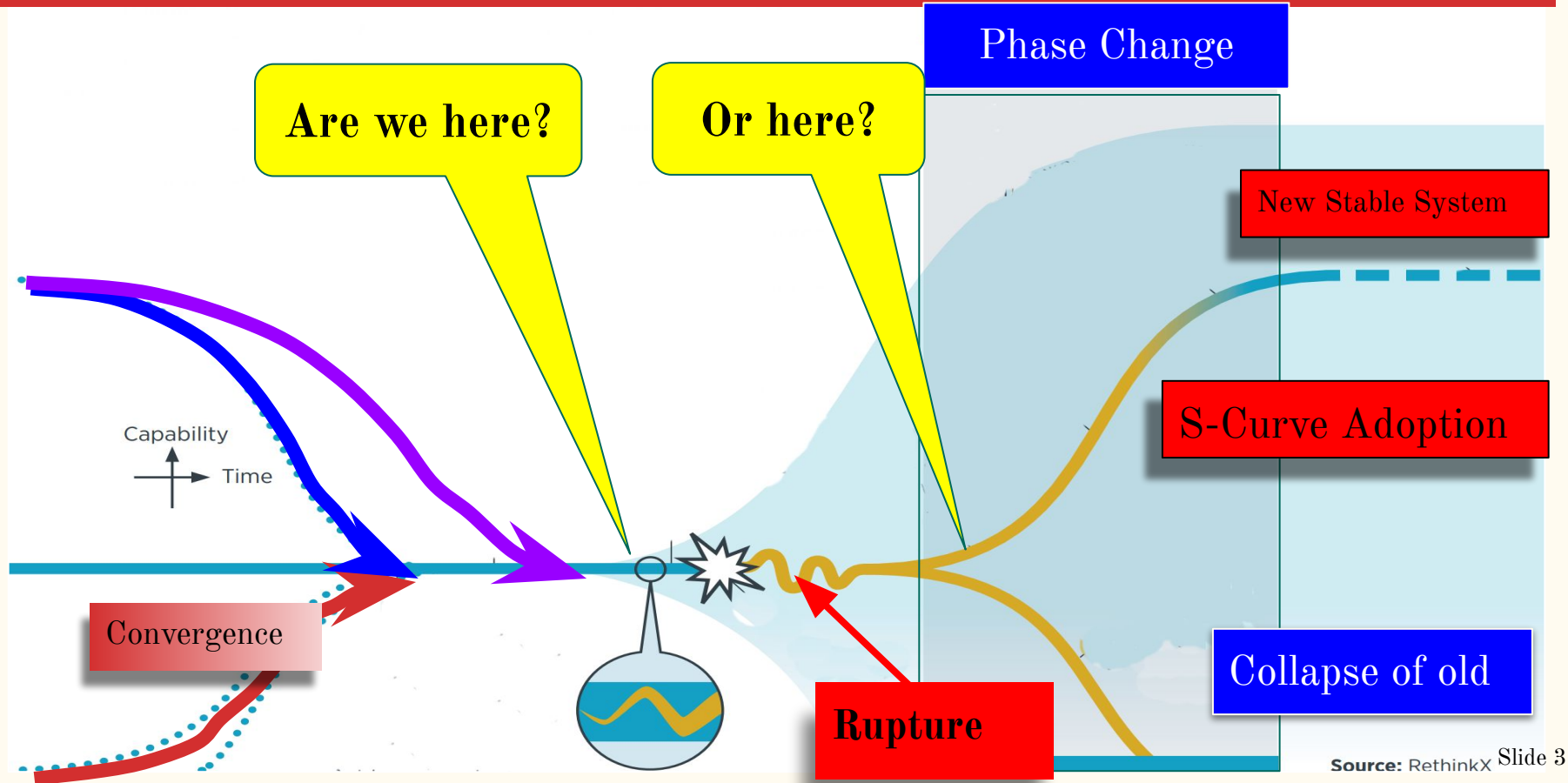
1. Technology

2. Economics



3. Politics and Belief Systems

Phase Change Disruption - AI is Past the Rupture Point



Technology

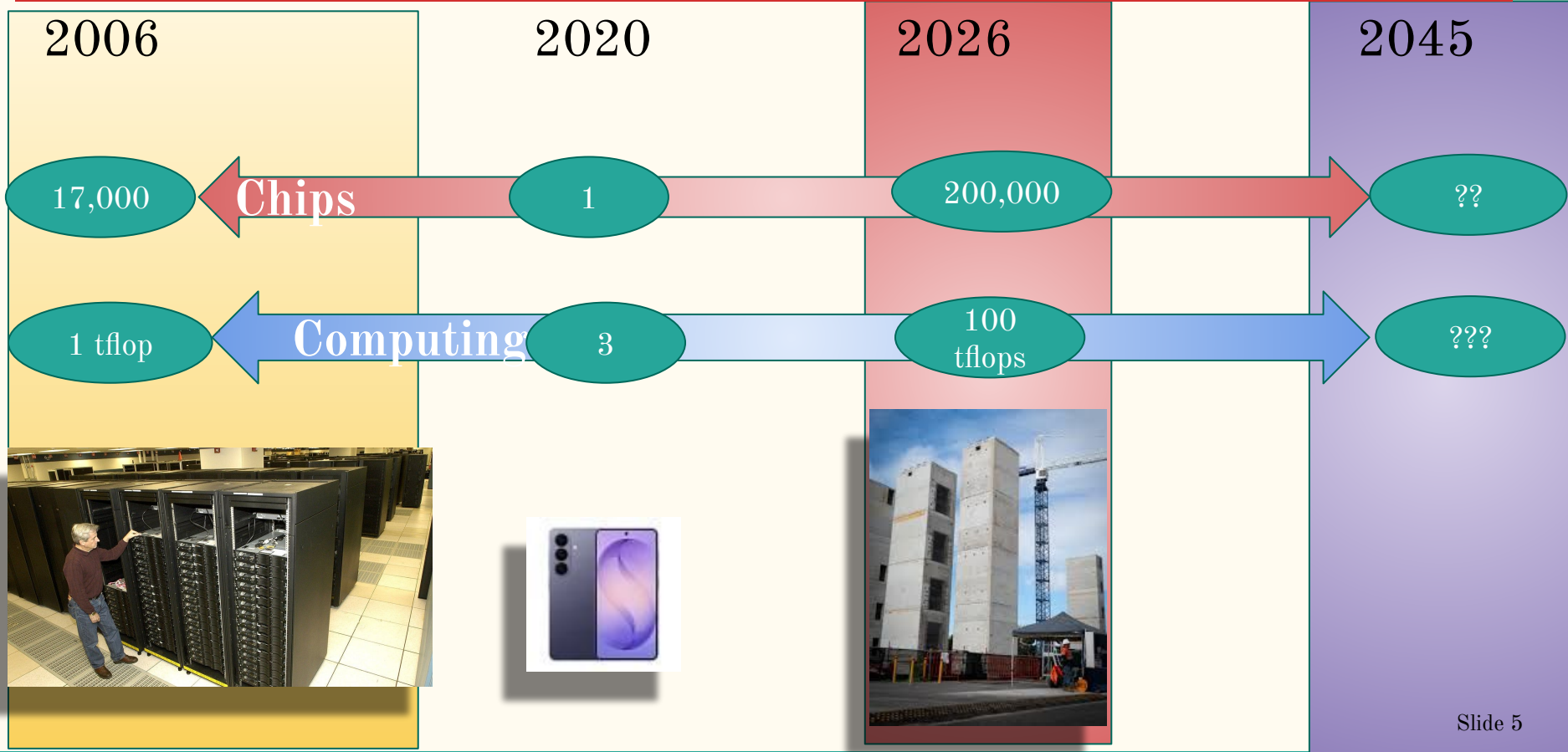
Economics

Politics & Belief

Where have we been?

- 80 years of software
- 1,000s times more powerful hardware
- Increasing application
- Rapid change

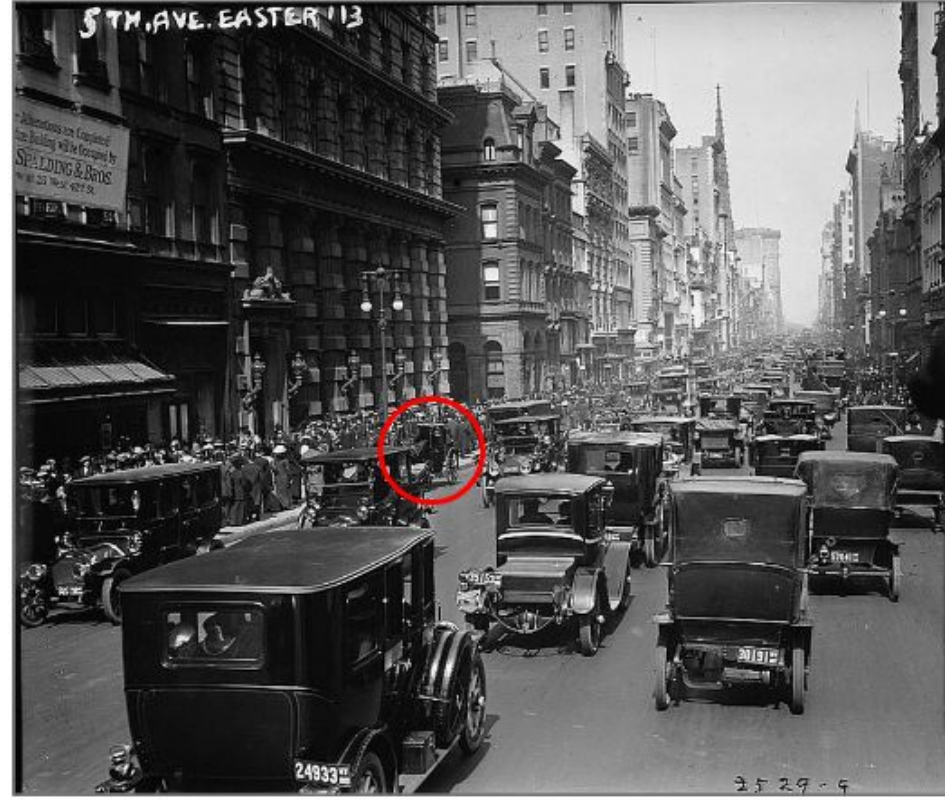
Speed in Computers: 14 years Supercomputer to iPhone



Speed of Change Can Be Fast - 13 Years Horse to Car



New York City 1900 - Spot the Car



In 1913 - Spot the Horse

Speed Accelerating today: Software, Chips, Uses

- Software Advances: 30 LLM, over 400 models
- Computer Chips: 500 faster in past 5 years.
- New laptop chips: 1,000 x faster by Dec 2026.
- Data centres: Aus: 162, 90 proposed, 12,000 global
- All of knowledge since printing press: captured
- All real time video

Technology

The Economics

Politics & Belief

- A Gold Rush
- What is driving investment?
- Looking 2 decades
- Jobs. Which jobs? Any jobs?

Rise of Machines: The Economics of Labour

- Robot = \$20,000
 - Work = 22 hours /day
 - Life = 5 years
 - \$0.50 per hour
- 100,00 already
 - 60 companies floated in 2026
 - 1 million per year by Tesla by end 2026



Economics: Labour Output!

- Human = \$15/hr - globally
- Robot = \$0.50/hr
- Human = 40 hours/week
- Robot = 160 hours/week
- 8 billion. 1 for every human potentially

Economics: Increasing Global GDP is the Prize!

- Total = \$118 trillion
- Growth = 3% pa
- Labour $\sim$ 1/3rd = \$40 trillion
- 4 times more = \$120 trillion
- Growth = 20% pa

Issues:

- a) Jobs gone.
- b) Who shares Wealth?
- c) Education What/who?

Technology

Economics

Politics & Belief

- 4 Examples
- Australia has 15 m jobs
- Each example $\frac{1}{4}$ million people
- Dirty, dangerous, drudgery industries first.

Eg. 1 Service Industry is first

Service Industry Aus

- 600,000 to 1.2 million by 2030
- 216,000 Software engineers

Eg. CORE Website

- My 2nd website 2001 \$120,000
- Today: 10 minutes. \$29 per month

Sunshine Coast Council

- 3R “Roads, rates, rubbish”
- 1800 total staff
- 5 indoor workers to 1 outdoor worker.
- What change in 20 years?

Eg 2. Transport - Stop Road Carnage! Costs. Benefits.

Jobs = 250,000 drivers

- 100,000 taxi and Uber drivers
- 160,000 truck drivers



Existing Costs

- 1,400 deaths & 62,000 injuries
- \$35 billion, 18% of health costs
- 1 in 5 hospital beds.

Robot Machine Benefits

- Personal public transport
- 6 minutes, 24/7, door to door
- 100 times safer
- 1/3 the fare

Eg 3. Food Processing - Global Disruption of Trade

- 200,000 jobs in Australia
- We outsourced cheap labour
 - Catch fish in fish farm
 - Send to Vietnam
 - Fillet
 - Bring back to eat.
- Quality - everything made is perfect
- Onshore \$0.50/hr



Eg. 4. Job Losses in The Military!

- 100,000 military jobs
- \$66 billion cost (Federal ed = \$52 billion)
- Drones and AI replace soldiers (Ukraine, Iran)
- Military is there to protect trade routes. But...
 - 45% of shipping carries fossil fuel
 - 35% other trade
 - Submarines are a fool's errand



Branch	Perm	Reserves	Budget
Army	27,700	22,100	\$13 b
Navy	15,100	4,700	\$16 b
AirForce	16,000	6,300	\$10 b
Total	60,000	33,100	\$50 b

Why Be Educated if there are No Jobs?

“Be a plumber” Prof Geoffrey Hinton, father of AI.

- Be an Artist?
- Be a CareGiver?
- Be a volunteer?

What Education prepares our children & grandchildren for 2045?

Technology Economics Politics & Beliefs

- Massive increase in Wealth
- Share wealth with
Sovereign Wealth Fund
- Massive Job Losses
- Who to Educate?