Digital Society, Energy Sovereignty and Circular Economy Goals

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Piero Rivizzigno

Co-Founder, Braynr

Nuecir Think Tank, Verona 2025

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Piero Rivizzigno is a serial entrepreneur with a strong focus on digital innovation and product development. After earning a degree in electronics engineering from the University of Padua, he co-founded Perseo, a Product Data Management consultancy later acquired by Ernst & Young. He also co-founded the e-business consultancy Framfab, later sold to AT Kearney. He is currently involved in Braynr, an AI-powered learning platform. Beyond business, Rivizzigno serves as President of an association advocating for multidisciplinary pancreatic cancer care. His career reflects a consistent commitment to innovation, efficiency, and human-centered design in both corporate and social sectors.

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Digital Economy: The Strategic Role of Technology and Energy Sovereignty

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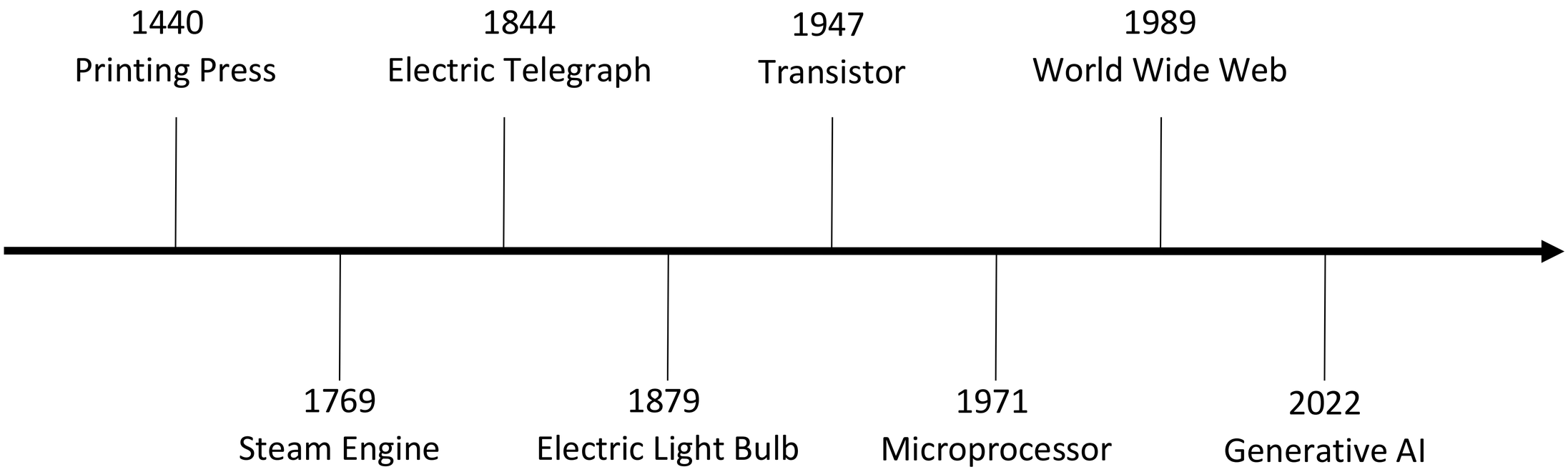
The Digital Economy:
Why Technological and Energy Sovereignty Matter

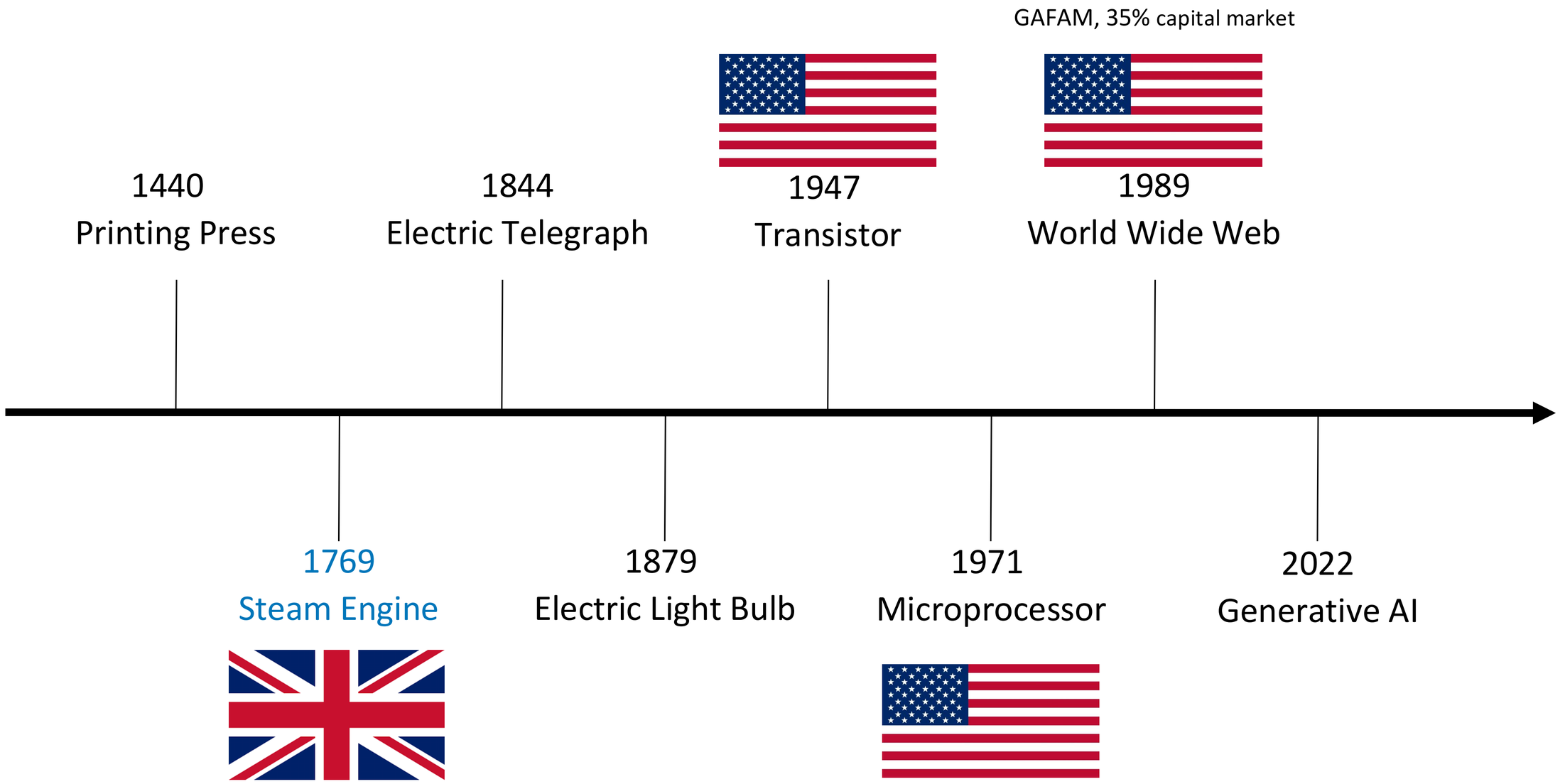
Piero Rivizzigno, Braynr

Verona, 8 October 2025

Some of the major industrial revolutions



The power impact



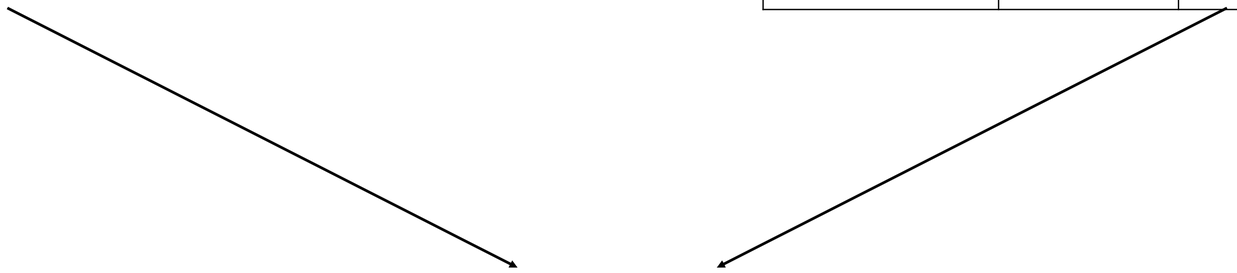
AI-driven Data Center Investment

AI Infrastructure Spending (2024)

Region	Amount	% of Global	Growth Rate
USA	$55-60B	59%	34% CAGR
China	$24-28B	20%	35% CAGR
Middle East - UAE, Arabia	$15-20B	13%	40%+ CAGR
Europe	$8-10B	7%	21% CAGR
Rest of World	$5-7B	~5%	Variable

Expected Investment by Region

Region	2024	2030 Projection	6-Year Total
USA	$60B	$200B+	~$900B
China	$25B	$120B	~$450B
Middle East	$18B	$100B	~$400B
Europe	$9B	$40B	~$180B
Rest of World	$6B	$30B	~$120B
TOTAL	~$118B	~$490B	~$2.05T



Huge investment in the energy required by the data center

Energy requirements and investment

Energy Consumption Growth

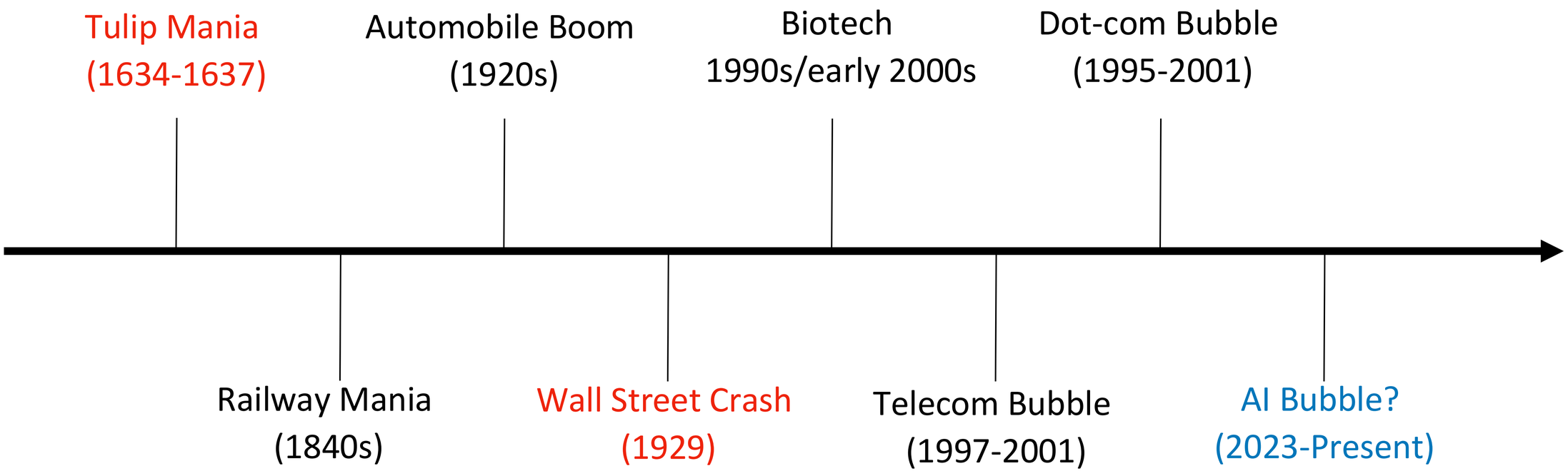
Metric	Base Scenario	High Scenario
2024 AI Consumption	50 TWh	50 TWh
2030 AI Consumption	402 TWh	638 TWh
Growth (6 years)	+352 TWh	+588 TWh
Equivalent	0.4 Japans	0.6 Japans

Energy Projection by Region

Region	2030 AI Consumption	Growth from 2024	Grid Investment Needed
USA	201 TWh	+171 TWh	$720B
China	100 TWh	+90 TWh	$380B
Middle East - UAE, Arabia	60 TWh	+56 TWh	$236B
Europe	32 TWh	+27 TWh	$114B
Rest of World	8 TWh	+7 TWh	$27B
TOTAL	402 TWh	+352 TWh	$1,478B

Grid infrastructure bottlenecks could limit AI growth more than chip shortages

Bubbles: financial and industrials



Unlike pure financial speculative bubbles, infrastructure bubbles like often leave valuable lasting assets - Britains'network remains essential today similar to how the 1990s telecom bubble left fiber optic infrastructure

Digital sovereignty

The tech stack

Chips & Compute – fabs, GPUs, packaging

Cloud & Data – where data is stored and who governs it

Network & Sites – where data centers are located and connected

Energy & Water – available power, cost, and sustainability

→ Without energy sovereignty,
digital sovereignty remain illusory.

The message

AI is energy-intensive: by 2030, the digital infrastructure will require power comparable to that of dozens of major cities.

Technological sovereignty is also energy sovereignty: without proper grid and generation planning, innovation remains “under someone else’s license.”

Act now: secure sites, long-term PPAs, efficiency standards, and European value chains (chips–cloud–energy) to avoid lock-ins and competitiveness blackouts.

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IEA "Energy and AI" Report (2025)

OPEC Energy Outlook (2025)

Goldman Sachs Research (Feb 2025)

IDC AI Infrastructure Tracker (Feb 2025)

McKinsey "Cost of Compute" (April 2025)

Thank you!