APPLIED CAx

The Exponential Age

Forcing Functions

Enablers

A&D Deep Dive

- Industry Challenges
- Case Studies

New Energy Deep Dive

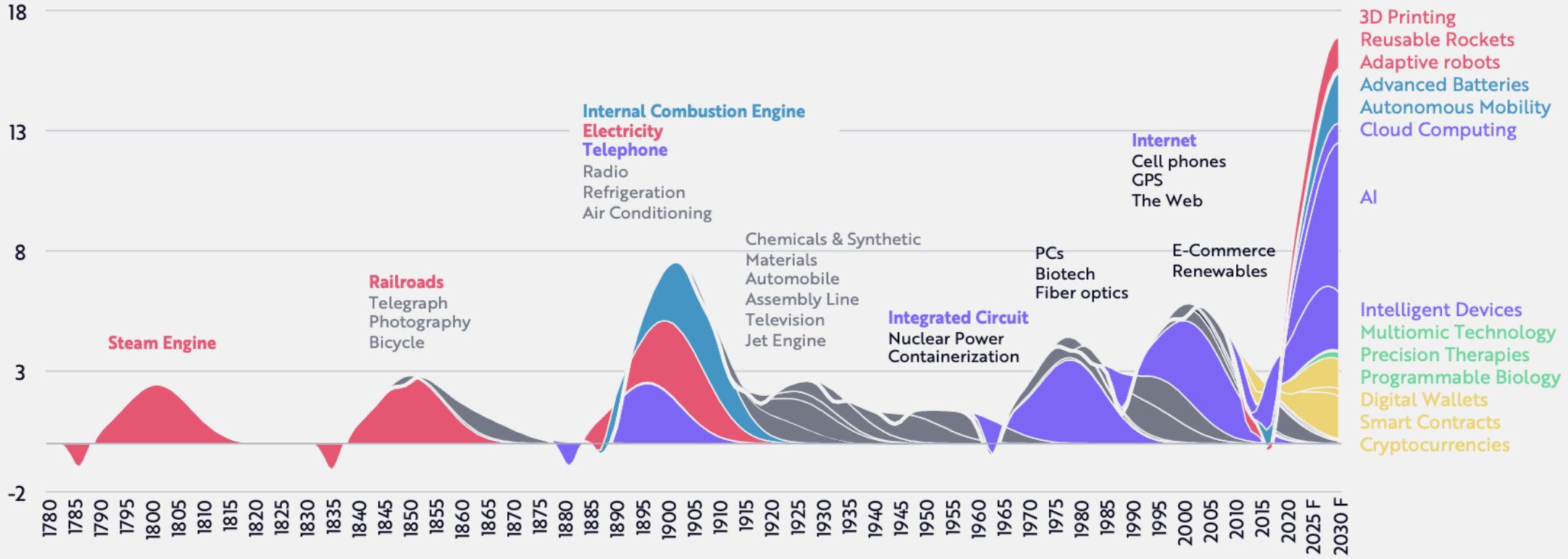
- Fusion/Fission
- Case Studies

Teamcenter	Design Tools	Methodologies	A.I.	Visioneering
Change Mgmt.	NX/Fibersim	MBSE	AI in Engineering	Optimization
TC Requirements	Capital	MBD/PMI	Generative Design	Platform as a Service
IPP&E	Mendix	Digital Thread	AI/ML Apps	2035 Vision

Converging Technologies Are Generating A Historic Technological Wave

Estimated Economic Impact of General Purpose Technologies

(Annual Percentage Point Additions to Real GDP Growth And Consumer Surplus)



Sources: ARK Investment Management LLC, 2024. This ARK analysis is based on a range of underlying sources, including Bekar et al. 2017, which may be provided upon request. The chart uses GPT 4 prompting to survey a comprehensive list of general purpose technologies using the identification framework detailed therein. Where available, academic literature is also used to assess attributable economic impact. A GPT-4 scoring rubric assesses technology-by-technology impacts. The impact measured directly is matched against the scoring to tune all scores to produce technology-by-technology estimates of economic impact (even when direct measures of economic impact are unattainable). Consistent with General Purpose Technology theory, these technologies are assumed to go through a period of investment in which economic impact is negative before productivity advances begin to realize into economic data. All technologies are assumed to have the same diffusion and realization cycle. If recent technologies are assumed to diffuse more quickly, the current wave would appear steeper. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results.