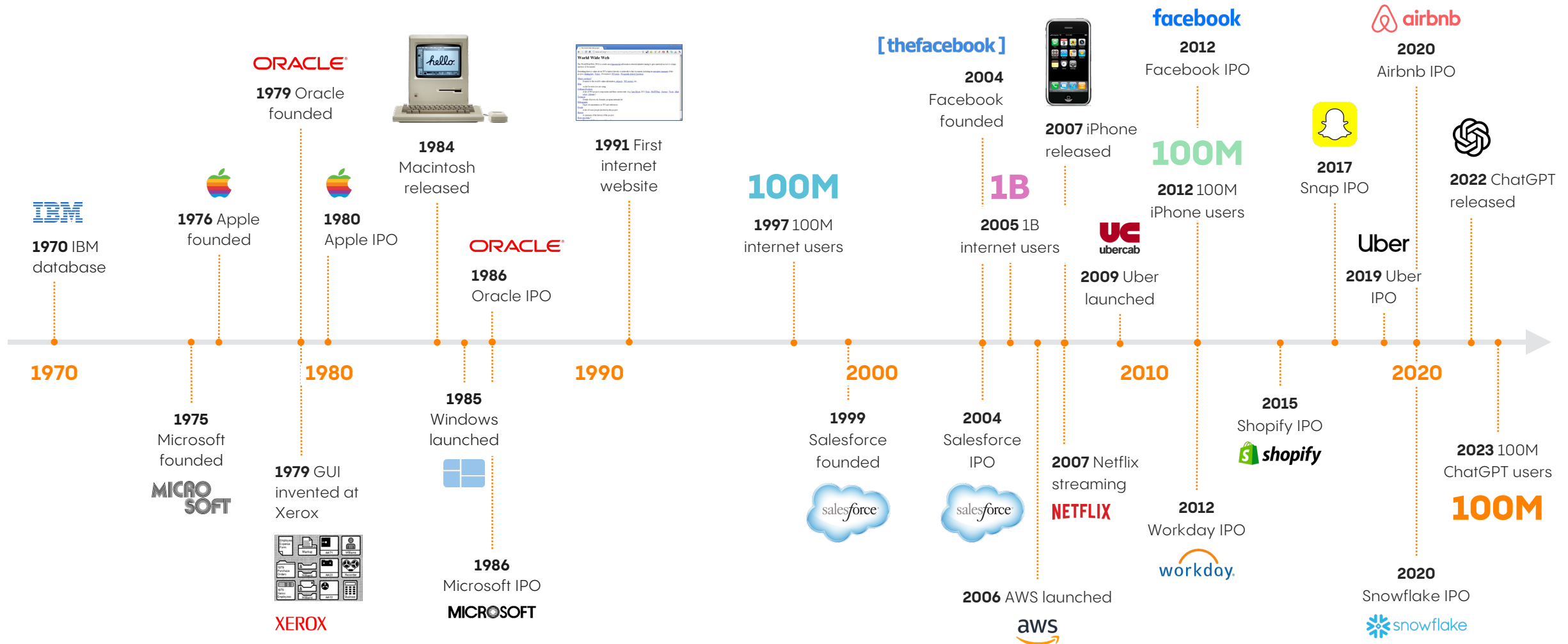


GenAI: Lessons From Prior Tech Waves*







Steve Sloane • May 2023

A Brief History of Innovation

Key inflection points across computing, internet, cloud and mobile

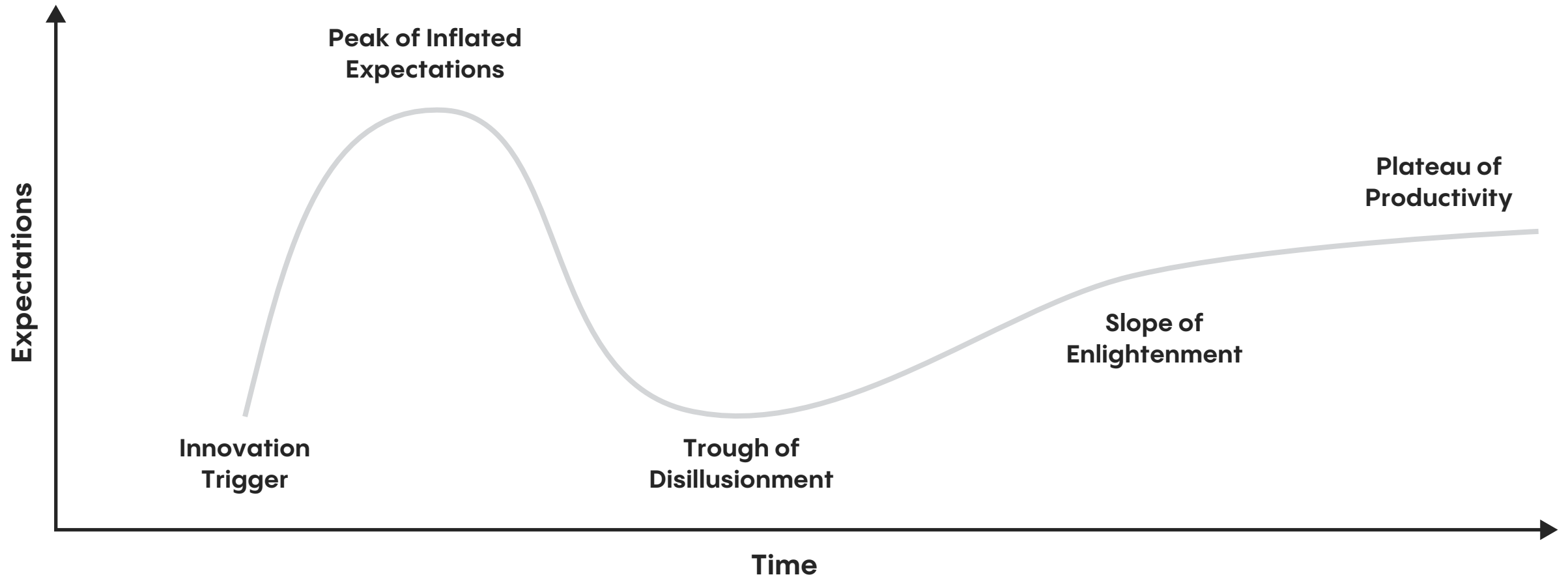


Ingredient Technologies Spur Significant Platforms **Within 3–6 Years**

Year	Ingredient	Time	Mass-market innovation	
1979	GUI	3–6 years	 Macintosh (1984)	 MICROSOFT WINDOWS (1985)
1991	Internet	3–6 years	 (1994)	
1999	Cloud	3–6 years	servicenow (2004)	 (2005)
2007	Mobile	3–6 years	 (2009)	
2017	ML Transformers	3–6 years	 ChatGPT (2022)	
2022	ChatGPT	?		

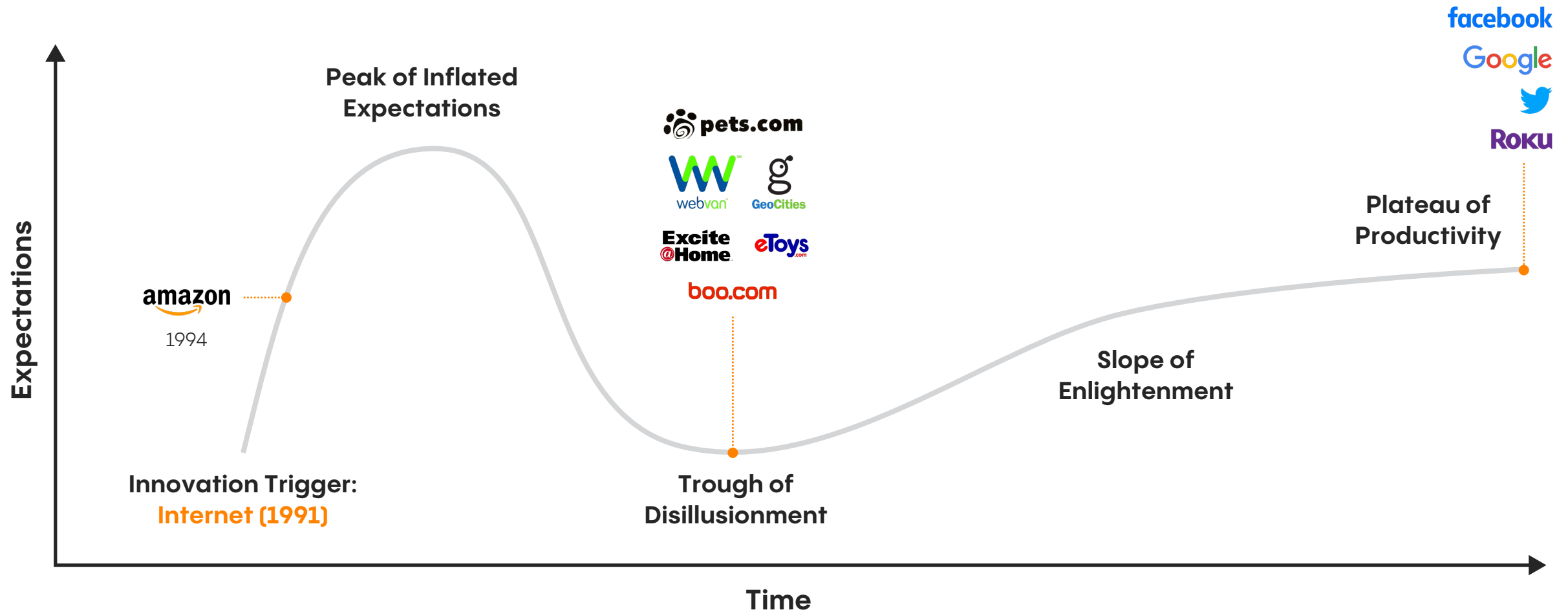
Though Not Without Peaks and Valleys

While generational companies often catch the innovation trigger early and build through the hype cycle, false positives occur before an enduring wave of value that persists for a decade-plus



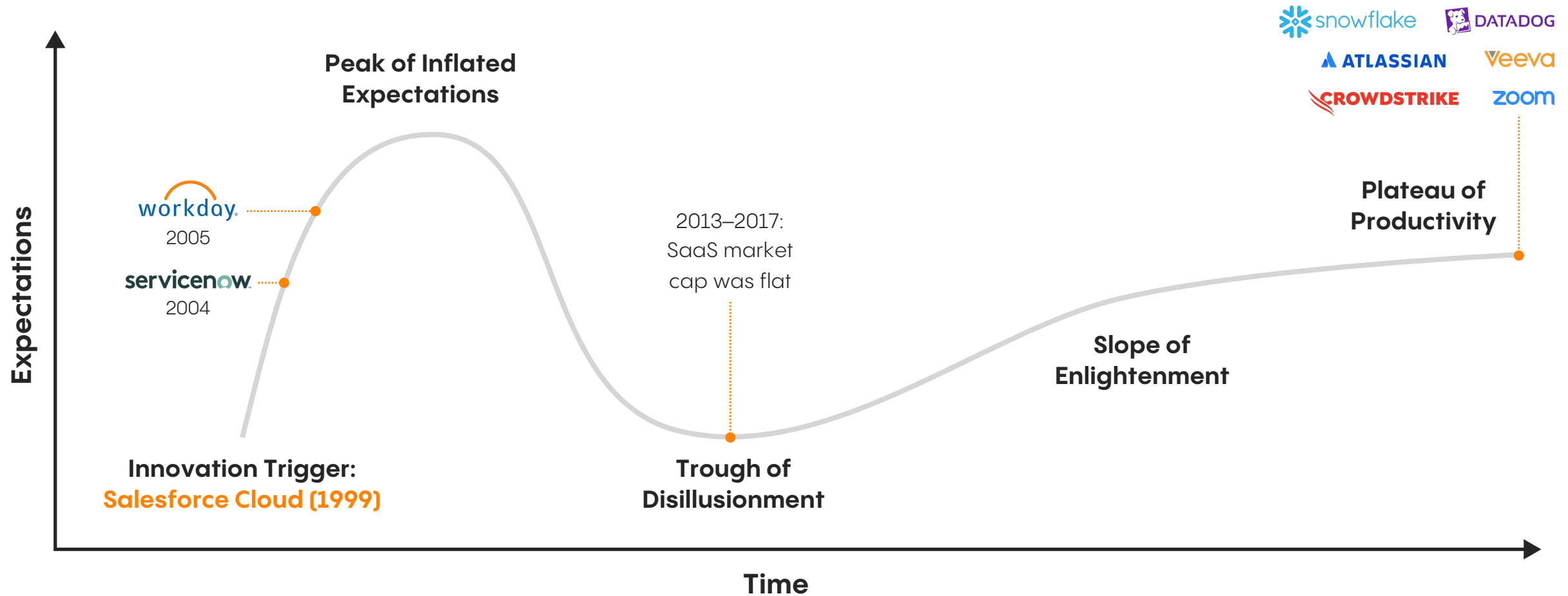
Internet

After the first website was launched in 1991, it took until 1997 to get to 100M users, at which point there were many false-positives. These eventually gave way to enduring businesses



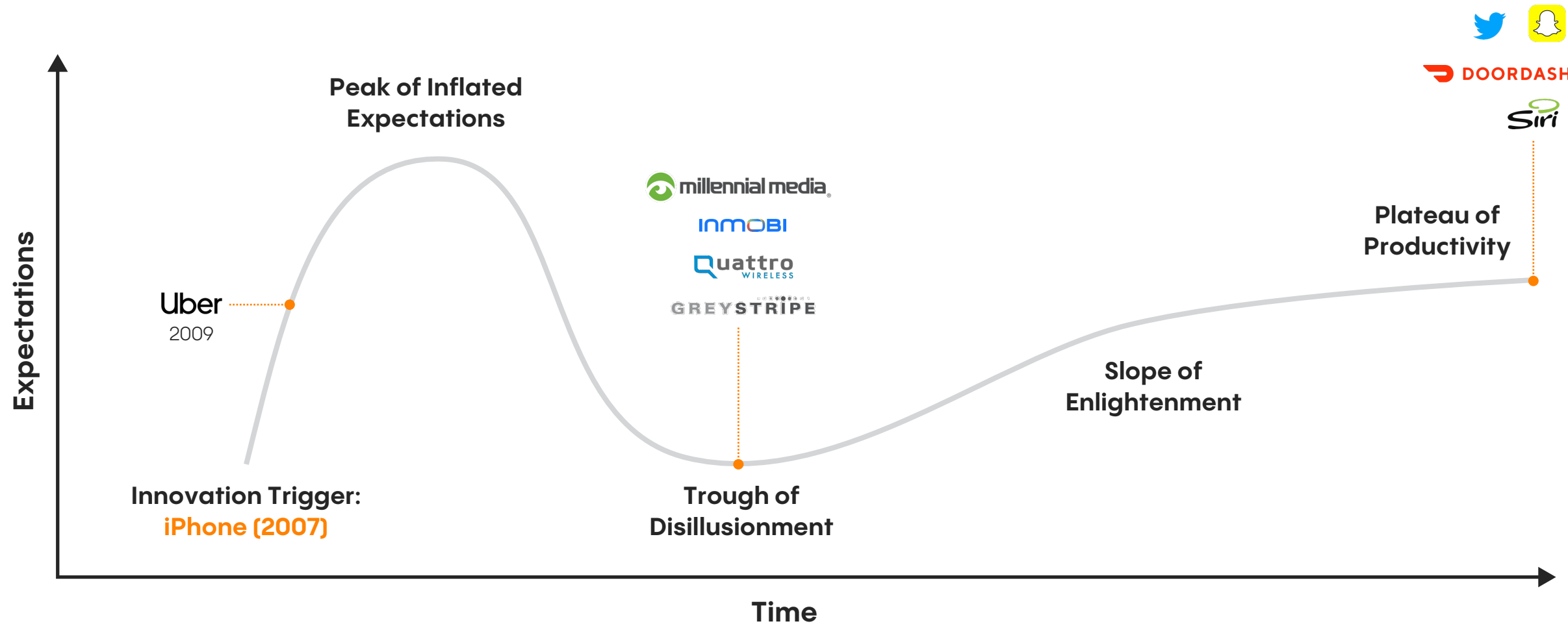
Cloud

Cloud was a relatively slower developing technology, with early platform winners (ServiceNow and Workday etc.) followed by a quiet period before a boom that was precipitated by cloud infrastructure



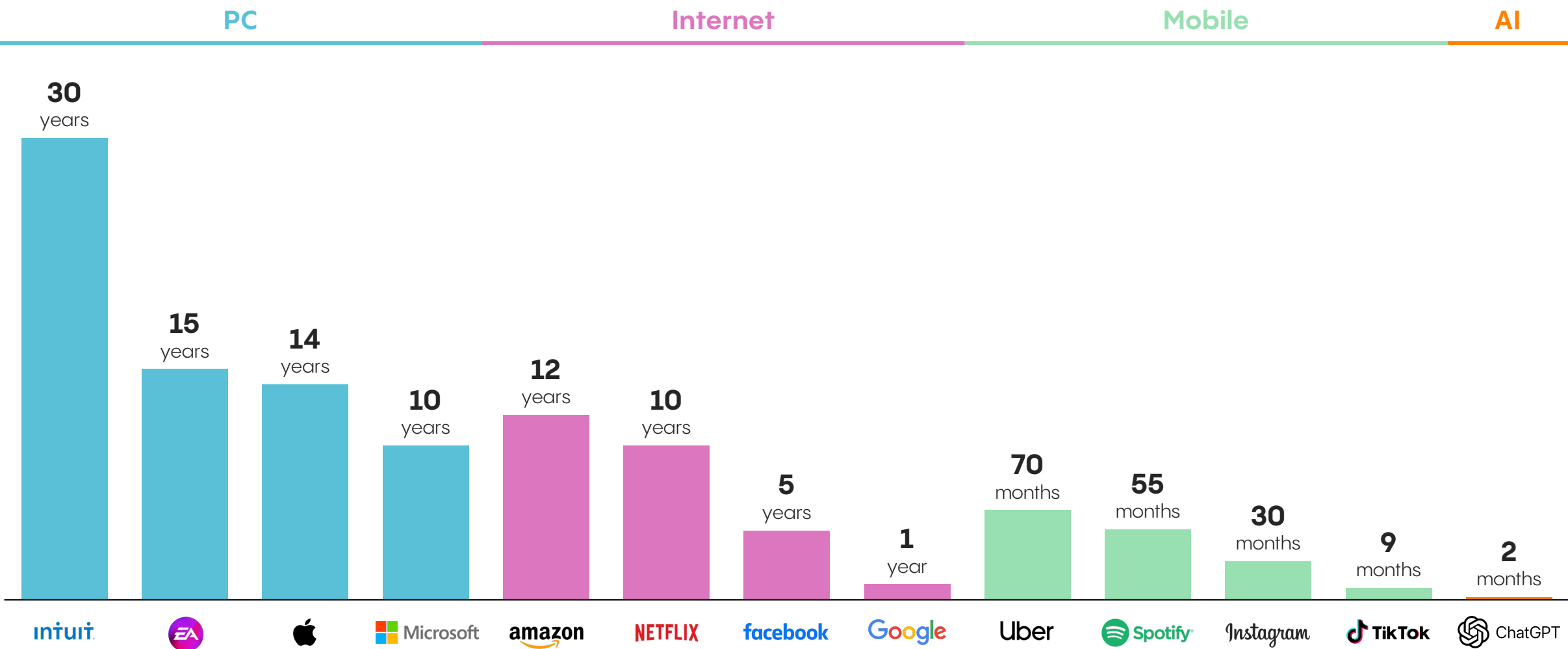
Mobile

After the launch of the iPhone, many early applications in ad-networks and mobile games flamed out, while large mobile platforms were created years later



Generative AI Growth Is in a League of Its Own

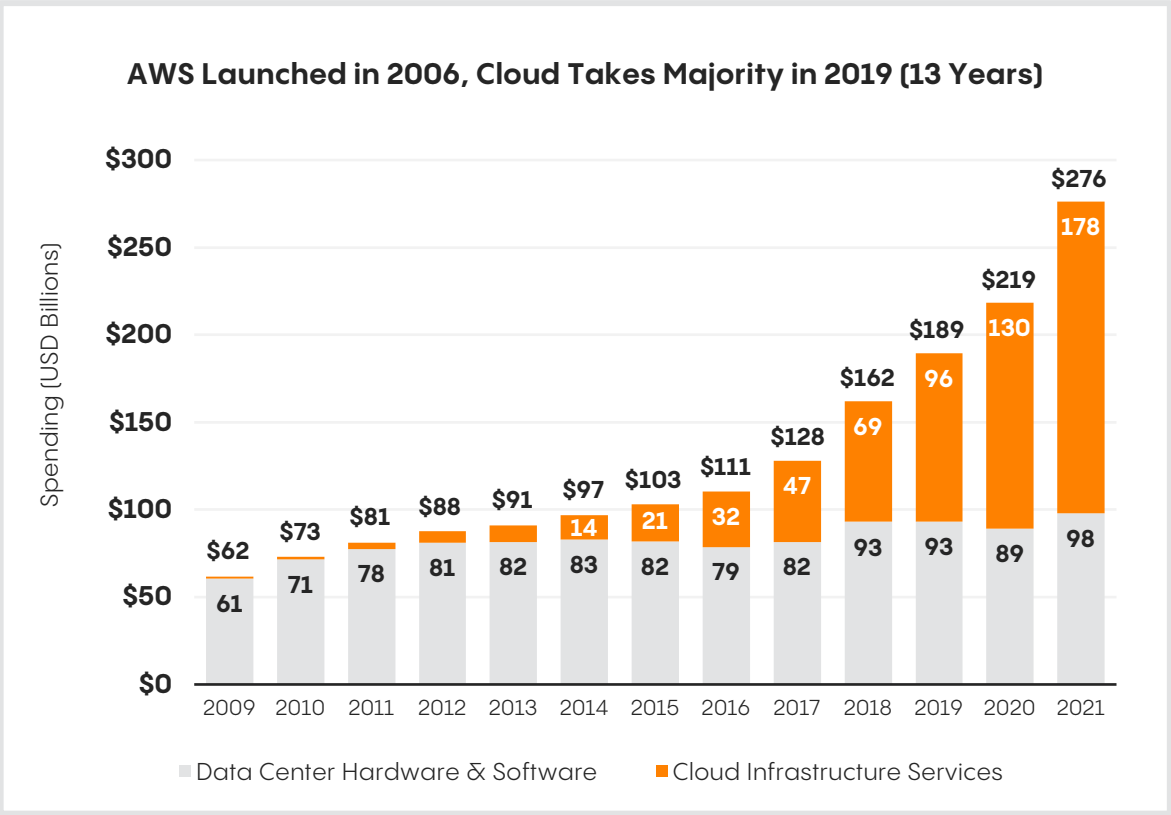
ChatGPT is the fastest ever to 100M users—things are happening on a very compressed timeline



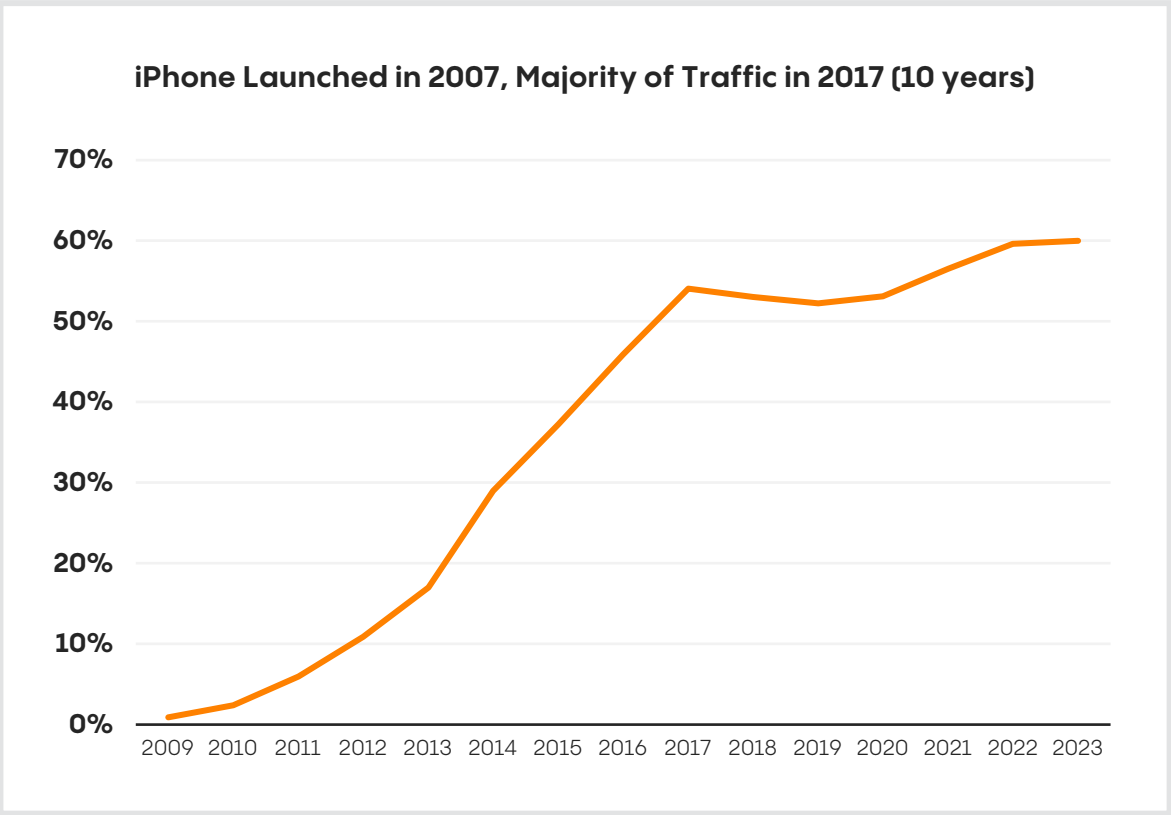
Without the Need for Re-Platforming

GenAI can be rapidly deployed by incumbents and start-ups alike. Mobile and SaaS required fundamental platform shifts and took years to cross into the majority

SaaS Displacement



















Mobile Share










Infrastructure vs. App

In each wave, a few core infrastructure platform companies are formed early and become massive, with application and ecosystem companies growing over a decade-plus

	Internet	Mobile	SaaS
Platform	 \$1.1T	 [\$2.6T]	 [\$90B]
	 \$1.3T		 [\$191B]
	 \$530B		 [\$47B]
App/ Ecosystem	 POSHMARK \$1.2B	 [\$25B]	 [\$10B]
	 \$800M	 [Undisclosed]	 [\$19B]
	 \$8B	 [\$60B]	 [\$11B]

Menlo's Generative AI Strategy: Investments to Date

Bet big to capture early platform/infrastructure winners which deliver outsized value. Selective at the app layer with focus on founder quality/early vision and drive existing portfolio in critical areas

Layer	Investments				
New Applications	 Typeface	<div>Investment TBA: Biotech</div>			
Existing Applications	 Sana™	 Genesis Therapeutics	 Everlaw	 Matik	 OBSERVE-AI
Data + Infrastructure	 Pinecone				
Foundational Models	ANTHROPIC				















Menlo’s Horizontal Generative AI Strategy

Investing at the layers where value will accrue

Layer	Definition	Menlo’s Strategy
Applications	End-user apps that leverage generative AI to create content or solve specific problems, such as generating marketing content or providing chatbots on websites	High focus: Invest in top-tier talent who will be able to out-execute a competitive ecosystem, as well as in vertical-specific use cases
Middleware	Developer tooling that provides an easier interface for developers to build and deploy generative AI applications	Low focus: While tools at the middleware layer may attract casual developers, we are less confident they will apply to the enterprise
Data + Infrastructure	“Picks and shovels”: tools for productionizing LLM apps such as databases, compute, and observability platforms	High focus: Invest in companies providing mission-critical use cases for LLM development; continue to create our own LLM apps to understand core use cases
Foundational Models	Core models that underpin generative AI applications, pre-trained on large data sets; may be fine-tuned or customized for specific use cases	Medium focus: Lots of value will accrue at this layer—huge TAM, though in the future, may be divided among a few competitive large players. Important to have 1-2 investments at this layer

Menlo's Vertical Generative AI Strategy

Generative AI applications will proliferate in a multitude of industry verticals, that are generally well-insulated from incumbents

Vertical	Opportunities	Rationale
Healthcare + Digital Health	   	Healthcare data and integrations are very sensitive, structured, and specifically integrated. In biological applications, LLMs will provide leverage on drug discovery
Legal	    	Legal is very well suited to Generative AI, and explosion of specific data will lead to interesting use cases
Finance	    	Parsing of documents, sentiment, and more will be empowered by LLMs

And **Opportunities** to Leverage Ingredient Technologies

Every company will be an GenAI company

Company

Application



AI-powered learning systems helps companies share knowledge, learn fast, and automate administration (10x less content writing and maintenance)



Call center agents are directly in the cross-hairs of LLMs, Observe can leverage proprietary systems to seamlessly blend LLMs with agents and maintain quality



LLMs will help find and isolate relevant content in eDiscovery



Auto-generation of relevant content and numbers for company presentations



Graphic generated by Dall-E 2

Summary

- In prior tech waves, the emergence of innovation spawned mass market technologies within 3-6 years as platforms were created early
- These generational companies rode through the hype cycle, but were often followed by false positives
- Platform companies create disproportionate market cap early, but ecosystem businesses create value over decades
- Our generative AI strategy seeks to boldly identify platform companies early, and then steadily invest at the app layer over the foreseeable future with a focus on founder quality and vision
- Our investment thesis should give more consideration to incumbents such as Microsoft and OpenAI which are likely to be powerful forces moving forward
- We should push our companies on GenAI, ensuring that it is being taken seriously
- Immerse yourself in the technology, you never know what ChatGPT can do!