1-800-ChatGPT: How OpenAI Could Successfully Launch a Mobile Phone

STRATMGT 386: Competitive Strategy for Technology Markets

Final Paper

Alexa Murray

Henri Fernandez

Ari Brown

Kyle Simmons

I. Introduction

OpenAI, creator of ChatGPT, recently acquired Jony Ive's design studio io, signaling a shift toward building end-to-end AI-powered hardware.[i] This paper outlines a strategic approach for OpenAI's entry into the mobile market, using frameworks of platform economics, network effects, and vertical integration.

II. Industry Structure and Ecosystem

The global smartphone industry is defined by a tightly held duopoly. Together, Apple and Google's operating systems control over 99% of the market, creating formidable barriers to entry for any challenger.[ii] Apple's model is aggressively vertically integrated; it owns every layer from silicon to software to services. This allows Apple to create powerful lock-in effects, cementing user loyalty and raising switching costs.

Google, by contrast, pursues a hybrid approach. While it licenses Android broadly to OEMs, it exerts control through required Google Mobile Services, pre-installed apps, and search defaults.[iii] Its arrangements with device makers and carriers ensure prominent placement and reinforce the strength of its data-driven flywheel. Both incumbents act as platform gatekeepers, wielding their app stores and APIs to impose significant fees and control user experience.[iv]

For OpenAI, this landscape presents significant challenges at every level of the stack. Key suppliers such as chipmakers wield negotiating power due to high capital intensity and limited alternatives. Cloud providers are critical for AI workloads, but have their own platform ambitions. Manufacturing partners are necessary, but bring their own operational risks. Perhaps most challenging is distribution: Apple and Google dominate both direct retail and carrier relationships, who are unlikely to jeopardize existing contracts for a new, unproven entrant. In this context, OpenAI must not only build great hardware, but also find creative ways to circumvent entrenched distribution and ecosystem moats, potentially by targeting overlooked geographies, building unique channel partnerships, or leveraging Microsoft's enterprise footprint.

III. Customer Need and Competitive Positioning

OpenAI's phone aspires to address a growing, unmet consumer need: a truly intelligent, proactive digital assistant that simplifies daily life, not by adding more apps, but by orchestrating tasks end-to-end via conversational AI. This vision goes beyond incremental improvements; it aims to fundamentally lower cognitive load and transform the user-device relationship.

For OpenAI to succeed, it must deliver a user experience that is not merely different, but vastly superior for specific, well-defined user segments. Early adopters may include productivity power users, tech enthusiasts, or those frustrated by the limitations of today's app-based paradigms. To convert this niche into a movement, OpenAI must build an ecosystem of agents, apps, and services from day one—using aggressive incentives for developers and clear, transformative use cases for consumers. The real competitive test is not whether OpenAI can match Apple or Google feature-for-feature, but whether it can reimagine the mobile experience in a way that makes the current platforms feel obsolete.

IV. Distribution and Market Access

OpenAI faces a tightly controlled mobile retail landscape dominated by entrenched carrier partnerships and exclusive contracts. In the U.S., most smartphones are sold through carriers that bundle phones with service plans and subsidized pricing, making it difficult for new entrants to secure shelf space or win over consumers tied to long-term agreements. Retailers like Walmart and Best Buy offer another route, but their support will depend on whether OpenAI's phone threatens core relationships with industry incumbents. Amazon may be especially reluctant due to its own hardware ambitions.

Given these barriers, OpenAI can't rely on the traditional playbook. Instead, it should prioritize direct-to-consumer sales to leverage its brand and user base, pursue creative partnerships with nontraditional channels like Microsoft or educational institutions, and target international markets with less incumbent dominance. Success will depend on starting small, building momentum in targeted segments, and using early traction to unlock broader distribution. In a market designed to keep out challengers, OpenAI must be prepared to redefine what a successful launch looks like.

V. Complements and Network Effects

OpenAI's long-term success in the smartphone market will hinge not only on the strength of its AI technology, but also on its ability to orchestrate a powerful ecosystem of complementary products and network effects. The value of the OpenAI phone will increase exponentially as more users, developers, and third-party services engage with the platform.

Direct network effects are already in play: ChatGPT's 400 million daily active users fuel a virtuous feedback loop where each interaction refines the models, making the core experience smarter, faster, and more context-aware.[v] As usage grows, OpenAI can deliver increasingly personalized, high-performing AI on-device, raising the switching costs for users and solidifying its market position.

However, **indirect network effects** will be decisive. To compete with iOS and Android, OpenAI must rapidly cultivate a thriving community of third-party developers and AI agent builders. This will require not only robust APIs and SDKs, but also attractive revenue-sharing models and tools for monetization and user acquisition. The more compelling and diverse the agent ecosystem, the more indispensable the platform becomes for end users—mirroring the app store flywheel that powered the rise of incumbents.

Critical complements, such as Microsoft Azure for cloud compute and partners like Stripe and PayPal for payments, can give OpenAI a cost and operational advantage by leveraging scale and established infrastructure. But hardware accessories, content providers (e.g., Spotify, Netflix), and smart device interoperability represent both opportunity and risk. Many such products are tightly integrated into Apple and Google's ecosystems and may be deliberately withheld from OpenAI's platform, risking a fragmented or incomplete user experience.

To mitigate this, OpenAI must aggressively pursue early partnerships with neutral or challenger brands in hardware and content, incentivize rapid onboarding of key services, and clearly articulate the advantages of building on an AI-first platform. Fast-tracking development, waiving platform fees for early-stage partners, and offering marketing support could catalyze the ecosystem's growth.

Ultimately, the strength of OpenAI's network effects and the breadth of its complements will define whether the phone becomes a true platform or just another device. The window to achieve critical mass is narrow; execution on ecosystem strategy must be as relentless as on technology.

VI. Business Model and Pricing

OpenAI's path to sustainable value in hardware depends on a flexible business model that combines platform economics with the realities of device manufacturing and ecosystem lock-in. The company must monetize across three fronts: device sales, subscriptions for premium AI services, and developer/platform fees. However, real success hinges on how well these elements are integrated and scaled.

A hybrid pricing approach is recommended. First, OpenAI should launch its phone at a price close to cost, well below flagship iPhones and Pixels, to overcome high switching barriers and rapidly build a user base. Even capturing just 1% of the U.S. smartphone market (about 3 million units) at a $100 margin would generate $300 million in hardware profit, while establishing a valuable funnel for future subscriptions and developer revenue.

Second, the focus should be on recurring revenue from premium AI services. OpenAI could offer basic agent features for free but include a year of ChatGPT Pro with each device to build user habits. If 30% of these users later convert to paid subscriptions at $20/month, annual recurring revenue would top $216 million on this base—far outpacing hardware margins.

Finally, to accelerate ecosystem growth, OpenAI should set developer fees well below the industry standard (e.g., 15–20%) and consider waiving them for early-stage partners.[vi]If 5,000 active agents each generate $5,000 per month in transactions, OpenAI could net $4.5 million per month from developer activity alone.

Early on, OpenAI must accept slim hardware margins to prioritize ecosystem expansion, using subscription and developer revenue to fuel long-term growth. Risks include significant cash burn and possible price wars if incumbents retaliate; mitigating these will require clear growth milestones and ongoing investment in unique AI experiences. Ultimately, durable value will come not from hardware profits, but from building a sticky user and developer ecosystem—a necessary playbook for shaping the next era of personal computing.

VII. Sources of Competitive Advantage

OpenAI's competitive advantage in the emerging AI-native hardware market is anchored in multiple, mutually reinforcing strengths. Foremost is its technological leadership in large language models—GPT-4 and its successors have set new benchmarks for conversational intelligence, contextual reasoning, and multimodal capabilities, positioning OpenAI ahead of rivals. However, this technical edge is not permanent; the pace of innovation and proliferation of open-source models require OpenAI to sustain aggressive investment in research and rapid model deployment to avoid being leapfrogged.

Equally central is the company's data flywheel. With hundreds of millions of ChatGPT users, every interaction contributes to a unique, proprietary dataset that enhances model accuracy and personalization.[vii] As OpenAI rolls out hardware, device-specific usage data—ranging from real-world context to behavioral cues—will further deepen this defensibility. To preserve its lead, OpenAI must invest in closed-loop learning systems, on-device fine-tuning, and privacy-preserving analytics that keep its data advantage proprietary and secure.

Brand equity is another key differentiator. OpenAI is now one of the most recognizable names in consumer AI, making it easier to attract users and partners. Yet this trust is fragile, and OpenAI's ongoing reputation will depend on transparency about data use, strong privacy protections, and a visible commitment to responsible AI, especially as regulatory scrutiny grows.

Strategic partnerships, particularly with Microsoft, provide access to world-class cloud infrastructure and the capital needed to compete at scale, accelerating both model training and deployment. Still, heavy reliance on a single partner introduces platform risk, potentially limiting strategic flexibility; OpenAI should diversify its infrastructure and partnerships over time to avoid future constraints.

Finally, OpenAI's deep bench of research talent—now combined with leading hardware designers—enables the company to integrate cutting-edge AI with user-friendly, intuitive devices. This rare blend of technical and design excellence will be essential for translating breakthroughs into real-world utility and daily adoption.

VIII. Industry and Market Structure Outlook

The competitive landscape for AI-integrated hardware is fundamentally shaped by winner-take-most dynamics: decades of entrenched ecosystem lock-in, high switching costs, and powerful network effects ensure that Apple and Google will remain dominant forces in the near term. For OpenAI, this reality means that unseating the incumbents outright is highly unlikely, at least in the initial years. However, a path to meaningful scale does exist through focused differentiation and strategic segmentation. Google's Pixel phones, for instance, have carved out a distinctive market share by doubling down on AI-powered features and a pure Android experience. Similarly, OpenAI could realistically build a billion-dollar business even if it secures just 2–3% of the global smartphone market, provided it targets high-value early adopters who prize productivity, automation, and a seamless AI-first interface.

To pursue this opportunity, OpenAI faces a critical strategic choice between full-stack vertical integration—controlling hardware, operating system, and AI assistant end-to-end—and a hybrid approach, in which it licenses its AI OS or core agent platform to third-party device manufacturers. A vertically integrated path maximizes control over user experience and differentiation, and is likely essential for the initial launch in order to establish the OpenAI brand, collect proprietary usage data, and drive rapid iteration. However, this strategy requires significant capital investment and constrains distribution to what OpenAI can directly support. In contrast, a hybrid model would enable broader market reach and faster ecosystem scaling by enlisting established hardware partners, but at the cost of some quality control and potentially diluting the distinctive features that set the OpenAI experience apart.

Ultimately, success for OpenAI does not require mass-market dominance in the traditional sense. Instead, it hinges on creating a new reference point for what a mobile device can do—delivering such a compelling AI-first experience for targeted user segments that it forces incumbents to respond. If OpenAI can establish itself as the device of choice for a passionate subset of consumers and catalyze a vibrant ecosystem around its platform, it will have the leverage to either expand vertically or scale horizontally through partnerships as the market evolves. In a market shaped by network effects, even a "niche" share—if highly engaged and high value—can be the foundation for outsized strategic influence and long-term growth.

IX. Risks and Regulatory Challenges

OpenAI's push into smartphones faces significant, but addressable, risks. The biggest hurdle is product-market fit: users deeply embedded in Apple or Google's ecosystems will only switch for a dramatically better experience. OpenAI should therefore target early adopters like productivity power users and developers and ease switching through bundled services and simple data migration.

Operational and financial risks are also high, given OpenAI's limited manufacturing experience and the scale of the undertaking; the company may face up to $44 billion in losses before reaching profitability.[viii] Staged rollouts, milestone-driven investment, and strong partnerships with experienced manufacturers are critical to limit downside.

On the regulatory front, OpenAI must visibly comply with global privacy laws, secure user data, and proactively address intellectual property and sustainability concerns. Ultimately, success hinges on solving for product-market fit and breaking ecosystem lock-in, while other risks can be managed through disciplined execution and strong partnerships.

X. Conclusion

OpenAI's path to success in AI-native hardware will hinge on delivering a radically differentiated device that early adopters can't live without. The immediate focus must be on building this core user base and rapidly scaling a developer ecosystem around it. Operational discipline, regulatory credibility, and fast iteration are table stakes. If OpenAI can change user habits and set a new bar for mobile intelligence, it won't just compete, it will force the market to follow.

Sources:

Axios. "Apple vet Jony Ive joins OpenAI in $6.5 billion deal for his hardware startup." *Axios*, May 21, 2025. https://www.axios.com/2025/05/21/jony-ive-openai-io-acquisition

Statista. "Mobile OS market share worldwide 2009-2024." Statista, December 2024. https://www.statista.com/statistics/272698/global-market-share-held-by-mobile-operating-systems-since-2009/

Business Today. "Guess What Google Paid Apple for Default Search Engine Status: A Staggering $22 Billion." https://www.businesstoday.in/technology/news/story/google-paid-apple-a-staggering-20-billion-in-2022-for-default-search-engine-status-427909-2024-05-02

Statista. "Commission rates for leading app stores worldwide as of September 2024." *Statista*, October 8, 2024. https://www.statista.com/statistics/975776/revenue-split-leading-digital-content-store-worldwide/

DemandSage. "ChatGPT Statistics and User Numbers 2025 - OpenAI Chatbot." *DemandSage*, June 2025. https://www.demandsage.com/chatgpt-statistics/

TopFlightApps. "Navigating App Store Fees | The Ultimate Guide for Founders." *TopFlightApps*, August 5, 2024. https://topflightapps.com/ideas/avoid-app-store-comissions/

Backlinko. "ChatGPT / OpenAI Statistics: How Many People Use..." *Backlinko*, April 14, 2025. https://backlinko.com/chatgpt-stats

Digitimes. "OpenAI Bets Big on Hardware: US$6.5B Acquisition of io Products Signals Shift from Software to Disruptive AI Devices." Digitimes, May 23, 2025. https://www.digitimes.com/news/a20250523PD205/openai-acquisition-hardware-smart-devices.html

Techsponential. "Humane Ai Pin Reviews Nightmare: Takeaways and Analysis." Techsponential, August 7, 2024. https://www.techsponential.com/reports/humanereviews

The Verge. "Most of the time, nothing happens." The Verge, April 12, 2024. https://spyglass.org/humane-ai-pin-brutal-review/

AppMysite. "Android vs iOS: Mobile Operating System market share statistics (Updated 2025)." *AppMysite*, April 22, 2025.

https://www.appmysite.com/blog/android-vs-ios-mobile-operating-system-market-share-statistics-you-must-know/

Backlinko. "iPhone vs. Android User & Revenue Statistics (2025)." *Backlinko*, March 31, 2025. https://backlinko.com/iphone-vs-android-statistics

Bloomberg. "Google's Payments to Apple Reached $20 Billion in 2022, Antitrust Court Documents Show." *Bloomberg*, May 1, 2024. https://www.bloomberg.com/news/articles/2024-05-01/google-s-payments-to-apple-reached-20-billion-in-2022-cue-says

CNBC. "OpenAI is buying iPhone designer Jony Ive's AI devices startup for $6.4 billion." *CNBC*, May 21, 2025. https://www.cnbc.com/2025/05/21/openai-buys-iphone-designer-jony-ive-device-startup-for-6point4-billion.html

Counterpoint Research. "Global Smartphone Sales Share by Operating System." *Counterpoint Research*, 2025. https://www.counterpointresearch.com/insights/global-smartphone-os-market-share/

Digital Trends. "The Humane AI Pin was destined to fail, here's why." *Digital Trends*, February 19, 2025. https://www.digitaltrends.com/mobile/i-knew-the-humane-ai-pin-would-fail/

Laptop Mag. "Remember the year's biggest AI flop? The Humane AI pin's public failure has a silver lining." *Laptop Mag*, December 12, 2024. https://www.laptopmag.com/ai/humane-ai-pin-failure-silver-lining

MacRumors. "Google Paid Apple $20 Billion in 2022 to Be Default Safari Search Engine." *MacRumors*, May 1, 2024. https://www.macrumors.com/2024/05/01/google-default-search-engine-safari-20-billion/

Museum of Failure. "Humane AI Pin." *Museum of Failure*, October 28, 2024. https://museumoffailure.com/exhibition/humane-ai-pin

PC Help Forum. "Humane AI Pin review roundup: an undercooked flop that's way ahead of its time." *PC Help Forum*, 2024. https://pchelpforum.net/threads/humane-ai-pin-review-roundup-an-undercooked-flop-thats-way-ahead-of-its-time.88574/

PhoneArena. "Google paid Apple $20 billion in 2022 to be Safari's default search engine." *PhoneArena*, May 2, 2024. https://www.phonearena.com/news/google-paid-apple-20-billion-in-2022-to-be-default-safari-search-engine_id157925

Reuters. "ChatGPT sets record for fastest-growing user base - analyst note." *Reuters*, February 2, 2023. https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/

Reuters. "OpenAI buys iPhone designer Ive's hardware startup, names him creative head." *Reuters*, May 21, 2025. https://www.reuters.com/business/openai-acquire-jony-ives-hardware-startup-io-products-2025-05-21/

Reuters. "OpenAI says ChatGPT's weekly users have grown to 200 million." *Reuters*, August 29, 2024. https://www.reuters.com/technology/artificial-intelligence/openai-says-chatgpts-weekly-users-have-grown-200-million-2024-08-29/

SEO.ai. "How Many Users Does ChatGPT Have? Statistics & Facts (2025)." *SEO.ai*, 2025. https://seo.ai/blog/how-many-users-does-chatgpt-have

TechCrunch. "Google Play drops commissions to 15% from 30%, following Apple's move last year." *TechCrunch*, March 16, 2021. https://techcrunch.com/2021/03/16/google-play-drops-commissions-to-15-from-30-following-apples-move-last-year/

TechCrunch. "Jony Ive to lead OpenAI's design work following $6.5B acquisition of his company." *TechCrunch*, May 21, 2025. https://techcrunch.com/2025/05/21/jony-ive-to-lead-openais-design-work-following-6-5b-acquisition-of-his-company/

Trusted Reviews. "What is the Humane AI Pin? Wearable smartphone replacement explained." *Trusted Reviews*, November 9, 2023. https://www.trustedreviews.com/explainer/what-is-the-humane-ai-pin-4389307

---

[i] In May 2025, OpenAI acquired Jony Ive's hardware startup io for approximately $6.5 billion, marking the company's largest acquisition ever and signaling its serious entry into the hardware

market. The deal brings Ive, former chief design officer at Apple and designer of iconic products like the iPhone and iPad, to lead OpenAI's design efforts.

[ii] According to Statista and multiple market research firms, Android and iOS together account for over 99% of the global smartphone operating system market share as of 2024, with Android holding approximately 70% and iOS holding approximately 30% globally.

[iii] Google's control over Android devices is exercised primarily through Google Mobile Services (GMS), which includes essential apps like Google Play Store, Gmail, YouTube, and Google Maps. OEMs must comply with Google's requirements to access these services.

[iv] Both Apple App Store and Google Play Store charge a standard 30% commission on in-app purchases and digital content sales, though this has been reduced to 15% for developers earning less than $1 million annually through their respective small business programs.

[v] As of February 2025, OpenAI announced that ChatGPT has reached 400 million weekly active users, representing a 33% increase from 300 million users in December 2024.

[vi] Apple and Google's standard 30% commission rate on app store transactions has been a point of contention for developers. OpenAI could potentially offer more favorable terms (15-20%) to attract developers to its platform.

[vii] ChatGPT reached 180 million monthly active users by late 2023 and has continued growing, with over 400 million weekly active users as of early 2025, making it one of the fastest-growing consumer applications in history.

[viii] According to reports from Digitimes and other sources, OpenAI is forecasted to face mounting losses totaling approximately $44 billion between 2023 and 2028 as it invests heavily in hardware development and aims to become profitable by 2029.