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Microsoft and OpenAI

The Defining Alliance of the Future

"AI will probably most likely lead to the end of the world, but in the meantime, there'll be great companies."

- *Sam Altman (Co-founder & CEO, OpenAI)*

In the rapidly evolving landscape of artificial intelligence (AI), the period between 2018 and 2024 has witnessed a surge in advancements, particularly in Generative AI, reshaping industries and driving innovation. One, if not the most, notable collaboration that emerged during this time involves Microsoft, a tech giant renowned for its cloud computing and productivity solutions, and OpenAI, a pioneering research startup specializing in AI development. Together, they form a strategic alliance aimed at integrating OpenAI's cutting-edge AI models into Microsoft's extensive product suite, leveraging Microsoft's resources and market reach to drive innovation and accelerate the adoption of AI technologies across various sectors.

The Evolution of Generative AI

The period between 2018 and 2024 witnessed a significant surge in advancements in artificial intelligence (AI), revolutionizing various industries and reshaping the way we live and work. During this time, AI evolved from being a promising but relatively niche technology to becoming an integral part of everyday life, with applications ranging from virtual assistants to autonomous vehicles.

The emergence of AI as a transformative force can be traced back to several key developments in the late 2010s. Breakthroughs in deep learning algorithms, fueled by vast amounts of data and advances in computational power, paved the way for AI systems capable of performing complex tasks with human-like proficiency. Companies and research institutions around the world raced to harness the power of AI, leading to rapid progress in areas such as natural language processing, computer vision, and robotics.

Today, AI permeates nearly every aspect of modern life, driving innovation and efficiency across industries. In healthcare, AI-powered diagnostics and personalized treatment recommendations are revolutionizing patient care, enabling early detection of diseases and improving treatment outcomes. In finance, AI algorithms analyze vast datasets to detect fraud, optimize trading strategies, and personalize financial services for customers. The retail industry has also embraced AI, using predictive analytics to forecast demand, optimize pricing, and personalize shopping experiences. In transportation, AI-enabled autonomous vehicles promise to revolutionize mobility, making transportation safer, more efficient, and accessible to all.

The period between 2018 and 2024 marked a pivotal moment in the history of AI, particularly Generative AI. Characterized by rapid advancements, strategic alliances, and widespread adoption across industries, the Generative AI boom is poised and already begun to enhance creativity, unlock value, and augment and eliminate jobs - driving progress towards a more intelligent, connected, and unknown world.

As the AI industry continues to evolve, it faces regulatory challenges and ethical considerations related to privacy, bias, transparency, and accountability. Governments and regulatory bodies are grappling with how to regulate AI technologies effectively while fostering innovation and protecting consumers' rights.

Competitive Landscape in the AI Industry

The competitive landscape in the AI industry is characterized by intense rivalry, rapid innovation, and strategic alliances as companies vie for dominance in this rapidly evolving sector. With the potential to revolutionize virtually every industry, AI has attracted a diverse range of players, from tech giants to startups, each seeking to carve out a competitive advantage and capture market share.

At the forefront of the AI industry are tech giants such as Google, Microsoft, Amazon, and IBM, which have invested heavily in AI research and development. These companies boast vast resources, extensive datasets, and top talent, allowing them to develop cutting-edge AI technologies and deploy them across a wide range of products and services.

Google, for example, has leveraged its expertise in machine learning and deep learning to enhance its search engine, develop AI-powered virtual assistants like Google Assistant, and pioneer breakthroughs in areas such as healthcare and autonomous vehicles through its subsidiary Waymo. Similarly, Microsoft has integrated AI capabilities into its cloud computing platform Azure, its productivity suite Office, and its collaboration tool Teams, positioning itself as a leader in enterprise AI solutions.

While tech giants dominate the AI landscape, a vibrant ecosystem of startups and emerging players is driving innovation and disrupting traditional industries. Companies like OpenAI, DeepMind (acquired by Google), and NVIDIA have made significant contributions to AI research, developing breakthroughs in natural language processing, reinforcement learning, and hardware acceleration, respectively. Startups such as UiPath, Automation Anywhere, and Blue Prism are leading the charge in robotic process automation (RPA), enabling businesses to automate repetitive tasks and streamline operations.

Strategic Alliances and Partnerships

In response to the competitive pressures of the AI industry, companies are increasingly forming strategic alliances and partnerships to pool resources, share expertise, and accelerate innovation. These collaborations enable companies to access complementary technologies, access resources such as cloud compute, fast track innovation, expand their market reach, and mitigate risks associated with AI development. Similarly, partnerships between technology companies and industry incumbents are driving AI adoption in sectors such as healthcare, finance, and manufacturing, unlocking new opportunities for growth and transformation.

Microsoft

Founded in 1975 by Bill Gates and Paul Allen, Microsoft carved its place in history by pioneering software for personal computers. With a mission to empower individuals and organizations globally, Microsoft's initial decades were marked by its highly successful Windows operating system and Office suite, which became ubiquitous in personal and professional settings.

However, there was a period when Microsoft's innovation seemed to plateau. After solidifying its dominance in operating systems and productivity software, the company entered a phase where significant breakthroughs were less apparent, especially during the tenure of CEO Steve Ballmer. Critics often viewed Microsoft as resting on its laurels, with Windows and Office being perceived as cash cows rather than sources of innovation.

Under CEO Steve Ballmer, who led the company from 2000 to 2014, Microsoft's innovative edge appeared to dull in comparison to its earlier years. Ballmer's tenure was marked by a continued financial reliance on Windows and Office, while competitors like Apple and Google seized the limelight with transformative products like the iPhone and the Android OS, respectively. During these years, Microsoft's attempts to enter new markets, such as with the Zune media player or Windows Phone, struggled to gain traction against the established leaders.

Ballmer's era, often criticized for a lack of vision, resulted in missed opportunities in search engine development, social networking, and hardware innovation, areas where rivals like Google and Facebook were making significant strides. Microsoft's efforts in these domains, such as the Bing search engine and the acquisition of Nokia's mobile business, were widely seen as reactive rather than proactive moves.

The company's trajectory shifted under the leadership of Satya Nadella, who took over as CEO in 2014. Nadella reinvigorated Microsoft's innovative spirit, particularly with a renewed focus on cloud computing, AI, and corporate culture. The introduction of Azure marked Microsoft's commitment to the cloud, directly challenging the market dominance of services like Amazon Web Services. Azure's growth under Nadella's leadership underscored a strategic pivot towards scalable and flexible cloud solutions tailored for businesses and developers.

Today, Microsoft's product portfolio reflects this transformative phase. The company has made significant strategic acquisitions under Nadella, including GitHub, LinkedIn, and Activision Blizzard, and has fostered an environment where these companies can thrive post-acquisition. Moreover, Microsoft has expanded into the hardware market with products like Xbox gaming consoles and Surface devices and has rejuvenated its digital services with offerings such as Bing.

In contemporary times, Microsoft stands as a major industry player with a reputation for being at the forefront of technological innovation, credited with driving changes that extend far beyond its original software foundations. Now, it is not just their 1.3 billion users across 170 countries engaging with their products; it is the industry at large that looks to Microsoft for its cloud and AI leadership, a testament to their significant evolution from a software giant to a multifaceted technology innovator.

Microsoft's history with AI

Early AI Efforts: Microsoft's foray into artificial intelligence (AI) began with early initiatives like Clippy, the Office Assistant introduced in 1997. Despite its mixed reception, Clippy represented Microsoft's ambition to embed AI into everyday computing experiences. The development and launch of Cortana in 2014 marked a significant milestone in Microsoft's AI journey. As a virtual assistant, Cortana leveraged natural language

processing to perform a wide array of tasks, from setting reminders to providing weather updates. However, Cortana's journey highlighted the competitive challenges in the AI space, struggling to secure a dominant position against rivals such as Siri and Google Assistant.

Microsoft Azure and the Cloud Era

The launch of Microsoft Azure in 2010 marked a pivotal shift towards cloud computing, positioning Microsoft as a key player in a market increasingly dominated by services like Amazon Web Services (AWS). With the introduction of Azure Cognitive Services in 2016, Microsoft democratized AI, offering developers tools to easily integrate AI functionalities into their applications. This initiative exemplified Microsoft's commitment to bridging the gap between complex AI technologies and practical business applications, facilitating the creation of more personalized and efficient user experiences.

The strategic emphasis on cloud and AI technologies not only solidified Microsoft's position in the tech industry but also paved the way for its future collaborations. By intertwining AI capabilities with Azure's cloud infrastructure, Microsoft has not only advanced its own technological offerings but has also contributed to the broader AI and cloud computing landscapes. This integrated approach reflects Microsoft's vision for a future where AI and cloud computing work hand in hand to empower businesses and developers, driving innovation and efficiency across industries.

Despite its efforts, Microsoft Azure has been playing second fiddle to Amazon's AWS for much of its existence. Its market share, however, has been growing, almost doubling from 11% in 2016 to 23% by the end of 2022 (Exhibit 1).

OpenAI

Company Profile and History of OpenAI

Founded in December 2015, OpenAI emerged as a collaborative effort among leading entrepreneurs and researchers, including Elon Musk, Sam Altman, Greg Brockman, and others. The organization was established with a mission to ensure that artificial general intelligence (AGI)—AI systems possessing human-like adaptability and intelligence—benefits all of humanity. OpenAI initially positioned itself as a non-profit research entity dedicated to advancing digital intelligence in ways that promote humanity's overall well-being.

Evolution and Milestones

OpenAI's journey is marked by several key developments and strategic shifts. Initially focused on AI research for applications like video games, the organization quickly

transitioned to broader AI challenges. A significant early milestone was the introduction of OpenAI Gym in 2016, an open-source platform designed to aid in the development of reinforcement learning algorithms.

The year 2018 marked a pivotal shift in OpenAI's approach with the publication of the Generative Pre-trained Transformer (GPT), laying the groundwork for a series of advanced neural network models that mimic human-like understanding and generation of natural language. This innovation underscored OpenAI's commitment to fundamental AI research and set the stage for subsequent breakthroughs.

The launch of Dall-E by OpenAI in 2021 marked a significant advancement in generative AI, showcasing the ability to create images from textual descriptions. This development underscored OpenAI's expertise in the field of AI, but it was the introduction of ChatGPT in 2022 that truly placed OpenAI in the global spotlight. With its sophisticated conversational capabilities, ChatGPT illustrated the practical and wide-ranging applications of GPT models, cementing OpenAI's leadership in AI innovation.

In addition to these achievements, OpenAI has developed technologies capable of generating lifelike images, videos from text, and even original music compositions, showcasing its breadth in AI research. The organization's evolution towards a hybrid model and the creation of groundbreaking technologies such as GPT-4 and Sora reflect OpenAI's ongoing efforts to push the boundaries of artificial intelligence towards the goal of achieving artificial general intelligence (AGI).

Currently, OpenAI charges developers to access its API, which powers applications using models under certain constraints and provides a chat interface (ChatGPT) to its text models under a “freemium” model (Exhibit 2). Released in Dec 2022, ChatGPT became the fastest app to amass 100 million users within just two months of its launch. Today it is evolving to include multi-modal inputs and a store of its own. While OpenAI is the most successful AI research company, but it does have competition. Key names include Google Brain, Deep Mind, Baidu, and Anthropic. Questions remain about tradeoffs for these companies on openness versus safety and the economic incentive structure around AI development.

OpenAI's research progress has necessitated a move towards more closed development to curtail risks from powerful AI systems. While they still aim to work for the public benefit, most of OpenAI's models are now only available via a commercial API instead of being open source. This has generated some debate around OpenAI's non-profit status as they move towards a for-profit model focused on API revenue. However, they argue this is needed to support safety research for transformative AI.

Company structure

A few years into its journey, OpenAI realized the necessity to attract capital for advancing its ambitious AGI projects. Founded as a not-for-profit organization, OpenAI created a new structure with for-profit subsidiaries in 2019 to facilitate a $1B investment from Microsoft and other investors (Exhibit 3). This "capped profit" subsidiary, OpenAI Global LLC, has returns capped; for initial investors returns were capped at 100x while for later investors, returns are capped at a significantly lower amount.

"For many decades, cutting edge research in AI took place in academia. That kept being the case until 2019, but then complexity and [compute] costs and complexity of these projects became too large"

- Ilya Sutskever, Chief Scientist, OpenAI

OpenAI Global LLC is majority owned by a holding company, OpenAI Inc., owned by OpenAI's employees and other investors. This holding company, in turn, is owned and controlled by a charity controlled by OpenAI's board that holds a fiduciary responsibility to its nonprofit charter. OpenAI's equity obligations can be thought of as a bond since the returns are finite. Once all the obligations have been paid out, OpenAI reverts to operating like a traditional non-profit.

The Alliance

On January 23, 2023, Microsoft announced a new multi-year $10 billion investment in OpenAI. Rumors of this deal suggest that Microsoft will receive 75% of OpenAI's profits until it secures its investment return and a 49% share of profits after that. The deal gives Microsoft exclusive license to OpenAI's intellectual property and makes Microsoft their exclusive cloud provider. It is unclear how long these exclusivity agreements may last. AGI technology is excluded from this arrangement. It is also very likely that a large share of the $10 billion is in the form of Azure compute credits.

Microsoft will integrate OpenAI's models and APIs into their entire product suite – Most notably Bing, their search engine, Edge (browser), and Microsoft 365 Products (Word, Excel, Power Apps, Power Automate). On the Azure side of their business, Microsoft has launched an entire service providing OpenAI's services packaged with Azure's benefits of load balancing, integration, commercial support etc.

The strategic partnership with OpenAI is not just limited to enhancing Microsoft's internal products and cloud services; it also extends its influence through high-profile collaborations. Microsoft and KPMG have launched an initiative to scale generative AI across audit, tax, and advisory services. Microsoft and Moody's have also developed enhanced risk, data, analytics, research, and collaboration solutions powered by

generative AI. A notable outcome of this partnership is the "Moody's Research Assistant," a tool built on Microsoft Azure OpenAI Service that compiles and summarizes complex information from multiple data sources to provide customers with integrated risk analysis.

Microsoft's infrastructure and OpenAI's AI models combined to accelerate the development and scaling of AI solutions, making sophisticated technologies like GPT-3 widely accessible and integrated into practical applications. Each entity filled critical gaps for the other. Microsoft gained access to leading-edge AI research and ethical guidelines, while OpenAI benefited from robust infrastructure, financial backing, and market reach it lacked. Together, they could drive AI innovation and adoption across industries more effectively than either could alone, setting new standards in AI technology and its application, from cloud computing to consumer services.

OpenAI strays from its mission

There are apprehensions about the impact of OpenAI's affiliation with Microsoft on its original non-profit mission. Initially, OpenAI aimed to ensure transparency and benefit for all in AI development. However, with its close relationship to Microsoft, there are fears that OpenAI might prioritize the interests of Microsoft over those of the broader AI community, potentially compromising its non-profit principles.

In March 2024, Elon Musk, one of the initial investors in Open AI and a public icon in the technology world, initiated legal action against OpenAI and its CEO, Sam Altman. The lawsuit alleged that OpenAI is breaching the founding principles and contractual agreements set during its inception in 2015. Musk accuses OpenAI of diverging from its original mission to develop and provide AI for the "benefit of humanity," pointing to the company's shift towards profit-seeking activities, particularly its partnership with Microsoft. Musk's lawsuit also includes allegations of breach of fiduciary duty and unfair business practices.

In January 2024, OpenAI announced the formation of a new Collective Alignment team that would aim to implement ideas from the public about how to ensure its models would "align to the values of humanity." The move was from its public program launched in May 2023. The company wanted the program to be considered separate from its commercial endeavors.

Ouster of OpenAI's CEO

On November 17th, 2023, OpenAI's board abruptly announced that co-founder and CEO Sam Altman was out, effective immediately. No reason was provided for this, but rumors speculate that it had to do with Altman's focus on commercializing OpenAI's work rather than continuing research towards AGI.

Hundreds of OpenAI employees signed a letter saying they would leave the company for jobs at Microsoft unless Altman is reinstated. This was followed by a public outcry for Sam and OpenAI on X (Twitter), with many technology leaders including CEOs like Satya Nadella (Microsoft) and Marc Benioff (Salesforce) publicly committing to provide employment and all the resources that OpenAI's employees would need if they came over to their companies.

Microsoft, a lead investor in OpenAI, was only informed of Altman's termination twenty minutes before the official public announcement. Five days later, Microsoft decided to hire Altman and any other OpenAI employees willing to join, creating an advanced AI team at Microsoft. After some negotiations, Altman returned to his post at OpenAI with a new set of board members, notably a non-voting observer role being given to Microsoft for the first time. This role has been filled by Dee Templeton, a VP at Microsoft who has been there for 25 years and leads strategic partnerships including the relationship with OpenAI.

"I mean, look, if tomorrow OpenAI disappeared, I don't want any customer of ours to be worried about it, quite honestly, because we have all of the rights to continue the innovation, not just to serve the products. But we can go and just do what we were doing in partnership, ourselves, and so we have the people, we have the compute, we have the data, we have everything."

– *Satya Nadella, Microsoft CEO, November 2023*

Pending copyright lawsuits

In December 2023, The New York Times filed a lawsuit against Microsoft and OpenAI, accusing them of unlawfully using millions of the Times's copyrighted works in their products. This lawsuit highlights ongoing concerns about the use of journalistic content by AI developers without permission or compensation, sparking a debate on the balance between innovation and copyright protection. This saw public support from the broader news/media alliance.

In February 2024, a group of smaller news media outlets filed a pair of lawsuits against OpenAI. The news organizations claim OpenAI and co-defendant Microsoft violated the 1998 Digital Millennium Copyright Act by stripping away copyrighted information when they trained ChatGPT.

The Authors Guild of America filed a class-action suit against OpenAI alongside more than a dozen renowned writers, including "Game of Thrones" author George R.R. Martin. Microsoft was later added as a defendant. The organization claims the company's large language models engage in "systematic theft on a mass scale." Previously, more than 15,000 authors including Margaret Atwood and Nora Roberts had signed a letter calling on companies such as OpenAI, Meta, Microsoft, and IBM to compensate authors for using their works.

These are a few of the many lawsuits aimed at OpenAI, and now Microsoft, that allege breaches of copyright laws and illicit appropriation of content from online media entities. A favorable outcome for the plaintiffs might mean AI firms will be required to heavily compensate publishers and right holders for the usage of their work in training their models.

Antitrust scrutiny

The main issue regarding this collaboration revolves around concerns that Microsoft may utilize its significant financial and technological resources to suppress competition within the AI market. Through exclusive access to GPT-4, Microsoft could potentially create and promote AI-driven products and services that outshine those of its competitors. Consequently, this could result in heightened prices and a decrease in innovation over time.

Antitrust regulators in the US, UK, and EU are all paying close attention to the Microsoft-OpenAI partnership. The European Union is evaluating the Microsoft-OpenAI alliance to determine if it might be subject to antitrust probes. This scrutiny is part of a broader examination of partnerships between large digital market players and generative AI developers. The investigation reflects growing regulatory interest in the competitive dynamics of the burgeoning AI sector. The US Federal Trade Commission has reportedly opened a preliminary investigation into the deal, while the UK Competition and Markets Authority is reviewing whether to launch a probe.

Regulatory bodies are exploring several avenues. One possibility is that regulators may mandate Microsoft to divest its stake in OpenAI, aiming to mitigate concerns over monopolistic tendencies and ensure fair competition within the AI market. Alternatively, they could require Microsoft to grant other companies access to the models, thereby fostering a more level playing field and encouraging innovation across the industry. Another potential outcome could involve imposing restrictions on Microsoft's utilization of OpenAI's models.. However, there remains the possibility that regulators may ultimately approve the partnership without imposing any significant constraints, believing that the potential benefits outweigh the risks.

Looking Forward

Commentary from both OpenAI and Microsoft would indicate that only a fraction of the $10B investment from Microsoft has been made to OpenAI. Though the exact numbers have not been disclosed, it has been indicated that most of the funding distributed so far has been in the form of cloud computing access for further development.

From OpenAI's end, innovation continues to pour out. During their first DevDay Conference in November 2023, updates to existing models and new ones were introduced.

These represent a leap forward in terms of efficiency and control. The innovations are expected to be made available on Azure OpenAI Service by the end of the year, making advanced AI tools more accessible to developers and enterprises. In February 2024, OpenAI announced a text-to-video AI model named Sora that can create realistic and imaginative scenes from text instructions. Sora is yet to be released to the public, but one can only imagine its capabilities. Filmmakers can use it to visualize concepts and scenes or generate special effects. Teachers can create immersive historical recreations, and manufacturers can use it to create prototypes and demonstrations.

However, the biggest innovation from OpenAI is one that has not occurred yet – AGI. Whether AGI is a distinct capability or an iteration of the LLMs currently being built is yet to be seen. Critically, AGI is excluded from the Microsoft – OpenAI alliance. With OpenAI's board holding the reins on AGI's development, this pinnacle of AI innovation remains a future milestone, exclusive and yet elusive.

"Given the picture as we see it now, it's conceivable that within the next ten years, AI systems will exceed expert skill level in most domains and carry out as much productive activity as one of today's largest corporations."

- OpenAI Blog, May 2023

The technology world is also waiting to see the final version of the European Union's AI Act and its implication for the development and use of AI. The current, near final, draft of the act proposes risk-based regulation of AI applications. All general-purpose AI providers will have to adhere to transparency requirements by drawing up technical documentation, complying with EU copyright law, and providing detailed summaries about the training content.

Penalties can be as high as 7% of the company's global annual revenue in case of use of AI for banned purposes and 1.5% for failure to disclose necessary information. Certain models will be exempt from the transparency requirements while they are in the R&D phase or if they are open source. Once put into law, companies and agencies will have a two-year grace period to comply.

"The current draft of the EU AI Act would be over-regulating, but we have heard it's going to get pulled back … The details really matter. We will try to comply, but if we can't, we'll cease operating."

"Very productive week of conversations in Europe about how to best regulate AI! We [OpenAI] are excited to continue to operate here and of course have no plans to leave."

- Contrasting statements by Sam Altman, May 2023

The absence of a stringent set of regulations for AI governance is underscored by the recent leadership turmoil within OpenAI, shedding light on critical aspects like transparency, accountability, compliance, fairness, safety, and oversight. These controversies accentuate the pressing need for more robust guidelines and regulations governing AI companies involved in research and development. Particularly concerning are the inherent risks at every stage of AI systems, ranging from input to output, as evidenced in discussions surrounding governance issues such as the black-box problem, algorithmic bias, and the ramifications of generative AI on disinformation and content generation. Addressing these challenges may necessitate the implementation of stricter guidelines and regulations for AI companies, albeit potentially slowing down the pace of innovation.

The uncertainties surrounding AI governance, highlighted by OpenAI's leadership challenges, could impact its alliance with Microsoft in several ways. These include the potential for more stringent regulations and guidelines that might slow down innovation's pace. As OpenAI navigates these governance issues—ranging from transparency and accountability to the mitigation of algorithmic bias and the risks of disinformation—its partnership with Microsoft could face increased scrutiny. Both entities might need to invest more in ensuring their AI research and development align with evolving regulatory expectations, which could affect their operational dynamics, strategic priorities, and the speed at which they can introduce new technologies. This situation underscores the importance of a proactive approach to AI governance, balancing innovation with ethical and social responsibilities.In the grand scheme, the journey of OpenAI and Microsoft, punctuated by OpenAI’ s initiatives and the looming presence of AGI, intersects with the regulatory narratives of the European Union. It's a tale of progression and promise. The anticipation is not merely for the technologies and models in development but for an era where AI's maturation is met with thoughtful oversight. This story is ongoing, a dynamic chronicle where every advancement is a step toward a future where AI is not only transformative but also aligned with the fabric of societal values and ethical standards.

Discussion Questions

1. What are the potential risks and challenges both companies faced before the alliance?
2. What strategic advantage do Microsoft and OpenAI gain from this alliance? How do they align with their respective long-term goals?
3. What are the ethical and social considerations of the alliance and how should the alliance address them?
4. Considering the rapid evolution of AI, what are the long-term prospects of this alliance and how should the partnership evolve?

Exhibits

Exhibit 1

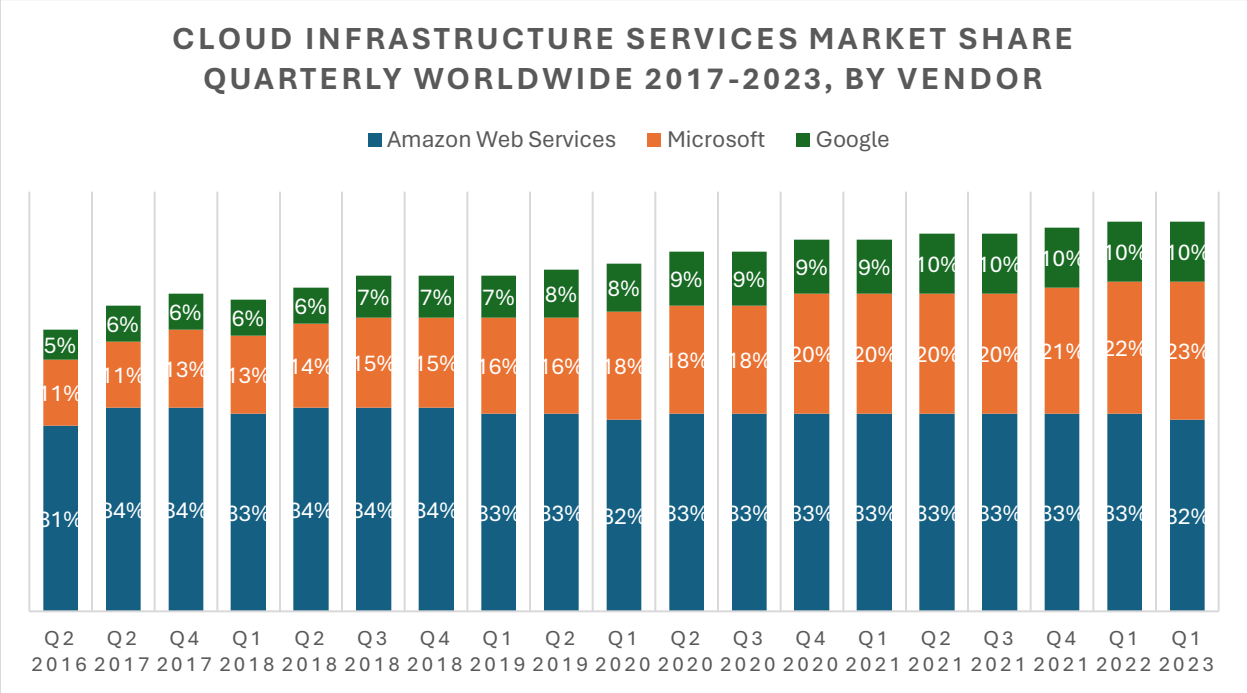


Exhibit 2: OpenAI's Business Model

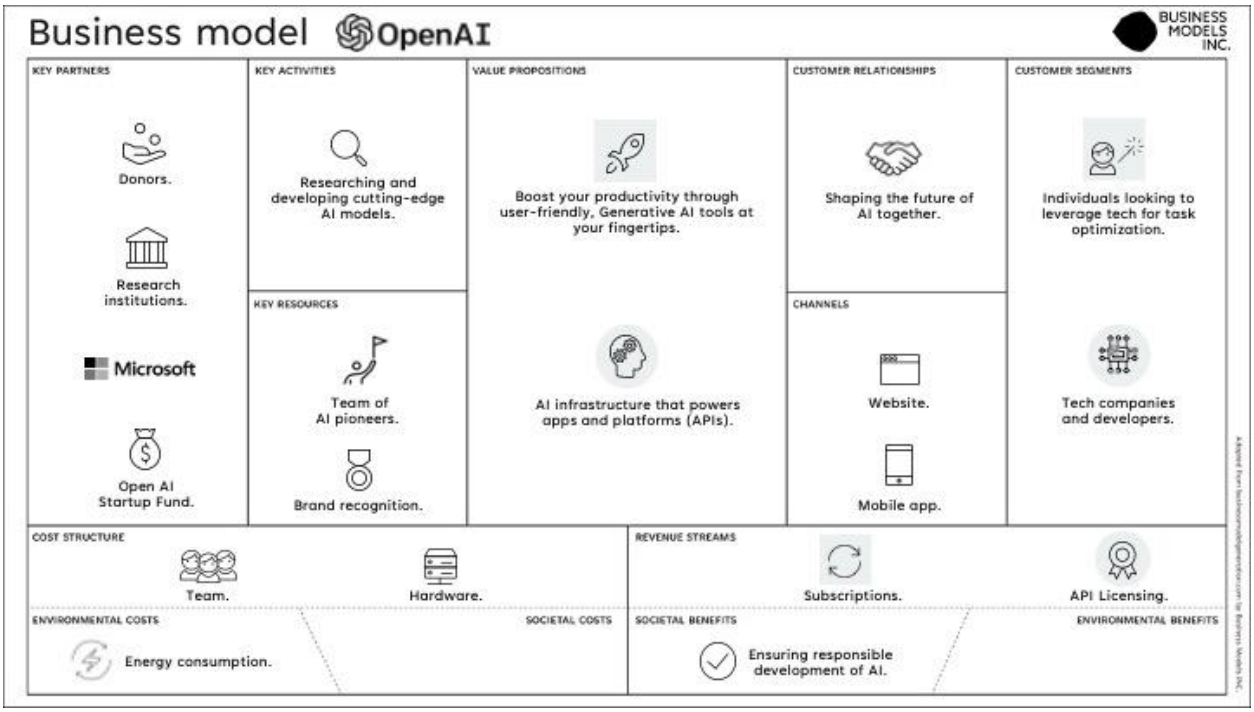


Exhibit 3: OpenAI structure revamped in 2019

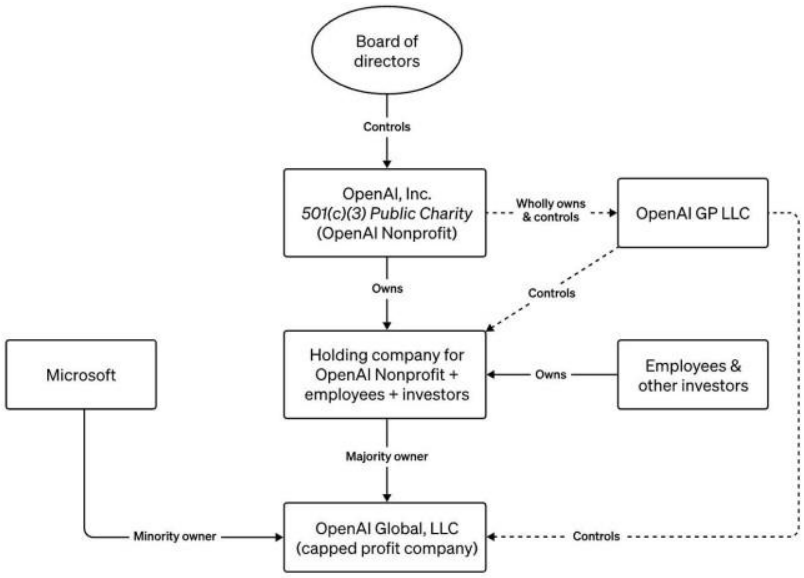
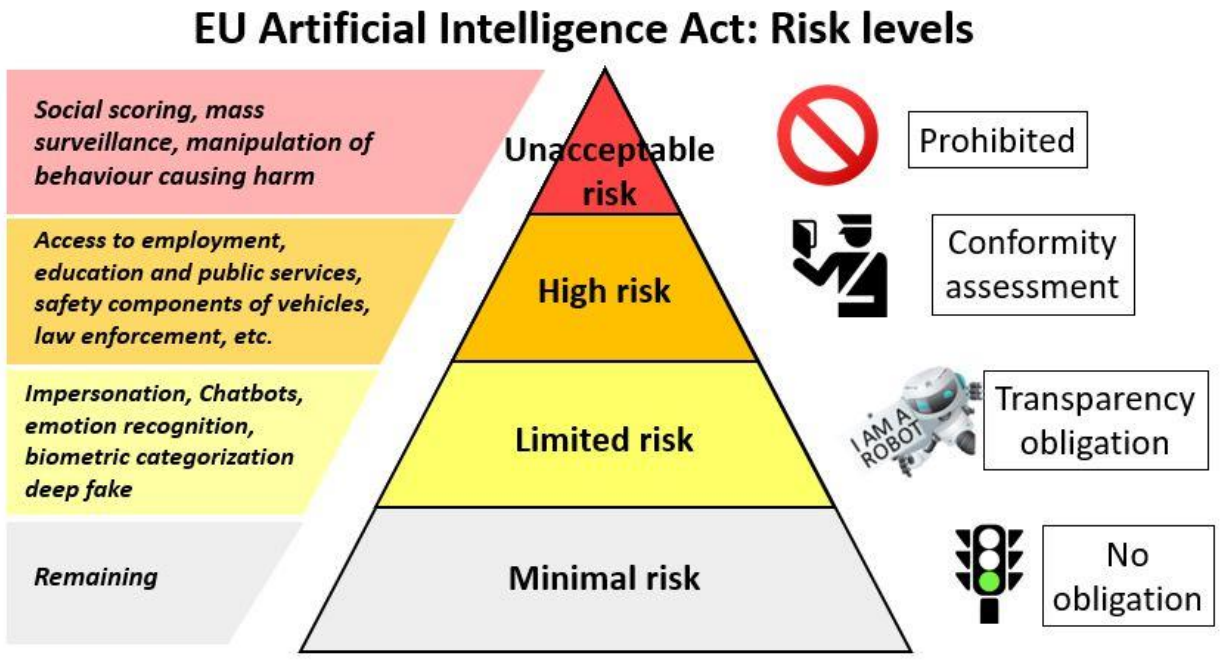


Exhibit 4: Microsoft Stock Price (March 2019 – March 2024)

Exhibit 5: European Union AI Act - Risk-based regulation



References

1. OpenAI has received just a fraction of Microsoft's $10 billion investment | Semafor
2. How Microsoft's multibillion-dollar alliance with OpenAI really works
3. Microsoft, Amazon and Google Face F.T.C. Inquiry Over A.I. Deals - The New York Times (nytimes.com)
4. Quick Essay: A Short History of OpenAI (substack.com)
5. Salesforce CEO tweet - X (twitter.com)
6. Nadella announcing hiring of Altman - https://x.com/sama/status/1726510261509779876?s=20
7. Microsoft CEO says the company can run its projects without OpenAI | Windows Central
8. Why OpenAI changed from non-profit to for-profit | Sam Altman and Lex Fridman
9. Corporate Structure for AI Companies
10. Microsoft and OpenAI partnership unveils new AI opportunities
11. KPMG LLP and Microsoft Establish Industry-Leading Initiative to Scale Generative AI Across Audit, Tax and Advisory
12. EU weighing whether Microsoft-OpenAI alliance could be subject to antitrust probe
13. Elon Musk sues OpenAI and CEO Sam Altman for breach of contract
14. Elon Musk sues ChatGPT maker OpenAI over 'unfair business practices'
15. Reinvention in the age of generative AI
16. 149 AI Statistics: The Present & Future Of AI At Your Fingertips

17. What is the history of artificial intelligence (AI)?
18. The Clever Crafting of Microsoft's Open AI Deal
19. AI Lawsuits to Watch: Elon Musk v. OpenAI, The New York Times v. Microsoft, More - Bloomberg
20. Governance of superintelligence (openai.com)
21. AGI is excluded from IP licenses with Microsoft should it be attained at OpenAI (cryptoslate.com)
22. https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai
23. Dawn of the EU's AI Act: political agreement reached on world's first comprehensive horizontal AI regulation | White & Case LLP (whitecase.com)
24. https://www.businessmodelsinc.com/en/inspiration/blogs/the-business-model-of-openai