

## **Monetization of AI: Industry Trends, Business Models, and Legal Frameworks**

A fundamental question facing the industry is how artificial intelligence (AI) will be monetized over the next few years. Much is being written over the ethical, legal, and technical challenges of AI, and these are all critical issues. But another fundamental issue that also has to be addressed both in the short and long term is how AI will actually make money for both investors and the industry.

### **1. AI-as-a-Service (AIaaS) Offerings**

The companies that are bringing us the enormous power of AI are spending heavily on the training phase, including curating training datasets and carefully filtering the output of the neural networks. These vendors of core AI computing services will need to make money to continue to improve their offerings.

The industry is deeply familiar with SaaS, DaaS, PaaS, IaaS and many other analogous service offerings. AIaaS has now emerged as a new industry term, and it represents core AI capabilities being provided from the cloud. An obvious AIaaS example is OpenAI making available ChatGPT via an API. The monetization models for AIaaS will likely include subscriptions, pay-per-use, and conversions from limited free offerings to paid models.

A survey of current AI monetization business models shows a dual-approach from OpenAI for ChatGPT, with a monthly subscription and a pay-per-use API license. The pay-per-use pricing is interesting because it focuses on “tokens” – a basic semantic unit used by the AI engine to process data. Hugging Face shows another approach to AI monetization with 6+ pricing tiers, varying from free, to a subscription fee, to customized pricing.

In general, from a legal standpoint, the monetization of AIaaS will not raise any fundamentally-new issues.

- From a vendor perspective, the legal frameworks will vary from off-the-shelf T&Cs with essentially no warranties and liability exposure, to customized enterprise agreements heavily negotiated with enterprise customers.
- For small companies and consumers, the power of AIaaS will offer new and powerful applications at low costs, but with no significant assurances (e.g., think of the typical current B2B or B2C T&Cs for SAAS services, which are generally unilaterally favorable to the vendor).
- From an enterprise customer perspective, the opportunity will exist to negotiate warranties around availability and SLAs, performance, indemnification, and so on. But even enterprises with significant leverage will likely encounter limitations in their ability to obtain full liability and risk coverage from the AIaaS vendors given the economic realities of the AIaaS business model (see below for a deeper discussion on this topic).
- In general, we should expect to see legal frameworks for AIaaS similar to those currently used for SaaS and other cloud-based subscriptions, pay-per-use and metering fee models, and data licenses (DaaS).

## 2. Low-Cost AI Computing and Pricing Pressures for AIaaS Vendors; New Opportunity for Insurance Companies

The fundamental technology used by ChatGPT and other current AI engines is largely known, and no AIaaS vendor is likely to have material competitive advantages in the long term at the AI-technology level itself. Computing power for AI engines will also likely be available on demand from large cloud infrastructure operators like Azure, AWS, Google and others. Consequently, in the long term, the main differentiator for the AI engines will likely be the amount, type and quality of the data used to train them.

In addition to various companies developing proprietary AI engines comparable to ChatGPT in technology and capabilities, we are also seeing a number of open source AI projects that expect to offer the same level of performance as the proprietary engines. In the long-term, from a customer perspective, the main differentiator in AI capabilities will likely be the input dataset and the customization of the output for the customer's needs.

This suggests that the AIaaS business model at its core will likely face price pressures in the long term. Additionally, collecting and curating large datasets without a customer paying for it is an expensive project in the abstract, and therefore the AIaaS vendors are also likely to continue to incur significant operating costs. ChatGPT has reportedly spent heavily to train ChatGPT 4.

From a legal standpoint, this means that AIaaS vendors will likely not be in a position to offer generous indemnification and liability coverage to their customers, and the cost-benefit analysis for AIaaS vendors may force them to hold the line on liability even for large enterprise customers. Conversely, large customers with significant leverage may want to take more pragmatic approaches to such negotiations, and should pick their fights carefully to expedite these transactions. Beating up on a vendor whose economic model is inconsistent with unlimited liability and indemnification coverage is not helpful in the end for anyone.

Using commercial insurance as a way to bridge the liability gap in such transactions for AIaaS offerings could be very helpful to the whole industry. This also creates a new opportunity for insurers to step into this emerging area and offer customized insurance policies. Insurers are very good at quantifying risks and creating customized policies for various industries and applications. Effective insurance policies could help both vendors of AI-based services and their customers to bridge the gap in expectations around warranties and liability.

## 3. Customized Datasets and Intracompany Applications; Third Party Service Providers

The next step for a business beyond subscribing to an AIaaS offering will be adapting an AI engine to a its particular dataset. For example, training an AI engine like ChatGPT 4 on the documents and data of an enterprise will customize the power of AI to the needs of that particular organization. We can only start to imagine the potential improvements in regulatory compliance, AI-enhanced R&D capabilities, cost savings and productivity improvements, and improved customer support.

The challenge with this approach is that the company must use its own highly confidential dataset to train the AI engine. Concerns around confidentiality and competition will be paramount. Those being said, this issue has already been solved convincingly by the cloud industry. For example, consider the multi-tenant databases offered by AWS, Azure, Google, and other vendors where data from multiple competitors are being stored in the same general computing infrastructure. As another example, consider how many companies are using the email platforms offered by Google through Gmail and by Microsoft through Outlook and Microsoft 365, including even competitors of Google and of Microsoft. So eventually the industry will undoubtedly resolve sufficiently the confidentiality concerns around AI solutions. Once that happens, both small and large companies will be willing to spend heavily in curating their own datasets and using those to train their own customized AI engines. This will create enormous monetization opportunities for third party service providers that have the expertise to curate large data sets and to train AI engines for specialized corporate applications. Consulting businesses, digital transformation companies, and other similar service providers will likely be significant winners in the AI space.

From a legal perspective, the arrangements that will enable third party service providers to adapt AI engines to corporate environments will be simple service agreements. These agreements will raise the same issues that we see in current high technology service agreements, for both the vendors and customers, including performance assurances, payments and milestones, IP ownership, warranties, regulatory compliance, indemnification, and liability.

#### 4. AI-Powered Products and Services.

At the AI application layer, companies that commercialize AI-enhanced services will be huge winners. The ability to leverage the full power of modern AI tools, as shown by ChatGPT 4, at low cost, is a game changer for the broader technology industry. Not much has to be said here, pretty much all current business models could benefit in one way or another from this new AI paradigm. In particular, smaller companies that did not previously have the financial capabilities to develop AI tools internally will find themselves using the same state-of-the art AI engines as the largest and best capitalized companies. AI will lift all boats, and will definitely lift all small boats very far!

From a legal standpoint, the existing legal frameworks will continue to apply for both the service providers and their customers. But one complication to consider is that the offerings of these companies will be reliant on AI solutions provided by third-party vendors. Third-party solutions have always existed, and the industry is used to disclaimers and limitations relating to third party software, services, data, products and other technologies. But the magnitude and impact of the underlying AI services that will permeate typical commercial offerings going forward will be unprecedented. Service providers will want to be more aggressive than ever in disclaiming third-party AI-related issues (e.g., output accuracy, data relevance, regulatory compliance, etc.), and B2B customers will conversely be more concerned about those disclaimers than in the past. The middle-road may be different for various industry segments, but solutions will undoubtedly be found in each case given the competitive need to deploy AI capabilities.

## 5. The Latent Question of Large Datasets

A material issue that will likely face the whole AI industry in the future is the latent question of how the enormous datasets used to train AI engines are obtained. We are already seeing litigation around this topic. Questions around personal data and consumer consents, data scraping, enforceability of online T&Cs limiting automatic data collection, regulatory compliance for both data collection and AI applications, and other similar legal issues will likely increase and may face the industry for years to come. These issues will propagate across the full commercial chain, from AIaaS providers, to companies offering AI-enhanced services, to third-party service providers that work with data, to the end customers. This is a complex subject that goes beyond the current topic.

Overall, the emerging AI capabilities demonstrated by ChatGPT 4 are already changing the cost-benefit analysis for many, if not most companies across the full commercial chain, and are creating material new entrepreneurial opportunities for both B2B and B2C business models. But aside from some systemic liability questions that will require an industrywide solution, the legal industry is already well-positioned position to assist both the emerging AIaaS vendors and the rest of the industry to effectively monetize the new AI-based offerings.