Data monetization: Value realization and data sharing

The era of big data is upon us, ushering in a digital transformation driven by the Internet–of–Things, mobile technology, AI and cloud computing. This revolution has generated a vast array of new digital data sources.[1] Many businesses are digitizing traditional paper records, while advanced algorithms now process various types of content — audio, video, text and images — with remarkable speed and efficiency.

These technological advancements have enabled the automation of analog-to-digital data conversion. Analytical tools have become so sophisticated that they can uncover patterns and insights in unstructured data that would elude human analysts. The boundary between the digital and physical worlds is increasingly blurred, simplifying the management and access to crucial information.[2]

[1] Broadly documented, but see "How the World Became Data-Driven, and What's Next," Debanjan Saha, Forbes, May 20, 2020, www.forbes.com/sites/googlecloud/2020/05/20/how-the-world-became-data-driven-and-whats-next.

[2] A good example of this research is captured in "Fueling Digital Operations With Analog Data," Kar-Woon Choy, Chilpa Goswami, Damian Lewandowski and Rob Whiteman, McKinsey, April 20, 2022, www.mckinsey.com/capabilities/operations/our-insights/fueling-digital-operations-with-analog-data.

protiviti®

Global Business Consulting

The progressive companies harnessing technologies that capitalize on this data surge have reaped significant benefits — optimizing process automation, new product development and enhanced risk management. However, more businesses are now exploring secondary or external uses for their data, which could yield both financial and societal rewards. In some industries, customers might also gain from data sharing regulations. This paper examines three case studies of data sharing and provides considerations for CIOs contemplating participation in the data sharing economy.

Case study 1: Sell your data to train artificial intelligence/machine learning models

To effectively participate in the data sharing economy, companies can form partnerships with organizations that require specific data to train AI models. The demand for real-world data to enhance AI capabilities is on the rise. As foundational general intelligence models mature, firms are increasingly focusing on industry-specific or company-specific applications. This specialization is where the majority of AI's value will be realized.[3] Venture capital firms have already shifted their investments toward companies that concentrate on these specialized applications. The ability to tailor a model to a specific use case will become the most critical challenge in the AI value chain, prompting foundational model companies to compete on ease of use and integration.

However, they will need context-specific data to train for those use cases. Synthetic or manufactured data provide a starting point but will only get so far. A good example of a company that is active in this space is Appen.[4] The firm provides high-quality datasets that power some of the world's leading AI models. Its datasets are acquired through the purchase of raw data and through a broad network of human-in-the-loop trainers that refine data to be context-specific. A real differentiator for Appen is its ability to work with companies that have the foundations of their AI models figured out but need to tune it to be more effective.

Companies interested in going down this path need to be mindful of the challenges they may encounter:

- Complying with data sharing regulations
- Providing well-curated, complete datasets
- Preparing complex datasets for external use
- Protecting consumer privacy
- Finding buyers and setting fair prices for unique datasets

Overcoming these challenges will yield rewards:

- New revenue from selling unused data
- Potential long-term partnerships with AI companies
- Improved internal data quality through preparation for sale
- Establishing your firm as a leader in your industry by providing quality data

---

[3] Venture capital firms have already pivoted to making investments in companies that focus on these specialized applications. See "The Real Value of AI Isn't General Intelligence," Phin Barnes, Every, November 25, 2024, https://every.to/thesis/the-real-value-of-ai-isn-t-general-intelligence.

[4] Information presented here is taken from Appen's website (www.appen.com) and from conversations with staff at the firm.

Case study 2: Participate in a data sharing value chain

Some companies may seek a more proactive approach by establishing a dedicated data sharing capability. This can involve participating in data sharing marketplaces or creating a specialized entity to sell enterprise data. The healthcare data sharing market serves as a prime example. Firms like Datavant and Iqvia[5] facilitate the transfer and transformation of healthcare data, selling it to pharmaceutical companies and researchers. These aggregators offer clean, standardized data and a robust platform for analysis. Data is available for licensing as a onetime or continuous feed. Additionally, these companies provide consumers with a technology platform featuring a user-friendly interface for data analysis. Beyond healthcare, industry-agnostic marketplaces such as the AWS Data Exchange and the Databricks Data Marketplace also exist.

To establish a formal data sharing capability, consider:

- Building trust with strong risk management and clear data policies

- Ensuring data quality and standardization for ease of use

- Developing secure infrastructure for data exchange

- Creating customer-centric services and offerings.

This can involve participating in data sharing marketplaces or creating a specialized entity to sell enterprise data.

[5] This data information is taken from company websites and discussions with members on their sales teams.

Case study 3: Regulation and data sharing in financial services

In financial services, data is crucial for personalized services and fraud prevention. However, privacy concerns have historically limited data sharing. The need to balance data security and value extraction has prevented institutions from fully leveraging their data. Newcomers like Yodlee and Plaid[6] have addressed this with open finance platforms and take several measures to ensure data privacy and protect sensitive financial information.

Yodlee

Yodlee employs robust security measures to safeguard data during transmission and storage. Here are some key practices:[7]

- **Encryption:** Yodlee uses industry-standard encryption protocols to protect data during transmission and storage, ensuring that financial information remains confidential and protected from unauthorized access.

- **Multifactor authentication:** Yodlee utilizes multifactor authentication to verify the identity of users before granting access to their financial data. This additional layer of security helps prevent unauthorized logins and protects against fraud.

- **Bank-level security:** Yodlee adheres to the same high security standards as banks, ensuring that financial data is handled with the utmost care and protection.

---

[6] Go to https://plaid.com for a deeper view into what its platforms offer.

[7] See "How Yodlee Connects to Banks: A Secure Comprehensive Guide to Secure Financial Data Aggregation," Activity Covered, April 15, 2024, https://activitycovered.com/how-does-yodlee-connect-to-banks.

Plaid

Plaid also prioritizes data privacy and security through several measures:[8]

- **Encryption:** Plaid encrypts financial data and only shares what is needed to power the app and protect consumers from fraud.

- **Consumer control:** Plaid ensures that consumers have informed control over their private financial data. It provides a resource called the Plaid Portal, which allows users to manage their connections and control the sharing of their personal data.

- **Compliance with regulations:** Plaid's security practices are designed to meet or exceed industry standards and comply with regulatory requirements.

In a landmark regulatory move, the Consumer Financial Protection Bureau (CFPB) finalized a rule in October that significantly bolsters consumer rights, privacy and security over personal financial data.[9] This rule mandates that financial institutions, credit card issuers and other providers must unlock and transfer personal financial data to another provider at the consumer's request, free of charge. By promoting competition and consumer choice, the rule aims to lower loan prices and enhance customer service across payments, credit and banking markets. Consumers will gain access to transaction information, account balances, payment initiation data, upcoming bill information and basic account verification details. This is expected to create numerous data sharing opportunities within the industry.

The CFPB's introduction of the Personal Financial Data Rights rule marks a significant step toward open banking. This rule empowers consumers by granting them control over their financial data and improving access to products while safeguarding against potential misuse. Initially impacting larger financial entities, the rule is pivotal to the industry's growth and sets the stage for open banking, a concept familiar in Europe for well over a decade. Overall, the rule is expected to create numerous data sharing opportunities within the industry, but it will also require financial institutions to invest in new technologies and processes to meet the regulatory demands. This shift toward open banking will likely lead to increased competition and innovation in the financial services sector.

---

[8] See "Plaid Puts You in Control of Your Financial Data," Plaid, https://plaid.com/how-we-handle-data.

[9] See "CFPB Finalizes Personal Data Financial Data Rights Rule to Boost Competition, Protect Privacy and Give Families More Choice in Financial Services," Consumer Financial Protection Bureau, press release, October 22, 2024, www.consumerfinance.gov/about-us/newsroom/cfpb-finalizes-personal-financial-data-rights-rule-to-boost-competition-protect-privacy-and-give-families-more-choice-in-financial-services.

Key considerations

We believe that the trend of opening data for broader use will continue, whether by regulations opening new markets or by innovation investments by CIOs looking for ways to add value to the enterprise. There are numerous examples that establish what a proper solution should look like and can be used to build a use case that will garner action. CIOs shaping their strategy should consider if the path of opening data is right for their organization. We encourage them to consider a few questions:

- What is the strategic value of our data? Assess whether your organization's data assets are unique enough to attract buyers and justify investment in monetization efforts.

- Are we prepared to address compliance risks? Evaluate whether your organization has robust governance frameworks in place to meet regulatory requirements and protect consumer privacy. Also, understand which regulations you will have to comply with.

- What technical infrastructure is required? Determine whether your current systems can support secure sharing, documentation and formatting of datasets for external use.

- How will this initiative align with our long-term goals? Consider whether selling data aligns with broader business objectives or if it risks cannibalizing competitive advantages.

There are numerous examples that establish what a proper solution should look like and can be used to build a use case that will garner action.

How we can help

Through our team of domain experts, ecosystem partners, and flexible delivery options, we help turn your data into a corporate asset. We help organizations in assessing the strategic value of their data, preparing them for compliance risks, and establishing robust governance frameworks. We guide leaders through the IT landscape that is required for secure data sharing and align your data initiatives with long-term goals. With Protiviti, you can confidently transform your data assets into a valuable resource, driving innovation and growth in your business.

About the author

Johan van der Walt
Managing Director, Protiviti

Johan has been a consultant, product owner and venture capitalist in his career serving clients in all aspects of financial services. He advises on technology transformation and modernization projects.

Contact Johan at johan.vanderwalt@protiviti.com.

Dan Stummer
Managing Director, Protiviti

Dan is a managing director and leader with Protiviti's Technology Strategy and Architecture group. He is an esteemed executive renowned for transformative business and digital innovation, adept in scaling businesses, and leading global teams. For over 23 years, he has excelled in strategic growth models and agile approaches, driving substantial revenue and operational efficiency. Celebrated for outstanding leadership, evidenced by multiple internal accolades including 'Most Inspirational' and 'Outstanding Coach', reflecting a commitment to excellence, innovation, and team-building.

Contact Dan at dan.stummer@protiviti.com.

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and its independent and locally owned member firms provide clients with consulting and managed solutions in finance, technology, operations, data, digital, legal, HR, risk and internal audit through a network of more than 90 offices in over 25 countries.

Named to the *Fortune* 100 Best Companies to Work For® list for the 10th consecutive year, Protiviti has served more than 80 percent of *Fortune* 100 and nearly 80 percent of *Fortune* 500 companies. The firm also works with government agencies and smaller, growing companies, including those looking to go public. Protiviti is a wholly owned subsidiary of Robert Half Inc. (NYSE: RHI).

protiviti®