



## Data monetization: the next frontier



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# Introduction

Many companies, in the pursuit of organic growth, possess a substantial amount of valuable assets—data. While many organizations recognize the value of analytics to inform decision-making, few companies today view their data as a strategic asset that can be used to create new business models and generate new revenue streams. Often referred to as “data monetization”, the concept of leveraging data as a strategic asset to enhance top-line growth or to attain other business objectives is gaining traction. Data monetization strategies, which were once thought to be too cumbersome and risky, are becoming commonplace. New technologies that can analyze terabytes of data in minutes along with emergent generative AI capabilities have spawned an entire ecosystem of innovative business models and products. Simultaneously, evolving privacy regulations around the world are giving companies a much clearer sense of what they can and cannot do with their customers’ data. These developments have opened the door for many organizations to embrace data monetization as part of their business strategies.

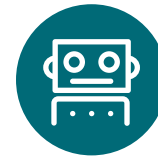


# Why now?

The convergence of industry, regulatory, and technological factors are creating favourable conditions for the adoption of data monetization strategies:



**Exponential growth in data generation.** With the proliferation of smart sensors and the Internet of Things (IoT), almost everything around us, ranging from our appliances and vehicles to the public spaces we visit, are collecting data. Indeed, the volume of data has grown at a nearly exponential rate with 90% of the world's data generated in the last two years alone. According to Statista, the global data volume is projected to reach 180 zettabytes by 2025.<sup>1</sup> For years, organizations generated large amounts of data, but either did nothing with it or threw it away. In recent years, data driven organizations have started to leverage their data to enhance their core business and increase operational efficiency in order to maintain a competitive advantage. However, many true market leaders have gone a step further by generating additional value from their data by monetizing it.



**Technological readiness.** Data is only useful if it can be analyzed, stored, and transferred safely and securely. With the increasing popularity of generative AI tools that use terabytes of data to train their models, establishing the right data governance, infrastructure and management is vital. As many of these platforms leverage cloud computing, privacy-preserving techniques are maturing, allowing sensitive data to be exchanged with minimal risk. In addition, with the advent of server-less computing, cloud-based analytics, machine learning, and event-driven programming has shortened the time required to turn data into decisions.



**Increased data savviness.** Executives at all levels are widely adopting a data-driven mindset. Here, decision-making is driven by predictive analytics and machine learning models that consume massive volumes of data for training purposes. For instance, a recent survey of global data and analytics decision-makers by Forrester Research indicated that more than 70% of respondents were expanding their ability to use external data, and another 17% planned to do so within the next 12 months.<sup>2</sup> The value generated from data enables organizations to achieve key business and economic benefits. Research from Forrester has shown that organizations that place a strategic focus on the value of its data and data-driven insights are 140% more likely to create a sustainable competitive advantage and 78% more likely to grow revenue. Simultaneously, many companies are collecting more data around their services, cost centers, logistics, and products. As the pool of data expands, executives have more opportunities to apply their data savviness in creative ways to generate both internal and external economic value. On the one hand, this may take the form of using data to improve product offerings, provide better service, or improve business performance. On the other hand, it may involve creating offerings around data-as-a-service, insights-as-a-service, or collaborative analytics. Regardless, more and more data savvy leaders are interested in crafting differentiated use cases and conceptualizing how they can use data to set their organizations apart.



**Market acceptance/demand.** Given all the advancements previously mentioned, it's no surprise the data monetization ecosystem has experienced significant growth over the last few years. On the back of increased demand of high-quality data, there has been an explosion of new data marketplaces, data exchanges, and data aggregators. They range in size and focus, from generalized to specialized by industry or ecosystem, but ultimately they provide a platform that helps get your data seen while also supporting key activities such as marketing, sales, and licensing agreements to name a few.



**Clearer expectations.** General Data Protection Regulation (Europe), The Personal Information Protection and Electronic Documents Act (Canada), the Personal Data Protection Act (Singapore), The Privacy Act (Australia), and numerous other privacy regulations around the world have set clear expectations on what companies can and cannot do with various types of data. For instance, transaction-level customer data is often highly regulated but aggregated or publicly available data is much less so. While the monetization use cases that often get the most attention involve customer data, the reality is that a majority of use cases do not require sensitive data at all. Instead, they use impersonal, aggregated and/or publicly available data, thus reducing concerns about reputational risk. Regardless of what data monetization model you choose, the key is to think about privacy upfront and to commit to being transparent about how your organization intends to use the data and the steps being taken to protect it.



**Maturing capabilities.** Many organizations no longer need to incur the expense of owning on-premises servers or recruiting numerous data scientists in order to generate insights, since cloud-based applications with built-in data pipelines and pre-trained AI models can inform decisions within seconds. In addition, many companies have adopted leading data management and analytics practices, such as the use of fully homomorphic encryption, which allows users to access critical data quickly without encryption keys. These advancements can give organizations the confidence and agility to pursue new opportunities.



Figure 1: Advantages of data monetization

# Data monetization strategies

When it comes to leveraging data as a strategic asset, internal value creation frequently comes to mind.

An organization may analyze its own data to better understand its customer base, to achieve better ROI, or to reduce customer churn. In contrast, external data monetization—using data to create a revenue stream or to generate value outside the organization—is not as well known. External data monetization strategies generally come in a few common varieties:

**1. Raw data.** Commonly sold through a data marketplace, raw data is generally

considered to be a low-risk, low-return strategy. Since the buyer takes on the processing burden, the seller often receives pennies on the dollar relative to the data's potential value.

**2. Aggregated data.** Data aggregation is a process in which an organization collects data from multiple sources and compiles it in a way that is meant to inform. Aggregated data generally does not contain any personally identifiable or

sensitive information. For example, a bank may aggregate data on customers that reside in a particular postal code in order to learn about the types of accounts and service offerings people in that area prefer. Aggregated data can be internally valuable to the business as well as externally valuable to a third-party. It can also be combined with aggregated data from other sources to create a richer picture. To generate revenue, aggregated data can be shared one-on-one with other businesses or offered through an ecosystem or marketplace.

**3. Insights as a service.** In this strategy, the organization takes responsibility for examining, refining, and analyzing the data to understand its value and where it can be leveraged in the market. To create a more robust product, a company may choose to combine its internal data with external sources such as publicly available data or anonymized, competitive, or comparative data bought from third-party providers. Eventually, the insights produced from this process can be sold to customers, business partners, or other third-parties either directly or through an ecosystem or marketplace. Insights as a service is largely considered to be a high return offering because the insights tend to be directly actionable.

**4. Collaborative analytics.** This strategy involves consortiums whereby a group of institutions come together to share data for the collective good or to solve an industry-wide problem. While collaborative analytics does not generate a direct revenue stream, it can still unlock tremendous value by allowing companies to tackle complex problems that cannot readily be solved by analyzing separate datasets. For instance, a consortium of insurance providers may submit claims data to a regulatory body for analysis in order to spot patterns related to fraud. Or, a bank, a retailer, and a telecommunications company may all agree to share data during a crisis to help their customers and the broader population during a difficult time such as a pandemic or natural disaster.



## The regulatory horizon

Of growing concern to many governments is the collection, use, and sharing of personal information to third parties without notice or consent of consumers. According to the United Nations Conference on Trade and Development, 137 out of 194 countries, or 71%, have put legislation in place to protect data and privacy.<sup>3</sup> Nine percent have draft legislation.<sup>4</sup>

Often considered to be “the gold standard” in data and privacy protection, the European Union’s General Data Protection Regulation (GDPR) demands that organizations are fair and transparent in how they handle, collect, and process data, emphasizing purposeful limitations on usage and storage as well as accountability for mishandling and misuse.<sup>5</sup> Accordingly, some nations are tightening their restrictions based on the principles set for in the GDPR. For instance, the Canadian federal government’s Directive on Automated Decision-Making echoes the GDPR’s principles on transparency, accountability, and fairness.<sup>6</sup> It also authorizes external audits that require organizations to document the collection, handling, processing, and monetization of their data assets.<sup>7</sup> Furthermore, with Bill -64 on the horizon for Quebec in 2023, any citizen whose personal data is handled through an automated monetization process must be informed of any such activity.<sup>8</sup>

# Key considerations

In evaluating their data-monetization options, many companies will likely discover that it's not about the data itself; it's about the value-add. The organization's creativity is often what turns the data into a strategic asset.

With this in mind, companies will need to assess their data assets and how they can enhance and optimize them. This process can be broken down into five steps:

**Identify the data assets.** The starting point is understanding the data assets, their maturity, and how close the organization is to being able to unlock their value. Key questions include: What data assets do we have? Where are they? What condition are they in? How can our existing strategies, people, culture and technologies help us to monetize our data? What additional capabilities would we need to develop to play in this space?

**Explore the art of the possible.** Important considerations include: What can our data be used for? Which industries can potentially take advantage of it? Why would it be valuable to them? And, how much would they be willing to pay for it? This step often involves holding executive group discussions to understand the different avenues for value creation, what the specific use cases are for each, and which ones are feasible. The opportunities unearthed during the workshop should be considered within the context of the business strategy and the organization's existing capabilities. For instance, would a potential offering be an extension of the company's core business, or would it be a new line of business altogether? It's important to examine your extended business ecosystem of stakeholders, including your suppliers, customers, partners, partner's customers and partner's suppliers to identify possible opportunities.

**Prioritize options.** To prioritize the list of data monetization ideas, the organization can establish criteria linked to its main business objectives. For instance, is the goal maximizing revenue, strengthening brand presence, introducing a new service line, or differentiating the business? By evaluating options against the business-based criteria, the organization can come up with a short list of possibilities.

**Assess readiness.** Does your organization have the people, processes, policies and technologies in place to launch a data monetization effort? What is the ideal pricing strategy for the new service? Do you have the right sales channels in place to reach your target customers? Would the right partnership increase the likelihood of success? In this phase, the devil is in the details. The organization will need to take thorough stock of itself, which can be difficult to do objectively. Deloitte has developed methodologies and frameworks for evaluating key capabilities, identifying gaps, and helping companies to address them to monetize their data assets.

**Keep privacy front and centre.** While companies may have a valuable data asset, they often underestimate the controls and privacy-preserving techniques that must accompany sharing their data. Privacy cannot be an afterthought. It should top of mind even when exploring the art of the possible.





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## POTENTIAL BENEFITS OF SHARING DATA

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### Institutions

- Net new business value generation



### Regulators

- Support innovation and competition
- Provide effective systematic oversight
- Mitigate systematic risks



### Customers

- "Higher quality and price competitive" products and services

## Keep privacy front and centre

To help companies keep privacy front and center, Deloitte has developed Privacy by Design, an internationally recognized framework based on the premise that privacy should be proactively embedded into the design, operation and management of IT systems, networked infrastructure and business practices. Privacy by Design has several fundamental principles that companies pursuing data monetization strategies may wish to consider:

- **Be preventative, not remedial:** Anticipate and prevent invasive events before they happen, not scramble to manage after a breach.
- **Lead with privacy as the default setting:** Ensure personal data is automatically protected; don't require users to take extra steps to do so.
- **Embed privacy into the design:** Privacy measures should be fully integrated components, not added on later.
- **Retain full functionality:** Privacy and security are equally important; neither should be compromised for the other.
- **Ensure end-to-end security:** All data should be securely held while it's needed and destroyed when it's not.
- **Maintain visibility and transparency:** Assure stakeholders that business practices and technologies involved are transparent to the end-user and subject to independent verification. Remember: it's not your data.
- **Respect user privacy:** Individual interests must be supported by strong privacy defaults, appropriate notice and user-friendly options.

# Ethics, trust, and data monetization

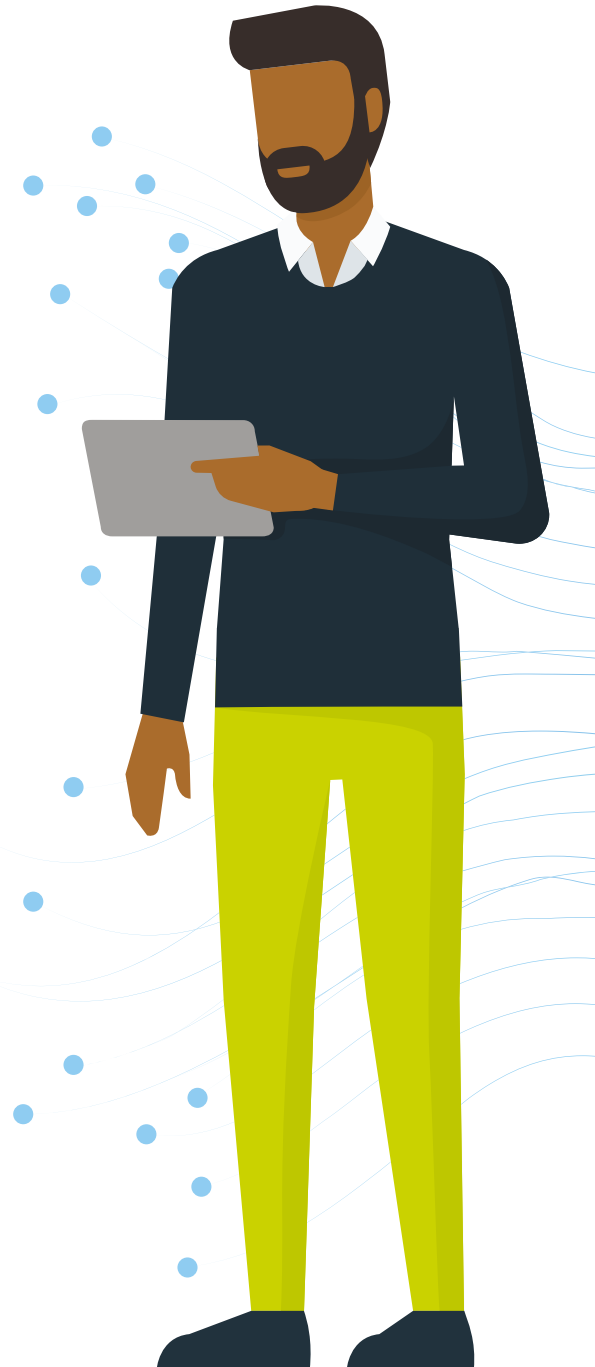
Tapping into data assets to provide new revenue streams is a rapidly emerging global trend. But as this trend grows, so too does societal trepidation about how organizations collect, use, and sell sensitive and personal data.

In an interconnected, digital world, datasets are increasingly linked to employees, clients, and customers in subtle ways that can elude even the most robust policy, legal, and regulatory frameworks. For example, digital tracking technologies and identifiers can link users' activity, such as shopping behaviours or advertisement interactions, across virtually every digital space they enter.

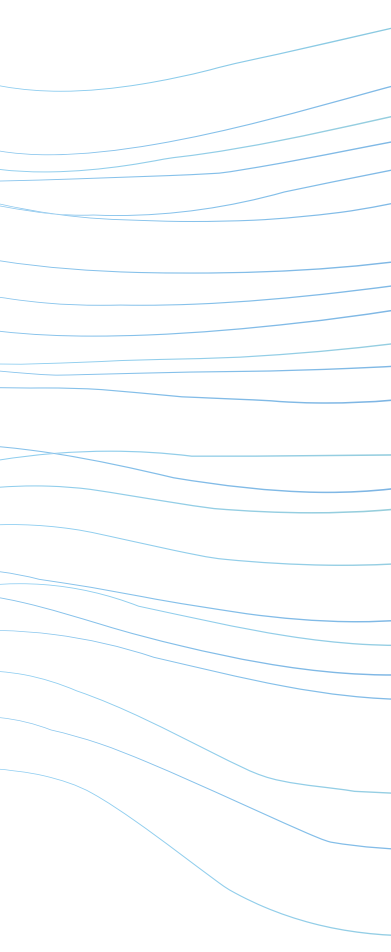
Simultaneously, datasets are becoming restless. They are constantly moving, expanding and becoming enriched. While ongoing extension of the data lifecycle enhances monetization possibilities, it often puts minority groups and disenfranchised populations at risk of data harms. For example, the use of data pertaining to First Nations people has historically been determined outside First Nations communities and without their consent and involvement. The Alberta First Nations Information Governance Centre argues, this can lead to misappropriation and broken trust.<sup>9</sup> In other instances of harms being introduced by extending the data lifecycle, a January 2021 Norwegian Consumer Council report found that online dating companies were sharing users' location and information about their sexual desires, alcohol use, political views, and ethnicity with third parties; and a 2019 Vice Motherboard investigation discovered that personal data collected and sold to third-parties by U.S. telecommunications companies had eventually fallen into the hands of bail bonds firms and bounty hunters.<sup>10</sup>

For these and other reasons, considering ethics right from the start is crucial to the success of data monetization strategies. To this end, Deloitte has developed the Trustworthy AI™ Framework, a tool that guides organizations on how to apply automated business solutions responsibly and ethically within their businesses. The tool helps organizations to organize their activities across essential areas of trust:

- Conducting fair and impartial use checks to identify potential algorithmic bias and avoid unexpected data harms and unfavourable outcomes.
- Implementing transparency and explainability mechanisms to demonstrate how datasets are being used.
- Establishing governance and accountability to define who is responsible for data activities and outcomes.
- Putting proper controls in place to ensure that the exchange of sensitive and personal data does not cause harms to the organization, its stakeholders, or the public at large.
- Monitoring for reliability to make sure that the expected data-driven results are delivered and to establish processes for handling issues and inconsistencies if they arise.
- Safeguarding privacy by adhering to data regulations and only using data for stated and agreed-upon purposes.



# The earlier the better



A lot of organizations think of data monetization as a scary proposition. Or they believe they're not far enough along in their AI transformations to even consider it. This hesitancy can be a mistake. Regardless of where your organization stands in its AI transformation journey, it's rarely too early to think about unlocking the value of your data through external monetization strategies.

Factoring this thinking into your transformation decisions upfront can proactively position your organization for success as opposed to retrofitting policies, processes, and technologies reactively after the fact. For instance, sharing data externally requires a different architecture than consuming data internally. Accommodating both possibilities upfront, avoids the time and expense of redesigning the system later.

Deloitte can help your organization see the value of its data from a broader perspective as well as establish the capabilities for taking advantage of both internal and external opportunities. With the advent of intelligent technologies, data isn't limited to providing insights to the business anymore—it can be the business itself.

# Contacts

If your organization is ready to accelerate its data monetization journey, Deloitte can help. Reach out today to start the conversation:

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# Endnotes

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