



MAXIMIZING RETURNS FROM DATA MONETIZATION STRATEGIES

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Large established organizations allocate on average US\$80 million—approximately 2 percent of annual revenue—to their data budgets, according to a recent MIT CISR survey.¹ Yet while some organizations struggle to recoup data investments, others achieve returns that far exceed their initial outlays. A key factor in these disparities is the organization's chosen data monetization strategy: a high-level plan that communicates how the organization will improve its bottom line using its data assets.

MIT CISR research has identified four strategies, each of which reflects a distinct portfolio of initiatives that focus on data monetization approaches for improving (optimizing internal processes and decisions), wrapping (delivering a product enhancement that customers value), and selling (developing new revenue-generating information solutions). These strategies are:

- **Operational optimization:** This relies on streamlining work tasks and eliminating inefficiencies, primarily from improving initiatives.
- **Customer focus:** This relies on delighting customers and serving them cost efficiently, using a mix of wrapping and improving initiatives.
- **Information business:** This relies on leveraging data assets to solve problems for other organizations or consumer markets, using selling initiatives to produce information offerings and wrapping initiatives to sustain the sales of those offerings.
- **Future ready:** This enables and encourages the use of improving, wrapping, and selling initiatives, as needed, to improve customer experience while simplifying operations and generating novel business models and revenue streams.

1 This briefing reflects findings from the 2024 MIT CISR Data Monetization: Generating Financial Returns from Data and Analytics Survey (N=349). The survey was distributed globally from August 2023 to August 2024 to senior executives possessing an understanding of their organization's enterprise-level data activities and outcomes. The reported average data budget of US\$80 million applies to organizations in the survey with revenues of at least US\$3 billion (40 percent). Generally this briefing reports insights from across organizations in the survey, including those with revenues of at least US\$3 billion and those with revenues between US\$500 million and US\$3 billion (23 percent) and under \$500 million (37 percent).

Yet while these strategies help to guide organizations' investments in data initiatives, our research shows that organizations experience vastly different levels of monetization returns—even when following the same strategy (see table 1). The organizations that achieve the strongest returns in relation to their budgets are those that demonstrate high *data monetization impact*, which we define as the extent to which an organization's data initiatives help the organization realize its strategic business outcomes.²

What distinguishes high-impact organizations is their ability to execute their chosen strategies effectively, by adopting strategy-specific practices that translate their aspirations into results. This briefing explores these practices and provides guidance for leaders looking to maximize their data monetization returns.

STRATEGY 1: OPERATIONAL OPTIMIZATION

Organizations pursuing operational optimization use data to enhance efficiency, such as to improve processes. But organizations achieving high data monetization impact take this further: they realize enterprise-scale efficiencies from developing what we call liquid data assets—data assets that are easily recombined, reused, and shared. In our research, at organizations with high impact, employee wait times for data access were cut in half—to an average of five days' wait from eleven days at organizations with low impact; and employees were able to devote 50 percent of their time to deriving insights, compared to just 30 percent at organizations with low impact.

To sustain these efficiencies, high-impact organizations clearly articulate their data and analytics aspirations in data strategies that make a compelling case for adopting better, cheaper, and faster ways of working. Leaders play a central role in advocating for the combination and reuse of data assets,

2 To measure data monetization impact, we asked respondents to report the extent to which their organization's data monetization initiatives (1) contributed to overall revenues, (2) reduced operating expenses, (3) enabled changes to the business model, and (4) provided a competitive advantage. These are four outcomes that organizations typically seek to achieve by monetizing data, and that statistically correlate strongly with financial and non-financial measures of firm performance.

thereby ensuring that data-driven improvement initiatives become an embedded part of organizational operations.

Amcor, a global packaging organization, exemplifies this approach. Amcor invested in a product specification data asset that made the complex recipes for making its products accessible throughout the enterprise.³ This supported a diverse array of initiatives, including supplier risk management, regulatory compliance, and sustainability reporting. To enable this, Amcor’s data unit established a cloud-based data lake, installed a standard reporting tool, and implemented semiautomated data governance processes. These investments not only reduced the time employees spent preparing and organizing data but also strengthened enterprise-wide data sharing, allowing teams to use specification data for multiple process optimization efforts.

STRATEGY 2: CUSTOMER FOCUS

Organizations that pursue a customer focus strategy invest in initiatives that delight customers while optimizing costs. High data monetization impact organizations following this strategy recognize that employees are the key to delivering exceptional customer experiences—and that equipping them with data and analytics is essential to their success. As such, they ensure that customer-facing data initiatives incorporate data-driven decision-making into employees’ daily workflows. They train employees to use data effectively, assess their ability to take data-informed actions, and provide incentives to encourage the use of enterprise data assets. To reduce friction, high-impact organizations, for instance, automate

privacy controls and enable experimentation techniques such as A/B testing, allowing employees to refine and personalize customer interactions in real time.

A strong data culture further amplifies these efforts. High-impact organizations give employees broad access to relevant data and cultivate an environment where data use is encouraged and expected. These leaders don’t just advocate for data-driven decisions; they actively integrate data and analytics into strategic discussions, strengthening the organization’s market position. By articulating how data differentiates the organization and raises customer willingness to pay, they reinforce its competitive advantage.

Fidelity Investments, a Boston-based financial services organization, provides an example of this strategy in action.⁴ To strengthen data-driven customer engagement, it developed a common analytics platform that centralized curated customer data and other priority subject areas. The platform leader established a vision to create long-term data assets, ensuring value for both known use cases and future opportunities. Fidelity created customer profiles to provide a 360-degree view of each customer to simplify account management across all interaction channels. The platform functioned as an internal marketplace, with a governance framework ensuring compliance with privacy, legal, contractual, and ethical policies. Employees requested access via a semiautomated workflow—ensuring secure and timely availability. These investments enabled Fidelity to increase customer value, boost revenue, and improve operational efficiency.

3 R. V. Bradley, B. H. Wixom, and C. M. Beath, “Internal Data Sharing: Four Examples,” MIT CISR Working Paper No. 459, May 2023.

4 Barbara H. Wixom, Gabriele Piccoli, and Joaquin Rodriguez, “Fast-Track Data Monetization with Strategic Data Assets,” *MIT Sloan Management Review*, July 29, 2021.

Table 1: Data Monetization Strategy Characteristics by Extent of Data Monetization Impact*

	Operational optimization (N=123)		Customer focus (N=104)		Information business (N=29)		Future ready (N=40)	
Focus of data monetization initiatives	Improving		Improving and wrapping		Wrapping and selling		Improving, wrapping, and selling	
Data monetization impact	Low	High	Low	High	Low	High	Low	High
N=	94	29	65	39	16	13	16	24
Avg. data budget (in US\$ million)	\$43	\$30	\$41	\$38	\$46	\$27	\$14	\$27
Avg. data monetization returns (in US\$ million)	\$30	\$27	\$27	\$177	\$15	\$784	\$111	\$223
Avg. percentage of revenues (or equivalent) from data monetization	3.0%	3.9%	4.7%	20.4%	7.8%	38.1%	3.6%	21.7%

* Note that these responses total less than 349, as some organizations either lacked a data monetization strategy (N=30) or did not answer all questions (N=23). The 296 organizations with a strategy were grouped as Low or High Impact (≤3 or >3 on a 5-point scale) based on their average answers to the measures of data monetization impact. By comparing the two groups’ scores across 88 practices, we were able to identify practices where the differences were both statistically significant and meaningful for a particular data monetization strategy.

STRATEGY 3: INFORMATION BUSINESS

The information business strategy involves offering market-facing information solutions that address customer needs. Organizations seeking new digital business opportunities are increasingly turning to this strategy, which has long been common among veteran data companies like Experian and LexisNexis. High data monetization impact organizations in this category differentiate themselves by developing marketplace solutions at scale. They focus on productizing data and analytics, ensuring that offerings are cost-effective and in line with market demands. These organizations excel at product management, tracking metrics such as data usage, consumer satisfaction, deployment speed, and financial impact to drive continuous improvement.

To succeed, information business organizations must balance external responsiveness with internal coordination. A strong chief data office plays a pivotal role in aligning enterprise-wide data activities, ensuring that data assets and capabilities are shared, governed, and leveraged effectively across the organization. This helps organizations break down silos while simultaneously enabling innovation.

Wolters Kluwer, a global provider of information, software, and services for professionals, represents what we consider an example of this strategy through its investment in expert solutions.⁵ To support this new direction, the CEO and leadership team articulated expert solutions as a strategic priority and structured the organization for scalable growth. They created corporate-level shared services to support areas such as innovation and product management. Over time, the organization invested in centers of excellence that equipped divisions with pricing, measurement, and other product management expertise needed to scale the growth of new data-driven products. By 2023, expert solutions became the organization's fastest-growing product line, achieving 8 percent organic revenue growth.

STRATEGY 4: FUTURE READY

The future-ready strategy positions data monetization as an enterprise priority. Organizations following this strategy leverage data across business functions, enabling innovation, and identifying new business opportunities. This strategy appeals to born-digital organizations and those with modernized technology portfolios.

High data monetization impact organizations following this strategy foster data democracies by empowering employees to access, share, and exploit data, and they keep their democ-

racies on track by setting and communicating strategic data priorities internally and externally via the annual report and other formal reporting channels. They enable their data democracies by investing in reusable data assets and capabilities, and they establish effective data sharing across the enterprise and with customers and partners. These organizations incorporate data-driven behaviors into performance management, for example, by evaluating employees based on their ability to use data effectively and rewarding them for contributing to data monetization initiatives. As a result, high-impact future-ready organizations recoup their data liquidity investments in half the time of lower-impact organizations.

In our view, Cemex, a global construction materials organization, pursued a future-ready strategy after years of investing in initiatives that enhanced customer experience and streamlined operations.⁶ Having made significant progress, the organization's leadership recognized a broader opportunity: leveraging its digital capabilities (particularly in data science) beyond enterprise boundaries. For example, in mid-2022, Cemex launched Arkik, a new venture that commercialized an internal IT solution by selling it to competitors. The move underscored the organization's shift from using data solely for internal purposes to leveraging it as a basis for market-facing offerings. Cemex's annual reports reflected this as well, highlighting key achievements in efficiency, customer satisfaction, and sustainability—where it was expanding its offerings with new information solutions.

FROM STRATEGY TO IMPACT

The first step in realizing data monetization returns is selecting a strategy that matches your organization's current abilities and long-term aspirations. Organizations focused on building foundational data monetization capabilities may find operational optimization to be the right fit. Those looking to enhance customer relationships while improving efficiency should consider the customer focus strategy. Organizations seeking to generate new revenue streams can explore the information business strategy, while those aiming to scale data-driven innovation across the enterprise should invest in a future-ready approach.

Once you've chosen your strategy, turn your attention to focused execution. Success lies not in the size of your data budget but in how effectively you leverage resources. Those who invest deliberately in the practices described in this briefing position themselves to realize significant returns from their data initiatives. Data is one of your organization's most valuable assets—but only if you are invested in having it make an impact.

⁵ B. H. Wixom, C. M. Beath, J. Duane, and N. van der Meulen, "Wolters Kluwer's Expert Solutions Journey," MIT CISR Working Paper No. 465, November 2024.

⁶ I. A. Someh, B. H. Wixom, C. M. Beath, and R. W. Gregory, "The Cemex Journey to AI at Scale," MIT CISR Working Paper No. 463, July 2024.

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