WHITE PAPER

The Data Monetization Maturity Model: Is Your Data Ready for a Marketplace?



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The path to monetization can be exciting, but grasping data maturity and sophistication levels can be complex. Companies need to understand where they are, where they're going, and how they compare to more or less advanced organizations. We created this **Data Monetization Maturity Model** to help you understand and forge your path toward building your data marketplace. Where you're at regarding producing, consuming, and leveraging data will be made clear as we explore the model and how it works.



How the Maturity Model Works



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The data monetization maturity model is built on two axes: data maturity (the horizontal axis) and externalization (the vertical axis).

Data maturity is a measure of sophistication and capability. On the left-hand side, we have "Data Nascent." This describes cultures that are either new to data concepts or new to operationalizing data. The former culture is comprised of ignorance, and the latter is one of inaction. These aren't judgments, just objective terms that describe whether a company has been exposed to data or has time to do something with data. **Externalization** is not so much a measure as it describes an organization's data quality. On the data maturity axis, more maturity is better. On the externalization axis, more externalization isn't "better" or "worse" in any way. Externalization of data is not correlated with data maturity, but the data maturity of an organization certainly affects the presentation and operation of the externalized data.

Bulk Data Provider	Information Productization	Line of Business
Data Services	Partner Sharing	Ecosystem
Data Nascent	Digital Transformation	Data Driven

Data Maturity

For example, an industry-leading company can be high on the data maturity axis and low on the externalization axis. In other words, this company is great with data and keeps its cards close to its chest. They aren't interested in sharing data with any outside parties.

Another company could be low on the data maturity axis and high on the externalization axis. In other words, they haven't established a data-driven culture but are looking to sell data to anyone interested. Yet another company could be just as mature as Apple, far right on the data maturity axis, and very external with their data. This could be an organization like CME, which runs the New York Stock Exchange and sells its daily market data to many data consumers.

Data maturity is a measure in the monetization maturity model, whereas externalization describes an intention.

		FULFILL		
Admin Managed	>	Automated	>	Self Services
Origination Request	>	Ticket		Order
Handling Admin	>	Support		Application
Execution Manual	>	Automated		Automatic

What Determines Data Commercialization Maturity?



What Determines Data Commercialization Maturity?

The path to commercialization lies within the data monetization maturity model. To start, companies can:

- Begin with data nascency
- Explore externalization into data services and bulk data providing
- Mature in information productization

 End up with a full-fledged line of business that contributes in a significant way to the organization's bottom line.

A data-driven line of business can only exist with the complete externalization of data-based products and services. A line of business requires external customers.



Data Maturity

Data Nascent organizations are low on the data maturity and externalization axes, meaning they have minimal experience with data. They barely use it and don't know what to do with it. However, they may decide to externalize what little data they have created, transformed, or repackaged. In these cases, they move into Data Services. These companies may have provisioned some data services, such as APIs or shared databases, which are exposed to data partners and the outside world.

Over time, they may provide more extensive datasets for some nominal fees. At this point, they are not providing high-value data but rather a firehose of data from which the consumer needs to determine value. The provider has **moved from Data Services to a Bulk Data Provider**. All of the burdens of determining value are on the data consumer. It may be a one-time download or an all-youcan-eat data buffet. In either case, there's much data externalization but little maturity.

This scenario may have dubious value, but plenty of industries in which this is perfectly acceptable. For example, data consumers in the financial services industry have enough sophistication to know that more data is better than less. But this situation can be problematic when bulk data providers deal with less sophisticated buyers. Various issues can manifest when the provider and the consumer have low data maturity. More importantly, the bulk data provider is leaving money on the table. Because they need more sophistication, they leave it to the consumer to find the value in their data. If the provider were to discover that value on their own, they could sell that higher-value data product for more money. Some companies realize this and become more mature, **moving into Information Productization.**

The data provider faces new market opportunities at this stage (high externality, moderate maturity). They may offer fewer data, ditching the firehose in favor of highervalue data products. This doesn't mean they're scaling their business, but they're better serving a market need. The more time they spend investigating what market needs can be served by their data products, the more mature they become. At this point, they begin scaling.

The provider moves into the Line of Business stage of monetization maturity as they gain more data product maturity and a deeper understanding of their underlying data. They're selling higher quantities and a greater variety of data products, which is when data licensing becomes an actual revenue stream. Soon enough, data licensing and productization are generating enough money to have their Profit & Loss (P&L) statements that legitimately affect their bottom line.

Data Sharing Maturity Path



Data Sharing Maturity Path

Data sharing is one of the most common use cases for a marketplace. It's a proven way of quickly and automatically de-siloing data and getting it to any part of the organization that needs it. This ends the frequent back-and-forth waiting game with most data fulfillment requests. No more waiting on work ticket assignments, managerial approval, or business justification.

An efficient internal marketplace strategy can automate all the documentation, approvals, chargebacks, and justifications for data requests. The marketplace can be beneficial when there's some data externalization, such as:

- Multiple business units (they may treat each other as different entities)
- Applications and software
- Business partners (e.g., franchisees, consultants)
- Customer research organization

In some use cases, it can be as simple as a request for data to complete a report. In more complex cases, it can be an "external" vendor (e.g., a contractor under NDA) aggregating data across multiple industries. The marketplace should be able to restrict what people see, even in an internal data marketplace. It should also trace every data transaction; who bought what data products, when, and for what purpose.

Whereas the data commercialization path above is relatively straightforward, there are more variables in the Data Sharing Maturity Path. Companies that choose this path are less concerned with commercialization and externalization and may end up in the following stages: Data Services, Partner Sharing, Digital Transformation, Data Driven, Ecosystem, or Line of Business.



When sharing data with mildly-externalized consumers, like business partners or research organizations, companies can **begin in the Data Services** stage of the data-sharing path. They could be shared into an application between companies or some other software form. In the financial services industry, it could look like buying, selling, and enriching data.

Digital Transformation is another stage in which companies can start on the Data Sharing Maturity Path. They may have gone paperless and moved entirely into a cloud-based ERP with powerful business intelligence and analytics capabilities. They may begin externalizing data to drive growth and competition in a Partner Sharing capacity. They could get a new CIO who recognizes that when more people have access to data, they'll generate more value. Or, they could be part of an Ecosystem as a vendor in a supply chain, and they want to share data to be more effective. Or they could complete their digital transformation and go all-in on data, creating a Data-Driven internal culture and sharing data to drive innovation internally.



There are innumerable impetuses for companies to begin externalizing their data, like partnerships or improvement opportunities. Regardless, they move to the right on the Data Maturity axis.

It's worth noting that the middle row (Data Services => Partner Sharing => Ecosystem) is the most complex use case because there is at least some externalization. These marketplaces can become hybrid or multilayered, which, as noted earlier, embody all the complexities and considerations of internal and external marketplaces.

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Definitions



Low Data Maturity

Companies on the left side of the data maturity axis are either: data nascent (low externalization), providing data services (some externalization), or providing bulk data (high externalization).

It's advantageous for organizations with low data maturity to develop simple products and make money at this stage. The lack of maturity, however, creates a gap between their actual and potential revenue. They may buy and sell data, then enrich the data sets in mundane ways.



Data Nascent

In the data nascent stage, companies are not using data for any practical or business-changing purpose. They may be producing or capturing data, but it is not accessible to internal or external teams besides the direct connection to the database. Additionally, the organization needs to consider data an asset that can be used and create a strategy around engaging with the data.



Data Services

Data is produced and managed in the data services stage but with limited externalization. A company must be more mature to formalize data products, so they share data via APIs, data lakes, and manual data dumps. They've gotten market signals that their data is valuable. They may generate some revenue (i.e., "pay for access to this not-super-important data we have"), or the data may be a public service (e.g., open-source weather data). There's not much at stake for companies at this stage, so that some services may have reliability and maintenance issues and severe limitations on the flexibility of request options.

The lack of maturity burdens the data consumer to discover value in the potential firehose of data. Some industries find this stage completely acceptable. Financial services consumers, for example, have enough data sophistication to know that more data is better than less. However, sophisticated buyers may need more interest in doing this fact-finding.

Bulk Data Provider

Bulk data providers have been externalizing their data at a relative scale. They have several customers that have consumed their data in the past. There may be some customers that are receiving regular updates to the data. The data products are mostly bulk data distribution, with limited flexibility for subsets and customer-specific data production. Distribution options are limited to just full dataset file delivery.



Some Data Maturity

As companies mature in data usage, they evolve and make data products. This opens new market opportunities with first-and third-party data. These opportunities are bound by an inability to scale. These data products may meet internal business and external market needs.

Companies in the middle of the data maturity axis are either: undergoing digital transformation (low externalization), partner sharing (some externalization), or productizing information (high externalization).



Digital Transformation

Organizations that have begun to leverage their data for internal use cases outside their primary purpose are categorized as organizations in digital transformation. These organizations produce value from their data and have begun to build infrastructure internally to convert and utilize data for more than a singular use case. They still do not necessarily consider data as an asset but do consider it valuable.

Companies undergoing digital transformation are transitioning from intuition-based decision-making, sharing data internally and meaningfully using it. In this stage, reasonable opportunities for data externalization can be discovered. This is when companies can sense future value in their data, but they don't know enough to execute.



Partner Sharing

Organizations participating in or leading an exchange of data with partners are considered under the partner-sharing category. These organizations have systems for either consuming external data or distributing data externally effectively. They have begun creating relationships and license rulesets that allow partners to engage and collaborate on the data they produce. They likely only have a single mechanism to share data with partners. Fulfillment of access to the data is still manual and requires multiple stakeholders to be engaged.



Information Productization

Organizations that have begun to monetize data and insights from the data are categorized under the information productization group. These organizations have set up maintainable services to distribute this content effectively and have active customers consuming it. They likely have begun to set up teams and processes to streamline the fulfillment, but it may still have multiple handoffs. Flexibility has improved, but most of their data product options are still bulk or standard. They likely support multiple distribution options centered around the data type available. They are also beginning to see the opportunity to build lines of business around their data.

Data products for organizations in this stage will range from "fire hoses" to formalized products. Whatever the case, a business will recognize that when more people have access to data, they'll generate more value. They may feel like they're part of an ecosystem (e.g., as a vendor in a supply chain) or part of a network of companies (e.g., sharing data with partners to improve shared services).

Companies in this stage of data maturity are beginning to hire data experts and analysts. They're buying tools and poring through sizable datasets. At this point, costs are rising and reaching a tipping point that can only be solved with maturity.



High Data Maturity

What truly differentiates companies with high data maturity are scalability, optionality, and capability. In this stage, they are "putting gas to the fire" by selling more data in more extensive products to various consumers, potentially in formalized lines of business. In this stage, data licensing becomes its revenue stream for externalized data, and data is used for product market leadership.

Companies with high data maturity are either: **making data-driven decisions** (low externalization), **working within a data ecosystem** (some externalization), **or running a line of business on their data licensing** (high externalization).

For these companies, sharing data is a norm, and data infrastructure is business-critical. They are likely to have data-specific executives on their leadership teams, make significant investments in data infrastructure, and have a grip on governance, compliance, licensing, and other risk concerns with data.

We see data marketplaces emerge in these stages of high data maturity. The data-driven companies with low externalization will likely have an internal data marketplace. Those working within a data ecosystem likely have a hybrid or multi-layered data marketplace. And those running a line of business are running an external data marketplace.



Data Driven

Organizations that are data-driven are consistently using data for multiple use cases. They have fully operational teams and systems that produce insight and strategies from data. Data is often in various formats and storage locations and available via many access options. Data is consistently used in decision-making and a key input to employees' dayto-day activities. The organization often builds in-house or interacts with a limited number of technology vendors for various use cases.

Ecosystem

Organizations continuously engaging with and contributing to datasharing initiatives and ecosystem activities are considered in the ecosystem stage. These organizations have multiple partners or customers that they are delivering data to and have systems in place that are scalable and maintainable for collaborating on data. They have teams and processes in place that are responsible for organizing and fulfilling external requests. The organization leverages several vendors to assist in leveraging data effectively.



Line of Business

Organizations that consider their data an asset to be monetized, drive revenue, and have the systems in place to effectively and scalably license and distribute data are categorized in the line of business stage. These organizations have an entire section of their organization dedicated to the activity of monetizing data. Data usage and externalization are core to the organization's strategy.



What's On Your Data Maturity Horizon?



What's On Your Data Maturity Horizon?

As organizations rely increasingly on data to drive decision-making (and should), data maturity is critical to consider as part of an up-to-date business strategy. The journey toward developing a mature data culture to thrive in a data-driven economy is a complex one that requires a strategic approach, which we've outlined in this Data Monetization Maturity Model.

About Revelate



Revelate's data marketplace platform provides a suite of capabilities for data sharing and data commercialization for our customers to fully realize the value of their data. We reduce the burden for data teams to distribute data, the way the consumer needs it, in and outside of their organization. Revelate integrates into the fabric of any data ecosystem to prepare, package, and distribute data from anywhere to anyone.