

Data Monetization

Creating value through data in the life sciences



Contents

Monetize the data	02	How to move forward (manage the data)	24
The four ways to monetize data	10	Lighting the way with data monetization (measure the value)	31
1. Improving with data			
2. Data wrapping			
3. Selling data			
4. Bartering data			
Data monetization in action	14		

Monetize the data

That's the mantra for life science companies looking to grow through data and analytics. But how do you turn insights into action?

Although few do it well, in this perspective, we'll explain how to “accept the mess” and get started now on maximizing the value of your data



Monetization is messy

We know that data is the key to success in this digital age. Life science companies are racing to redefine their business strategies around data and to explore all pockets to monetize data to maximize value. Most have struggled with this. Yet, there are successes and failures shaping a path for monetization



Monetize the data

Too often, firms jump into the fray without understanding why they are monetizing, appreciating the primary ways to monetize, or knowing all methods to monetize. Told in retrospect, stories of data monetization can look like an orderly journey. But nearly all examples in life sciences are messy and one-off functional-led implementations. Embrace the mess, learn from others, and get started!

Manage the data

Information maturity varies wildly, as does the organization's ability to embrace data and information as a true corporate asset. Both are evolutions to aspire to over time as part of the journey, not end states needed to be solved before you can begin monetizing. Yet, most are ignoring this altogether—at their peril

Measure its value

The greatest limitation to an organization's ability to monetize data effectively and at scale is its ability to measure the true value of the data. While no gold standard exists, the expectation is ever-increasing to have a clear way to measure and track the value of your data and put your organization in a position to take advantage of the current environment to compound the value of your data and information

What is data monetization?

Data monetization is making a positive and measurable impact on business profitability by using data effectively

It is not simply about selling insights from your data to another party—there are many other ways to utilize data that can positively impact costs or revenue



Data monetization is no longer a choice; it's an imperative



It's not whether you're going to monetize data; it's how you're going to monetize data

Organizations today generate and collect a vast amount of data, but few treat their data as a strategic asset. Any kind of organization needs to be embracing the data that is exploding inside it and creating value in a way that makes sense for them

Every organization needs to embrace the data that is exploding inside it and create value in a way that makes sense

Your data is a precious asset, and may be worth more than your company



United Airlines' loyalty data valued at \$22B

Data valued during COVID and used to secure a CARES Act loan; market cap was \$9B at the time

Source: United's Form 8-k, June 12, 2020 ([link](#))

American Airlines' data valued at \$24B

Like United, American used the valuation for its loyalty program data as security; market cap was \$8B

Source: American's Form 8-k, June 12, 2020 ([link](#))

Caesars' player data is its most valuable asset

Customer loyalty data valued at \$1B by creditors during its bankruptcy proceeding

Source: Kate O'Keeffe, "Real Price in Caesars Fight: Data on Players", Wall Street Journal, March 19, 2015 ([link](#))



Data is a unique asset, with challenges and advantages



HEADWINDS

The challenges to overcome

TAILWINDS

The unique advantages



No Accounting and Asset Management Practices for Data

You have better visibility of the inventory for your office furniture than your data; financial management and reporting discipline woefully lacking compared to other assets

Misaligned Leadership Behaviors

While leaders talk about data as their most important asset, few behave as it is. Rather it is managed as a byproduct with little accountability to show a return. Data is a business asset, not an IT asset

No Alignment on Measuring Value

Because it isn't accounted for as an asset, few employ methods for quantifying data asset value and embrace formal data asset management practices. The result is it's treated like a cost center

Data Is a Regenerative Asset

Data is non-depletable, easily replicable, non-rival and highly reusable. What is not as explicit is that it is a regenerative asset—the use of data and its application leads to more data and information creation

Data Is Liquid

While not as liquid as cash, certain information has a viable market. With money you can buy things; with information you can attain insights, relationships, performance *and* things.

Data Is Not a Capital Asset

Because data isn't considered a capital asset, it has no balance sheet value, no disclosure requirements, and generally isn't taxable when bartered. Business leaders should be taking advantage of this and incorporate this "feature" into their business models

Most companies struggle to monetize data, but those who do it well outperform

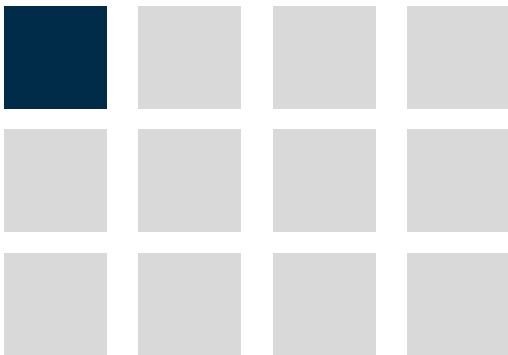
THE GOOD NEWS...

You're not alone

Most organizations are floundering to monetize data in an effective way. In fact, only 1 in 12 companies are effective¹

1 in 12

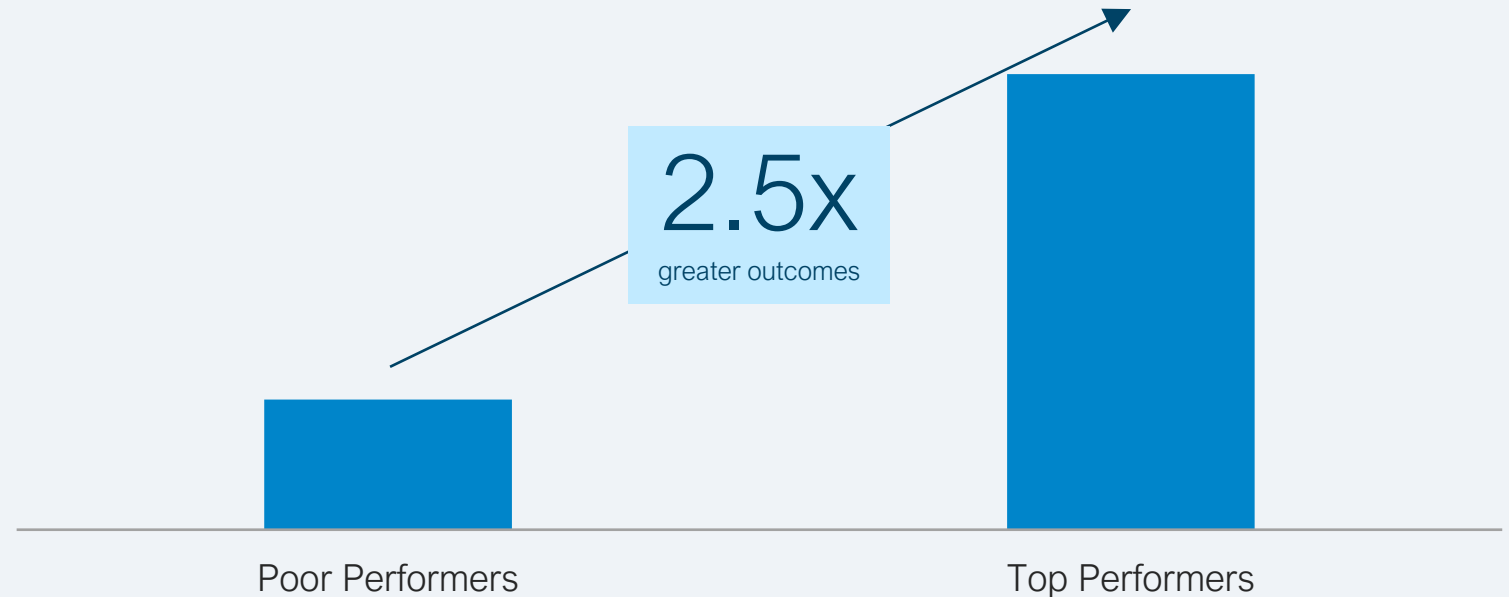
monetize effectively



...AND THE BAD NEWS

Most flounder because it is hard to monetize data effectively at scale and they don't make the right strategic choices and commitments to succeed

The select few who are good at it, are pulling away from the field and realizing value 2.5 times greater than the rest²



The first mental roadblock to monetizing data is a failure to think beyond selling it



Selling information is how most organizations think about monetization, but you can get more than cash for your data

Selling is rarely the best method

Selling data is a taxable transaction when other methods can yield a better economic result

Selling can leave value on the table

With the right partner, you will end up receiving more economic benefit from your information than you would from selling

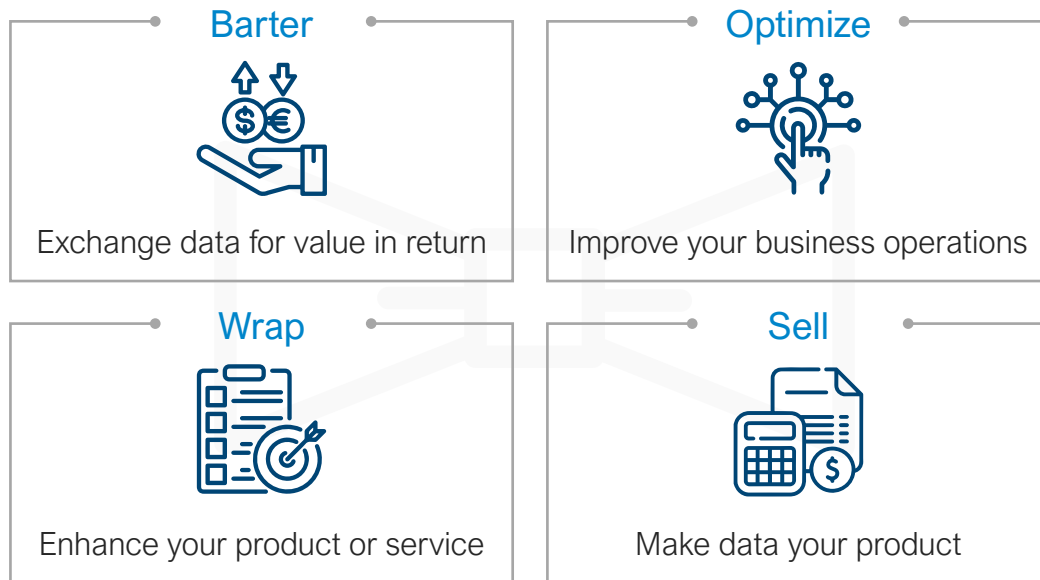
Indirect methods can return more value

Look beyond selling as applying data internally can yield outsized returns in myriad ways







BOWS illustrates the four ways to monetize data

We leverage this simple framing to evaluate where you are and what you are driving towards

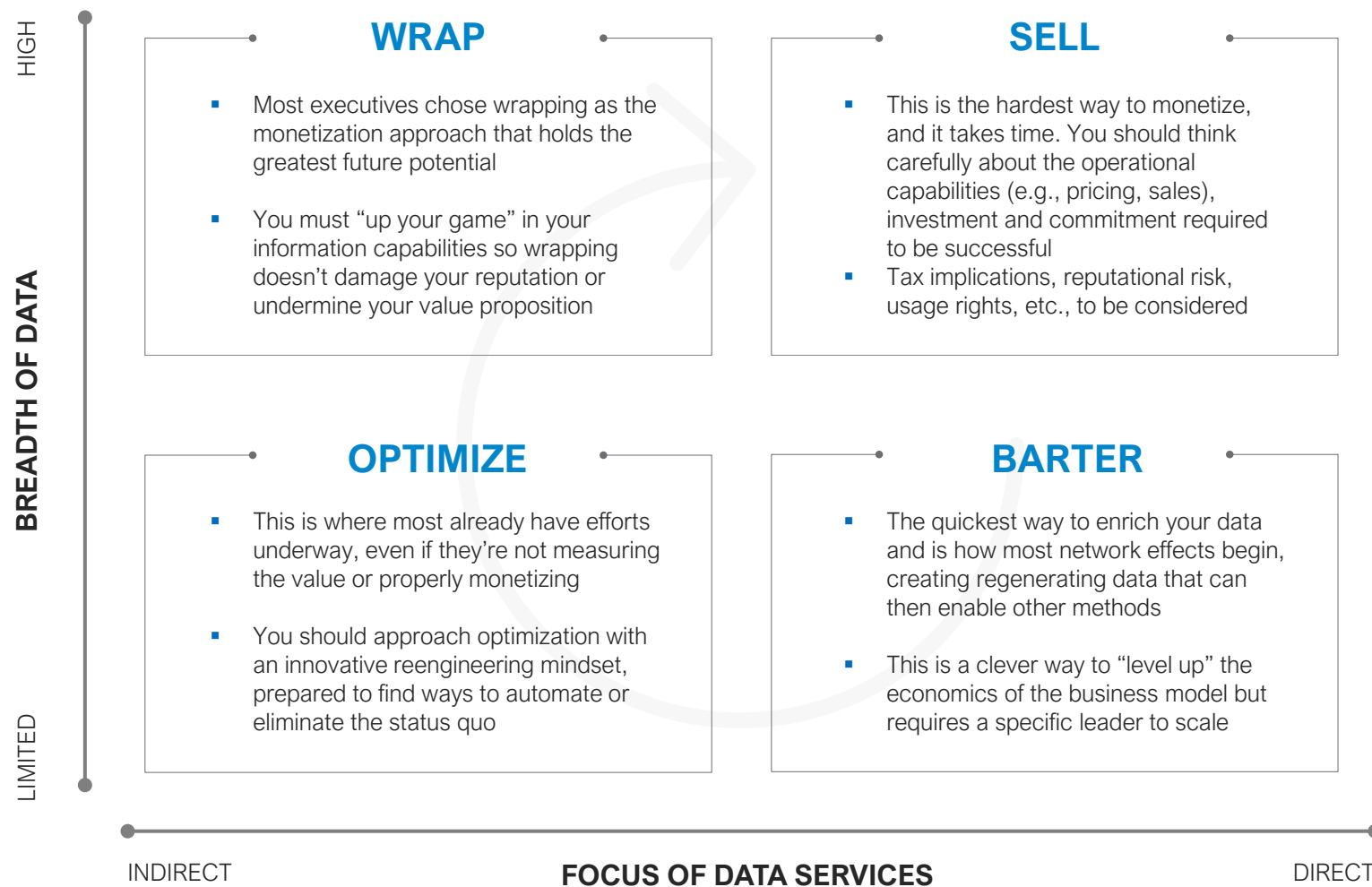


Within the four monetization methods, the possibilities to are endless

Examples help bring to life the different monetization strategies

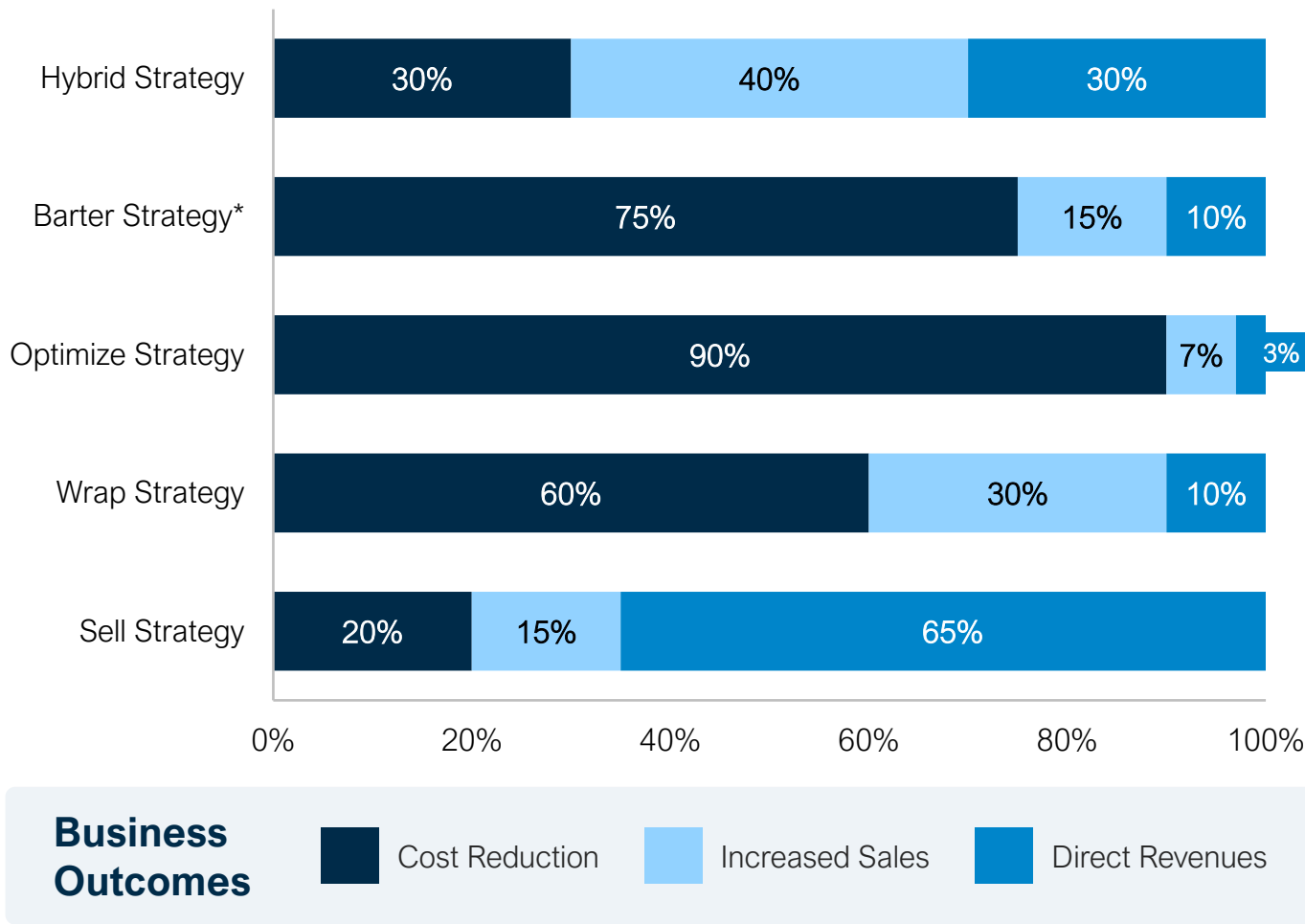
	Description	Examples Across Industries
 Barter Exchange data for value in return	Trading data in exchange for goods or services that benefit the company in some way; often the source for creating network effects	<ul style="list-style-type: none">▪ Loblaw's consumer feedback mechanism in return for discounts (feedback incorporated into its Media Services product).▪ Health systems exchanging their procedure data for aggregated benchmarking services
 Optimize Improve your business operations	Use data to make processes more efficient, inform decision making, improve business performance, reduce risks and improve safety	<ul style="list-style-type: none">▪ Using customer and marketing data to target the sales force▪ Business intelligence dashboards used to improve decision making▪ Using equipment data for predictive maintenance▪ Identifying and reducing expenses due to fraud and waste
 Wrap Enhance your product or service	Offer data or insights to enhance an existing product or service, often improving the customer experience	<ul style="list-style-type: none">▪ Domino's pizza tracker, FedEx package tracker▪ CVS/Walgreen's COVID-19 vaccination appointment finder▪ Amazon's product recommendation engine▪ Facebook, Google, Loblaw's leveraging user data to enable targeted advertising that enhances its advertising services
 Sell Make your data the product	Package your data or insights and sell them directly to third parties	<ul style="list-style-type: none">▪ Strava premium product offering visualizations and analyzing your workouts, cumulative stats, heart rate zones, etc.▪ IQVIA selling its commercial data to pharmaceutical companies seeking to understand brand performance

Breadth and focus of data may influence where you start, but ideally, you'll advance against all four methods over time





There are many ways to use BOWS, to different outcomes



Source: 2018 MIT CISR Data Monetization Survey (n=315)
* A&M estimates as measuring value from barter strategies is not yet commonplace

Data monetization in action



Improving with data

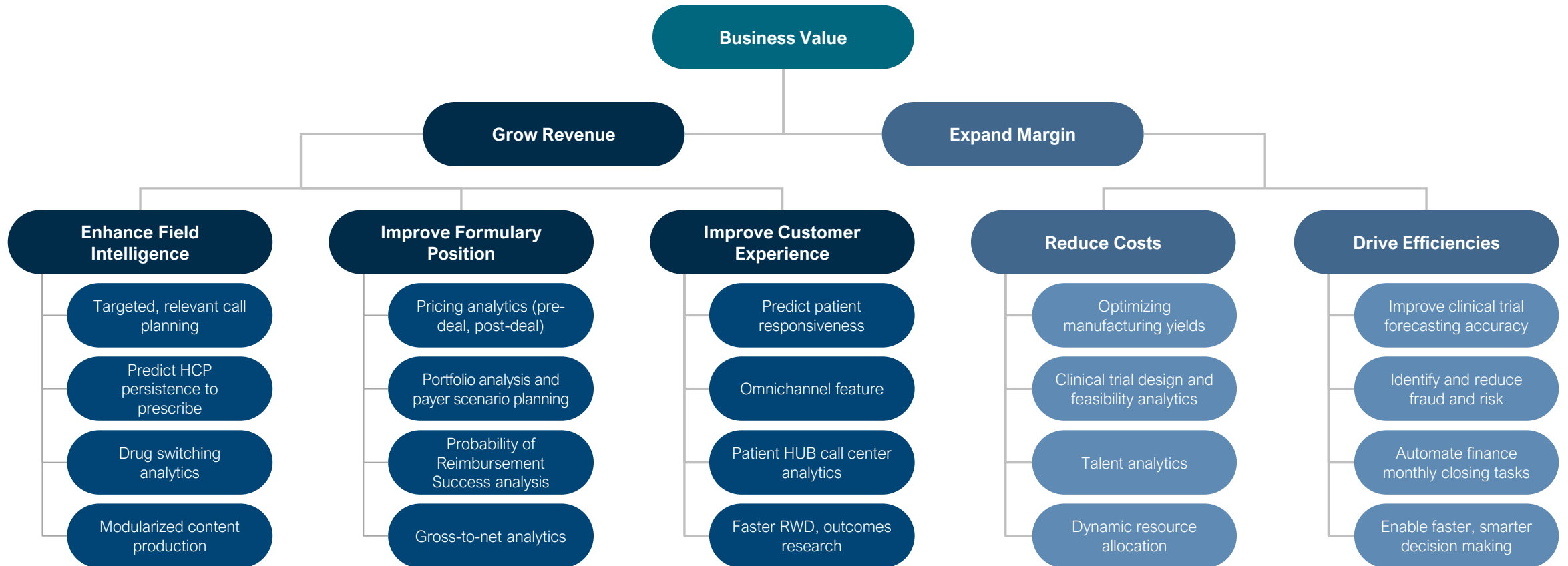
Arm your people with information
and free them up to think strategically

With data-based insights and clear decision
rules, people can deliver more meaningful
services, better assess and address customer
demands and optimize production

There are several ways companies are leveraging data to become more efficient and profitable

Organizations drive financial performance gains by improving the top and bottom line

NON-EXHAUSTIVE





Data wrapping

Distinction through experience

Companies are increasingly amplifying the customer value of their offerings by adding analytics-based features and experiences, a phenomenon we call “wrapping”

Key activities distinguish the best wrappers

122%

ROI for best performers

39%

ROI for all others

They focus on useful and engaging wraps

Good wraps motivate customer response to digital directives (e.g., refill prescription) that help the customer. This creates value that is captured in the form of sales lift, such as by selling more of the product or retaining a greater number of customers longer

They tailor the experience

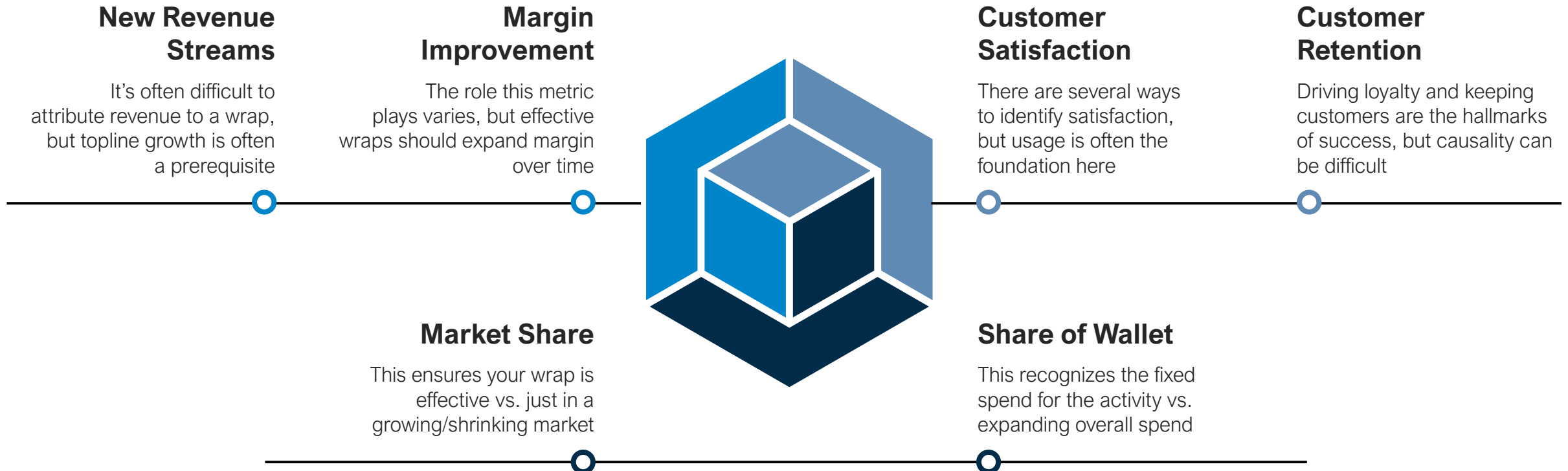
Once you identify customer needs and desire, four design characteristics are considered: (1) anticipate the need, (2) advise decision making, (3) adapt to the situation and (4) act to benefit the customer

They measure financial returns

A wrap's impact on sales is indirect, so measurement is complicated. High performing companies use a portfolio of techniques like usage tracking, AB testing and controlled experiments, customer surveys and pilot studies

Measuring wrapping performance is tricky

Aligning on a detailed tracking mechanism is needed to attribute exactly how much value the data wrap's feature or experience enhances an underlying core offering





Sell your data

The hardest way to monetize data

Many executives are eager to sell their company's data, convinced that it has inherent value and can generate new revenue streams for the company. But most companies are not set up to execute as this requires a unique business model

Everyone has data, but it's not all worth selling

To embark on your journey to sell your data, answer these key questions



What to sell?

Knowing what to sell is the first step, and is often not adequately considered

- Data: first-party, combining data
- Insights, outcomes
- Analytics platform



Who to sell to?

It's a bit more involved than just B2B or B2C

- Pharma companies
- Health systems
- Research institutions
- Digital health companies
- Device/instrument companies
- Patients



How to sell?

Key steps can ensure you're capable of selling data

- Who pays vs who uses
- How much will they pay?
- Pricing model: subscription, dynamic, consumption
- Existing channel: PBM, existing services, payer
- Different sales force?



How to deliver?

There are many choices to ensure the right model is in place

- New or existing team
- Access existing code and data
- Enhance data quality
- Segregate the data
- Assess the data sources and IT systems



Bartering with data

Here, companies exchange their collected data for data, goods and services or favorable business terms with a vendor

Bartering with data can take many forms



Bartering for Goods and Services

Retailers, mobile and ISPs, energy and utility companies, and financial transaction processors are on the leading edge of bartering with information because most of the examples involve customer data

But other kinds of business information are becoming accepted currency as well, such as retail product categorization and medical claims data



Bartering for Favorable Terms

Win favorable contract terms in return for sharing information. Exchanging information among partners also facilitates improved relationships. Transparency breeds trust

This can occur in the consumer context too, like getting a discount on your health insurance premium for submitting key vitals annually

Health systems have bartered with their data to get better pricing for tech solutions (e.g., providing EMR data to Flatiron)



Bartering for Data

Exchanging data with another to enrich one another's dataset

A prescription decision support company gets plan data from payers in exchange for providing the payers prescribing pattern behavior amongst its physician customers

In areas like supply chain and manufacturing, making operational data available to others is becoming commonplace, and expected, even in life sciences

How to move forward





Build data liquidity to accelerate data monetization

To monetize data, companies must first create strategic data assets that can be reused and recombined for new value creation

Recognizing that data does not have to be treated like traditional company assets is crucial. Heavy equipment, office furniture, land and even cash will deteriorate or be depleted; companies have no choice but to control their use. Data is different—it can be reused and recombined freely without degradation. Data assets are born to be liquid!



Build data liquidity by removing silos



Prepare for new value creation by optimizing for the enterprise, not a particular function

A company's data typically has low liquidity; the data is trapped in local business processes, locked in closed platforms, replicated in multiple locations, incomplete, inaccurate and poorly classified or defined. It's no wonder that a lot of managerial attention focuses on liberating data from silos and applying it to a new specific use such as calculating customer churn or spotting supply chain breaks

This is a good exercise, but not a strategic one. Sure, an initiative on customer churn or supply chain will realize new value for the company. But if you continue to pursue only a linear value creation cycle, you are leaving money on the table

Your data monetization journey is fueled by initially building five capabilities

1

Data curation

Make data consumable and prepare for reuse

2

Data dissemination

Make available across and beyond the org

3

Insight enablement

Obtain meaning and insights from the data

4

Customer awareness

Know your customers' needs and behaviors

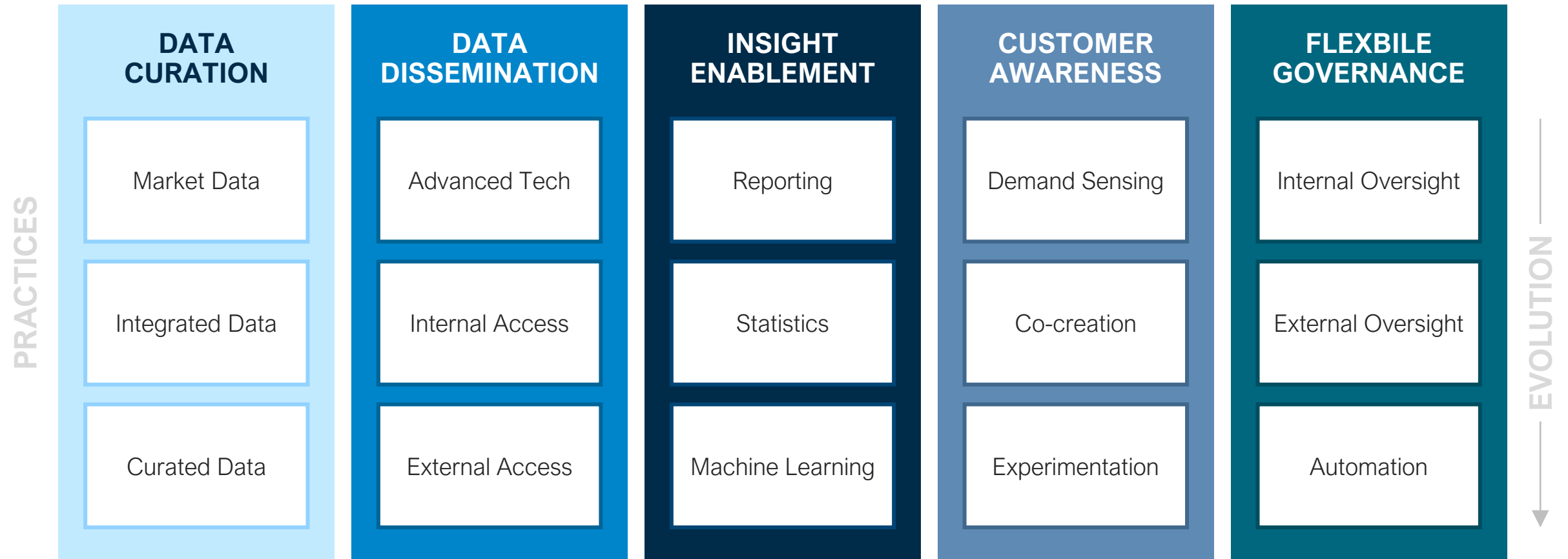
5

Flexible governance

Effectively balance compliance and ethics

Data monetization capabilities are evolutionary

Companies evolve their capabilities with more advanced practices building on foundational predecessors





We often confront four challenges



Data exists in too many places

Data often resides on multiple, non-integrated systems but new technologies can solve for this



Poor data quality and consistency

Data proliferation of structured and unstructured data requires new methods to clean and standardize



Lack of sufficient data volume

You often need vast amounts of data to be valuable; augmenting and linking data creates options



The complex regulatory landscape

Navigating the constantly changing regulatory landscape for data is not easy, but it is possible

Principles of our approach

Marathon Mindset

Many companies have been trying to make money from their data for years. Rest assured; data monetization capabilities are evolutionary. They become stronger as companies master sequences of practice over time, with more advanced practices building on foundational predecessors

Built for purpose

Each monetization strategy places unique demands on the company. Moreover, data monetization capabilities are approach specific so take the time to discern which capabilities to prioritize and how to evolve over time

All Business

Data is an enterprise asset and shouldn't be optimized for a particular function or monetized by IT. The core of data monetization is a business strategy. The efforts may be supported by IT, but they shouldn't be led by IT.

Vested Interests

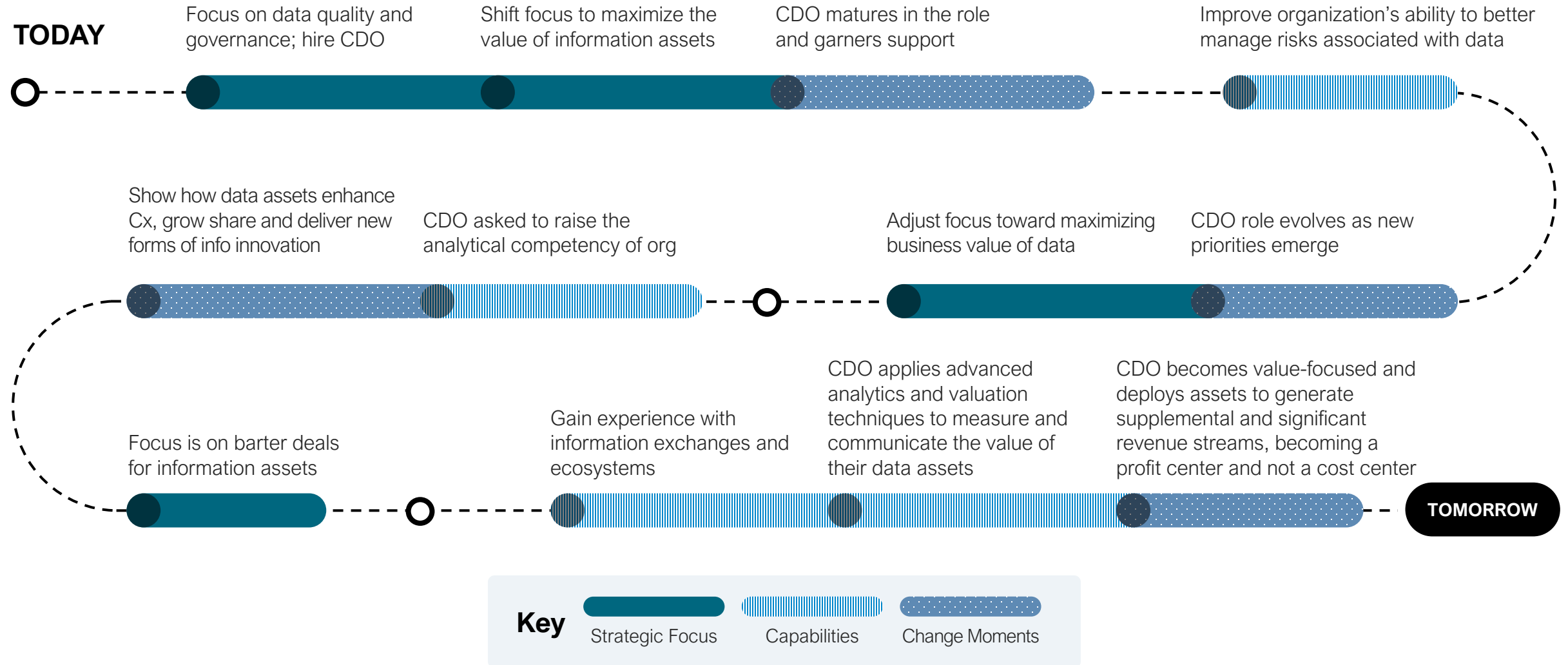
Each of the data monetization strategies requires new processes, skills and cultures to generate maximum returns. It is insufficient to simply put data and tools in the hands of the employees. Accountability for monetization must sit in the business and, ideally, the C-suite to create the necessary urgency and commitment



Lighting the way to data valuation

Modernize and transform the value you
derive from your data

The road to monetization leads to enhanced enterprise value





Capturing value requires a data valuation approach

Despite rhetorical consensus on the value of data, organizations struggle to measure it

Key considerations for the evolution of data valuation approaches



Attributes matter

The value of data may be based on a variety of cost and value drivers and fluctuate as it progresses through the stages of the data value chain



Include future use

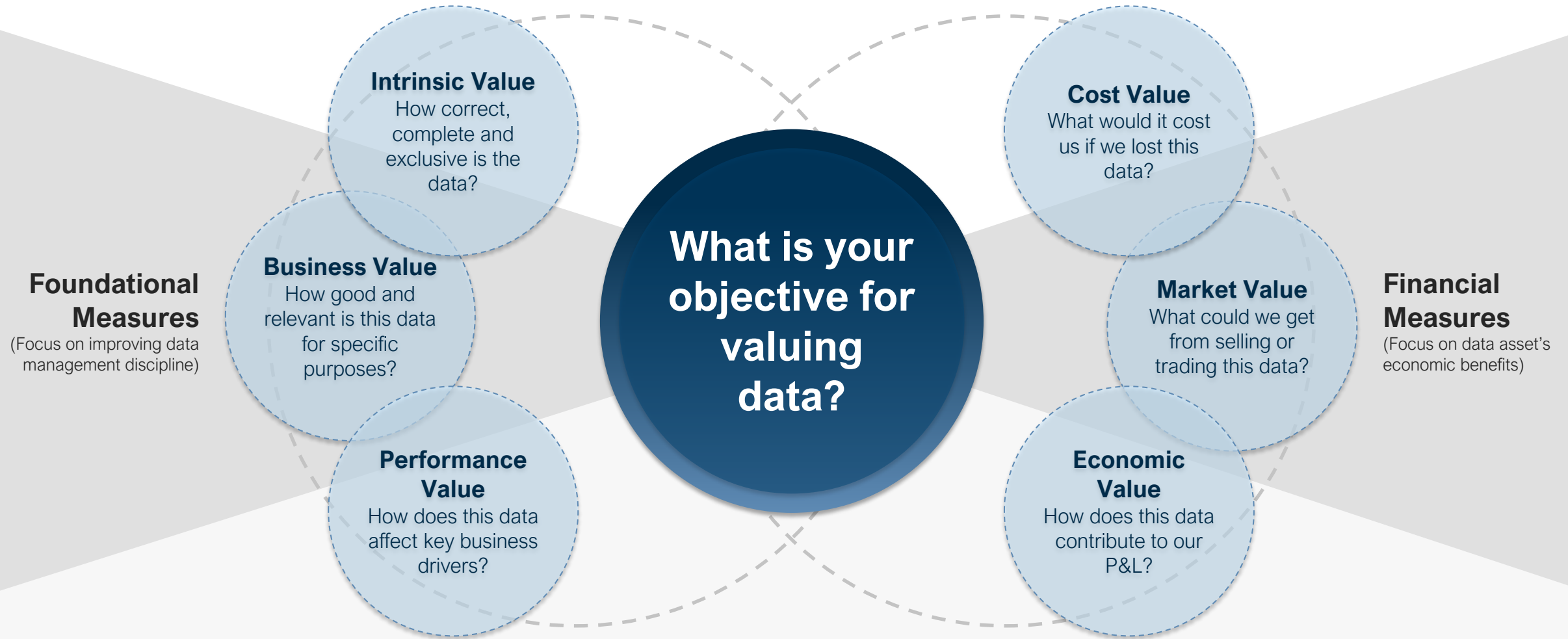
Data can take different value paths, so the valuation approaches will depend on both the existing and potential future uses of data

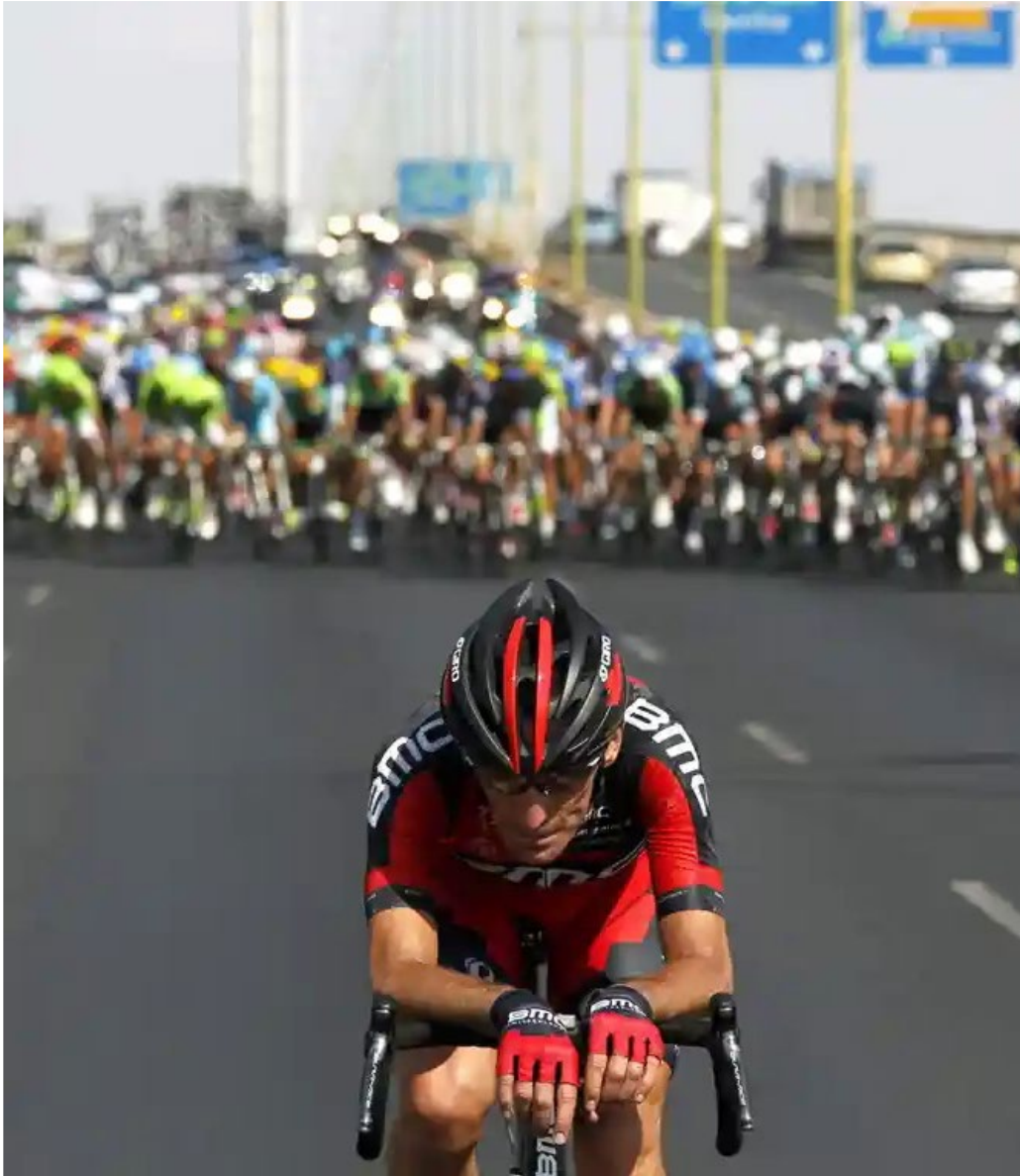


Look beyond revenue

Go beyond revenue to encompass responsibility for socio-economic impacts, the collective prosperity and reputational benefits that come with it, and equitable distribution of value to all stakeholders

We recommend leveraging a variety of methods to assess the value of a data asset





Don't just advance your journey, break away from the pack

Enter with “eyes wide open” and choose the strategy with the clearest potential payoff—and strive for top performance

- Which strategy offers the most for your business model?
- Which strategy aligns best with your strategic intent?
- Which strategy is achievable, given your current state of capability?

Thank you

