

Modern Data Practices for Fintechs

A guide to data strategy best practices

“Modernizing IT infrastructure will be a cornerstone of this evolution.

As institutions adopt advanced technologies, refining data practices will be critical for unlocking actionable insights. This involves streamlining data architecture, aligning operations with evolving compliance demands, and enhancing maintenance practices. By responsibly managing data, financial institutions can enhance transparency, mitigate risks, and strengthen trust.”

Proxet's expertise in data ensures fintechs can achieve these outcomes efficiently and responsibly.

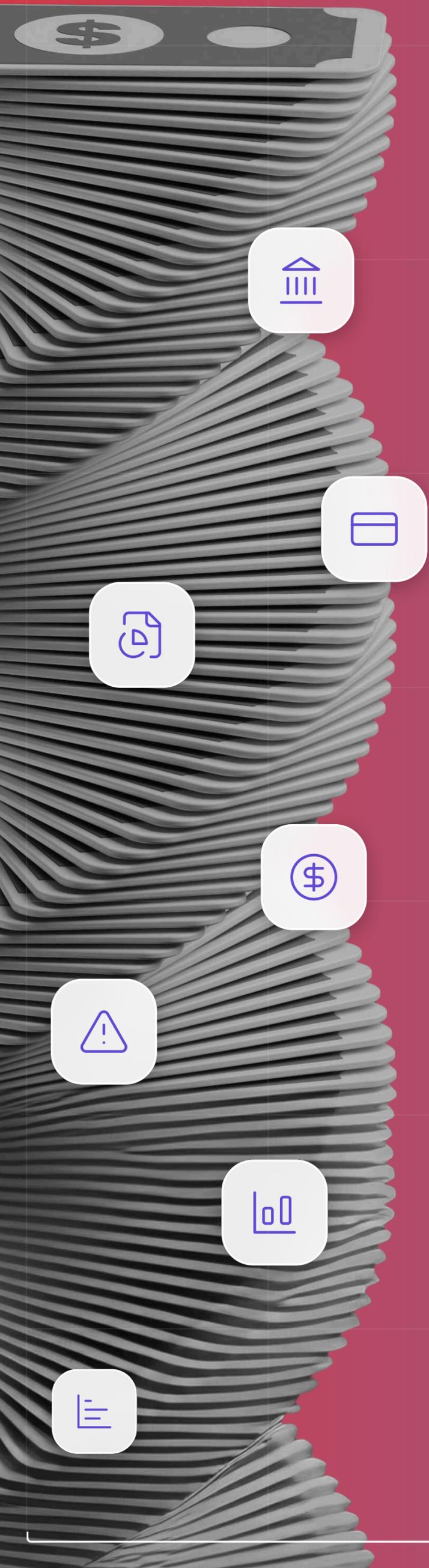
For more information, contact:

Ben Adair

↳ Fintech Solutions

↳ Ben.Adair@proxet.com





Whether you're building a neo bank, a payment gateway, or an embedded finance solution, you rely on an array of tools — real-time transaction processing systems, fraud detection engines, customer engagement platforms, blockchain/DLT networks, and open banking APIs.

Each of these tools generates a wealth of data, but too often this data gets trapped in silos, accessed only on an as-needed basis. However, when **managed strategically, your data can be transformed into a powerful business asset.**

Imagine AI detecting payment fraud in milliseconds by analyzing behavioral biometrics, transaction anomalies, and global threat intelligence. Or machine learning models personalizing financial products and payment flows by evaluating user behavior and real-time market shifts.

With the right technology, you can **shatter those silos, organize vast data sets, and convert your insights into revenue drivers.**

This guide will show you how to leverage data as a strategic advantage — no matter which tools you use.

Executive Summary

The Problem

Fintech and payment firms gather extensive data from real-time transactions, user interactions, and third-party API integrations. Yet much of this information remains siloed, disorganized, and underutilized. Without effective data management tools and strategies, firms struggle to scale rapidly, innovate effectively, and maintain regulatory compliance. Ultimately they risk their competitiveness in a rapidly evolving digital economy.

The Solution

By adopting the proven data engineering practices of tech giants and leading digital natives, fintech and payment firms of all sizes can transform fragmented data into a unified, governed asset. A modern data architecture, leveraging advanced analytics, automation, and artificial intelligence, positions these companies to stay competitive, accelerate innovation, and ensure robust security without requiring extensive internal resources or large budgets. With the right strategy and technology partner, firms can efficiently turn their data into actionable insights and scalable innovations.

The Value

Enhancing data capabilities enables fintech and payment companies to unlock substantial business advantages:



Smarter Decisions

Improve real-time fraud detection, proactively manage liquidity and settlement, and swiftly identify high-growth market opportunities.



Stronger Performance

Analyze data signals, user engagement, and payment processing efficiency to optimize user journeys, enhance revenue potential for digital platforms, and enable tailored offerings based on historical purchases, predictive advertisements, and personalized checkout experiences.



Scalable Innovation

Develop AI-powered solutions tailored to evolving business objectives, ensuring continuous adaptability and growth.



Real ROI

Transition from intuition-driven decisions to data-backed strategies, providing measurable business outcomes and clarity amidst complexity.

Whether your focus is optimizing payment routing, enhancing user onboarding, or guiding strategic product development, adopting a robust, modern approach to data management is critical to sustaining growth and staying ahead in today's competitive fintech and payment landscape.

The Opportunity

Modern data practices are driving the rapid evolution of the fintech and payment environment. Data engineering, AI, and data science have revolutionized the industry, giving companies access to insights far beyond experience at a fraction of the cost.

Previously, only incumbent financial institutions with massive IT budgets could afford robust data infrastructure. Today, fintech and payments startups and scale-ups of any size can tap into powerful computing resources to unlock valuable insights.



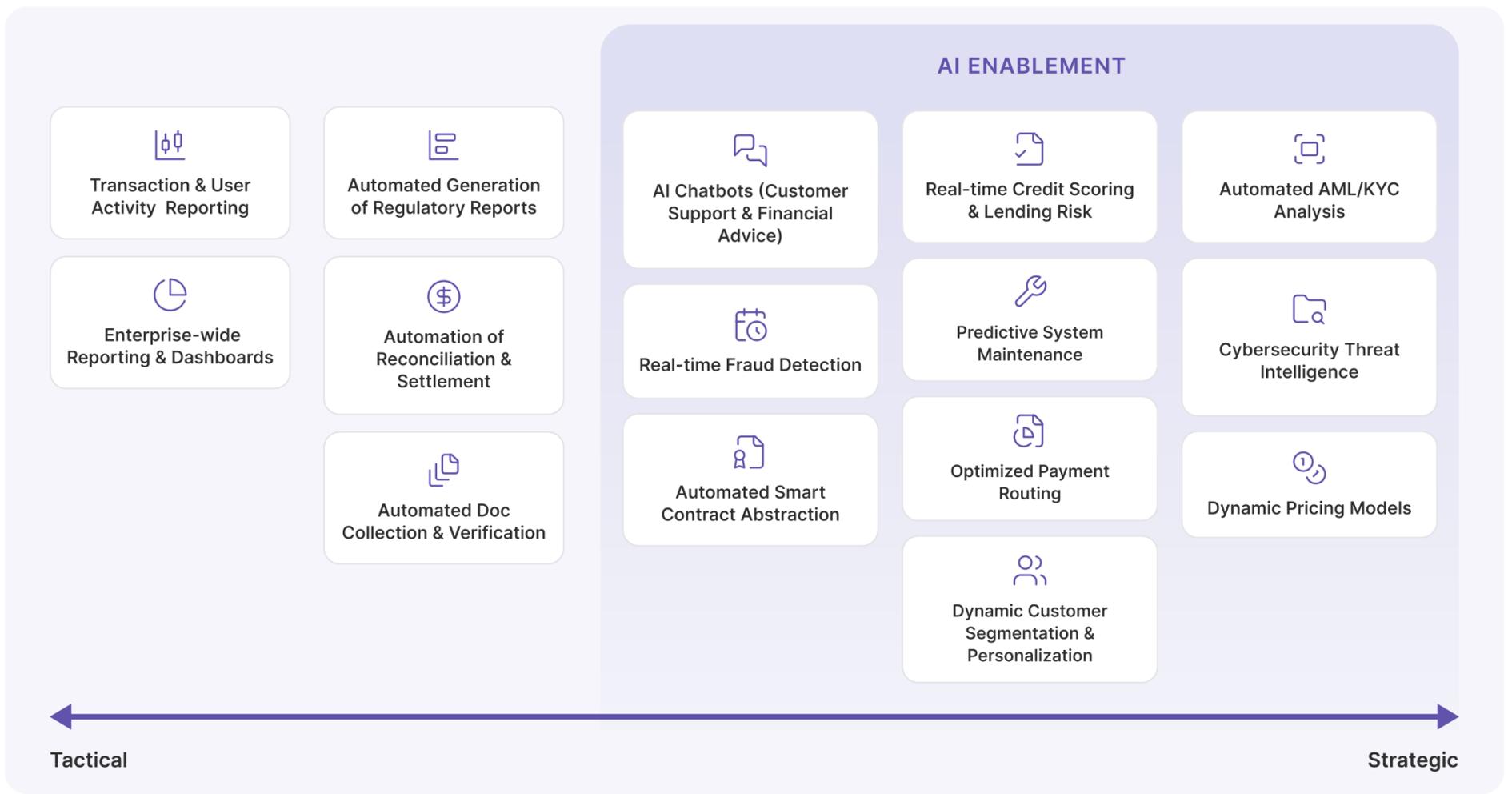
“Organizations are beginning to leverage data holistically to uncover market trends and improve decision making across their portfolios.”

- Josh Herrenkohl, Senior Managing Director at FTI Consulting

Organizations that fail to use data effectively risk competitive disadvantages, operational inefficiency, and missed revenue opportunities.

Use Cases

From automating manual processes to unlocking new revenue opportunities, advanced data practices are helping fintech organizations cut reporting costs by up to [60%](#) — and that’s just the beginning. Below are key use cases that show how leading firms are putting data to work across the value chain.



Real-time Operations & Product Analytics

- **Transaction & User Activity Reporting:** Provides immediate insights into payment flows, user engagement, and platform performance.
- **Enterprise-wide Reporting & Dashboards:** Consolidates data from various data sources, including on-premise systems and third-party data platforms, into intuitive dashboards for real-time monitoring and benchmarking of digital products.
- **Automated Generation of Regulatory Reports:** Streamlines the creation of compliance reports (e.g., AML, KYC, PCI-DSS) — improving accuracy and efficiency.
- **Automation of Reconciliation & Settlement:** Reduces manual effort by automating expense tracking and budgeting for assets.

Digital Onboarding & Compliance Management

- **Automated Document Collection and Verification:** Simplifies the process of gathering and validating critical user documents (e.g., KYC, AML checks), ensuring compliance while accelerating user onboarding.
- **Automated Smart Contract Abstraction:** Extracts key information from blockchain-based contracts or digital agreements, making it easier to analyze terms and obligations without time-consuming manual review.

Strategic AI for Operational Efficiency

- **AI Chatbots:** Uses AI-driven chat assistants to answer user queries regarding transactions, account issues, or personalized financial advice, improving response times and reducing reliance on manual research.
- **Real-time Fraud Detection:** Utilizes machine learning to analyze transaction patterns, behavioral biometrics, and network anomalies to identify and prevent fraudulent activity in milliseconds.
- **Predictive System Maintenance:** Leverages data analytics and monitoring tools to detect potential infrastructure or application failures before they happen, reducing downtime and ensuring platform availability.
- **Dynamic Customer Segmentation & Personalization:** Analyzes user data to segment customers and tailor payment options, financial product recommendations, and digital experiences to maximize engagement and lifetime value.

Data-Driven Risk and Financial Management

- **Real-time Credit Scoring & Lending Risk:** Uses predictive analytics to assess borrower creditworthiness based on alternative data, enabling instant loan decisions and identifying potential default risks.
- **Automated AML/KYC Monitoring:** Assesses and flags suspicious transactions or user behaviors by analyzing historical data and real-time feeds for compliance with Anti-Money Laundering and Know Your Customer regulations.
- **Cybersecurity Threat Intelligence:** Models different attack vectors and vulnerability scenarios to help platforms make informed security decisions and anticipate threats.

AI-Powered Revenue Optimization & Growth

- **Dynamic Pricing Models:** Uses AI and market trends to adjust transaction fees, lending rates, or subscription models dynamically to maximize revenue and competitiveness.
- **Optimized Payment Routing:** Uses data-driven insights to route payments through the most efficient and cost-effective channels for maximum profitability.

Need help identifying your organization's use cases?

Connect with Proxet for expert advice and a free consultation on best practices!

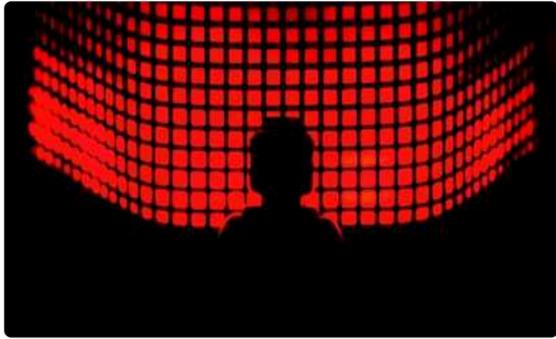


The Challenges

“70% of CFOs still rely heavily on Excel for planning, forecasting and reporting. Most of these spreadsheets tend to live on local drives and shared folders, with no version control, no audit trail and little to no security.”

-Dr. Sebastian Dewhurst, Founder of EASA via CFOtech.uk

Many organizations in the fintech and payments vertical struggle to harness data effectively, facing challenges such as:



Data silos

Information is scattered across systems and departments, limiting accessibility and analysis.



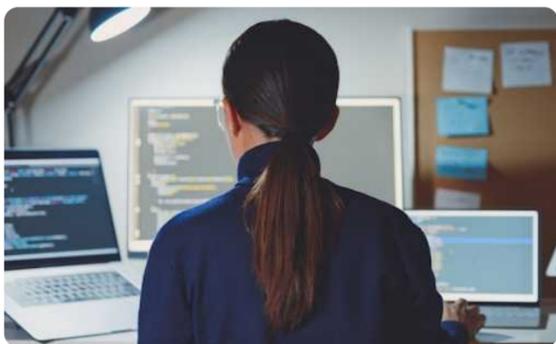
Poor data quality

Inconsistent formats, missing values, and inaccuracies hinder decision-making.



Undefined data standards

Ambiguous labeling and definitions create integration and usability issues.



Lack of data culture

An environment where data is not central to decisions.



Resistance to change

Shifting to a data-driven approach often meets internal pushback.



Technical debt

Suboptimal, quick-fix data solutions that accumulate over time, hindering future scalability and innovation.

To mitigate these challenges, consider the following strategies:



Invest in data quality & real-time validation

Implement data quality processes and tools to improve data accuracy and consistency across all transaction and user data.



Implement data-driven decision making tools

Use real-time analytics and AI to enhance decision making processes, ensuring that strategies are based on accurate, consistent data.



Address ethical & regulatory concerns

Develop clear data privacy and security, and algorithmic fairness policies, and comply with relevant regulations.

Understanding Data for Business Impact

Before launching a data project, assess your organization's data maturity — how effectively your business uses data to drive decisions.

What is Data Maturity?

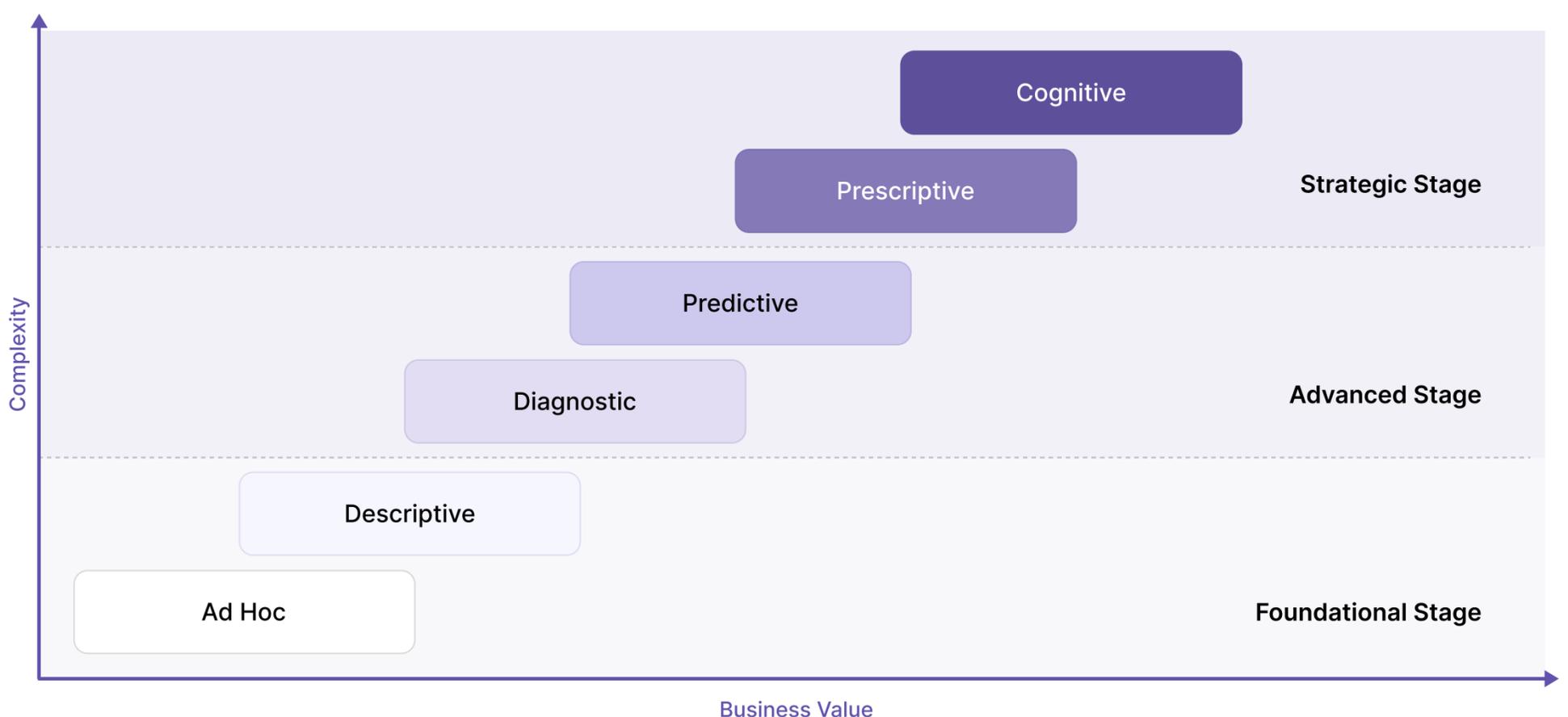
The Data Maturity Model serves as a roadmap, helping organizations:

- Assess current data capabilities
- Benchmark against peers and competitors
- Identify growth opportunities
- Set clear, realistic goals for data-driven initiatives
- Prioritize investments and allocate resources effectively

This structured approach clarifies where a company stands, where it wants to go, and how to get there. It also helps businesses evaluate their current data governance and strategy, ensuring a solid foundation and data culture for future growth. There's no right or wrong place to be on the data maturity scale — what matters is aligning your objectives with business needs and building a roadmap for progress.

The Data Maturity Model

To effectively use data, organizations must understand how it's obtained, interpreted, and managed. Assessing data maturity helps businesses identify what they can realistically achieve.



Adapted from Gartner's Analytics Maturity Model. Expanded and modified by Proxet.



STAGE 1

The Foundational Stage

This is the beginning stage of any company's journey. Foundational Stage companies use their data to understand business insights, visualize trends, and analyze historical data. Data activities are mostly manual, unconsolidated, and driven by immediate needs.

The foundational stage is characterized by ad-hoc reporting and basic descriptive analytics. Although reports offer some insights, they may not offer a big-picture view of your data and how it aligns with various sources and tools. At this stage, there are few or no formal policies for data handling, and employees often see data as something extra, not essential.

While useful for quick answers, this ad-hoc approach frequently leads to technical debt that complicates future projects.

Traits of Foundational Stage data:

→ Ad-hoc

Responding to specific data requests on an as-needed basis. While useful for quick answers, it can be inefficient and time-consuming.

→ Descriptive

Summarizing and describing data to understand what has happened.

Start developing a data culture.

Examples of Foundational Stage initiatives:

→ Platform performance reporting

Consolidates data from various microservices and payment gateways to provide a unified view. This involves integrating data from various sources, such as transaction logs, customer support systems, and marketing platforms.

→ Account/Customer-level reporting

Tracks the performance of individual accounts or customer segments against budget. It involves collecting and analyzing data on transaction volumes, customer engagement, and other financial metrics.

Opportunities to mature at the Foundational Stage:

→ Break down data silos

Gain a more complete understanding of their operations and identify opportunities for improvement across digital products and payment services.

→ Monitor platform and product performance

Define data governance procedures and processes. Identify bottlenecks, optimize user flows, and improve overall service delivery.

STAGE 2

The Advanced Stage

At this stage, data analysis becomes a core function for every team. The Advanced Stage focuses on diagnostic and predictive analytics, allowing organizations to understand not just what happened, but why and what might happen next. To enable this, formal data governance is applied with clear policies, assigned data stewards, and documented processes for quality and access.

This maturity is often necessary to realize the full value of a modern data infrastructure, and often requires addressing technical debt.

Employees become more comfortable using data for decision-making, supported by management who fosters training and cross-team cooperation. For example, tools like **Sigma BI** facilitate self-serve analytics, giving users powerful, connected models that replace traditional spreadsheets. Data is now considered essential for daily work.

Traits of Advanced-Stage data:

- **Diagnostic:** Analyzing data to identify the root causes of problems or trends, such as identifying reasons for payment failures, user churn, or unexpected market shifts.
- **Predictive:** Using data to forecast future outcomes, such as predicting fraudulent transactions, identifying emerging market trends for new fintech products, or forecasting demand for digital payment services.

Consolidate data culture across organization.

Examples of Advanced-Stage initiatives:

- **Predicting fraud risk in real-time:** By analyzing transaction patterns, user behavior, device data, and external threat intelligence, organizations can develop predictive models to assess the likelihood of fraudulent activity. This can help payment processors and fintechs identify risks and prevent losses.
- **Identifying market trends:** Leveraging tools like **Snowflake**, businesses can access public data such as S&P Global Market Intelligence reports to gain valuable insights into consumers' financial strategies and market movements.

Opportunities to mature at Diagnostic Level:

- **Expanding data ecosystems:** Integrating real-time sources like streaming transaction data, API logs, external market indicators, and cybersecurity threat feeds. Implementing tools for data governance.
- **Implementing automated alerts and dashboards:** Helping operations and risk teams monitor real-time anomalies and trigger immediate responses.
- **Enabling continuous feedback loops:** Real-world transaction outcomes and user behavior refine models, keeping them accurate and aligned with shifting market conditions and fraud patterns.

Opportunities to mature at Predictive Level:

- **Integrating insights:** Build a long-term product roadmap and risk management strategy that aligns with business goals.
- **Implementing decision support systems:** Automate micro-lending decisions or personalized product recommendations — reducing manual intervention and improving response times.
- **Conducting regular performance reviews:** Continually assess predictive systems to ensure they adapt to changing user behaviors, market dynamics, and regulatory requirements.

STAGE 3

The Strategic Stage

At the final stage, companies operate at the cutting edge of data innovation. Strategic organizations view data as a key asset, integrated across the business and used proactively for planning and innovation. A strong data culture is in place where data governance is fully established with clear roles from executive to operational levels, ensuring teams work together and share insights. Strategic companies have the technology and tools to answer questions others haven't even thought about asking. By analyzing real-time data, they make forward-looking decisions about products, markets, users, and staffing.

This stage is characterized by prescriptive and cognitive analytics. Strategic organizations not only predict future outcomes but also shape their destiny.

Traits of Strategic Stage data:

- **Prescriptive:** Using data analysis to recommend specific actions or decisions that align with strategic goals and vision. It helps to chart the course for the future by suggesting ways to achieve desired outcomes.
- **Cognitive:** Using AI and machine learning techniques to automate data analysis tasks and uncover complex insights. It's a helpful supplement to human intelligence, as machines can process and analyze large amounts of data quickly and efficiently, while humans can provide valuable context, judgment, and creativity.

Data culture permeates every business decision.

Examples of Strategic Stage initiatives:

- **Automated payment optimization systems:** Use AI to quickly process large amounts of real-time transaction data. These systems identify optimal routing for payments based on cost, speed, success rates, and regulatory requirements. With automation, you can improve efficiency and scale your payment operations more effectively.
- **Algorithmic product pricing & personalized offers:** Measures the impact of dynamic pricing on user adoption and revenue. This simulates different scenarios, such as competitor pricing or changing user preferences, and models how these changes impact new product launches or existing service profitability. This can help you make more informed decisions and anticipate market shifts.

Opportunities to mature at Prescriptive Level:

- **Automated anomaly detection & response:** Use AI to scan real-time data streams and flag the most critical anomalies (e.g., security breaches, large-scale payment failures) and automatically trigger mitigation actions.
- **Generative AI for personalized financial content:** Deploy AI to create tailored financial advice, product recommendations, or customer support responses based on individual user data and preferences.

Benefits of progressing through each maturity stage

No matter where your organization currently stands on the Data Maturity Model, remember that every journey starts somewhere. Making small, consistent strides in data maturity can lead to significant benefits.

- **Better decision making:** Data-driven insights, accessed through structured, defined, and optimized tools, can help you make more informed and effective decisions.
- **Increased efficiency:** Automation and streamlined processes can lead to significant cost savings and time efficiencies.
- **Enhanced customer experience:** Data can be used to personalize user journeys, offer tailored financial products, and deliver best-in-class digital service.
- **Competitive advantage:** A data-driven approach can differentiate your organization from competitors and drive growth.

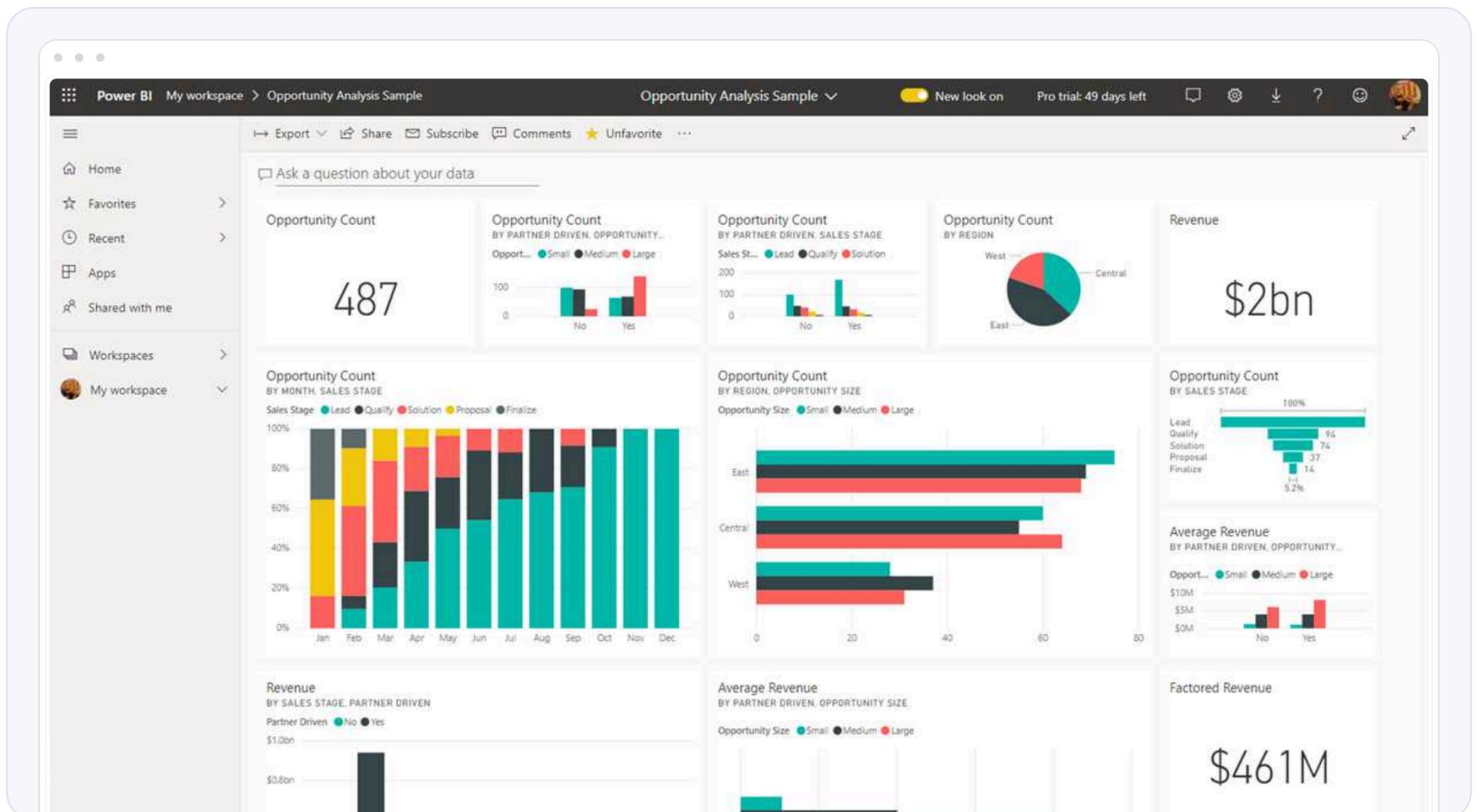
PART 2:

Enabling Data for Business Impact

“Applying greater management discipline to what can often be sprawling data-architecture, -sourcing, and -use practices can unlock significant savings... by enabling greater visibility, standardization, and oversight... companies can recover and redeploy as much as 35 percent of their current data spend.”

-McKinsey

Before you can use your data — for example, getting insights from a dashboard like the one below — you have to ensure its accuracy and organize it. Enter the data platform.



A dashboard in Power BI — a platform that allows users to connect, transform (through its integrated tool Power Query), and visualize data from various sources for strategic decision-making.

A data platform is a set of technologies that collect, store, process, integrate, and manage data from multiple sources to meet an organization’s end-to-end needs, provide access, and enable AI.

Let's say you need immediate information on a specific user's transaction: name, payment method, transaction amount, merchant details, and fraud score. In a low-maturity environment, that data lives in silos. You'll dig through disparate microservice logs for transaction details, check a CRM for user history, open fraud system alerts in separate dashboards, and cross-reference spreadsheets or legacy payment systems.

The same issues arise elsewhere — like analyzing new product feature adoption or tracking real-time liquidity. Without integrated architecture, you're chasing fragmented reports and questioning what's current.

With a modern data platform, this information is modeled into a single source of truth. User profiles, transaction records, and risk data are structured, connected, and accessible to the right people, in real-time.

This is what we call the golden copy.

The Golden Copy: Your Source of Truth



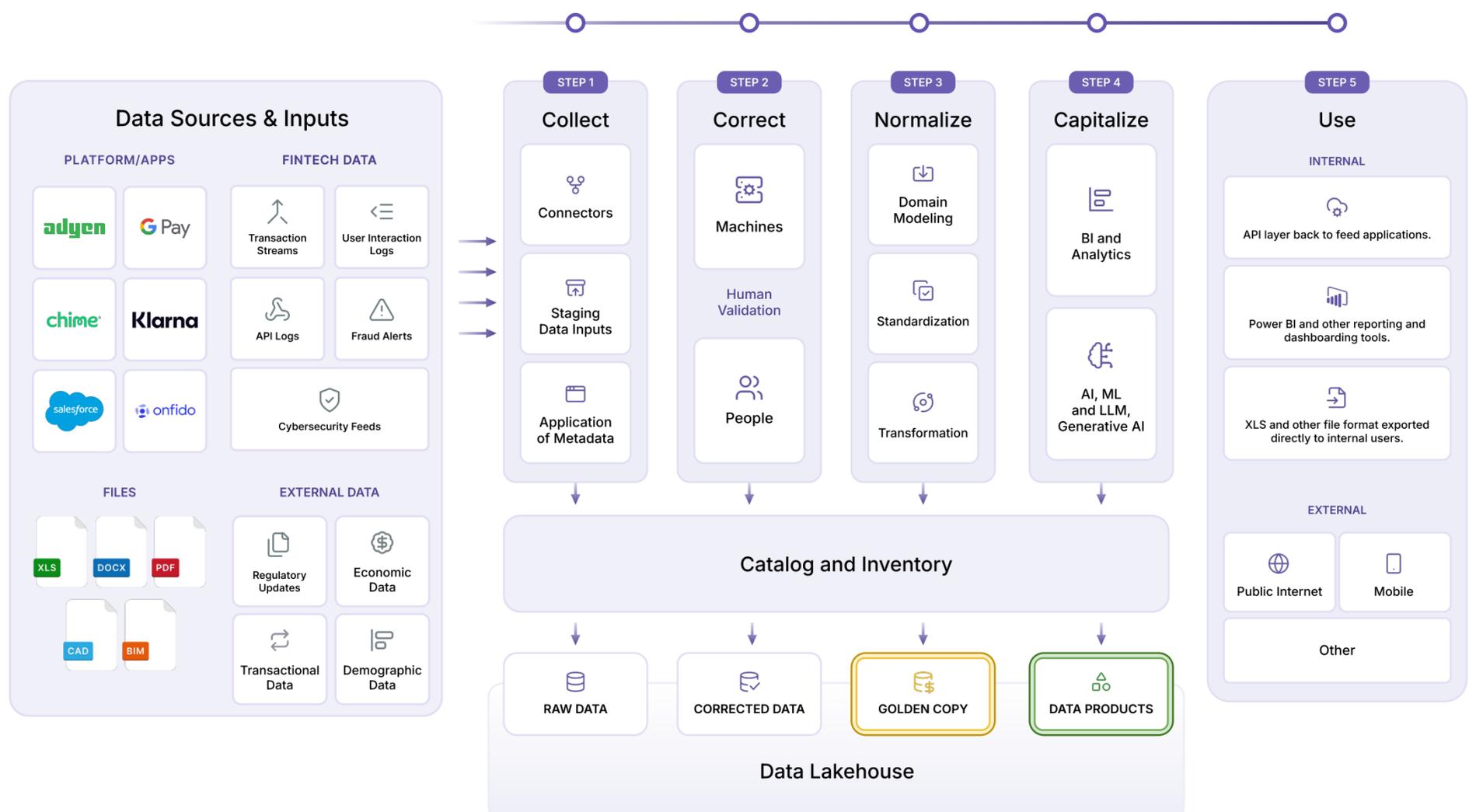
The most important component of a data platform is the “golden copy.” A golden copy is a trusted, accurate version of your data that can be used throughout your organization. It enables better decision making, improves operational efficiency, and supports advanced analytics, reporting, and AI applications by providing a single source of truth.

To create a golden copy and develop valuable data products, you need a solid foundation that ensures data quality and manageability: **the data platform architecture.**

The Modern Approach to Data Platform Architecture

Essentially, data platform architecture is the blueprint for how data flows through a data platform, from ingestion to insights.

Our five-step approach outlines the key components, activities, and data transitions involved in producing high-quality data products. While some organizations describe data progression using Bronze, Silver, and Gold Layers, our model offers a detailed, actionable framework tailored to end-to-end data success.



GROUND ZERO:

Identify Data Sources and Inputs

Many organizations find themselves overwhelmed by the amount of data systems and the increasing complexity of integrations. This can make managing data feel like an insurmountable challenge.

However, organizations can create a repeatable and sustainable roadmap for data success by adopting a structured approach and transitioning raw data from legacy systems (or “systems of record”) into manageable, governable data products. This approach applies to any organization, regardless of its size or industry.

- **Platforms like Stripe, Adyen, Chime, Salesforce**
- **Sources like real-time transaction streams, user behavior logs, API gateway logs**
- **External data like market volatility, social media sentiment, regulatory changes**

STEP 1

Collect

A strong strategy starts with effective data collection and integration. This means identifying relevant data sources like payment gateways or user interaction logs and ingesting them — often via streaming connectors — into a centralized data lakehouse. Popular data collection tools include **Airbyte**, **Azure Data Factory**, and **Fivetran**.

Adding metadata at this stage ensures transparency around data origin, quality, and lineage. Robust data governance and tracking build integrity, helping organizations make confident, data-driven decisions.

STEP 2

Correct

Raw data is rarely perfect. Once collected, it must be cleaned and corrected to ensure accuracy and reliability. Tools like **Monte Carlo** and **DBT** help resolve discrepancies between systems and business realities.

For example, real-time transaction data from different payment processors may contain inconsistencies that require immediate correction. A combination of machine learning and human oversight ensures clean, trustworthy data for real-time analysis and automated actions.

STEP 3

Normalize

Normalization transforms raw data into structured business objects, often called digital twins. A digital twin represents a real-world entity, such as a user account, a payment transaction, or a digital identity. With tools like [Palantir Foundry](#), businesses can bring the right data into their pipeline and ensure coherent data access. **Databricks**, **DBT**, and **Azure Data Factory** are commonly used to normalize streaming data.

The Normalize step enhances data usability by reducing errors and inconsistencies. By standardizing data across multiple sources, organizations create a unified, consistent view that simplifies analysis and decision making.

STEP 4

Capitalize

With clean, structured data, organizations can extract value from it. This is where data becomes an asset — feeding into reports, dashboards, fraud detection engines, and machine learning models that generate actionable insights.

To capitalize on data, businesses often rely on tools like **ATScale** and **Cube**, which help translate raw inputs into trusted outputs. With the right tools in place and a focus on data quality, organizations can optimize operations and drive growth.

STEP 5

Use

The final step is secure, user-friendly access to data products. This includes developing self-service dashboards, APIs, and reporting tools that empower teams to interact with data effortlessly by using popular tools like **PowerBI**, **Sigma BI**, and **Tableau**.

Strong access controls ensure only authorized users handle sensitive data, maintaining security and regulatory compliance.

Traditional Reporting vs Advanced Analytics



Although advanced analytics tools like Power BI and Tableau are on the rise, traditional Excel spreadsheets remain popular due to their user-friendliness and accessibility.

Instead of abandoning spreadsheets altogether, opt for analytics tools that support Excel-like reports. Both [Palantir Foundry](#) and Sigma BI offer business unit-level analysis in spreadsheets connected to your data infrastructure.

Bringing It All Together

At each step of the process, data is cataloged, inventoried, and refined to ensure quality and traceability. The data lakehouse serves as the central hub for storage and management, while the access layer ensures the secure, governed availability of data products.

By following this data platform architecture, organizations can effectively leverage their data to drive innovation, improve decision making, and gain a competitive edge.

Data Platform Best Practices

When building a data platform, it's important to consider scalability, flexibility, security, and governance. A scalable platform can accommodate future growth, while flexibility ensures adaptability to changing business needs. Security measures protect sensitive data, and strong governance policies help maintain data integrity, especially crucial in the high-risk fintech and payment sectors.

Additionally, cost and maintenance are key factors, as some platforms require significant ongoing investment and technical expertise. With many options available, businesses can choose from platforms like [Palantir Foundry](#), which integrates data, analytics, and operations for better decision making, or Microsoft Fabric, an all-in-one analytics solution that simplifies data management and reporting while offering cost-effective scalability.

Seeking the perfect data platform for your organization?

Connect with Proxet for expert advice and a free consultation on best practices!

PART 3:

Leveraging Data for Business Impact

Shifting from treating information as a byproduct to using it as a revenue-generating asset requires a structured process.

Here are three steps to leveraging data for maximum business impact.

STEP 1

Identify Potential Data Products

A data product is an asset that uses data to create value for specific stakeholders.

Just like you would design a software product or a physical product, you need to carefully consider the purpose, audience, and complexity of your data product.

Data products can range from simple to complex, from basic dashboards to advanced AI-powered solutions. The key is to choose the right approach based on your specific needs and capabilities.

Examples of Data Products



Strategic

These data products help organizations strategize for the future.

- **AI-driven product:** Evaluate potential new fintech products or features based on market trends, user behavior, and predictive models.
- **Real-time liquidity management:** Model the impact of payment flows and market events on platform liquidity and capital efficiency.



Tactical

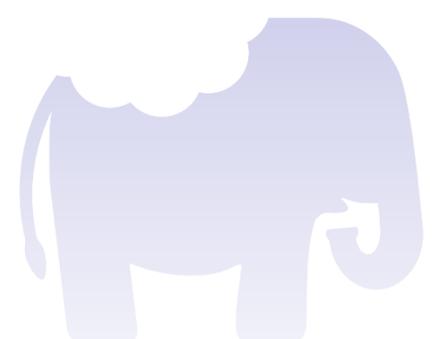
These data products help organizations make short-term decisions in the day-to-day.

- **Self-service transaction analysis:** Empower product managers and operations teams to create their own reports and dashboards on payment success rates, user funnels.
- **Competitor feature analysis:** Develop side-by-side digital product or service comparisons for researching competitors' offerings.

To create data products, follow a structured approach that includes prioritizing valuable products, preparing data, modeling business objects, developing the products using appropriate tools, and deploying them for user access.

Achieving data-driven success might seem like a daunting task, but remember the old saying: 'How do you eat an elephant? One bite at a time.'

Similarly, building valuable data products requires a strategic approach and careful prioritization. In the following section, we will discuss our prioritization framework, which will help you navigate this journey step by step.

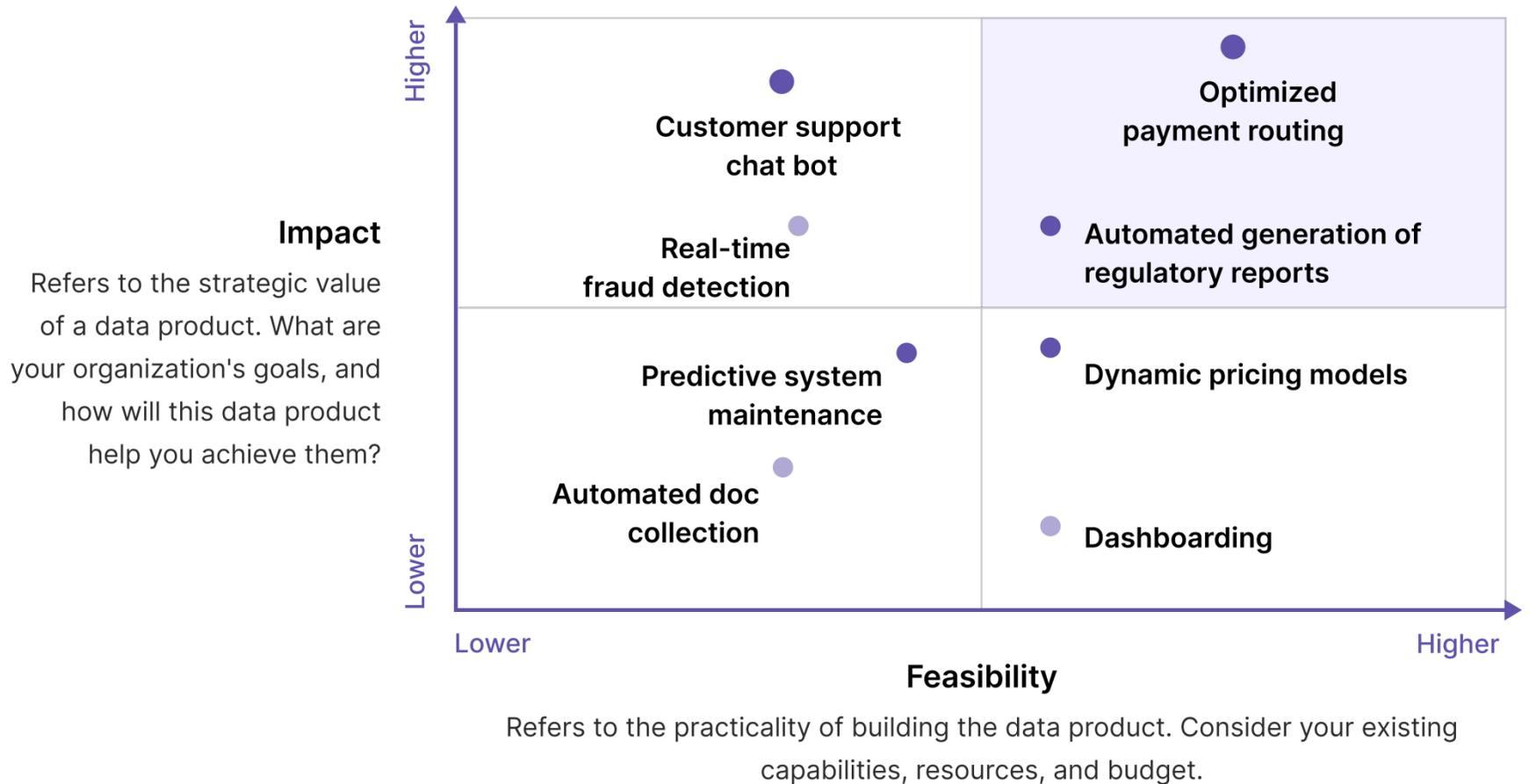


STEP 2

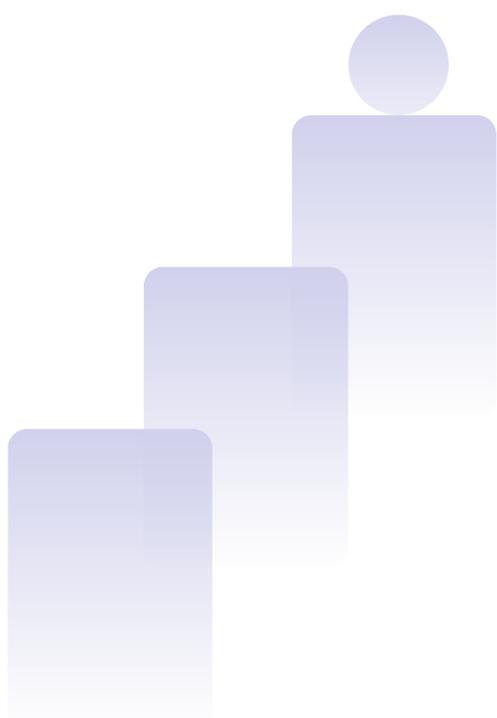
Prioritize Data Initiatives

When it comes to data products, every organization has unique priorities and capabilities. To effectively choose which data products to build first, it's essential to consider both impact and feasibility.

The Impact-Feasibility Matrix allows organizations to evaluate data products, initiatives, and projects for prioritization. Note, every organization will rank a project's impact and feasibility differently based on their data maturity and goal.



How to Prioritize Your Projects



Here's a step-by-step approach to prioritizing data initiatives:

- 1. Identify strategic objectives:** Evaluate potential product opportunities based on market demand, user needs, and competitive landscape.
- 2. Assess capabilities:** Evaluate your current resources, skills, and technology infrastructure.
- 3. Discover potential data products:** Brainstorm ideas for data products that align with your objectives and are feasible, given your capabilities.
- 4. Score and prioritize:** Evaluate each data product based on its impact and feasibility. Visualize your findings using the Impact-Feasibility Matrix or a similar scoring system.
- 5. Build alignment:** Gain consensus among stakeholders on your priorities. This will help ensure that everyone is working towards the same goals.

As your organization grows and its needs change, you will need to revisit and adjust your priorities. By following a structured approach and effectively prioritizing your data initiatives, you can maximize the value of your data and drive business success.

STEP 3

Continuously Improve

Continuous improvement is a powerful methodology that helps businesses achieve long-term growth. At its core, it involves incremental changes to processes, products, and services to improve efficiency and effectiveness over time. But before you can determine where to focus your improvement efforts, you'll need data.

Data is essential to continuous improvement because it provides a clear picture of what's working and what's not. By tracking and analyzing data related to processes, products, and market conditions, businesses can identify areas for improvement and make data-driven decisions. For example, if you notice a pattern of failed payment transactions, you can use that data to build AI to make improvements to the payment routing or fraud detection process.

How to Drive Data Improvements

1. Educate

- ↳ Learn what data can do for you
- ↳ Educate yourself on best practices for data management in your industry

2. Assess

- ↳ Collect and assess the data. Data Maturity evaluations take place
- ↳ Set benchmarks for where you want to be

3. Strategize

- ↳ Analyze the data
- ↳ Examine patterns, trends, and insights to pinpoint areas for improvement

4. Prioritize

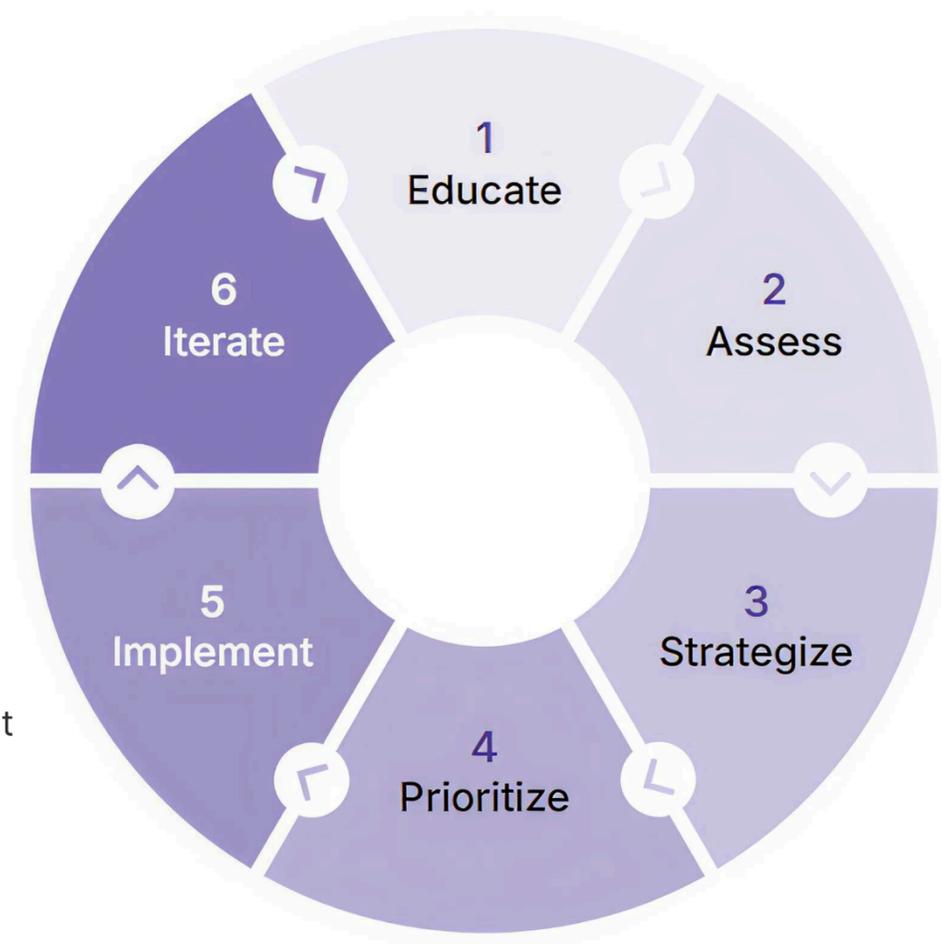
- ↳ Identify focus areas
- ↳ Determine the most critical areas for improvement based on impact/feasibility analysis

5. Implement

- ↳ Take action
- ↳ Apply data-driven changes to processes, products, or services to enhance performance

6. Iterate

- ↳ Review and optimize
- ↳ Continuously refine strategies based on new data to drive ongoing improvements



Conclusion

Many organizations in the fintech and payment sectors struggle with siloed data, poor data quality, and fragmented systems. Those who don't adapt risk falling behind, while those who embrace a structured, data-driven approach gain a sharp competitive edge, driving disruptive innovation.

Data is more than a byproduct — it's a strategic asset. When effectively managed, it fuels smarter decisions, creates new revenue opportunities, and enhances efficiency, particularly in real-time operations.

Key Takeaways

- Industries in fintech and payments are adopting AI, data science, and engineering to build innovative products, optimize operations, and reduce risk.
- Common challenges — silos, poor data quality, and technical debt — can be solved with the right strategy.
- The Data Maturity Model helps companies assess their data capabilities and move from basic reporting to strategic business insights and automated decision making.
- A modern data approach — paired with robust architecture — creates a single source of truth, making data more accessible, secure, and useful for a wealth of valuable use cases.

Kickstart Your Data Innovation with Proxet

Companies that treat data as a strategic asset make smarter decisions, stay ahead of the competition, and drive business value.

Proxet helps organizations like Aurora Payments, General Catalyst, and TriTech turn raw data into actionable insights and use it to fuel innovation.

To determine your organization's data maturity, contact Proxet for a comprehensive evaluation of your data platforms and tech stack.

We'll help you:

- Assess data infrastructure and security vulnerabilities
- Identify automation opportunities to streamline operations
- Evaluate AI & ML readiness for property valuation, forecasting, and insights
- Develop a high-level roadmap for optimizing your tech stack

If you're ready to get more from your data, the experts at Proxet can help.

[Get Started →](#)

At Proxet, we innovate, engineer, and transform your future

Proxet is a global full-service firm specializing in custom software development and digital transformation services.

We deliver the personal touch of a boutique firm and the boundless innovation and business acumen of a large consultancy.

We offer data, AI, cloud, product engineering, and managed teams solutions to clients around the world and across multiple industries.

Proxet proudly boasts a 90% client referral rate, and 80% annual client retention. We've been fortunate to serve leading brand clients on their digital transformation journeys, including Mass General Brigham, General Catalyst, Roku, Chewy, and Trip Advisor.

Why choose Proxet for your fintech or payments business?

- Our experience designing digital transformations for leading tech-forward companies and ability to scale data and AI teams will help you leapfrog your peers.
- We've built a strong foundation that combines the right skills, continuous learning, and a consistent approach to hiring — ensuring that we grow without losing quality. This lets us move faster, handle more projects, and deliver great results every time.
- Our team is skilled in leading data platforms like Palantir Foundry, Databricks, and Snowflake, working across all major clouds. We have fintech and payments expertise with systems like Adyen and ACHQ, and strong coding and reporting skills. We use top big data, orchestration, and integration tools, and also build ML models for predictions, recommendations, and forecasts.
- We get the job done! Our engineers focus on using the best technologies to solve your most pressing challenges — whether they involve automation of highly manual and error prone workflows or the application of advanced analytics and AI to optimize real-time payment processing and digital product performance.