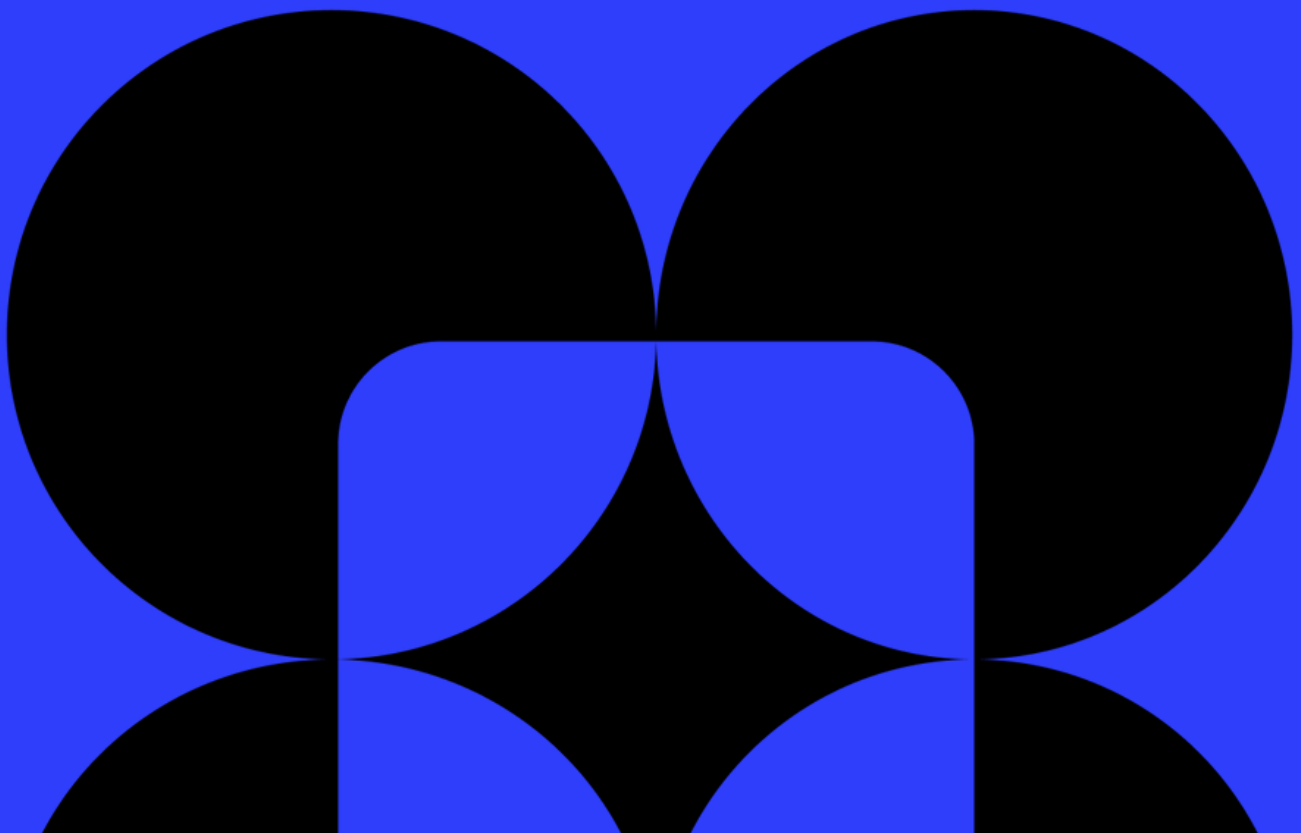


BUILD VS. BUY

The Retail Guide to Data and AI Infrastructure

A practical worksheet to help commerce teams scope the cost, effort, and trade-offs of building in-house vs. buying.

www.chordcommerce.com



INTRODUCTION

We're here to make the choice easier

Whether you build in-house or partner with a platform, the goal is the same: a reliable data and AI foundation you can trust. What matters most is making the right call for your retail business.

The challenge is particularly acute for retail and ecommerce. The martech landscape grew again since last year, up 9% to 15,384 solutions, representing explosive growth from just over 150 tools in 2011. Meanwhile, commerce teams are struggling with the consequences of this complexity.

35% of commerce technology projects fail to meet objectives
95% of enterprise AI pilots fail to deliver measurable business impact

These project failure rates aren't theoretical—they're happening right now across both traditional commerce tech and AI initiatives. MIT research shows that AI pilots fail not because the technology is broken, but because organizations can't move beyond controlled experiments to real-world implementation. Tool complexity (31.4%) and vendor management was the top martech challenge for large companies. Cost of ownership is also a significant concern for the future of martech stacks, reported by 19.5% of respondents according to the 2025 State of Your Stack Survey. The proliferation adds cost, complexity, and fragility—slowing down the very insights and activation that drive growth.

This worksheet is designed to help you scope the real lift: from resourcing and technical scope to cost, risk, and opportunity cost. By the end, you'll have a clearer picture of what's worth building yourself—and what's better to buy.

Need an easily editable format? [Use our Notion Template.](#)



PEOPLE & RESOURCING

Your stack is only as strong as the team behind it. Map out who will own the build and, more importantly, who will keep it running long-term.

Role	Responsibilities	Name or Team	Available Bandwidth?
Data Architect	Schema design, modeling, data governance		
Data Engineers (1-2)	ETL pipelines, integrations, observability, QA		
Analytics Lead	Metric definitions, reporting logic, stakeholder alignment		
AI/ML Engineer	Context modeling, prompt infrastructure, validation		
Marketing & Ops Leads	Use-case scoping, campaign integration		
Compliance & Access Owner	Permissions, governance, audit trails		

Building is only half the battle. Your data foundation will need maintenance, security, and improvement to stay reliable as your business grows. Make sure these roles are lined up for the long haul.



Building a foundation means covering every layer, from raw infrastructure to AI readiness and activation. Check off what your stack will need to support.

CORE INFRASTRUCTURE

- Cloud data warehouse (e.g. Snowflake, BigQuery)
- ETL/ELT pipelines and transformation logic
- Scalable historical data storage
- Real-time data streaming or processing engine

ANALYTICS & IDENTITY

- Cross-platform identity resolution
- Cohort-based LTV and attribution modeling
- Governed, explainable metric definitions
- Version control, QA, and schema management

AI READINESS

- Organized data for context modeling
- Explainability and traceability across outputs
- Prompt infrastructure for safe and reliable copilots
- Guardrails to prevent hallucinations and drift

ACTIVATION LAYER

- Segmentation and orchestration logic
- Real-time output routing to marketing and ops systems
- Direct integrations with ESP, CRM, ad networks, social media, analytics platforms, and more

Most internal builds only cover some of these requirements. Very few deliver all of them—especially with governance, security, and performance built in.



Step back and look at the big picture. Are you solving something unique, or rebuilding what already exists? These questions can help clarify your path.

Category	Your Estimate
Internal team hours per month	
External vendors or tooling	\$
Time to launch (take your ideal and add 6–8 weeks)	----- months
Ongoing maintenance (annual)	\$
Risk of delay or knowledge loss	High / Medium / Low

UNDERSTANDING TECHNICAL DEBT

Technical debt isn't just a theoretical concern—it has measurable business impact. Companies pay an additional 10 to 20 percent to address tech debt on top of the costs of any project. Some 30 percent of CIOs surveyed believe that more than 20 percent of their technical budget ostensibly dedicated to new functionality is actually consumed by technical debt management.

In aggregate terms, tech debt costs \$2.41 trillion a year in the US alone and would require \$1.52 trillion to fix. While these are macro-level figures, they illustrate how quickly technical shortcuts compound into significant operational overhead.

Don't just count dollars. The opportunity cost of slow launches, delayed insights, unclear ownership, and technical debt can be more than the line items. Factor in the 10-20% overhead McKinsey identifies as the cost of managing technical debt on every project



GUT CHECK

You don't have to choose between speed and control

Step back and look at the big picture. Are you solving something unique, or rebuilding what already exists? These questions can help clarify your path:

- Are we solving a unique challenge, or rebuilding what already exists?
- Is this the best use of our technical and operational resources?
- Can we deliver this faster, cheaper, or more reliably than a purpose-built platform?
- Are we prepared to own this infrastructure indefinitely?
- Have we accounted for the 10-20% technical debt overhead on future projects?

Consider that Gartner estimates by 2028, I&O leaders using structured methods for managing infrastructure technical debt will report 50% fewer obsolete systems than those who do not. The question isn't whether you'll accumulate technical debt—it's how you'll manage it.

Not sure? That's exactly what this was for.

If this exercise gave you confidence to move forward with an in-house build—great. If it exposed gaps, risks, or unknowns—that's valuable, too. You don't have to choose between speed and control.

With Chord, you get a commerce-native foundation that's already built, battle-tested, and ready for AI, so your team can move faster without taking on unnecessary complexity.

Want to talk it through? Reach out to our team for a pressure-free consult. We'll walk through your stack, your goals, and where you might not need to build from scratch.





Build what's unique. Buy what already works.

Your data and AI foundation doesn't need to be complicated. What matters is clarity: knowing when to invest in building, and when to lean on proven solutions.

That's why we created this worksheet—to help commerce teams map the real lift, pressure-test assumptions, and make confident decisions.

If building in-house is the right call, you'll know it. And if it isn't, Chord provides a commerce-native foundation that's already built, battle-tested, and ready for AI—so your team can move faster without unnecessary complexity.

See how Chord can help today: chordcommerce.com



Sources

1. ChiefMarTec (2025). "2025 Marketing Technology Landscape Supergraphic: 100X growth since 2011, but now with AI..." May 7, 2025.
2. G2 (2024). "The State of MarTech: G2 Data Reveals Latest MarTech Trends."
3. [MarTech.org](#) (2025). "These are the challenges and barriers impacting your martech stack." April 16, 2025.
4. McKinsey & Company (2023). "Breaking technical debt's vicious cycle to modernize your business." April 25, 2023.
5. McKinsey & Company (2024). "Digital Transformation Study 2024." Referenced in Shopify Enterprise Blog.
6. MIT Project NANDA (2025). "The GenAI Divide: State of Enterprise AI Adoption." July 2025.
7. Accenture (2024). "What is Tech Debt?"
8. Gartner (2025). "Reduce and Manage Technical Debt." May 30, 2025.
9. WebFX (2024). "30 Martech Statistics to Elevate Your Strategy in 2025."
10. Shopify Enterprise (2025). "How to Build an Ecommerce Tech Stack in 2025."

