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# Building a Modern Data Practice in the AI Era

*Designing Clean, Consented, Actionable Data & Pipelines for AI Project Success*

**April 27th, 2026**

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INVESTOR'S BUSINESS DAILY Market

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# Anthropic Extends Enterpri
# Software Stocks

Licensing

REINHARDT KRAUSE | Updated 01:32 PM ET 02/24/2026

Artificial intelligence model builder Anthropic on Tue
disruption in the software industry by showcasing co
hammered by its product roll-outs. Shares in Salesfo
(INTU) and other software stocks climbed.

At an event in New York City, Anthropic focused on h
leveraged to deploy "agents" in enterprises. Anthropi
Cowork" ecosystem. But Anthropic emphasized that
generally harvest to be useful.

"After watching Anthropic's enterprise agents briefir
that model providers are unlikely to displace softwar
themselves and their agents to be an orchestration la
existing and incumbent systems," said Deutsche Bank

# JetBlue hit with lawsuit after accusation airline used personal data to hike ticket prices

NEW YORK POST | REUTERS
Thu, April 23, 2026 at 9:29 AM PDT

0


JetBlue Airbus A320 series passenger aircraft of the low cost airline as seen at the tarmac and jet bridges of LaGuardia Airport in New York City with the airline logo...

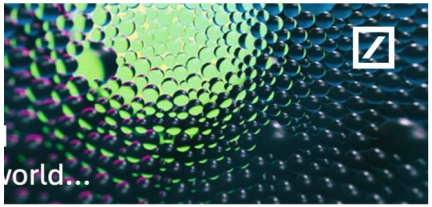
JetBlue has been sued in a proposed class action claiming it uses customers' personal data to set ticket prices, after its response to a social media post raised concern that the carrier employed "surveillance pricing" to make flying more expensive.

only) Deutsche Bank Research (public)

anage preferences

itself and the world...

Full screen Download




eight on the near-term obstacles to
. These range from data quality and
nts such as access to energy. Conversely, we
kely even larger than implied—extending well
proved analytics as genuinely new economic

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## Practical Education + Applied Strategy

# TOPICS

| | |
|---|---|
| The AI Data Reality Check | |
| Three Components of AI Data Quality | |
| | Anatomy of an AI Maturity Strategy |
| Four Phases of Data Orchestration | |
| | Choose the Right Use Case to Start |
| AI Data Metrics | |
| Break | |
| | Use Propensity Modeling to Level Up |
| Building an AI Data Practice | |
| | AI Ecosystem Integration to Win |
| The Data Orchestration Strategist | |
| | Tealium's Connected AI Playbook |

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# The AI Data Reality Check

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# **The AI Reality Check:** The Data Paradox

- Organizations are “drowning in data;” while starving for insights and outcomes
- Companies collect hundreds to thousands of data points per day, yet only a tiny fraction ever informs decisions or result in activation
- The rest increases cost, complexity, and risk without adding value

Companies without a strong data strategy only achieve 60% of their goals;

Those with a strong strategy achieve 89% of their goals

Typical large enterprises lose ~$12.9M annually to poor data quality;

multiplied across enterprises this becomes a trillion-dollar problem

**“More Data”**
**≠**
**“Better AI”**

More data can actually hurt if it increases noise, bias, or inconsistency; what models need is fit-for-purpose data, not simply volume

A simple analogy:

Feeding a model “all the data we have” is like feeding a high performance race car low-quality fuel

*more bad data doesn’t make the model run better*

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# **The AI Data Reality Check:** Challenges Impacting AI Initiatives

### AI is Bottlenecked by Data, not Models

Most AI failures trace back to data issues: fragmented identity, poor quality, missing consent lineage, and broken activation—not models or technology

### Governance is Treated as a Blocker

Without a structured way to answer “Should we use this data for this AI purpose?”, privacy and legal teams slow initiatives or say “no” late in the process

### Data Responsibilities are Fragmented

Data, AI, privacy, and business teams often pursue AI initiatives independently; key groups operate separately and have different languages

### No Single Owner for the AI Data Lifecycle

The orchestration flow (If one exists at all) is split across multiple teams, so no one is accountable for AI-ready data end-to-end.

### Lack a Clear View of AI Data Readiness

Traditional data KPIs (volume, uptime, query speed) don’t reveal whether data is clean, consented, and actionable for AI use cases

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# **The AI Reality Check**: How Bad Data Breaks AI

## Low-Quality Data

When data comes from many sources; missing values, bad labels, and inconsistent formats can make it impossible to use or connect

## Stale Data

Outdated data drives drift and weak predictions; recent activity is a far stronger predictor of behavior than vast amounts of old data

## Unreliable Identity

Multiple IDs and poorly linked identities fragment customer profiles, preventing the model from seeing a complete history to act upon

## Inconsistent Definitions

If terms like “active user” or “churned customer” are defined differently across systems, model labels won’t match how the business interprets predictions

## Weak Consent Lineage

If you can’t prove which data was collected for what purpose, you may be legally or ethically at risk to use it for training, even if it is technically available

## Activation Gaps

Data is worthless, even risky, if it doesn’t feed decisions or result in action; even a highly accurate model fails when the data is not activated

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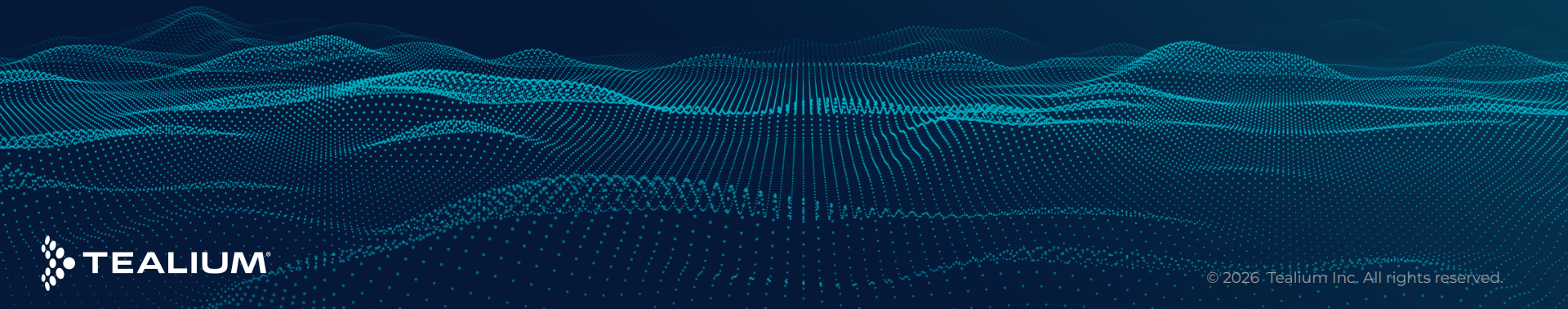
# Garbage In = Garbage Out

Seemingly small inaccuracies in data,

can be significantly magnified by AI at scale.



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# Questions for Consideration

- How many have had experiences where data issues impacted a project or initiative?
- How many feel your organization's data is truly ready for AI today?
- How many have an AI pilot today that is already delivering measurable business value?

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# Three Components of AI Data Quality

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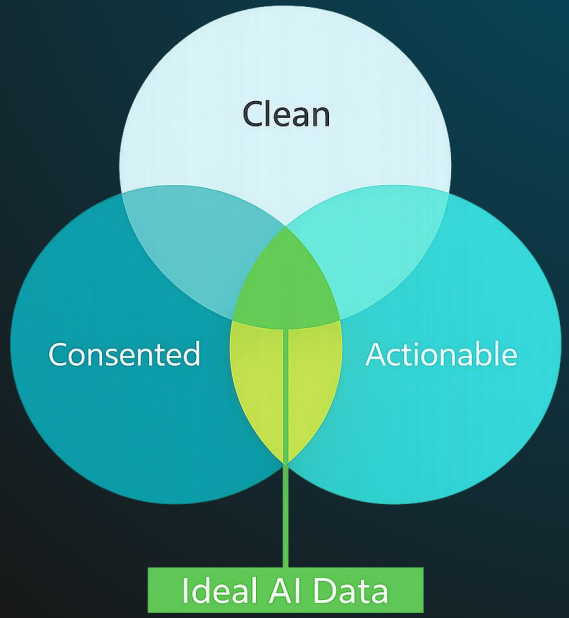
# **The AI Data Success Trifecta:** Clean, Consented, Actionable

- **Clean**: Accurate, de-duplicated, standardized events and identities from web, app, POS, call center, etc., unified into a real-time profile layer.
- **Consented**: Purpose-based consent and global privacy control enforced at both client and server, across all systems and warehouses.
- **Actionable**: Data must flow with the right latency and granularity into activation systems (email, ad, onsite, call center, AI agents) with strong feedback loops for verification and improvement.

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# **Clean Data:** Data Quality Dimensions for AI

## Accuracy

Data accuracy is the extent to which unified customer profiles and their associated data reliably represent the true customer (e.g., names, emails, preferences), enabling confident decision-making and personalization

## Completeness

Models often depend on key attributes being present; when identity is fragmented (e.g., separate IDs per channel), the model sees partial histories that undermine pattern discovery

## Consistency

The same concepts should be encoded consistently across sources; differing formats or units (e.g., currencies, time zones) confuse AI models

## Timeliness

Stale data can cause models to optimize for patterns that no longer hold — impacting critical use cases like fraud, personalization, or supply chain

## Skew

Models learn from training data, but run on inference data—If features are computed differently performance degrades, this skew often is why models look great but fail in production

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# **Clean Data:** Design for Clean at Capture

## Establish Clear Shared Data Definitions

Define canonical schemas and data contracts for core entities so that teams know which fields and formats are authoritative

## Think Upstream

Encourage “designing for clean at capture” rather than assuming issues will be fixed later, this might include enforcing required fields, standardizing event names, and aligning on shared definitions

## Check Data At the Door

Introduce validation and anomaly detection at ingestion (e.g., checking for impossible values, unexpected spikes in missing data)

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# **Consented Data:** Why Consented Data Is Essential

- Consented data is not just about a checkbox; it's about a clear, documented understanding of how and why the data was collected and what the individual was told their consent was related to
- AI systems often repurpose large volumes of data for new uses - without clear consent and purpose alignment, AI can breach expectations and rules
- Trustworthy AI requires that individuals would not be surprised—or harmed—by how their data is used

## Limitation & Minimization

- **Purpose Limitation**: Use data only in ways aligned with why it was collected - This means that data collected for, say, "service improvement" cannot automatically be repurposed for unrelated AI-driven profiling
- **Data Minimization**: Collect and retain only data necessary for a well-defined AI outcome

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# **Consented Data:** Operationalizing Consent for AI

### Capture Consent at Collection

Explicitly capture consent for data use at the initial point of collection, be sure to be clear on all the different uses that the data will be utilized for right up front

### Advocate for Consent Metadata

Such as permitted purposes or legal bases - alongside the data itself; add explicit tags or flags that say “This data is OK for this kind of use; but not these.”

### Align Data, AI, and Privacy Teams

Align on repeatable approval policies and processes, enforce policies before data is used to train or run models

### Review Datasets *before* Training Models

Not after deployment; encourage pre-training reviews where data owners, privacy, and AI teams jointly decide if a dataset is appropriate, rather than handling this after deployment

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# **Actionable Data:** Considerations for AI Outputs

### Move From Events to Features

- Models learn from features, not logs - Click events, transactions, are the raw, but models work from aggregated representations (e.g., “visits in last 30 days,” “average order value,” “time since last complaint”)

### Define what Needs Real-Time vs. Batch

- Some decisions require in-session signals (e.g., fraud, on site recommendations), others can rely on longer updates (e.g., lifetime value, churn risk)
- The question is: “How fresh does this data need to be for this decision?”

### Embed Activation

- AI does not create value on its own; its outputs must be embedded where humans or systems decide or act.
- AI outputs are: scores, labels, rankings, recommendations, forecasts and create value when integrated into customer experiences, workflows, and decision systems

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# **Actionable Data:** Where Insight-to-Action Breaks

### Lack of Business Engagement

Business teams are not involved early, so they don't trust or understand how to use the model's outputs


### Data Not Activated

Outputs are written to a table or log but never wired into the front-end or workflows, leaving "insights on the shelf"

### Latency

Latency between prediction and delivery is too high, so the context has changed by the time action is taken

### No Learning

There is no feedback loop to learn what happened after the prediction

The way to avoid this is to make activation explicit and defined
what system, what trigger, what action, what time, what feedback

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# Questions for Consideration

- Which of these is hardest in your organization; Clean, Consented, or Actionable? Why?
- Do your teams know what data can (or should) be used for AI - and what can not (or should not)?
- Do your models trigger actions today?

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# Anatomy of an AI Maturity Strategy

## Leveraging AI Output in the Context of Tealium Use Cases

AI's rapid evolution will open new ways to utilize data, driving a transformative wave in technology...

...Tealium will provide the **essential data infrastructure** to help organizations **seamlessly integrate AI into their customer experiences & personalization efforts.**

***Organizations are running towards AI everywhere, but the adoption of production-scale AI can be slow. Tealium provides the data necessary to get value from your AI initiatives.***

***Technology is not the hardest part.***
***77% of the hardest challenges [are] invisible and intangible costs: change management, data quality, and process redesign.***
***61% of successful projects included at least one prior failure, whose costs never appear in the final ROI.*** [1]

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# Tealium's AI Differentiators

***How Tealium Powers Your AI Strategy***

## Real-Time Data Foundation & Contextualization

*Laying the groundwork for AI with clean, contextual, and real-time data.*

Real-Time Data Collection

Data Labeling & Enrichment

Event, Visit, and Visitor Data Capture

## AI Enablement & Interoperability

*Powering seamless integration between Tealium and AI/ML systems for activation of AI.*

AI Output Activation with Real-time Integrations

Moments API for RAG and MCP Interoperability

Model Input/Output Exchange with Functions

## Tealium-Native AI Capabilities

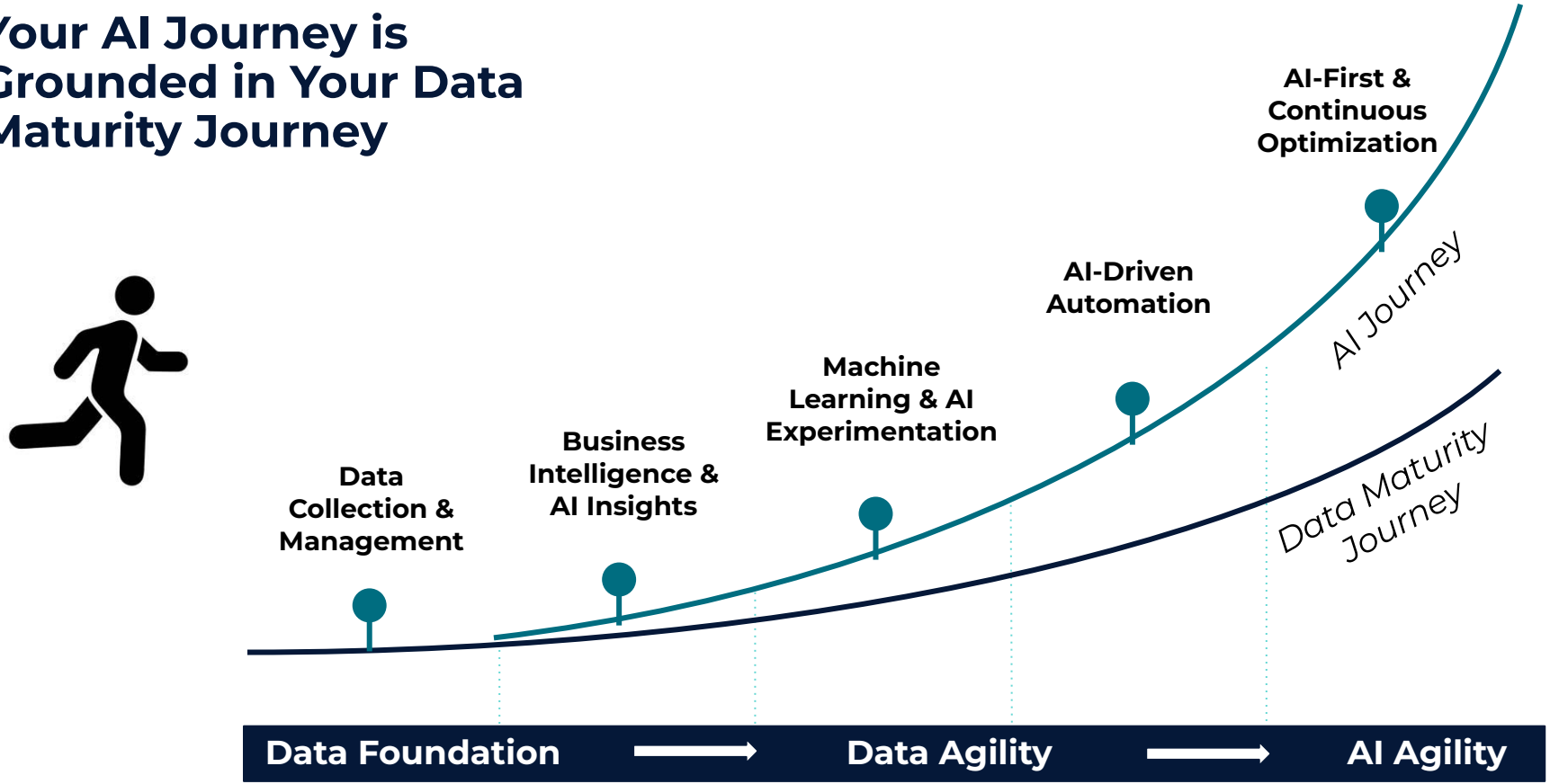
*AI products and features built directly into the Tealium platform.*

**Tealium Predict -** AutoML for propensity scoring

**Tealium AI Assistant -** Natural Language Processing interfaces to support users in Tealium

Recommended Data Layer, Attributes, and Audiences (in-development)
Real-time AI with Moments AI (in-development)

# Your AI Journey is Grounded in Your Data Maturity Journey

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# AI Maturity Strategy

Engagement Model

**1. Foundational Rules-Based Audiences**

Use AudienceStream to **create business rules enabling us to identify and segment the most engaged users** within specific business categories.

**Deterministic Rules**

Propensity Model

**2. Increase Accuracy by Using Predict ML**

**Leverage propensity scoring alongside engagement modeling** to prioritize audiences most likely to convert.

**Propensity Rules**

Integrate Advanced Models

**3. Automated Real-Time AI Data Supply Chain**

Enable AI teams to **consume contextual profile data from AudienceStream, use it to train internal models, and activate output** from those models using Tealium's real-time integrations.

**Bring Your Own Model**

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# Four Phases of Data Orchestration

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# Four Phases of Data Orchestration


Get the right data into the ecosystem - connect to web, mobile, offline, data clouds, etc.

Ensure the data is consented, lawfully used, ethical, and responsibly managed

Transform and manage raw inputs into AI readable and ready for action features

Wire AI outputs into activation platforms and decision systems that directly impact experiences

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# **Connect:** Getting the Right Data for the AI Model

Connect is how events, transactions, and reference data flow from sources into your data & AI platforms

This brings together online + offline + cloud data (web, mobile, POS, call center, CRM, CDW) data sources

Not just integration; a coherent plan for all the data needed for the AI use case (personalization, churn, risk, fraud, service)

### Identity Resolution is an AI Requirement

- Moving from channel IDs to enterprise identity (customer, household, account)
- Handling anonymous-to-known journeys; cross-device and cross-domain stitching

### Completeness & Timeliness

- Define “must-have” vs. “nice-to-have” fields for a given AI use case
- Define when you need the data

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# **Govern:** Data use is Lawful, Ethical, and Controlled

Includes tracking where data came from, what it was collected for, for what was it consented, who is allowed to use it, how is it allowed to be used, and under which conditions

Position governance as a business enabler; when you can demonstrate control and compliance, stakeholders are more willing to approve AI use cases

Well governed data reduces organizational risk - reframe governance from a blocker to a strategic accelerator

## AI Governance Failures are Often Basic Data Governance Failures

- Data without lawful basis or traceable consent
- Inability to explain what data and which purposes underpin a model

## Always Keep an Eye on Regulatory Realities

- Give thought to the impact of GDPR, CPRA, and emerging AI / sectoral rules are evolving at data level
- How consent, minimization, and data subject rights intersect with AI training and inference

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# **Transform:** Turning Raw Data into AI-Ready Features

Transformation is where AI value is either unlocked or lost

Transformation is where you compress click-stream complexity and individual data points into representations models can learn from and act upon

It is critical to maintain consistent transformation logic across training and production instances

## Raw Data vs. Feature-Ready Data

- From clickstreams and events to features, labels, contexts, and windows (number purchases in 30 days, lack of activity in 90 days)

## Standardization & Enrichment

- Schema standardization (naming, types, constraints)
- Enrichment from external sources (ID graphs, product catalogs, risk scores, CDW outputs)

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# **Activate:** Deliver AI Outputs into Real-World Workflows

Transferring model scores, segments, and feature-based decisions from AI platforms into orchestration tools for action

Activation closes the loop between AI insight and real-world action - it ensures that predictions show up where they are needed: in campaign tools, customer experiences, agent desktops, and operational systems

This step also includes capturing the results so AI systems can be monitored, evaluated, improved

### Operationalizing AI Outputs

- Personalization (content, offers, journeys)
- Decisioning (eligibility, risk, prioritization)
- Automation (agent assist, bots, triggered workflows)

### Insight Without Activation = Zero AI ROI

- Models that predict churn but don't trigger saves
- Recommenders that never reach the front-end or contact center

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# **Data Orchestration:** Common Pitfalls

### Inconsistent Schemas and Naming Conventions across Sources

Define and enforce a single, documented canonical data model with governed naming standards, then map every source into it at the integration layer

### Data that is Housed in Silos and not Able to be Connected

Implement a single, shared identity (e.g., a governed customer / account ID) that every system must publish to and consume from, instead of trying to connect silos point-to-point.

### Fragmented Data Collection Across Teams and Tools

Establish one centralized, governed collection layer (data layer) that all teams and tools must use, so events are captured once in a consistent way and then fanned out to downstream systems

### Late-stage Data Stitching in the Warehouse Instead of at the Leading Edge

Avoid over-reliance on downstream cleansing and stitching of profiles instead of clean and stitched at capture

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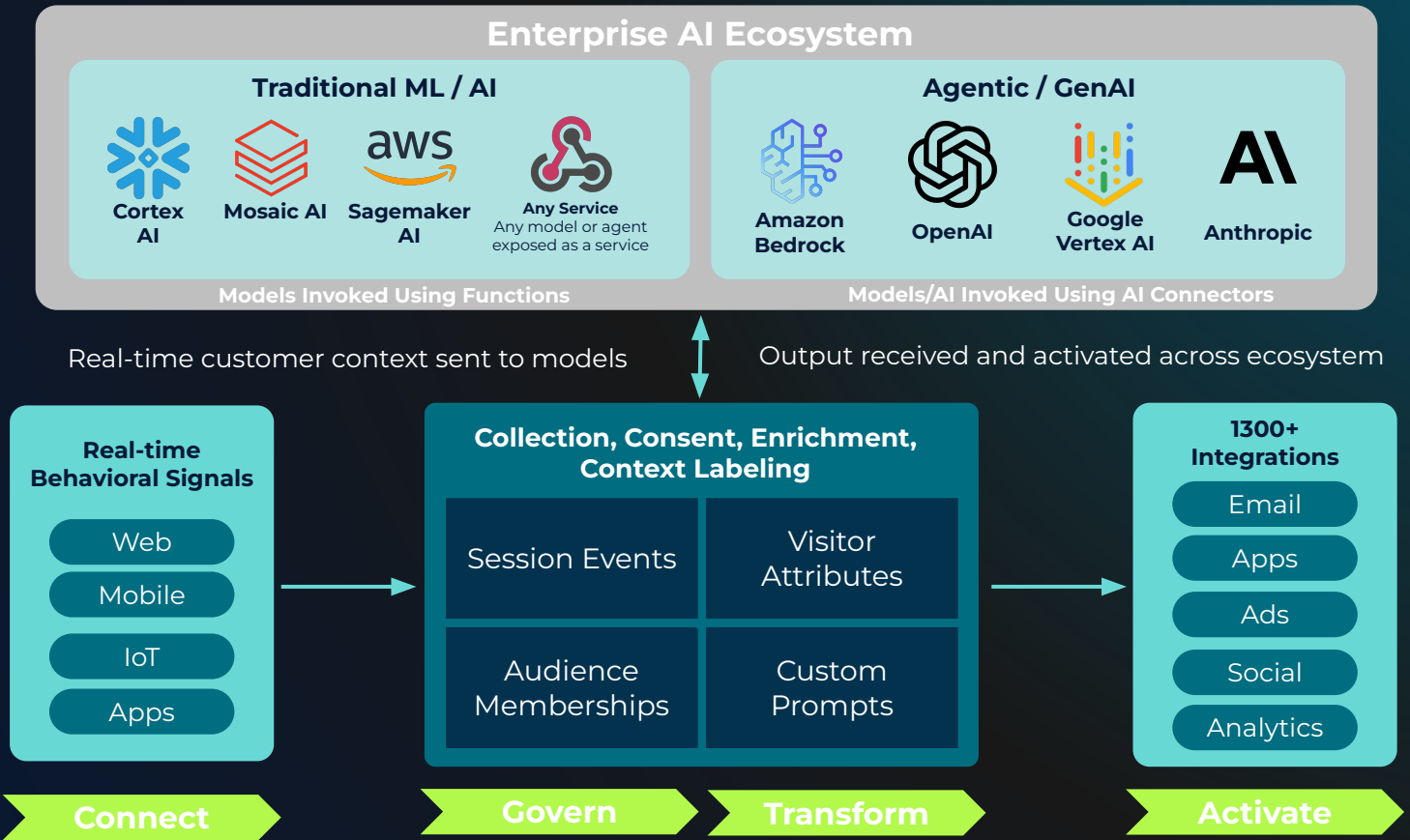
# Example Tealium and AI System Architecture Orchestration

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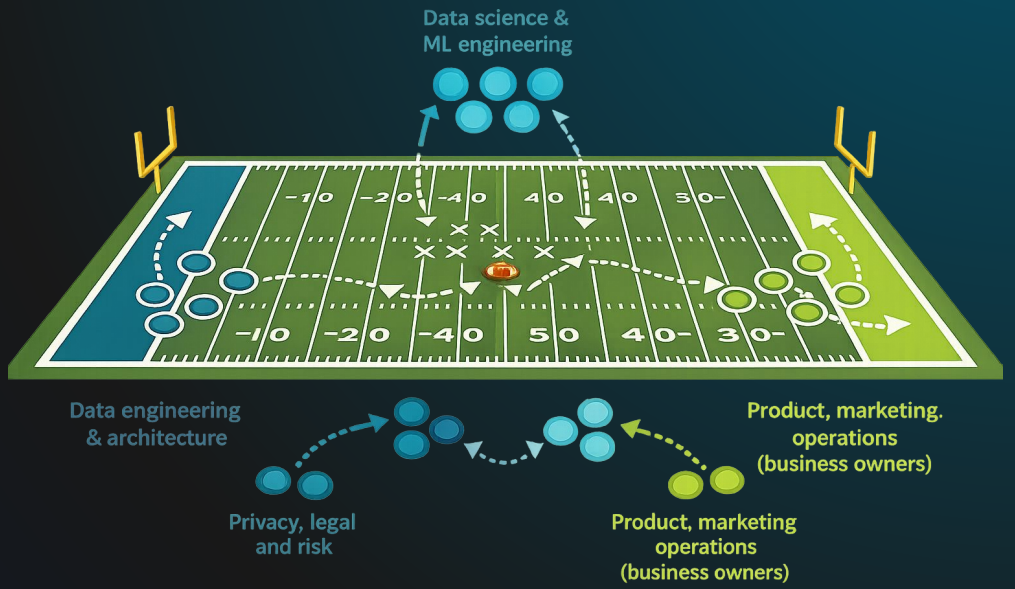
# **Managing the Four Phases:** It's a Team Sport

- Think of this as a shared model for cross-functional teams
- Instead of each group focusing only on their own tools, everyone can see how their work fits into orchestration process
- No single team owns the entire chain; instead, organizations need shared expectations and handoffs that cross traditional silos
- Think in terms of co-ownership between data, AI, governance, and business teams, rather than viewing any stage as "somebody else's problem"

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# Questions for Consideration

- Do you truly have orchestration, or just integrations?
- Which phase is strongest? Which is costing you the most time and value?
- Where do initiatives usually stall, and who owns fixing it?

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# Choosing the Right Use Case to Begin Your AI Journey

## Foundational Rules-Based Audiences

# Enterprise AI Use Case with Tealium: Engagement Scoring

| | AI Maturity Level | Engagement Scoring Audience Creation |
|---|---|---|
| 1 | **Foundational**<br>**Rules-Based Audiences** | Define categorical engagement scoring rules and create audiences leveraging user behavior. |

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# Tealium Data Scopes


Tealium collects and processes events, which are **a single interaction or action taken by a user.**

This can be a page view, a button click, a purchase, a form submission, or any other digital activity captured by Tealium.

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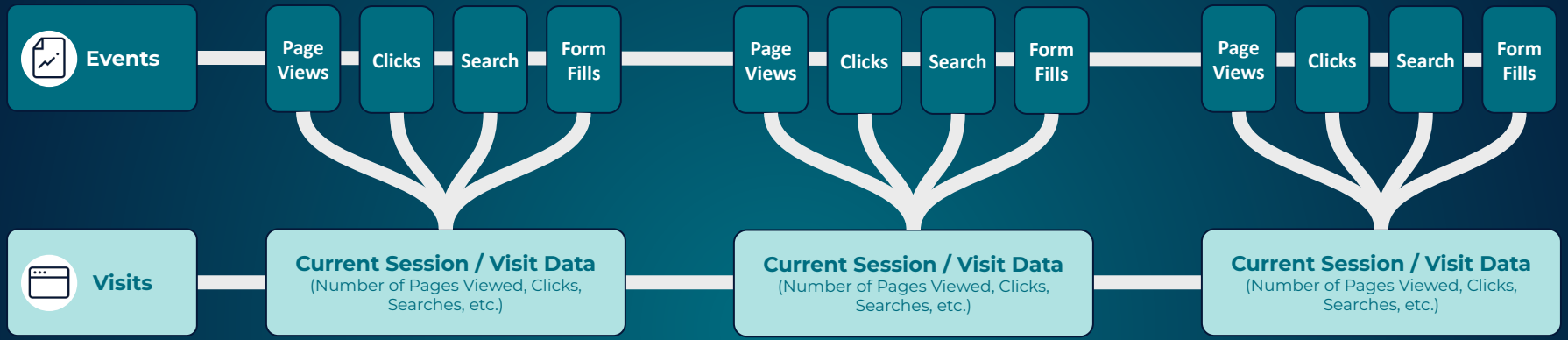
# Tealium Data Scopes




Tealium collects visits (or sessions), **a collection of events that occur within a specific time frame** during a user's interaction with a website or app.

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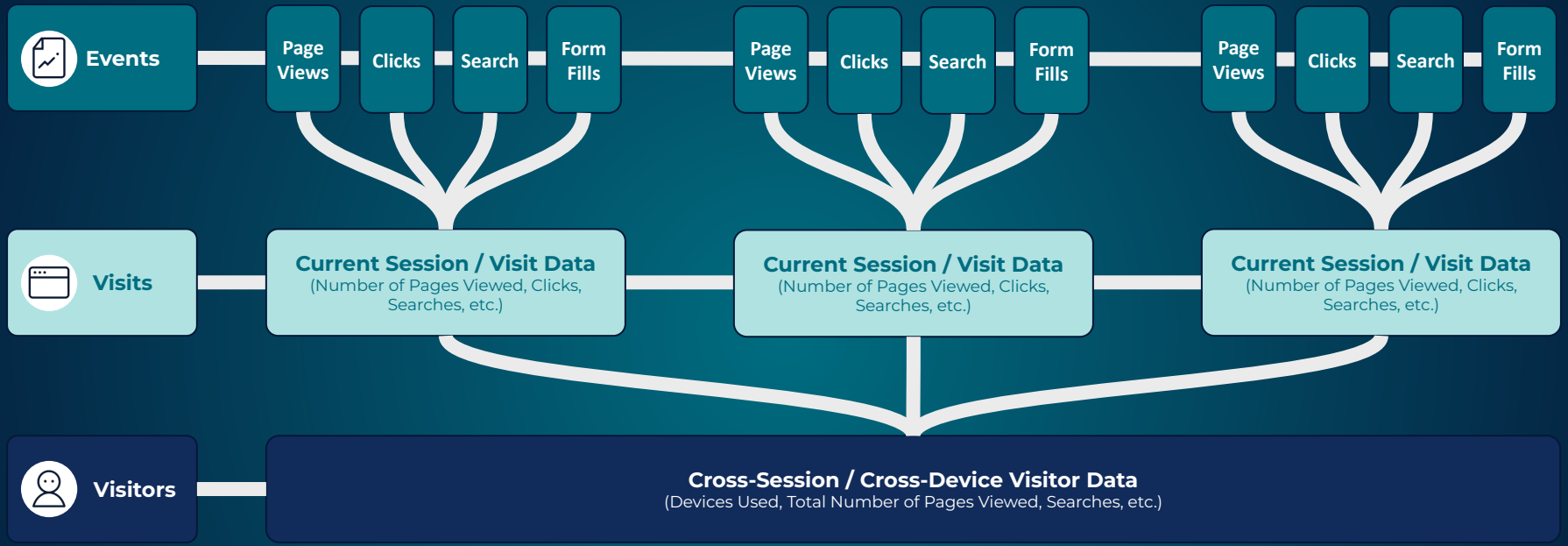
# Tealium Data Scopes




Leveraging Tealium's real-time Identity Resolution, Tealium creates visitor profiles using persistent identifiers (e.g., cookies, customer IDs, device IDs) and can create and capture visitor data in the form of Attributes.

**Audiences can be created by defining business rules that group visitors who share common Attributes.**

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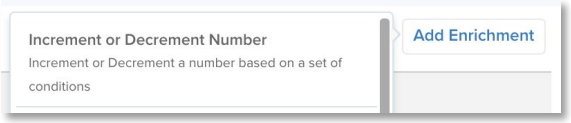
# Foundational Rules-Based Engagement / Lead Scoring M

## CALCULATING INTENT SIGNAL BASED ON THRESHOLD SCORING

Use data from the CDP to classify customers based on engagement metrics. **Assign weighted scoring to the Engagement Score Visitor attribute** based on user interactions with owned content.
**The more we know about the consumer and the deeper their engagement, the higher their score.**

**Consumers with a higher score represents potential high-intent prospects.**




| Profile Data | Points |
|---|---|
| Add to Cart (Flag) = true | TBD |
| Offer Seen (Flag) = true | TBD |
| Category Viewed (Flag) = true | TBD |
| Categories Viewed > 3 | TBD |
| Product View (Flag) = true | TBD |
| Products Viewed > 3 | TBD |

| Profile Data | Points |
|---|---|
| More than 3 visits over 7 days | TBD |
| Where to Buy - Store Finder Used = true | TBD |
| Time Spent on Site in Minutes > 10 | TBD |
| Viewed Product Options = true | TBD |

**How to Use This in AudienceStream?**

Once enough points have been accumulated, assign the **High Engagement Badge** to the Visitor.

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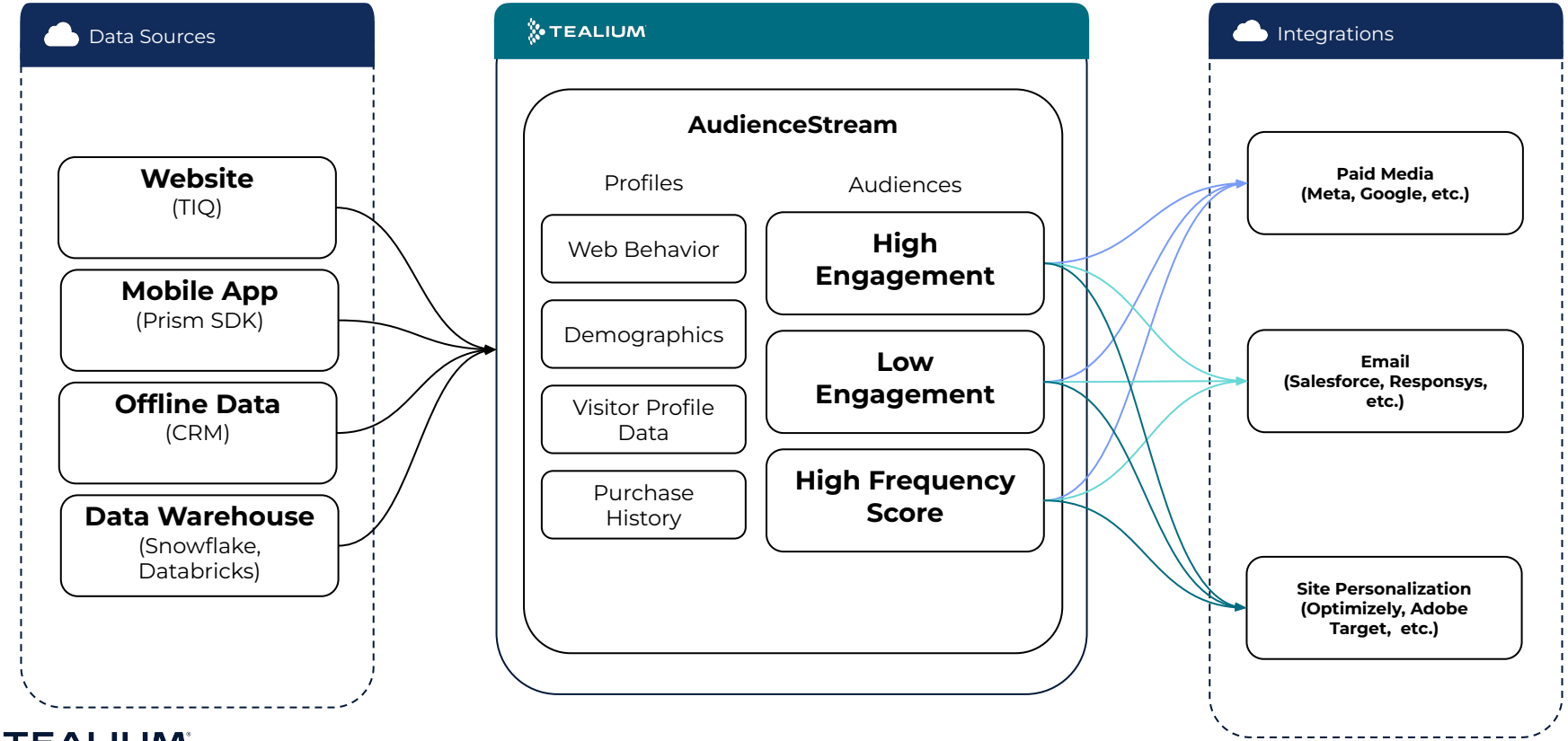
# Scoring Models

USE CASE

DATA FLOW

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# Three Types of Use Cases

## Help me to choose a thing

I'm still deciding what to do or buy — help me evaluate options, compare, or choose.

**Recommendations, lookalikes, retention, scheduling, next best action, product notices**

## Help me to finish a thing

I've started something — a purchase, task, application — and I need support or encouragement to complete it.

**Abandonment, onboarding, journey nurturing, pre-call, chatbot**

## I finished a thing, now what?

I've completed the journey — now guide me to next steps, added value, or re-engagement.

**Upsell, cross-sell, second purchase, lapsed, post-call, suppression, fraud detection**

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# Engagement Scoring in Context

Engagement Scoring is a **measurement layer** that spans across all 3 of our use case types.

It tells you **how actively a customer is interacting** with the brand, and therefore how (or if) you should act within each category.

An Engagement Scoring metric can be created in Tealium then used in conjunction with AI to further refine our go-to-market strategy.

## Role of the Engagement Score

| | |
|---|---|
| **Help me choose a thing** | Prioritize high-engagement prospects; down-rank low-interest visitors. |
| **Help me to finish a thing** | Identify stuck but engaged users who may need support; ignore those who bounced quickly. |
| **I finished a thing, now what?** | Use the engagement level to determine timing and relevance of re-engagement. |

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## What Is The Role of AI?

AI should act as a real-time decisioning and optimization layer that sits ***on top of*** a fundamental use case — enhancing how we detect, predict, and respond to customer behavior within defined audience categories.

## Role of Tealium + AI

| | |
|---|---|
| **Detection** | Clean + consented data feed to identify user state and classify them. |
| **Prediction** | Anticipate what a user is most likely to do next. |
| **Decisioning** | Select optimal content, timing, channel, or offer. |
| **Automation** | Execute activation at scale; in real-time. |

# AI Data Metrics

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# **AI Data Metrics:** Four Core Components of AI Data Metrics

- Metrics like database uptime or query latency matter, but they do not tell you whether your training data is biased, your consent coverage is adequate, or your activation loop is working.
- AI requires visibility into additional qualities, such as:

| Data Health | Trust & Compliance | AI Readiness | Value & Impact |
| --- | --- | --- | --- |
| Are your inputs technically sound and fresh enough for the use case? | Are you using data in line with stated purposes, with provable consent and auditability? | Do your features maintain parity between training and serving, and is drift monitored over time? | Are AI predictions being used, and are they making a measurable difference to business outcomes? |

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# **AI Data Metrics:** By Orchestration Stage

## Data Health
(Connect)

*Is data complete, consistent, identifiable, and timely?*

### Core KPIs:

- Data completeness: % model-critical fields populated
- Schema conformance: % events matching contract
- Identity: % events/profiles tied to durable ID; avg IDs per person
- Latency: event time → AI-available p50/p95

### Red Flags:

- Rising missing-data or invalid-event rates
- Declining match rates / more fragmented IDs
- Latency breaches on real-time AI journeys

## Trust & Compliance
(Govern)

*Are we using data in ways that are lawful, ethical, explainable?*

### Core KPIs:

- Consent coverage by region / domain
- Consent mismatch rate (data collected vs allowed use)
- Policy enforcement success (blocked / transformed events)
- Restricted-data incidents & near misses
- Audit readiness: % models with approved data-use

### Red Flags:

- Training data without consent lineage
- Over-collection beyond stated purpose
- Inability to explain “which data trained which models”

## AI Readiness
(Transform)

*How fast can we move from idea to activation in channels?*

### Core KPIs:

- End-to-end time: idea logged → first production activation
- Stage times: idea→data ready; data ready→model live; model live→first activation
- Activation coverage: % models in active use
- Change lead time: new signal/feature → in production

### Red Flags:

- Number of “deployed” models with no live activations
- Long tail between model live and channel wiring
- Repeated re-work due to late governance or data readiness issues

## Value & Impact
(Activate)

*Is AI meaningfully improving revenue, cost, risk, or CX?*

### Core KPIs:

- Incremental revenue / conversion lift vs control
- Churn / retention improvements on AI-treated cohorts
- Cost savings (manual work avoided, reduced escalations)
- Risk avoidance (incidents avoided, exposure reduced)
- CX metrics (NPS/CSAT, FCR, AHT, complaint vol)

### Red Flags:

- Models with stable metrics but no measurable business change
- High model abandonment rate within 6–12 months
- CX complaints or opt-outs concentrated in AI-driven experiences

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# **AI Data Metrics:** Early Warning vs. Lagging Indicators

- Focus on metrics that act as leading indicators of future AI issues, rather than waiting for issues to arise
- Link metrics into existing ops or governance (e.g., dashboards, reports) can help catch problems early

## Leading Indicators

Data Health, Trust / Compliance, and AI Readiness
(issues early in the orchestration process)

- Rising missing / invalid data in model-critical fields
- Dropping event / schema conformance rate
- Identity resolution coverage falling
- Data freshness / latency creeping up
- Consent coverage declining
- Consent mismatch rate rising
- Transformation / feature pipeline failures
- Falling AI output activation rate

## Lagging Indicators

Value & Impact plus Risk on the Activate stage
(issues late in the orchestration process)

- Production model performance degradation
- Business KPI deterioration tied to AI use cases
- Customer complaints about AI-driven experiences
- Regulatory / privacy findings and escalations
- High rate of manual overrides and workarounds
- A/B tests showing AI underperforms simpler baselines
- Post-incidents blaming “bad data” or “no consent clarity”
- Formal risk / compliance flags on AI initiatives

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# Questions for Consideration

- What metrics do you currently use to measure AI data success?
- Do you have a method for monitoring and flagging when metrics are out of bounds?
- Do you track consent and governance?

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# Tealium Predict

## Propensity Scoring With Tealium Predict

# Enterprise AI Use Case with Tealium: Engagement Scoring

| AI Maturity Level | | Engagement Scoring Audience Creation |
|---|---|---|
| 1 | **Foundational Rules-Based Audiences** | Define categorical engagement scoring rules and create audiences leveraging user behavior. |
| 2 | **Propensity Scoring with Tealium Predict** | Leverage Predict ML to run model on profile data and deploy propensity scores directly into visitor attributes.<br><br>Leverage attributes in categorical engagement scoring audience creation and activate across channels. |

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# Propensity Scoring Using Tealium Predict

Tealium Predict is an ML tool enabling you to build predictive models without requiring extensive data science expertise.

**What You Do:**

1. Train a machine learning model in Predict on binary classification outcomes such as purchase outcomes (target = "purchase within 7 days").
2. Generate scores for all visitors, indicating their likelihood to purchase.
3. Use thresholds to create audiences like "High Likelihood to Purchase in 7 Days."

**Benefits of Tealium Predict:**

- **Ease of Use:** User-friendly interface in the Tealium UI for building and deploying predictive models.
- **Automated Model Training & Scoring:** Handles feature engineering and feature scoring automatically.
- **Actionable Insights:** Generates propensity scores that can be directly used for audience segmentation and activation.

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# What Tealium Predict *Can* Do For You

**Predict helps identify the likelihood of someone performing a certain action**

**Propensity modeling** is a set of approaches to building predictive models to forecast behavior of a target audience by analyzing their past behaviors.

That is to say, propensity models help identify the likelihood of someone performing a certain action.

**A probabilistic estimation of whether your customers will perform any of such actions or not – a propensity score.**

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# What Tealium Predict *Can't* Do For You

Clustering & unsupervised models (Classifications)

Regressions

Recommendations

Next Best Action

Deep Learning

Bring your own models

# Leveraging Predict With an Engagement Scoring Strategy - Categorical Targeting


Tealium can combine the output of Predict and Engagement Scoring metrics together to group users into audiences based on both Propensity ***and*** Engagement.

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# Leveraging Predict With an Engagement Scoring Strategy - Categorical Targeting


**Predict Target:**
High Propensity to Buy Most Popular Category SKU in Next 7 Days

Tealium can combine the output of Predict and Engagement Scoring metrics together to group users into audiences based on both Propensity ***and*** Engagement.

Users in a **High-Propensity, High-Engagement** audience should be **engaged via higher-cost marketing channels/campaigns** and offered a personalized experience to better drive conversions from this audience.

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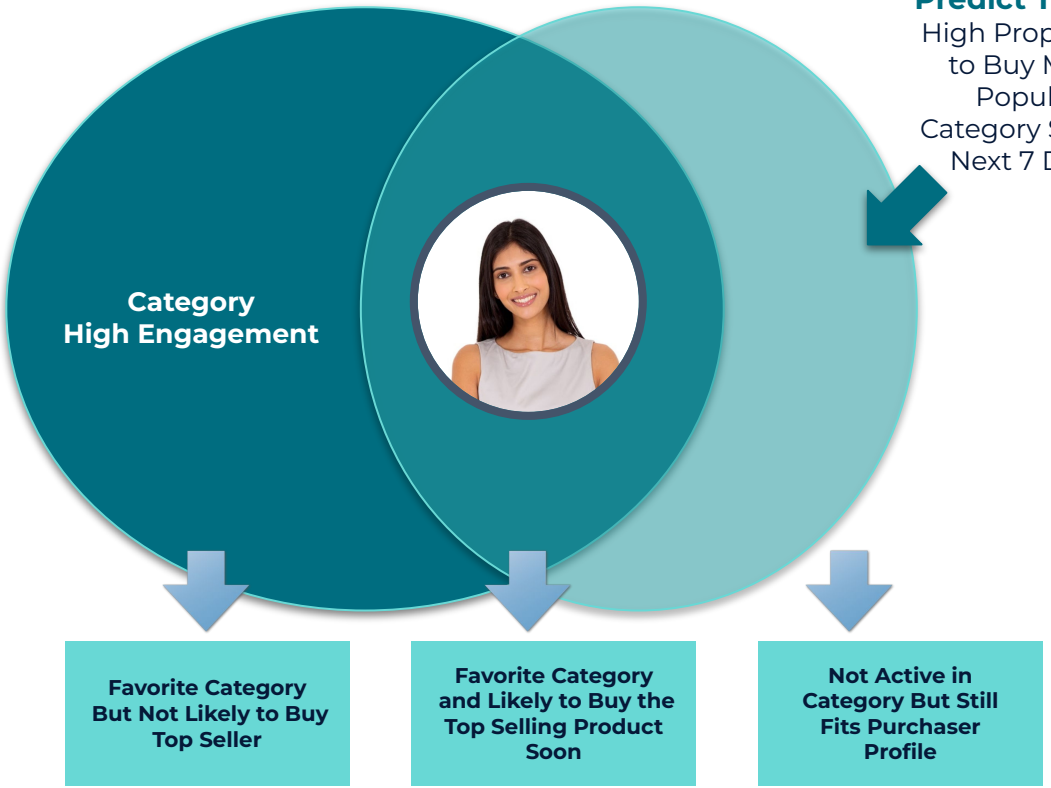
# Leveraging Predict With an Engagement Scoring Strategy - Categorical Targeting

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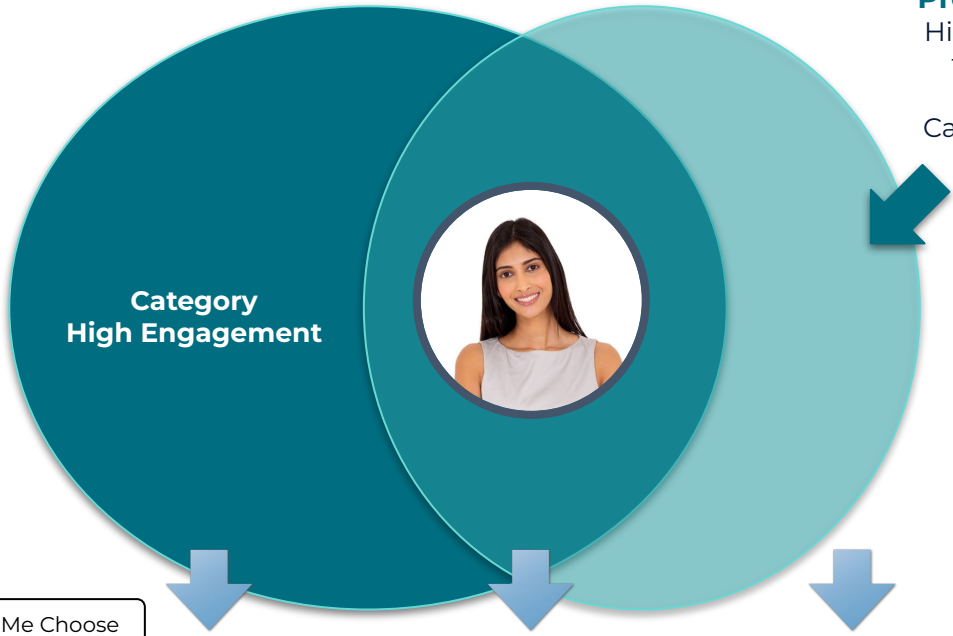


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Users in only in the **High-Engagement** audience should be **engaged via marketing channels/campaigns** but they should have a differentiated experience as they may be **looking for a more specialized product in that category**.

**Once converted, users should be suppressed from campaigns** to optimize marketing spend.

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# Building a Modern AI Data Practice

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# **AI Data Practice:** Breadth and Depth

## BREADTH

The AI Data Practice is a cross-functional initiative

- **Aligns Data, AI, Privacy, and Business Lines:** around a shared operating model for AI data (Connect → Govern → Transform → Activate)
- **Owns Standards, Patterns, and Guardrails**: for AI-ready data across the organization
- **Accelerates Safe AI Experimentation:** by providing reusable blueprints, checklists, and scorecards that teams can adopt for their own use cases
- **Makes AI Data Health Visible**: through an AI Data Readiness Index and executive reporting that highlight both opportunity and risk

## DEPTH

Not just models, full data & orchestration for AI

- **Data Readiness for AI**: Source and schema standards, identity strategy, latency expectations for AI use cases
- **Consent, Governance, and Risk**: Policies and patterns for consent-aware AI data pipelines, purpose limitation, minimization, and auditability
- **Transformation & Feature Patterns:** Shared definitions for entities, features, and transformations across training and serving; guidance on real-time vs batched
- **Activation & Measurement:** How model outputs are operationalized in channels and how impact, utilization, and feedback loops are measured
- **Standards and Templates**: AI data input blueprints, governance checklists, operating model canvases, and AI data scorecards to reuse across initiatives

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# **AI Data Practice:** Teams; Roles & Responsibilities

**Data & Architecture Team** (Connect)

- Design and maintain AI data pipelines, schemas, identity resolution, and platform integrations.
- Own completeness, conformance, latency, and observability of AI-critical data.

**Privacy / Legal / Compliance Team** (Govern)

- Define policies for lawful, ethical AI data use; approve or reject datasets and use cases.
- Own consent, purpose mappings, minimization rules, and audit requirements that must be enforced in AI pipelines

**AI / ML Team** (Transform)

- Define model objectives, design features in collaboration with data teams, run experiments, validate models, and monitor performance and drift.
- Partner with the CoE to ensure training/serving parity and to expose model outputs in ways that orchestration and activation systems can use.

**Business & Product Teams** (Activate)

- Own AI use cases, KPIs, and success definitions.
- Ensure AI changes how decisions are made in products, marketing, and operations that ensure business value is realized.

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# **AI Data Practice:** Three Groups for Reporting

## Operational
(Clean)

**Data & AI Teams**
Near real-time views

**Purpose**: early warning on AI data issues before they hit customers or regulators

- Ingestion and schema conformance
- Consent enforcement and policy violations
- Transformation success, drift warnings, and training/serving parity
- Activation delivery status and feedback loop coverage

## Risk & Governance
(Consented)

**Privacy, Legal, Security, Risk**
Periodic summaries (monthly/quarterly)

**Purpose**: give second-line and third-line functions a clear line of sight into AI data risk

- Consent coverage and mismatch trends
- Restricted data exposure incidents and remediation status
- Audit readiness—lineage completeness, approvals, and evidence of enforcement

## Business & Executive
(Actionable)

**Business Leaders, AI Sponsors**
A simple AI Data Readiness Index

**Purpose**: show whether investments in AI data and orchestration are improving readiness and value over time.

- Trends in time-to-activation for new AI use cases
- High-level risk exposure trend (e.g., consent mismatch rate, incidents)
- Business impact from AI (incremental revenue, churn reduction, cost savings, risk avoided)

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# **AI Data Practice:** Four-Step Practice Development Plan

## 1 Define Breadth, Scope, and Sponsorship

- Clarify purpose: align data, AI, privacy, and business; reduce duplication; manage AI data risk
- Set scope: data readiness & governance; Connect/Govern/Transform/Activate patterns; metrics & reporting
- Secure executive sponsors: and agree on CoE-level success metrics (readiness, consent, time-to-activation, value)

## 2 Design Ops Model, Roles, Architecture

- Define roles & RACI across Data / Architecture, AI / ML, Privacy / Legal / Security, and Business / Product
- Codify standards for Orchestration (schemas, consent patterns, feature patterns, activation flows)
- Publish a reference architecture and AI data scorecard model (Connect / Govern / Transform / Activate metrics)

## 3 Assess Current State & Prioritize Use Cases

- Inventory current/planned AI initiatives and data pain points (quality, consent, identity, activation)
- Run a data maturity assessment (Data Strategy, Identity, Integration, Measurement) to find gaps
- Select 1–3 flagship AI use cases as pilots with clear sponsors, teams, and KPIs

## 4 Implement, Pilot, and Scale

- Stand up intake and review practices; create a mini-charter per pilot use case
- Execute 30/60/90-day plans to fix highest-impact data gaps and wire AI into 1–2 channels with measurement
- Embed assets (blueprints, checklists, canvases, scorecards), review results, and scale to additional AI initiatives

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# Questions for Consideration

- Do you currently have a purposeful centralized AI data practice today?
- If not, what challenges do you face to implementing a structured practice?
- If so, what are the improvements that have been noticed?

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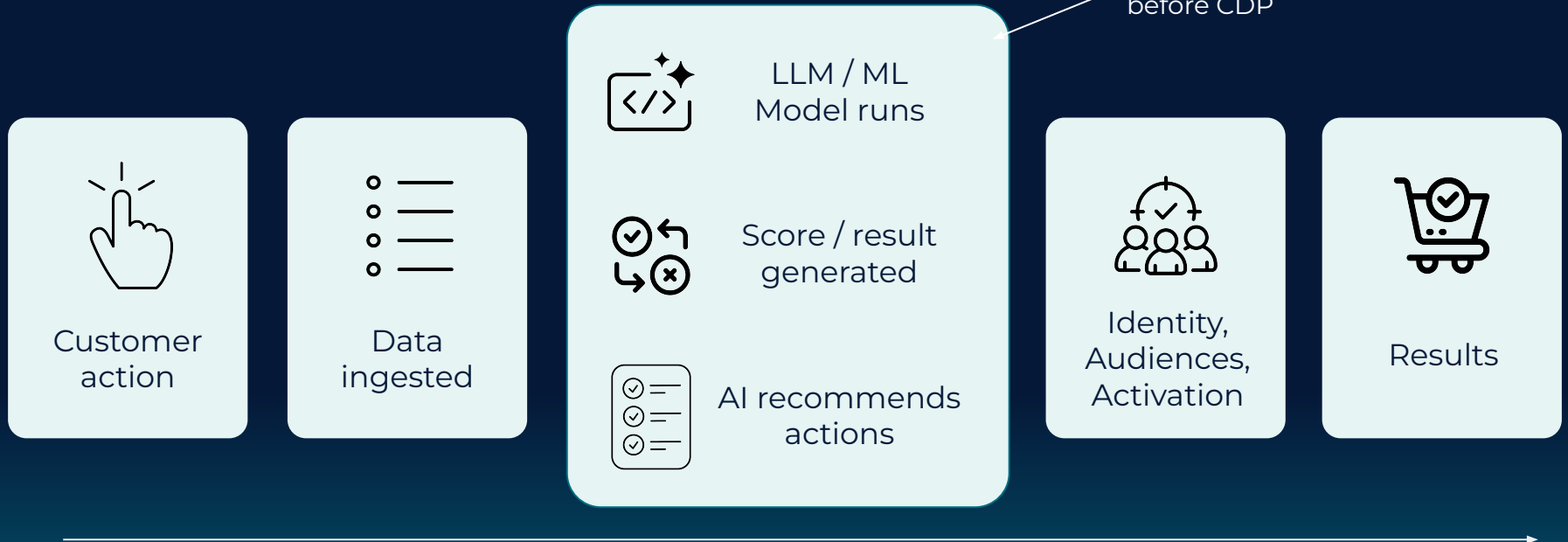
# AI Ecosystem Integration

## External Model Ingestion and Activation

# Platform AI: Real-time AI Decisioning

Scores, decisions and recommendations, in real-time - at the source - Tealium style!

Decisioning happens before CDP

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# AI Ecosystem: Activating Your AI Stack

## Foundation Models

Integrate and activate directly with LLMs in your GenAI platforms

Claude · GPT-4o · Gemini · LLaMA

## Data Clouds

Integrate and activate directly with models on your ML/AI platforms

aws · snowflake · Google Cloud · databricks

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## Vector Databases

Get Tealium data directly into your vector DB for your RAG pipelines

Pinecone · Weaviate

## Agent Frameworks

Connect Tealium directly to your agent framework

LangChain · crewai

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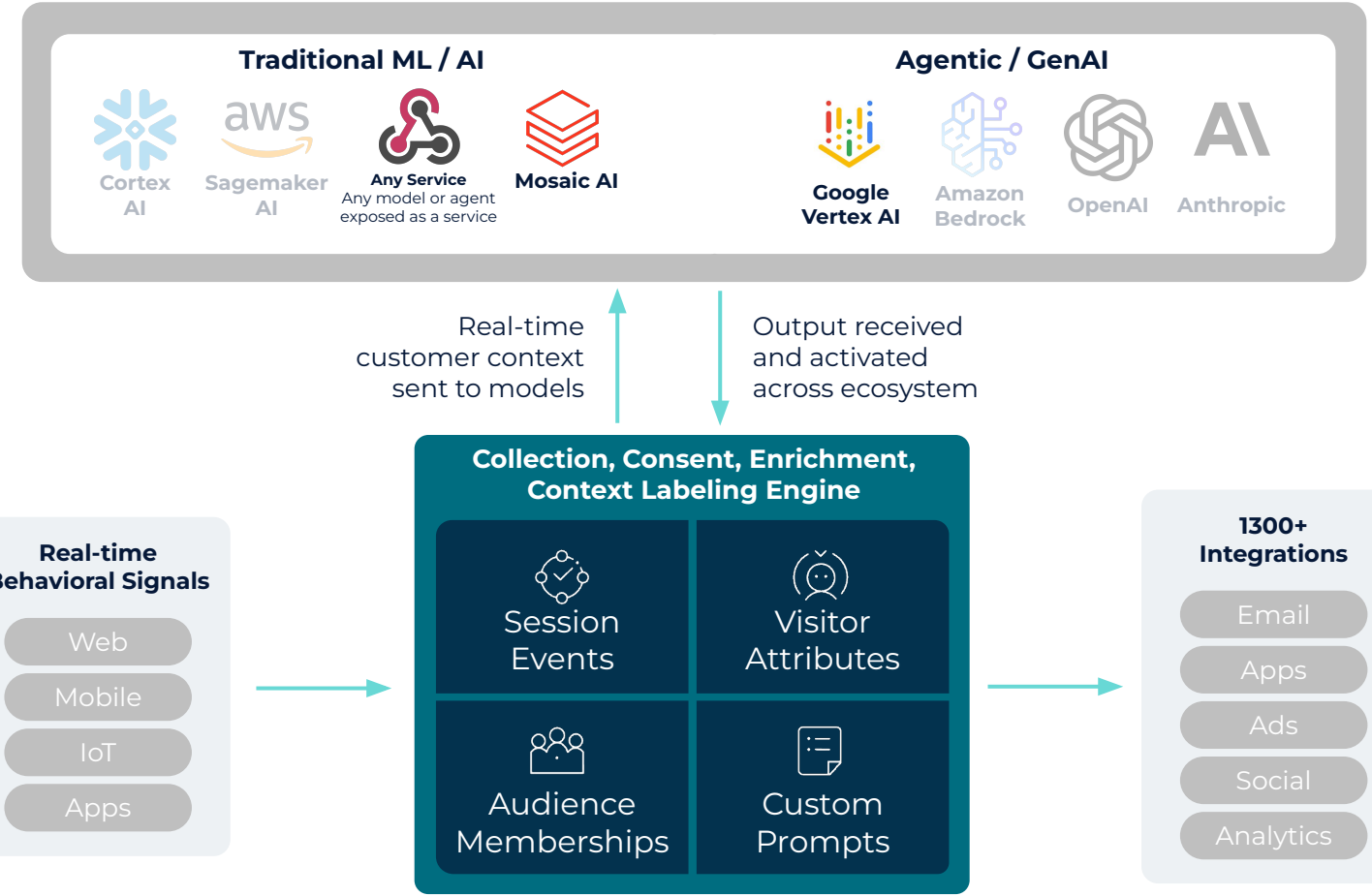
# Enterprise AI Ecosystem

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# ENTERPRISE AI ECOSYSTEM

## Traditional ML / AI

Analyzes data and surfaces patterns, insights and scores

e.g. “this customer is 80% likely to purchase if they get the right offer”

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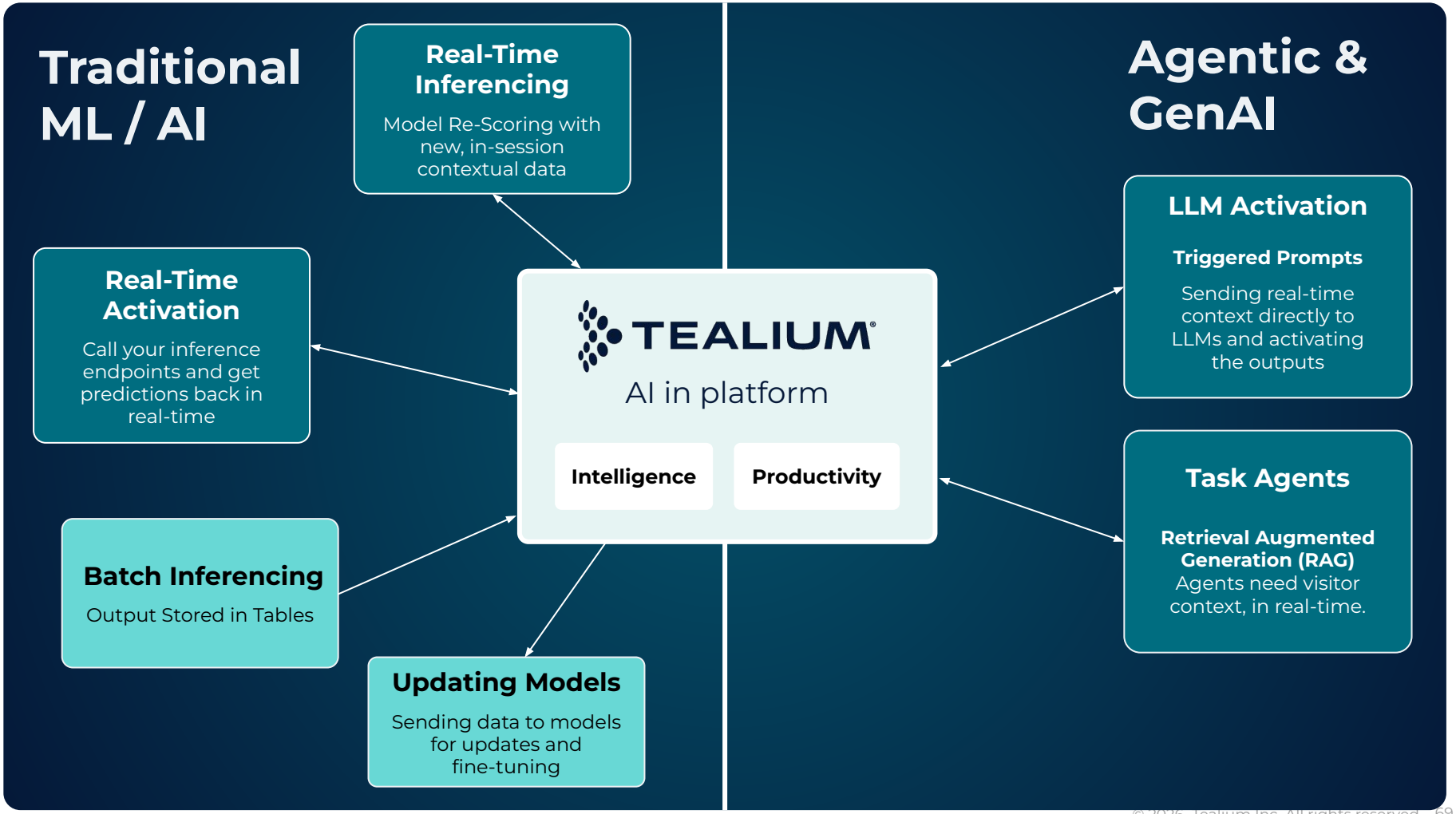
AI in platform

**Intelligence** **Productivity**

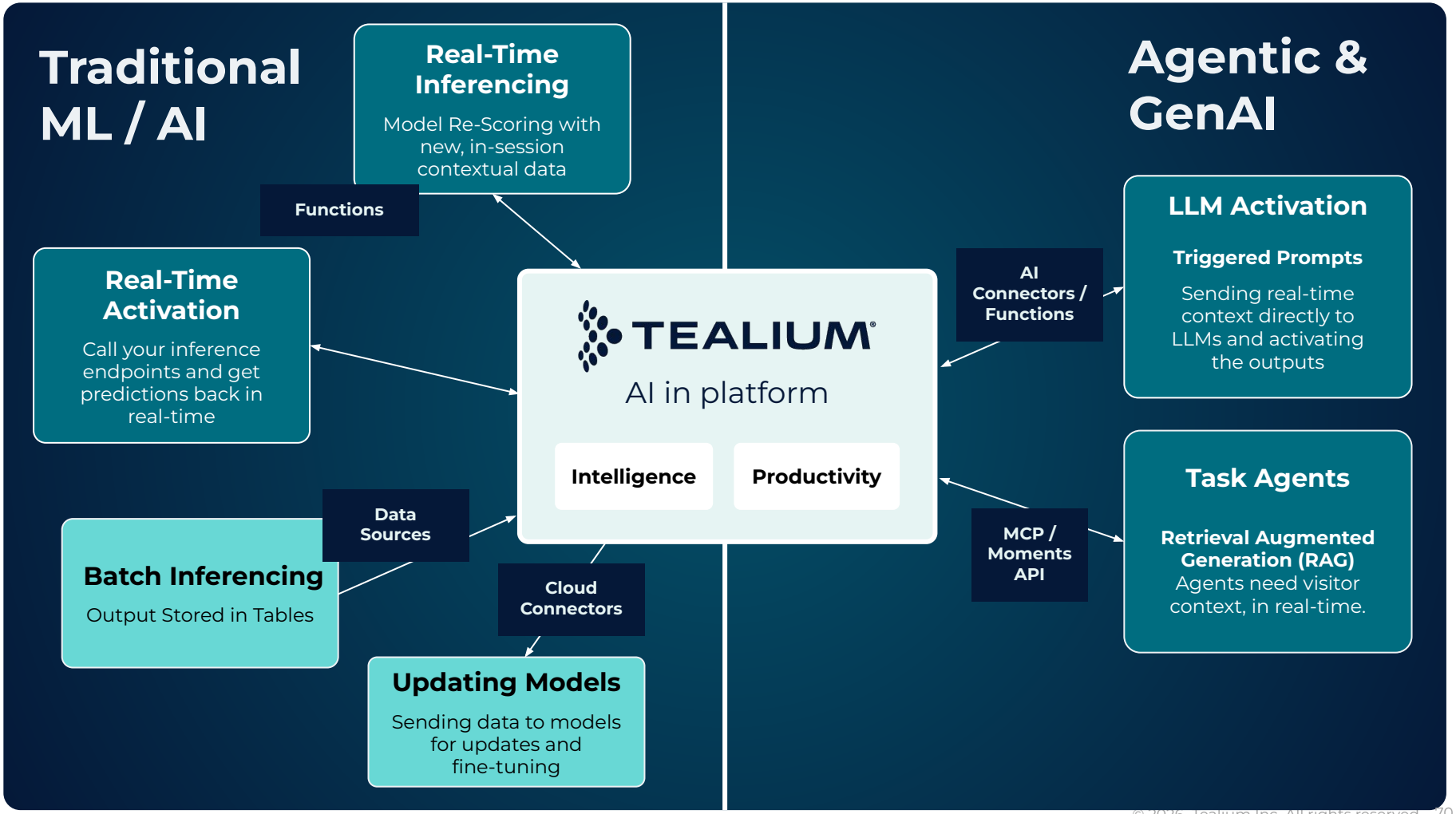
## Agentic & GenAI

Acts on those insights autonomously — generating content, making decisions, and executing workflows without human intervention

e.g., "this customer is likely to purchase, so I've created and presented a personalized offer to solidify their purchasing decision"





# Enterprise AI Use Case with Tealium: Engagement Scoring

| AI Maturity Level | | Engagement Scoring Audience Creation |
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| 1 | **Foundational Rules-Based Audiences** | Define categorical engagement scoring rules and create audiences leveraging user behavior. |
| 2 | **Propensity Scoring with Tealium Predict** | Leverage Predict ML to run model on profile data and deploy propensity scores directly into visitor attributes.<br><br>Leverage attributes in categorical engagement scoring audience creation and activate across channels. |
| 3 | **External Model Ingestion and Activation** | Send visitor data to data warehouse, run your own propensity models and generate propensity score.<br><br>Return propensity scores back to Tealium, enrich profile attributes, add to engagement scoring audiences and activate across channels. |

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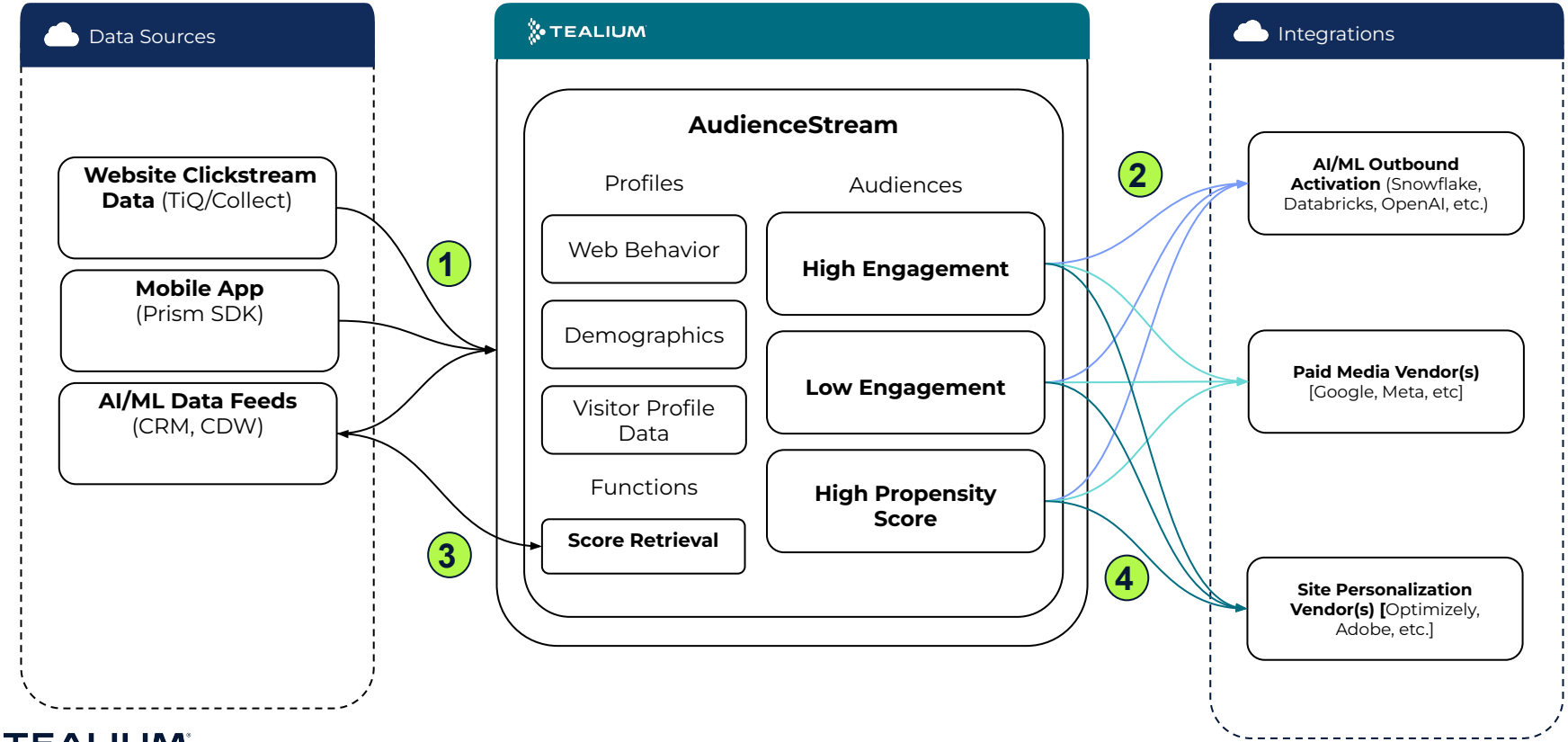
# AI/ML Data Ingestion & Activation

USE CASE

DATA FLOW

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# Use Case Timing


| | AI Maturity Level | Scoring Delay | Timing to Score in Use |
|---|---|---|---|
| 1 | **Foundational Rules-Based Audiences** | No delay. No scoring logic, the Audience can be activated right away. |   |
| 2 | **Propensity Scoring with Tealium Predict** | Delay in model scoring and activation. Model run at the end of session. |   |
| 3 | **External Model Ingestion and Activation** | Delay in feature updates, model scoring, and activation for large batches. |   |

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# Most Organizations are Asking the Wrong Question

*They ask:*

**“How smart is the model?”**

# Most Organizations are Asking the Wrong Question

*They ask:*

**“How smart is the model?”**

*They should ask:*

**“How late is the answer?”**

**A prediction that arrives after the moment of decision is not a prediction. It’s trivia.**

# The Data Orchestration Strategist

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# **The Data Orchestration Strategist**: A New Role for a New Reality

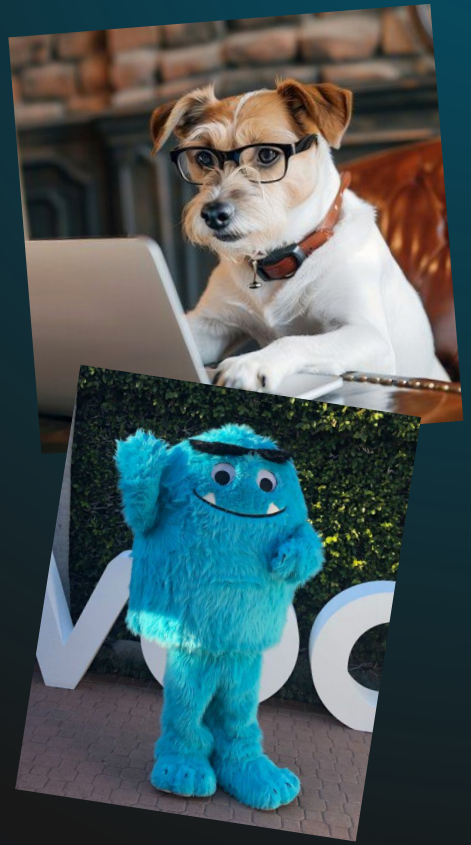
## The Evolution of Data Roles

- Data Analysts → Data Scientists → Data Engineers, and even...

... yet the *strategic gap* remains...

## The Data Orchestration Strategist

- Operates at Altitude and Across Organizational Functions, asks questions and aligns functions and activities such as:
  - What data do we need?
  - How do we ensure it is clean, consented and actionable?
  - How should it flow and be implemented; in what systems and situations?
  - Which use cases generate the most value?
  - How do we measure success?



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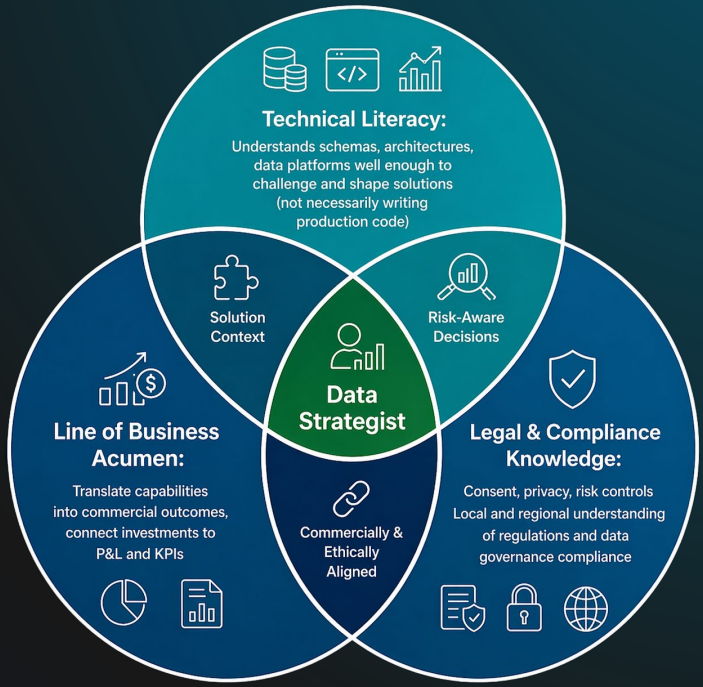
# **The Data Orchestration Strategist**: Core Capabilities

- **Technical Literacy:** Understands schemas, architectures, data platforms well enough to challenge and shape solutions (not necessarily writing production code)
- **Legal & Compliance Knowledge:** Consent, privacy, risk controls Local and regional understanding of regulations and data governance compliance
- **Line of Business Acumen**: Translate capabilities into commercial outcomes, connect investments to P&L and KPIs
- **Organizational Bridge**: Facilitate conversations across teams, integrates data requirements into planning and sprints, keep everyone informed and aligned so projects go live and achieve goals

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# **The Data Orchestration Strategist**: Key Responsibilities

## Data Strategy & Roadmap

- Lead assessment of current data landscape and maturity
- Define target-state data flows, unified profile strategy, and activation patterns
- Maintain a rolling 18-month roadmap for data initiatives

## Translate Needs to Requirements

- Facilitate requirements between marketing / product, legal and data / engineering
- Convert business goals into concrete data / tech specs (events, IDs, attributes, latency)
- Ensure initiatives has clear, feasible data requirements up front

## Business Case, Metrics, and ROI

- Build and maintain business cases for data investments
- Define success metrics and baselines for each initiative
- Report realized value and learnings back to leadership

## Governance, Risk Integration

- Partner with legal, security, and privacy teams to embed requirements into data flows
- Define ownership, RACI, and guardrails for collection, storage, activation, and retention
- Ensure new use cases adhere to agreed governance patterns

## Capability & Org Development

- Define competencies for the Data Strategist and related roles
- Identify and coach internal talent who can evolve into strategist roles
- Shape operating model between CMO / CDO / IT / Legal and line-of-business teams

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# **The Data Orchestration Strategist**: Key Deliverables

## Data Strategy & Roadmap

- Current-state data landscape & maturity assessment (sources, owners, usage, gaps)
- Written data strategy (principles, target architecture, priority use cases)
- 3 / 6 / 12 - month roadmap with sequenced initiatives and success criteria

## Translate Needs to Requirements

- Standard use-case brief template shared across teams
- Data & identity specs for top 5–10 high-value use cases (per year)
- Prioritized use-case backlog with effort vs. impact estimates

## Business Case, Metrics, and ROI

- Business case library (3–5 flagship use cases with modeled impact)
- Standard metrics framework (speed, precision, scale, risk) for data initiatives
- Quarterly impact report tying data work to revenue, cost, and risk outcomes

## Governance, Risk Integration

- Data governance playbook (roles, policies, decision rights, escalation)
- Set of standard patterns for consent, identity, and activation (e.g., reference architectures)
- Audit-ready evidence pack for key use cases (data lineage, consent handling, access control)

## Capability & Org Development

- Role & competency model for strategists and adjacent functions
- Development plans for at least 1–3 internal candidates (rotations, mentoring, exposure)
- Documented operating model (org placement, engagement model, forums, cadences)

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# **The Data Orchestration Strategist**: Impact and Results

**Common Results:** Returns often visible within 6–18 months

| ~48% see ROI within 6 months | 79% within 12 months | 91% within 18 months |
|---|---|---|

**Real Impacts:** Improvements across multiple critical operational measures

- Faster access to insights (up to 75%)
- Faster ML model deployment (up to 90%)
- Reduced operational errors (~44% decrease)

**Most Important Result**

Shift from reactive to proactive stance on data use, cross team engagement, resource allocation, data orchestration

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# Questions for Consideration

- Do you have anyone who owns the full AI data readiness and orchestration process?
- How much time is lost because no one owns cross-functional execution?
- Which handoff slows progress the most in your organization?

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# Tealium AI

## Helping Simplify Your AI Data Operations

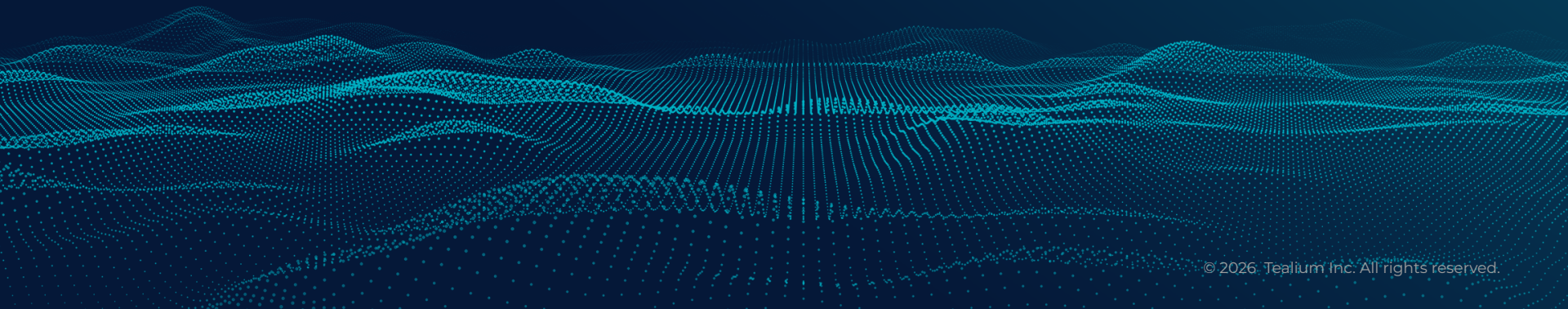
# Reality Check

*61% of successful AI projects included at least one prior failure, whose costs never appear in the final ROI.*

## 95% of AI Pilots Fail

**Failure is driven by poor organizational integration**

**Disconnected data prevents measurable impact**



# Fueling Your AI Ambitions

*with consented, filtered, organized and enriched data in real time*

**83% of companies claim that using AI strategically is a top priority**

**Connect your Models to your Tools in Real-time**

**Profile Context Improves Model Performance**

**Disconnected Data Prevents Measurable Impact**

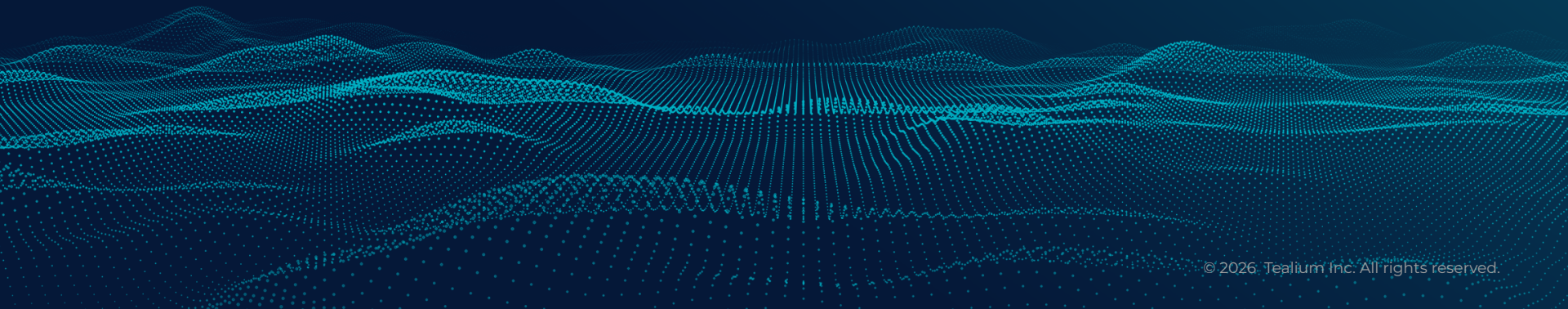
# Where the Work Is

*61% of successful AI projects included at least one prior failure, whose costs never appear in the final ROI.*

## 77% of challenges are operational

**Process, data, and adoption drive outcomes**

**Drive AI-Readiness with Real-time Data**



# Creating Operational Leverage

*Risk and lack of buy-in slows adoption*
*Legal, HR, and compliance require control*
*Governance enables safe scaling*

## 10x more effort beyond the model

**Process redesign and data readiness dominate cost**

**Organizational alignment determines ROI**

# Time to Value

*Risk and lack of buy-in slows adoption*
*Legal, HR, and compliance require control*
*Governance enables safe scaling*

## weeks vs. years

**Executive Alignment Accelerates Success**

**Existing Data Foundations Reduce Friction**

# Data Strategy

*Executive ownership providing active steering, measurable OKRs, and strategic integration gives teams permission to fail – and ultimately succeed!*

# We don't need perfect data

**Capture and connect all signals to give models the right decisional context**

**Then activate in real time to drive value**

# Value Realization

*Executive ownership providing active steering, measurable OKRs, and strategic integration gives teams permission to fail – and ultimately succeed!*

# AI drives measurable outcomes

**Personalization increases conversion**

**Speed and iteration improves decision-making**

# CLOSING

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# **Building a Modern AI Data Strategy** Closing Summary

| | | |
|---|---|---|
| **The AI Data Reality Check** | AI models are only as good as the data that feeds them | Competitive advantage comes from Data, not just Models and Tools |
| **Three Components of AI Data Quality** | Clean, Consented, Actionable | The core components of data that feeds healthy AI models |
| **Four Phases of Data Orchestration** | Collect, Govern, Transform, Activate | Most data is managed in silos, think in terms of Orchestration for success |
| **AI Data Metrics** | Traditional metrics do not give full insight into data for AI initiatives | Include factors such as Trust, Consent, Consistency, Actionability |
| **Building an AI Data Practice** | Create a purposeful process for managing your AI data | Maximize data practices for AI initiatives to max AI value |
| **The Data Orchestration Strategist** | Presents a new role to help manage AI project data needs | Aligns business units and data needs for successful AI projects |

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# **AI Strategy for Success** Closing Summary

| | |
|---|---|
| **Anatomy of an AI Maturity Strategy** | AI success isn't about models, it's about organizational **data maturity and execution**. |
| **Choose the Right Use Case to Start** | **Rules-based audiences drive immediate value** and create the foundation for AI. |
| **Use Propensity Modeling to Level Up** | **Move from reacting to predicting.** |
| **AI Ecosystem Integration to Win** | **Build models anywhere** then **activate them in real time with Tealium.**<br><br>Win by progressing from **connected consented data signals** **to prediction to real-time action**. |
| **Tealium's Connected AI Playbook** | **AI doesn't create value: execution does.**<br><br>**Tealium makes that execution real-time.** |

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# Questions for Consideration

- What will you take away from today's session to apply in your organization?
- What's your next step in improving your organization's AI data readiness?

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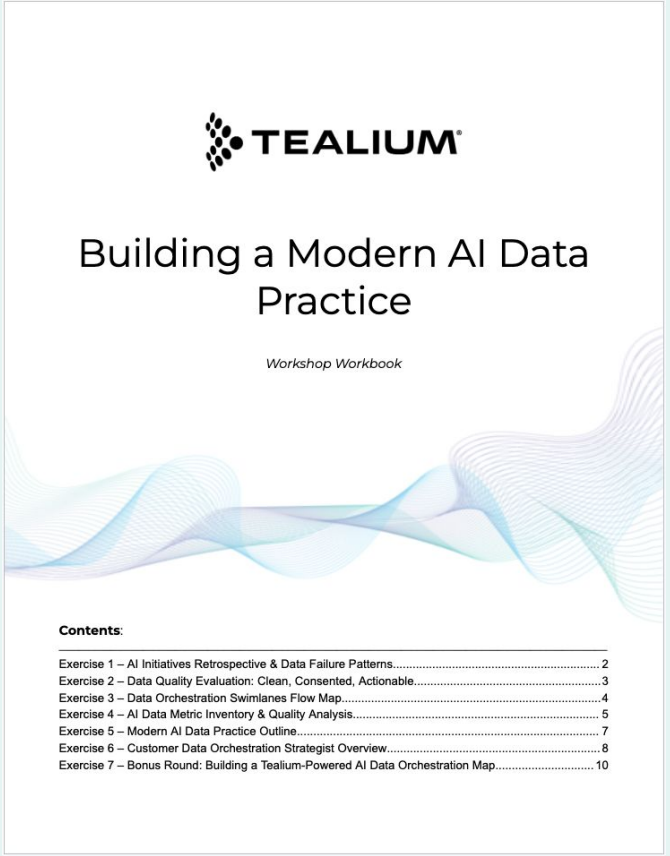
# The Workbook



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Building a Modern AI Data Practice

*Workshop Workbook*

**Contents**:



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# Next Steps

## Take Our New Training Courses

If you haven't already, **enroll in Tealium University** and start getting yourself and your team optimizing your use of Tealium to max your ROI!

## Connect with Your Team

Setup a time this week with your Tealium team to review your account, take advantage of **our AI Accelerator offer**, and discuss all the great new learnings from DV!

## Visit the Beast Bar

**Use the Digital Velocity App to book a 1:1 consultation** with a Tealium expert to discuss your AI strategy and use cases!

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# Tealium AI Offers

*Get Connected with Your Tealium Team to Get Started*

## AI Accelerator Offer

Jump-start a new AI use case

✓ Free Tealium AI volume for up to 3 months / 50M events

✓ Tealium experts at your side at no extra cost

✓ Get new AI use cases live in record time

## AI Discovery Workshop

Design your AI roadmap

✓ Free expert-led workshop to harness your AI potential

✓ Tie priority AI use cases to clear business and CX goals

✓ Optimize your data, architecture, and roadmap for AI

# Thank You!

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