

Building A Data Platform That Predicts and Prevents Attrition



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Active Students: **197,000+**

**Largest
University in
USA**

100%

Online
competency-based
nonprofit Higher
education

Western Governors University's (WGU) mission is to **change lives** for the better by creating **pathways to opportunity**. To be the most **student-centric university** in the world.

Degrees Earned: **461,000+**

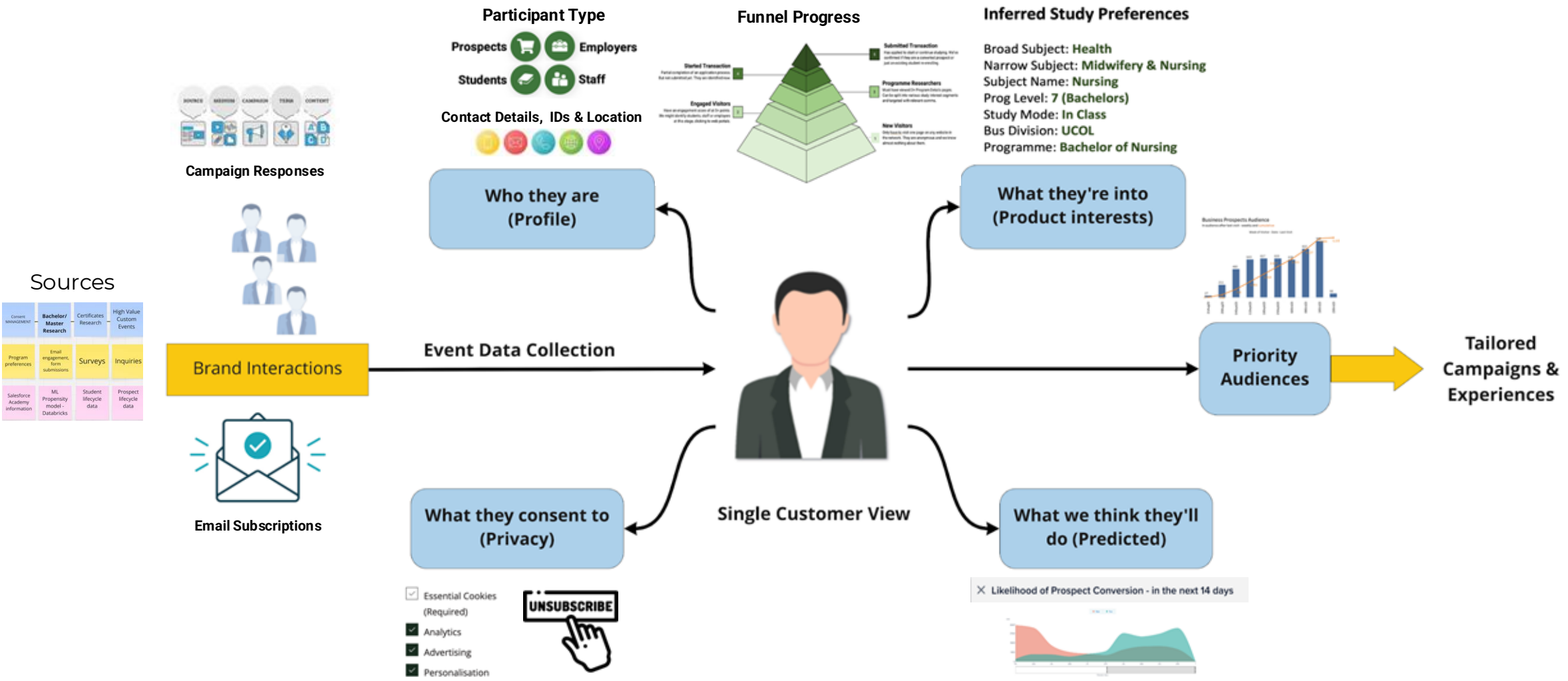
**Diverse,
working adult
student base**

**High need for
real-time,
personalized
guidance**

We needed a way to start sorting visitors into participant types – 5 main categories



How we are creating our student 360 view



Campaign Responses

SOURCE MESSAGE CAMPAIGN TERM CONTENT



Sources

Course Management	Bachelor/ Master Research	Certificates Research	High Value Custom Events
Program preferences	Email engagement form submissions	Surveys	Inquiries
Salesforce Academy Information	ML Propensity model - Databricks	Student lifecycle data	Prospect lifecycle data

Brand Interactions

Email Subscriptions



I know that half of my
advertising dollars are wasted...
I just don't know which half.

~ John Wanamaker

AZ QUOTES

The Solution is Hidden In The Traffic



Where are The Ad Dollars Are Going

Likely Students



Wasted spend



Leads & Applicants
(Upper & Mid Funnel)



Wasted spend



PROSPECTIVE STUDENTS

Have not applied yet



This is where your budget belongs

\$XX M REALLOCATED ✓

Likely staff
or employees
visiting



Wasted spend



WHY

Stop paying for people already in our funnel and Reinvest in lower funnel retargeting / lookalikes

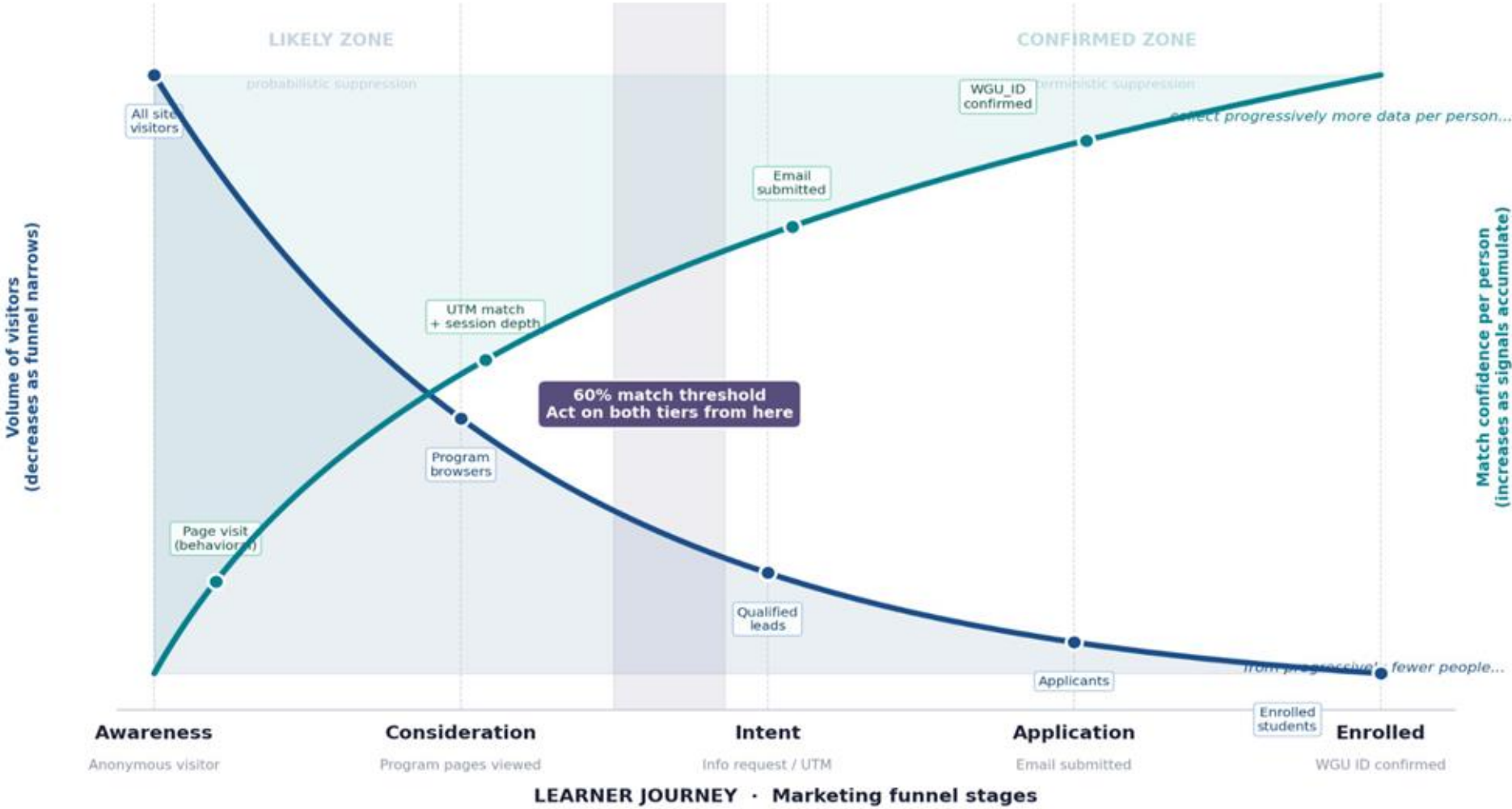
HOW

Tealium 1st-party audiences pushed to Google, Nexxen, Bing, MNTN. PII-matched. 80-90% match rate.
Auto-refreshed daily

Suppressed these audiences

Identified via PII (email, phone) → AudienceStream → Google, Nexxen, Bing, MNTN

Confidence through the Learner Journey



Key insight

Both curves cross at ~60% match rate – suppression fires on both tiers from that point. If match rate below 60%, suppression still runs - then you iterate on signal quality.

Likely Probabilistic – behavioral signals – act now

Confirmed Deterministic – PII matched – suppress with certainty



The Outcome



4% lift

**PAID MEDIA
REALLOCATED**

>3M

**UNIQUE VISITORS
SUPPRESSED**

deduplicated across Google,
Nexxen in one month

< 2 weeks

**BEFORE
DEADLINE**

shipped early, a team win across
CDP + media + data eng.

NEXT SPRINT: Microsoft Bing — same playbook, third channel, more reallocation.

The Amazon Badge One Signal, Site-Wide Intelligence



⚠️ THE PROBLEM

Amazon employees arrive via their Workday portal, but the site has no way to recognize them.

If they browse to a covered degree and click “Apply,” the site sends them to — the wrong enrollment path.

They lose their Amazon benefit.

WGU and Amazon Career Choice

Amazon and WGU: A Nonprofit University Built for You

WGU is a university built for you. We know how hard it is to juggle work, life, and earning a degree, which is why thousands of Amazonians have chosen to attend WGU for their degrees with hundreds of WGU alumni working at Amazon. We care if you have to work a double shift. We care what's going on in your personal life. We know you have incredible life demands, so we've built WGU around you. Take tests when you're ready. Complete courses on your time. And speed up when you know your stuff. We're a university that cares about you. We are the University of You. Find out today how you can join the many Amazon employees who are currently receiving a high quality education to help them propel their careers forward.

Ready to start your degree program? You can apply directly to WGU and start your degree program at any time if you don't want to take a trial course. All students must meet standard admission criteria to begin.

amazon | career choice

The Amazon Badge

One Signal, Site-Wide Intelligence

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✓ THE FIX: Tealium Amazon Badge + VWO

- 1 Badge assigned on landing**
Visitor arrives on Amazon partner page → Tealium fires “Amazon Prospect” audience segment
- 2 Button swap, site-wide**
VWO detects the badge and swaps “Apply” on covered degrees from normal enrollment portal → partner portal
- 3 Invisible to the user**
Prospect browses freely — no pop-ups, no redirects — the right path just works wherever they go

How It Works

1

Amazon Workday

Employee sees
WGU → clicks
to partner page

2

Tealium Badge

Tealium CDP
fires
“Amazon Prospect”
segment on
page load

3

VWO Activation

VWO Injects
Amazon-covered
degrees block
+ swaps
Apply buttons to portal

4

Correct Application

Routed to
VIP EC team
with full
benefit intact

The Outcome



10,000

AMAZON
PROSPECTS

1,000

INCREMENTAL
APPLICATIONS

+10% lift

CONVERSION
RATE

vs 2.5% Industry avg.

SCALING THE PLAYBOOK: Same Tealium badge mechanism already ready for McDonald's, CVS, and all off-model partners.

Protecting Media Spend by Excluding Fraudulent & Bot Identities



PROBLEM



Fraudulent Leads Consuming Budget

Bot-submitted forms and synthetic identities enter Marketo and paid media audiences — wasting ad spend on non-humans.



No Signal at Activation Layer

Risk scores from Sardine live in a silo. They never reach the platform where suppression decisions are made — Tealium CDP.



Reactive, Not Preventive

Fraud is discovered post-spend during campaign audits — days after impressions are served to low-intent or fraudulent visitors.

SOLUTION



Sardine Risk Score → Visitor Profile

Sardine's fraud/bot score is appended to the Tealium visitor profile in real time, making risk context a persistent visitor attribute.



Tealium Suppression Segments

High-risk and bot-flagged profiles are bucketed into dedicated audience segments, using existing tooling and integrations.



Omnichannel Exclusion at Activation

Suppression audiences flow to integrated paid media tools. Fraudulent identities are excluded before the impression fires.

Protecting Media Spend by Excluding Fraudulent & Bot Identities



Risk score activated
in real-time

WEB VISITOR

wgu.edu page interaction

Marketo form submission

SARDINE

Device fingerprint
Bot / fraud risk score

risk_level:
HIGH | MED | LOW

TEALIUM

SERVER-SIDE EVENTS

Sardine webhook
→ server-side event ingestion

Payload:
sardine_risk_score,
risk_level,
session_id

VISITOR PROFILE

sardine_risk_score
risk_level appended
as live attributes

AUDIENCES

Confirmed Bot
risk_level = HIGH
+ bot_signal = true

High Fraud Risk
sardine_score > 85
risk_level = HIGH

Elevated Risk
sardine_score 60-85
risk_level = MEDIUM

Clean / Safe
sardine_score < 60
risk_level = LOW

Consistent exclusion across paid
+ email with no new connectors

**AUDIENCES
SUPPRESSED
/ EXCLUDED**

EXISTING CONNECTORS

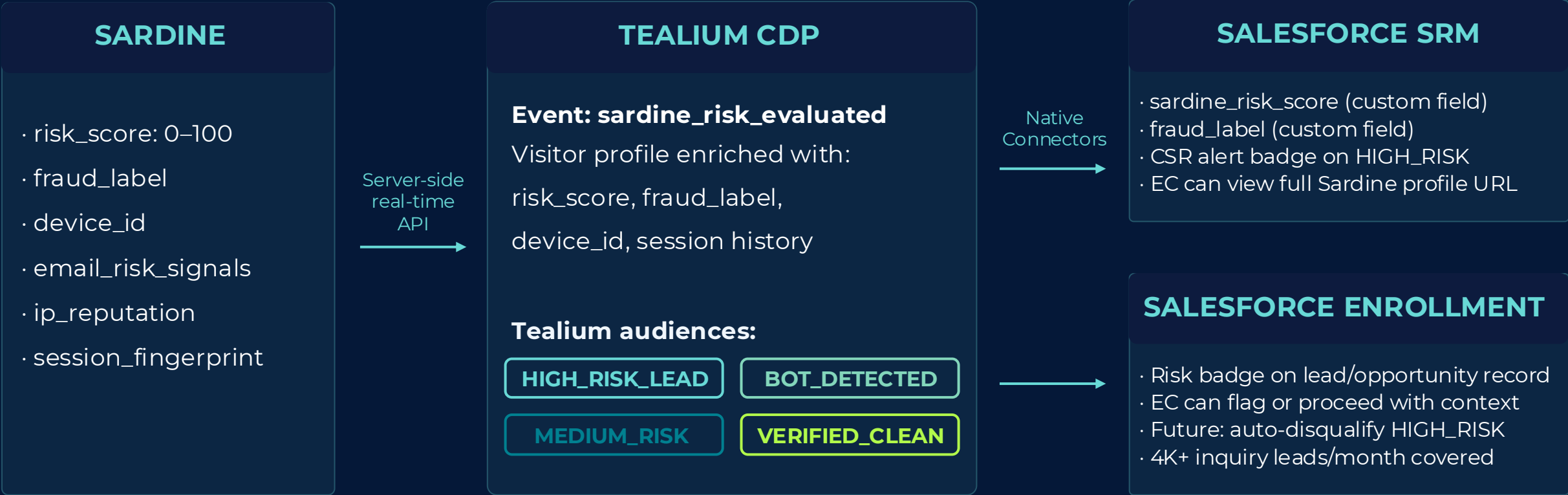
Google Ads

Bing / MSFT

Nexxen DSP

Marketo

Salesforce Risk Score Propagation



One Tealium connector, multiple SFDC consumers



1

One Pipe, Two Consumers

Tealium holds the single Salesforce connector. Both SRM and Enrollment instances receive risk data from one integration — no duplicate Sardine → SFDC build.

2

CSR Context at a Glance

Support reps see risk_score + fraud_label directly on the student record in SRM. No separate Sardine dashboard login. No extra training.

3

Audit Trail in Databricks

Every sardine_risk_evaluated event flows to Tealium data lake → Databricks. Full audit history for compliance, analytics, and model training.

4

No Sardine → SFDC Direct

We don't want to implement Sardine directly in Salesforce. Tealium CDP carries the enriched profile, protecting SFDC architecture.

What we learned building a real-time CDP for student persistence

01

Find the opportunity before you build

The 4% media reallocation opportunity came from one whiteboard session with Olivia — not a platform sprint. The business question always precedes the CDP build.

Audience suppression live in <10 days

02

One segment, endless activations

Any new partner reuses the same pattern with minimal effort.
One Tealium segment - "Amazon Prospect" - powers website, email and paid media.

Next partner live in days, not weeks

03

Going from reactive to proactive

When a student misses an assessment, that event now flows through Tealium in real time — so the coach acts the same day instead of days later. Measure the decision not the event.

Same-day mentor alert



Thank you

Learn more at [Tealium.com](https://www.tealium.com)