

The Most Valuable Data in Business Is Hiding in Plain Sight

The Data Race is Underway - an introduction to Signal™ by PanOps.

Why is there even a data race, and why right now?

1 AI agents are improving every function in every company.

Sales, support, operations, HR, finance - within two years every department will run AI agents. Those agents will need to understand how the company actually works. Not the org chart. Not the policy manual. The real, living, breathing operation.

2 The quality of those agents depends entirely on what they know.

Give an agent CRM records and standard operating procedures and it produces the same generic output any consultant could. Give it the actual texture of how the organization operates - real conversations, real decisions, real relationships - and it reflects the true nature of the company.

3 Capturing and structuring the right information creates a compounding advantage.

Every call, every message, every thread, every meeting - that data is being generated today and most of it is disappearing. The organizations that move first are building something that grows more valuable every day.

So the question becomes: what does it take to win?

Three things you have to get right.

1 **Capture everything.**

Not just the data in software applications - every conversation, every decision, every handoff across every channel, before it disappears into the noise.

2 **Keep your data in an environment you control.**

All of your data lives in a dedicated, isolated environment - not commingled with anyone else's, not used to train anyone's models, and governed by the security protocols you choose.

3 **Know exactly who touches your data.**

Every third-party model, every API, every integration - if it can see your data, you need to know about it and you need to have chosen it.

The cost of not knowing.

Three examples out of hundreds.

Regrettable Departure

\$50K–\$200K

Your best engineer told a colleague she was "exploring options" three weeks ago. It was in a Slack DM. Nobody flagged it. Now she is gone, and the replacement search starts from zero.

Key Account Churn

\$300K+

Your largest customer's tone shifted six weeks ago - shorter replies, fewer calls, a competitor mentioned in passing. The signals were there. They were just buried across three platforms and four people.

Compliance Failure

\$2M+

The problematic conversation happened on a recorded call. The policy violation was discussed in email a week before. It was all there - it just was not surfaced until it was too late.

Every one of these had warning signs buried in communications - conversations that happened, were never connected, and disappeared. The information exists.

Enterprise systems capture the footnotes. Communications contain the real story.

WHAT STRUCTURED SYSTEMS RECORD

A deal closed on March 15th for \$240K

An employee was promoted to Senior Manager

A support ticket was resolved in 4.2 hours

Q2 revenue hit \$18.3M

WHAT COMMUNICATIONS ACTUALLY REVEAL

The deal almost died twice - saved by a side conversation between the VP and their CFO

That promotion was controversial - three people on the team are quietly looking to leave

The ticket was "resolved" but the customer told the account manager they are evaluating competitors

Revenue hit target, but the sales team is burning out and the top closer told a colleague she is done after Q3

For many companies, less than 10% of what actually matters lives in structured systems. The other 90% - the context, the intent, the risk, the real relationships - lives in the communications between people.

Capturing the right information is step one. Mapping it into a knowledge base is where value lives.

FOUNDATION

The Knowledge Base

Every communication - email, call, message, meeting - ingested, transcribed, and structured into a unified, searchable repository. Nothing lost. Everything connected. This is the raw material.

▼ feeds

DATA STRUCTURE LAYER

The Organizational Map

People, projects, decisions, relationships, sentiment - automatically identified and continuously maintained. Who works with whom, on what, how, and how well. A living model of how the organization actually operates, not how anyone thinks it does.

APPLICATION LAYER

What Gets Built on Top

Once the map exists, anything can be built on it. Executive visibility, team coaching, compliance monitoring, onboarding acceleration, retention intelligence - every function that depends on understanding the human layer of the organization.

▼ realizes

FIRST APPLICATION

Signal™

Executive visibility. Ask any question about how your organization actually works and get a precise answer, grounded in proof.

Compliance & Risk

Retention Intelligence

Onboarding

Team Coaching

M&A Integration

and more

Signal™ is provisioned and managed entirely by PanOps for its customers, in a dedicated, isolated environment. Fully operational in less than a day.

LIVE DEMO

Let's see Signal™ in action.

We pull up a live Signal™ test drive environment and take questions directly from the audience - real queries, real answers, in real time.

AUDIENCE QUESTIONS WELCOME.

QUESTIONS & CONTACT

Let's talk about it.

panops.ai · hello@panops.ai

GOING DEEPER

Appendix

The Ontology Engine: from language to knowledge.

1 - INGEST

Raw Communication

From: Mike Torres
To: Sarah Chen
Subject: Meridian - need your help

Just spoke with David Park from Meridian about the Chicago rollout. He is concerned about the timeline - their board meets March 15 and they need a working demo.

Can you loop in Jake? He handled the Apex demo and David specifically asked for him.

Also - Lisa mentioned she might not be available next quarter. Something about looking at options.

Every email, call, message, and meeting, captured with full metadata before anything is lost.

2 - RESOLVE

Structured Extraction

PERSON Mike Torres - internal, sender

PERSON David Park - external, Meridian

PERSON Jake - internal, demo specialist

PERSON Lisa - internal, possible flight risk

ACCOUNT Meridian - active deal, Chicago rollout

ACCOUNT Apex - prior customer, successful demo

EVENT Board meeting - Mar 15, hard deadline

EVENT Demo request - Jake by name

LINK Mike to David Park: direct relationship

LINK Jake to Apex: prior success, transferable

RISK Lisa - "looking at options" - 78% attrition

Every person, relationship, deadline, and risk, identified automatically with a confidence score attached to every fact.

3 - MAP

Ontology Mapping

Person

name / role / reports_to /
collaborates_with

Organization

name / has_employee / has_deal_with

Project

name / status / involves_person /
deadline

Signal

type / severity / indicates_risk_for

A purpose-built organizational schema, not generic NLP. Every fact is temporally grounded and confidence-scored.

Even the most capable frontier models work against raw text - they can summarize, they can guess, but they have no structured understanding of your organization. The ontology gives Signal™ a living, typed, confidence-scored model of every person, relationship, project, and risk.

What the map actually knows.

Onboarding

Culture Shift

Behavioral

Team Dynamic

Dependency

Priority Shift

Comm. Pattern

Decision Path

Revenue Risk

Inst. Memory

Deal Status

Knowledge Gap

Momentum

Compliance

Churn Signal

Exec Alignment

Timeline Risk

Influence

Conflict

Workload

Resource Gap

Engagement

Escalation

Hiring Need

Risk Signal

Sentiment

Client Health

Synthesis

Bottleneck

Relationship

Onboarding

Culture Shift

Behavioral

Team Dynamic

Dependency

Priority Shift

Comm. Pattern

Decision Path

Revenue Risk

Inst. Memory

Deal Status

Knowledge Gap

Momentum

Compliance

Churn Signal

Exec. Alignment

Timeline Risk

Influence

Conflict

Workload

Resource Gap

Engagement

Escalation

Hiring Need

Risk Signal

Sentiment

Client Health

RELATIONSHIP DYNAMICS

Sarah Chen is the actual decision-driver on the Meridian deal

Engineering and sales both defer to her, regardless of title.
14 emails, 6 Slack threads, 2 calls over 3 weeks

INSTITUTIONAL MEMORY

Jake is the person David Park trusts

From the Apex demo four months ago. Not in any CRM - lives in one email thread.
Email history + calendar patterns over 4 months

RISK TRAJECTORY

Lisa's disengagement has escalated over 3 weeks

Shorter replies, skipped standups, "looking at options." Risk score: 84%.
Email sentiment, Zoom attendance, Slack activity decline

BEHAVIORAL PATTERN

A regional manager skipped 3 of 4 standups

Team lead language shifted from "on track" to "figuring things out."
Zoom attendance + transcript sentiment analysis

HIDDEN DEPENDENCY

The Meridian demo depends on Rachel's DevOps team

But Rachel is prioritizing two other customers first. Nobody has escalated.
1 call + 1 Slack thread, cross-referenced with workload

CROSS-CHANNEL SYNTHESIS

Hard board deadline, demo date, broken staging, flight risk

All from one morning across four channels. No one person saw all of it.
Email + call + Slack + Zoom in one morning

These are six examples. The map holds hundreds of insights like these, continuously updated across the entire organization. No person in the organization holds all of this, and no existing system captures it.

Now multiply this across every channel, every day.

WEEK 1		MONTH 6
~35,000	→	~1,000,000
communications		communications

The map does not just accumulate. It compounds.

At Week 1 it knows what happened this week. At Month 6 it sees behavioral trajectories, relationship evolution, shifting commitments, and slow-burning risks - all extraordinarily difficult to detect in any single time window across disparate systems. Integration protocols move data between systems; only the map turns it into compounding organizational knowledge.

The map is the foundation. Everything built on it performs at a level connectors alone never reach.

LAYER 1

The Ontology Engine

Raw communications become structured, typed, confidence-scored knowledge.



LAYER 2

The Knowledge Map

A living, compounding model of every person, relationship, project, and risk in the organization.

LAYER 3

Applications

FIRST APPLICATION

Signal™

Executive visibility. Ask any question about how your organization actually works and get a precise answer, grounded in proof.

BUILT ON THE SAME MAP

Compliance & Risk

Retention Intelligence

Onboarding

Team Coaching

M&A Integration

and more

Even frontier models do not perform without access to a structured map.

The most capable generalized models are structurally less performant on organizational intelligence tasks without a purpose-built knowledge base to work from.

METRIC	GENERALIZED AI	SIGNAL™	ADVANTAGE
Hallucination Rate Fabricated facts, invented attributions, and unsourced claims in model responses	20-40% Domain-specific attribution tasks	<5% Grounded to verified source data	4-8x reduction
Factual Accuracy Correct retrieval and representation of real events, decisions, and commitments	55-70% Enterprise domain retrieval	>90% Calibrated + verified harness	~1.5x improvement
Sparse Signal Detection Identifying meaningful signal in high-volume, structurally uniform communications	~20% precision Similar-language corpora	>90% precision Domain-tuned retrieval	~5x improvement
Corporate Voice Consistency Correct identification of individuals, roles, and communication patterns across the org	45-65% Without org-specific context	>90% Org-specific calibration	~1.7x improvement

This is before considering the prudence of giving a generalized frontier model access to all of your corporate communications and intellectual property in the first place, with no architectural guarantee about where that data goes or whose model sees it.

Some problems essentially disappear when a map exists.

These are not model improvements. They are problems the architecture resolves before the model ever sees them.

METRIC	GENERALIZED AI	SIGNAL™	ADVANTAGE
Scalability at Volume Performance maintenance as the corpus grows to thousands of employees and millions of messages	>30% degradation At enterprise corpus scale	<5% variance Purpose-built indexing	Structural advantage
Source Attribution Accuracy Correctly attributing statements and commitments to the specific individual who made them	60-80% Text inference only, no identity layer	>95% Pre-model identity resolution	Structural advantage
Entity Disambiguation Correctly resolving "Mark", "the Henderson deal", or "the Q2 launch" across a large corpus	65-80% Text inference only, no identity layer	>95% Directory-resolved at ingestion	Structural advantage
Temporal Precision Correctly placing events and statements in time: "last Tuesday" vs. "three months ago"	55-75% Text inference only, no metadata layer	>95% Metadata-resolved at ingestion	Structural guarantee

No amount of frontier model capability closes this gap, because the gap is not in the model.