

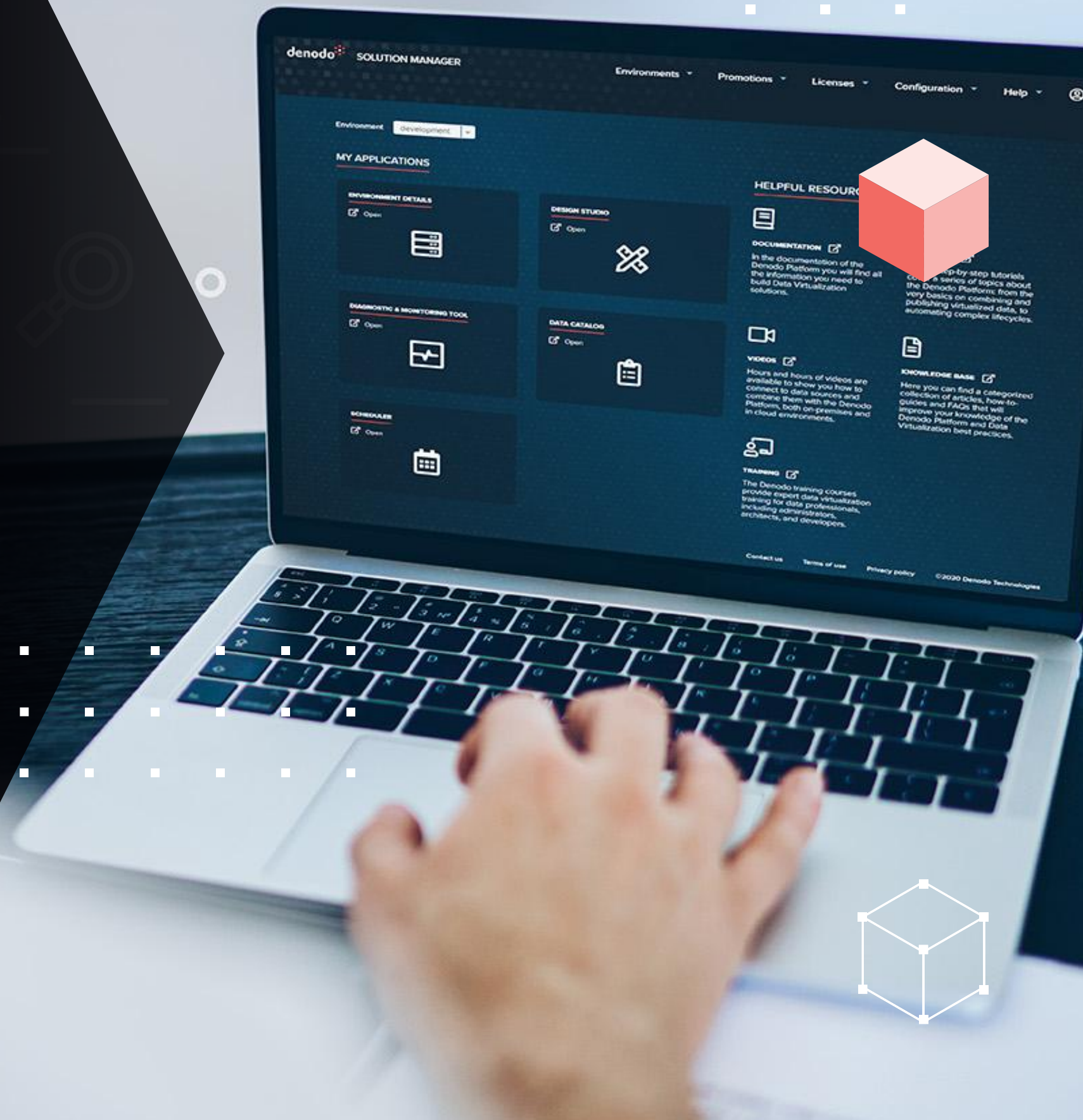


Enabling Reliable Agentic AI Through Unified Data and Business Context

A Government Perspective



Étienne Pelletier



Flyers would be more impactful if...

They knew that:

I have 3 teenage boys that eat like ogres

They have coeliac disease (gluten allergy)

I live within walking distance of 5 grocery stores

I don't drink Pepsi

I love blueberries

This flyer required

8 Weeks

15 People



But someone's working on it

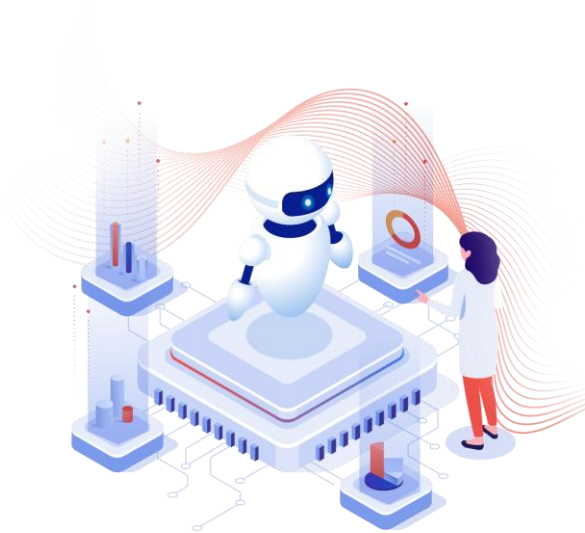
2 Weeks

3 People



Chatbot or Agentic?

It Depends



*Chatbots are
PRODUCTIVITY tools*

For Power BI users, chatbots act as an add-on that lets them generate new queries on the fly, meeting evolving business questions faster than data teams can build new reports.

For non-technical people, Generative AI is what Power BI is for analysts. Ask questions in plain language and get answers, charts, or simple reports



Chatbot	Agentic AI
Effective within predefined work patterns	Adapts to changing expectations and goals
Follows pre-defined processes	Learns and improves in real-time
Manual intervention required for multi-query orchestration	Makes autonomous decisions, understands context
Basic automations for simple tasks	Advanced automations, workflow optimization and cost reduction

*Agents are
AUTOMATION tools*

For a COO, Agentic AI drives operational efficiency by triggering corrective actions across systems without waiting for human intervention.”

For any data user, Agentic AI goes beyond Q&A to execute multi-step data workflows autonomously,

What if you worked with this gentleman?

"How will Canada's GDP growth over the next 5 years be impacted if we accelerate clean energy investment, factoring in global commodity demand, domestic employment trends, and fiscal pressures from provincial budgets?"

- "...and what if tariffs increase by another 10%?"
- "...and compare with U.S. economical projections."
- "...and show fiscal stress by province under each case."
- → Each requires weeks of rework by policy and BI teams.



Public Sector Agentic AI Use Cases

Just a few examples...

Service Delivery & Citizen Support	Compliance, Oversight & Risk Mgt	Procurement & Financial Management
•Automated eligibility checks and benefit optimization •Guided application support for immigration, visas, or student permits •Smart triage for Service Canada inquiries •Personalized retirement or benefits planning agents for citizens •Multilingual (English, French, Indigenous languages) real-time information agents	•Fraud detection and case preparation •Trade compliance monitoring agents •Health Canada regulatory scanning •Cybersecurity response agents for Shared Services Canada •Audit preparation assistants for Office of the Auditor General	•Automated vendor qualification checks in procurement •Contract monitoring agents that flag risks like delays or cost overruns •Grant and subsidy application screening to ensure compliance with Treasury Board rules •Spending analysis agents that suggest efficiencies across departments

AI in Federal Government

Responsible use of automated decision systems in the federal government

By: Benoit Deshaies, Treasury Board of Canada Secretariat; Dawn Hall, Treasury Board of Canada Secretariat

Automated decision systems are computer systems that automate part or all of an administrative decision-making process. These technologies have foundations in statistics and computer science, and can include techniques such as predictive analysis and machine learning.



Government of Canada finalizes investment to support Canadian-Born AI leader, Cohere

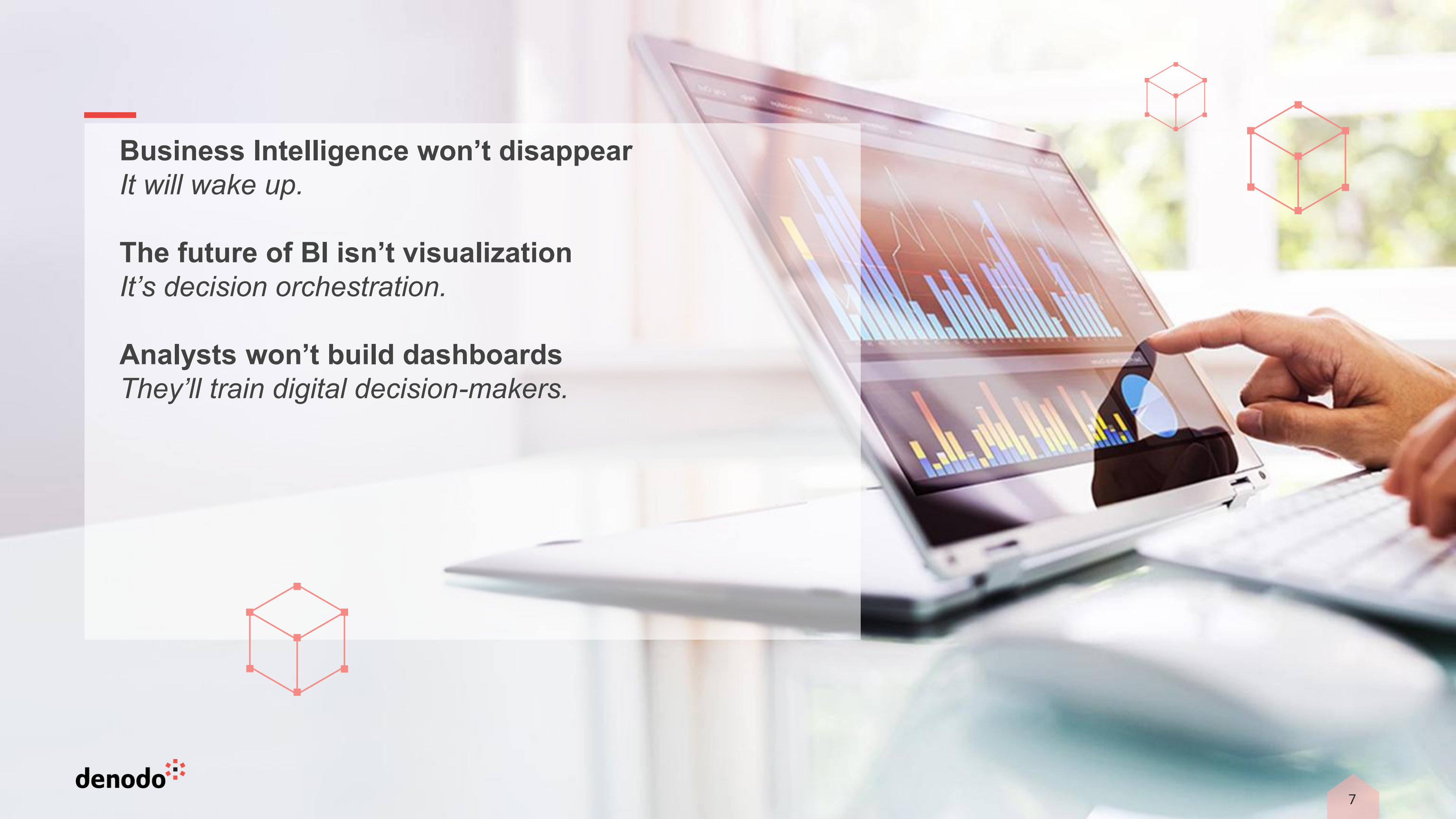
From: [Innovation, Science and Economic Development Canada](#)

News release

Investment will boost domestic compute capacity to strengthen the Canadian AI ecosystem

March 20, 2025 – Ottawa, Ontario

Today, the Honourable Anita Anand, Minister of Innovation, Science and Industry, announced that the Government of Canada has finalized its investment of up to \$240 million in [Cohere Inc.](#)'s \$725 million project to bring domestic compute capacity to Canada and support the development and scaling of AI capabilities here at home.

A hand is shown interacting with a laptop screen. The screen displays a business intelligence dashboard with various charts, including a bar chart and a line chart. The background is a blurred office setting with a window showing greenery outside. Three red wireframe cube icons are positioned around the text: one in the top right, one in the middle right, and one in the bottom left.

Business Intelligence won't disappear
It will wake up.

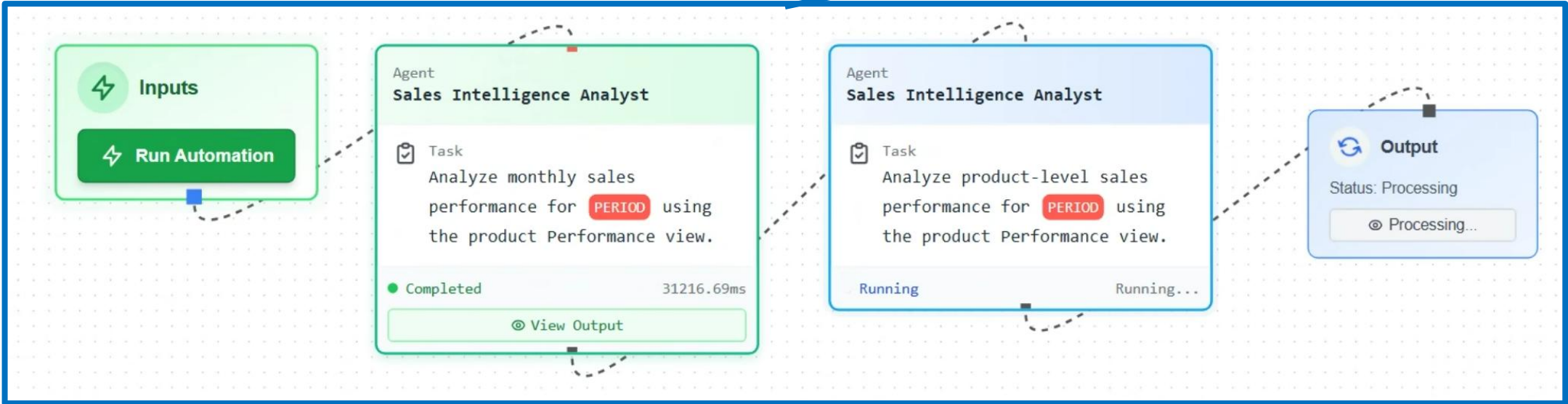
The future of BI isn't visualization
It's decision orchestration.

Analysts won't build dashboards
They'll train digital decision-makers.

How does it work? (1/2)

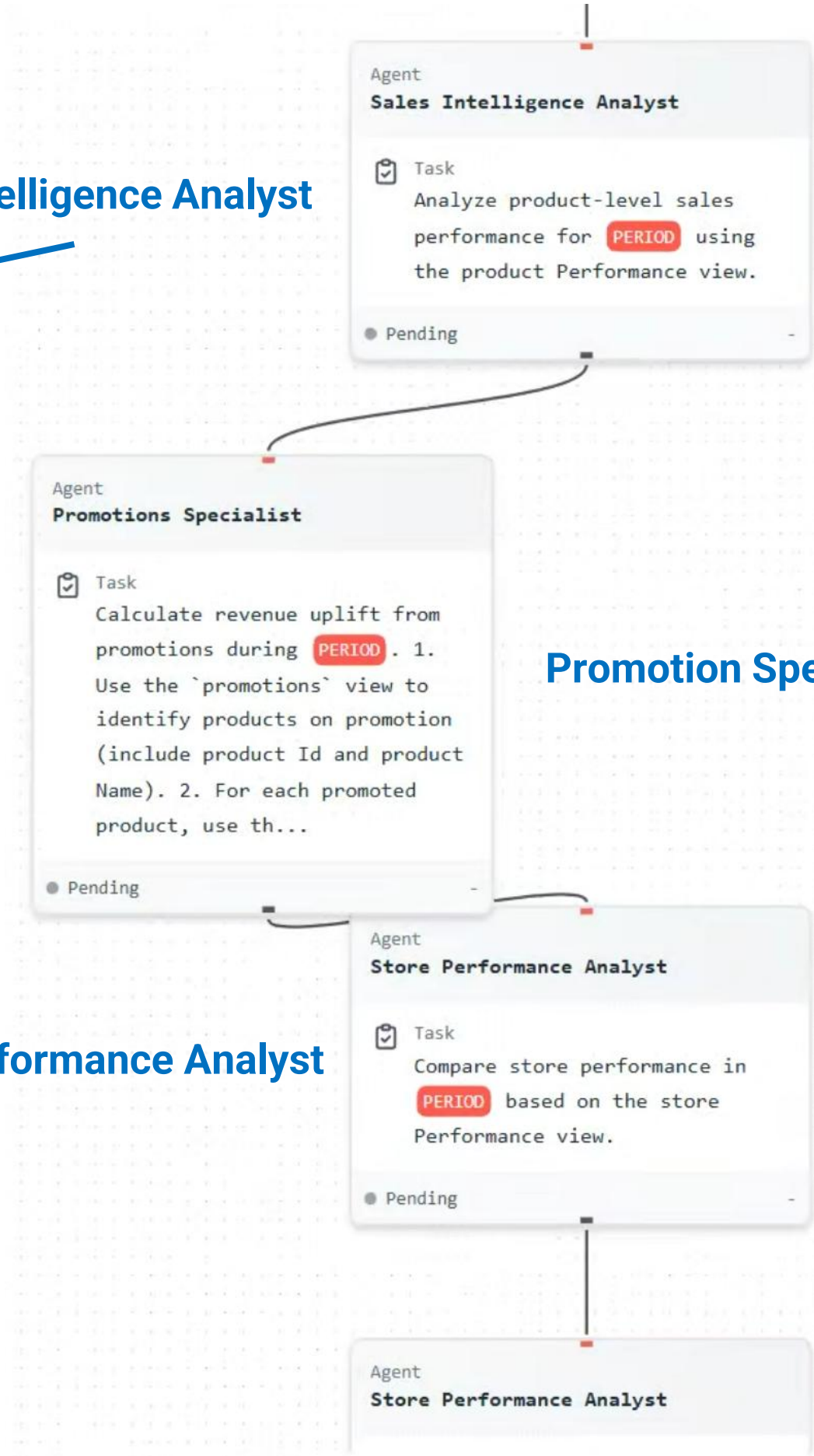
Specialized agents collaborate within a workflow

Sales Intelligence Analyst



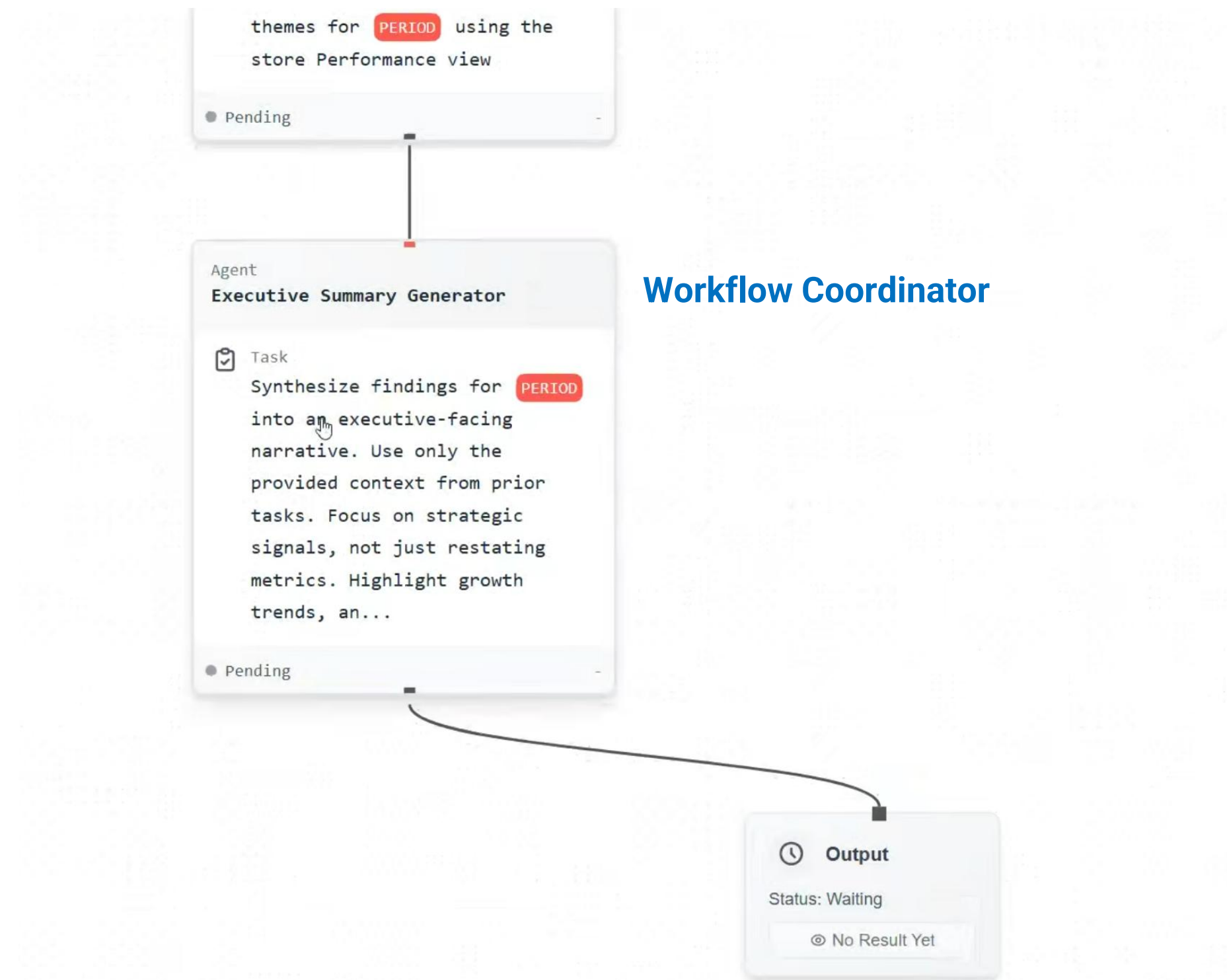
Promotion Specialist

Store Performance Analyst

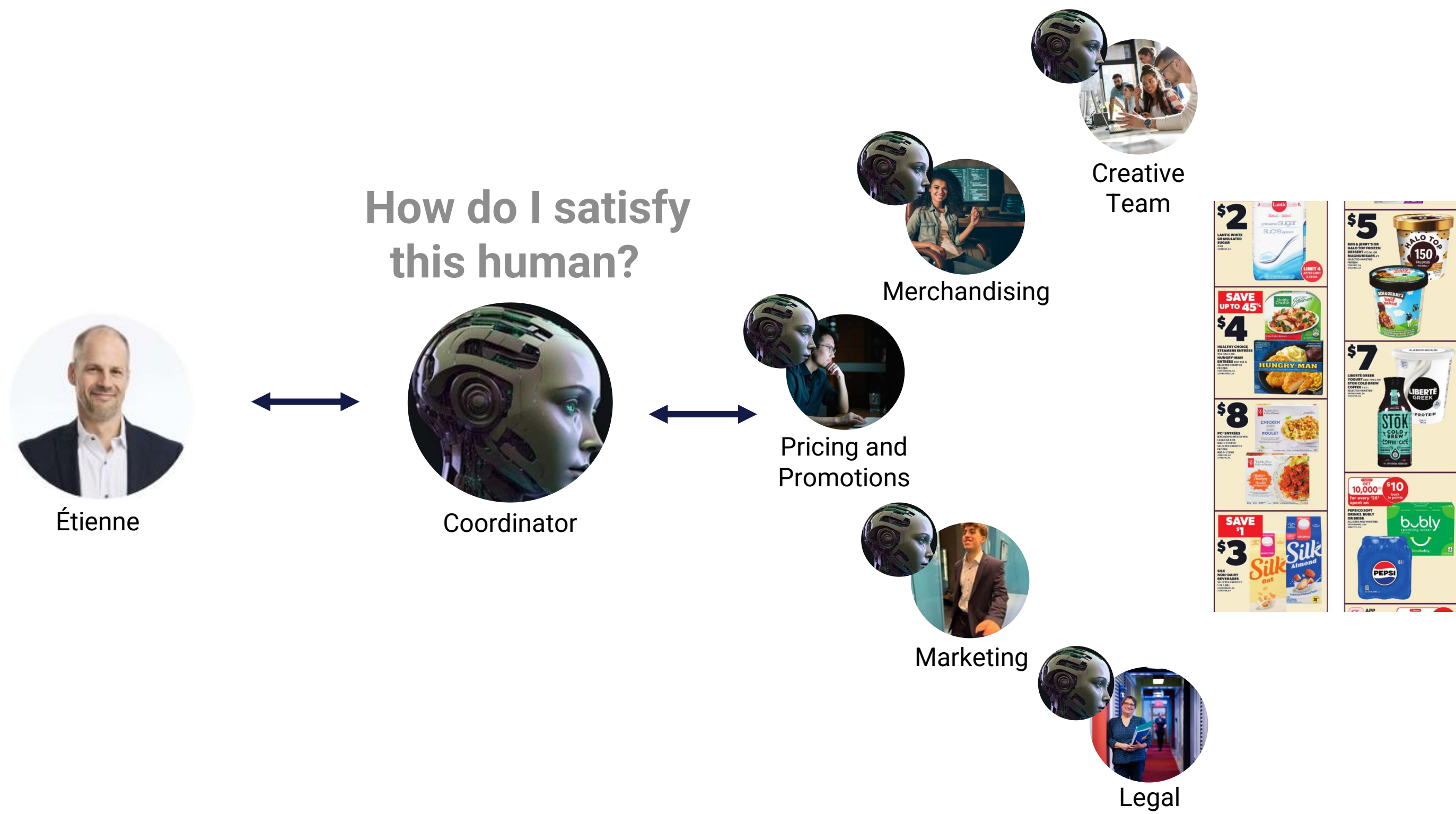


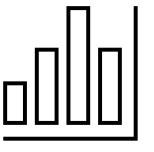
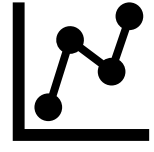
How does it work? (2/2)

Tasks and results are coordinated by a “Master” agent that delivers the answer to the interface



Put Yourself In The Coordinator's Shoes



-  Product Master Data
Customer Master Data
Store Master Data
-  Buying Patterns
-  Store Performance
-  Discount rates
-  Current and forecasted inventory
-  Pictures
-  Legal
-  External Events
-  Competitive Analysis

HOW?

Managing Complex Considerations



Pace of Innovation

- Constant flow of requirements
- Continuous delivery of data
- Dependencies on deliverables



Uncertainty

- Changing data requirements
- Unknown sources and structures
- Potential competing projects



Globalization

- Multiple Time Zones
- Multilingual
- Disparate data



Multimodal

- Model connectivity
- Analyst accessibility
- Business interpretability



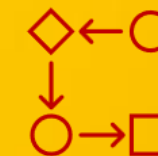
Volatility

- Imminent cloud migration
- Imminent ERP migration
- Decommissions/New platforms



IP Protection

- Trade Secrets form 3rd Party
- Safeguard other IP
- Ensure distinction via Data



Transformation

- Enterprise-Wide Transformation
- Project guided transformation
- Dependent transformations

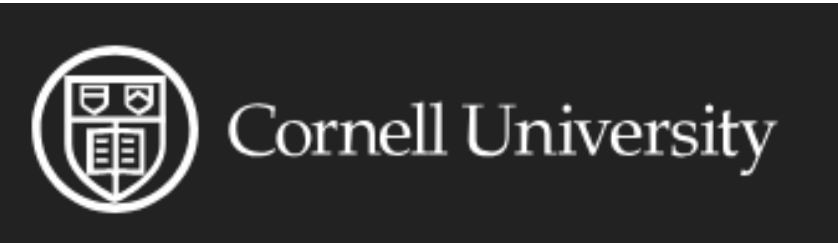


Supportability

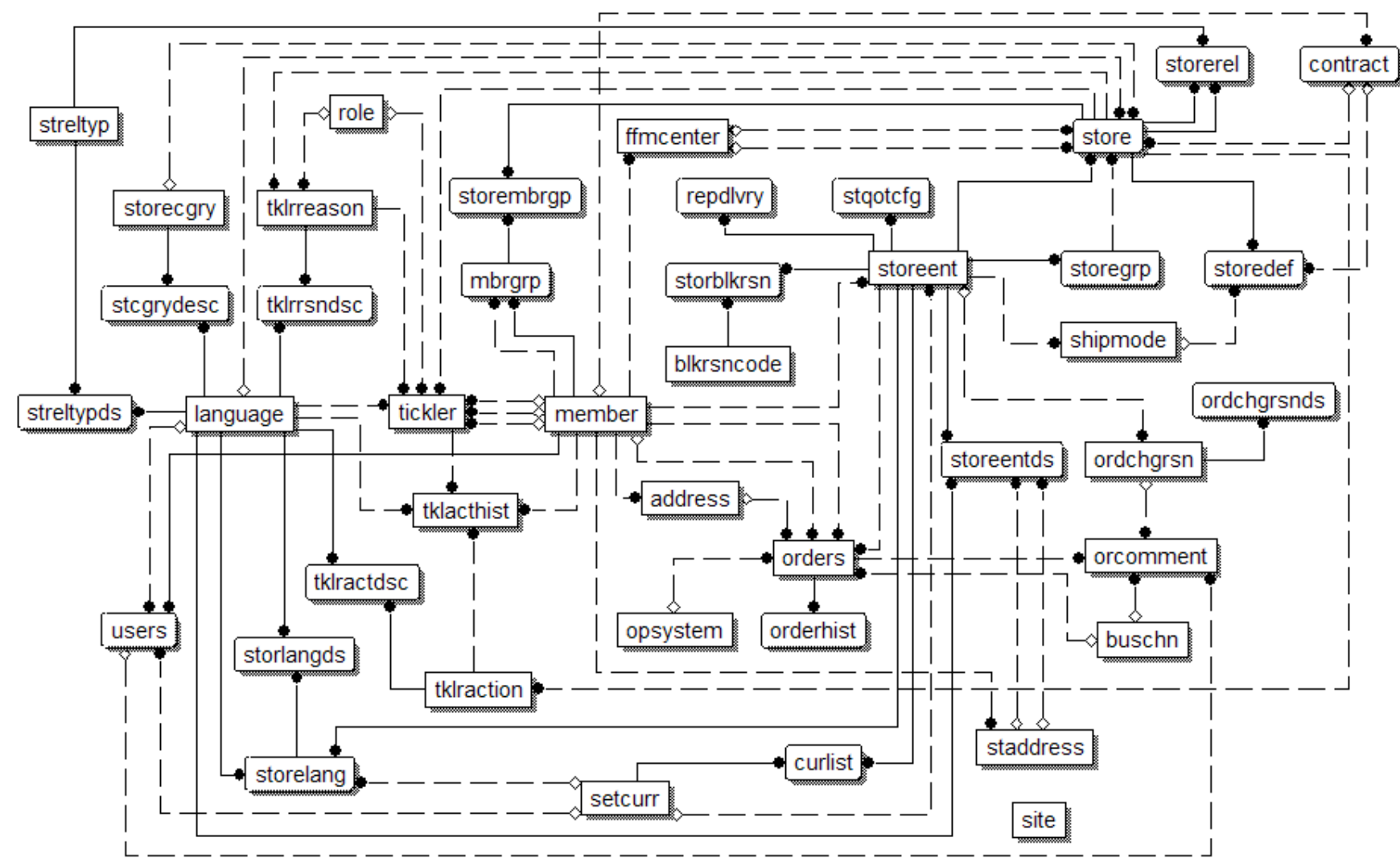
- Enterprise-Level support
- Long-term support
- Continuous Delivery

How can we be agile and stable with so much going on!!!

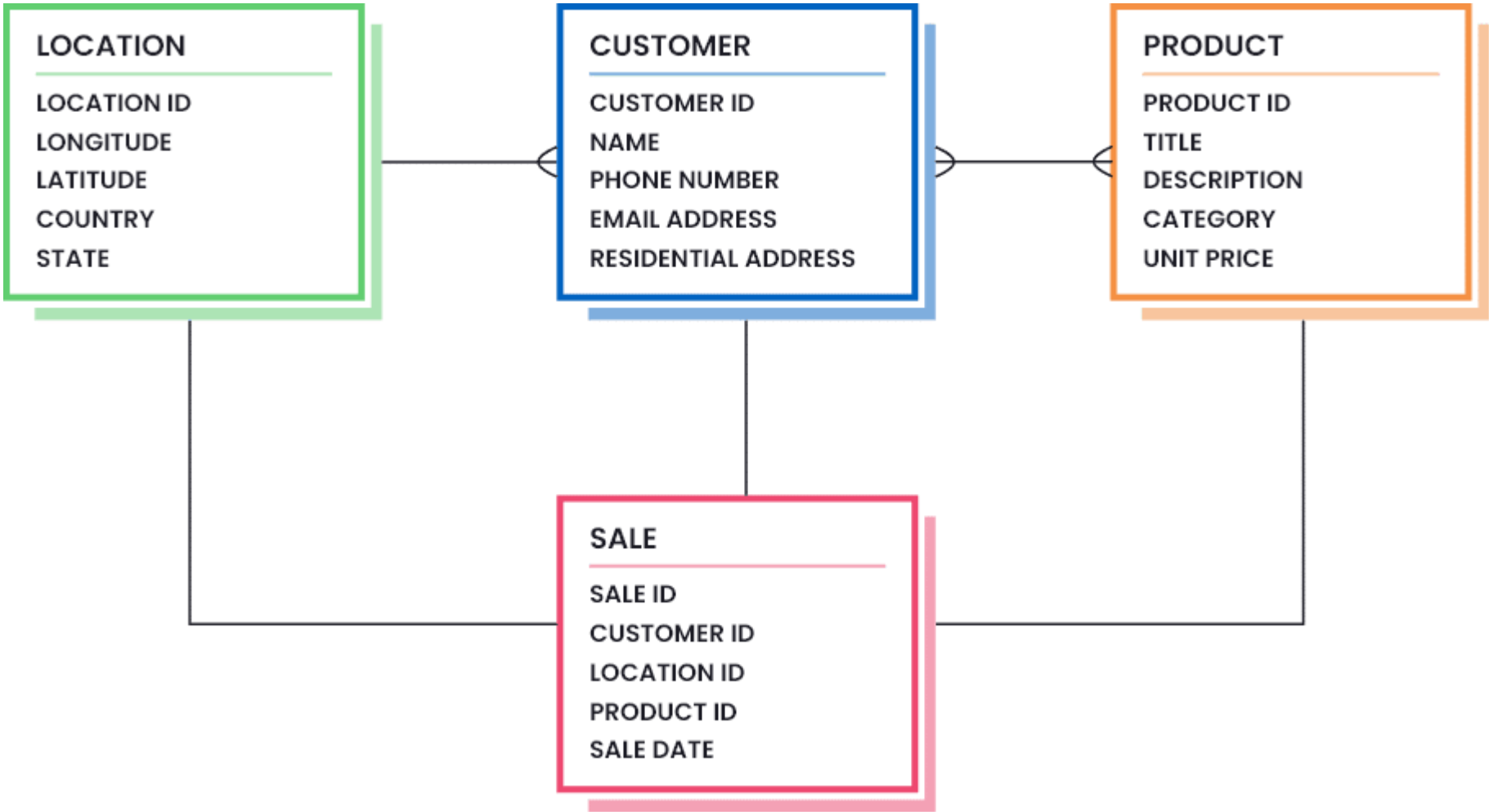
Data Must Make Sense to Humans... and Agents



Study: *Increasing the LLM Accuracy for Question Answering: Ontologies to the Rescue!*
“...research showed that by using a semantic layer (ontology, knowledge graph) the **accuracy improved from 16% to 54%.**”

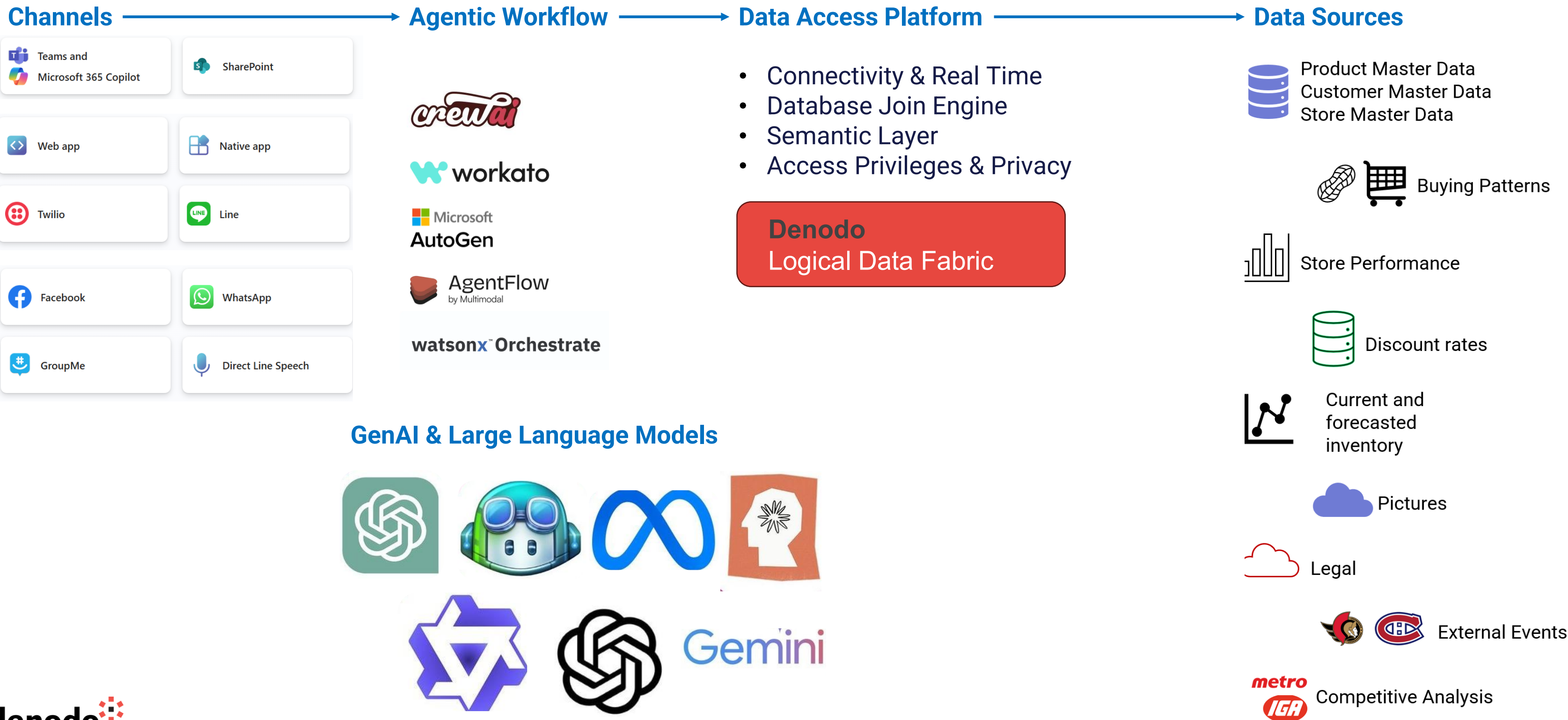


RAW DATA



SEMANTIC DATA

The End-to-End Agentic Flow



GenAI & Large Language Models





denodo[®] Fearless Data

The Denodo Platform delivers data in the language of business, at the speed of business.

- ✓ Access and join data from anywhere
- ✓ Using the language of business
- ✓ Secure interface to data
- ✓ Governance and security
- ✓ Simplified interoperability

Page 10 of 10

Transform Your Data Ecosystem for AI and Self-Service



Learn More

Visit the Denodo Booth

or contact

Carlisle Gomes cgomes@denodo.com

Semantic Unification
of All Data

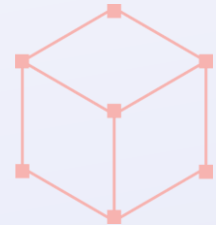
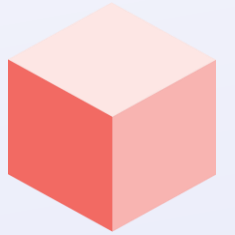


Personalized
Data **Self-Service**



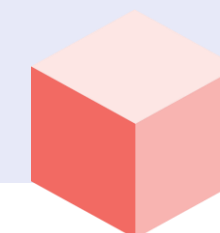
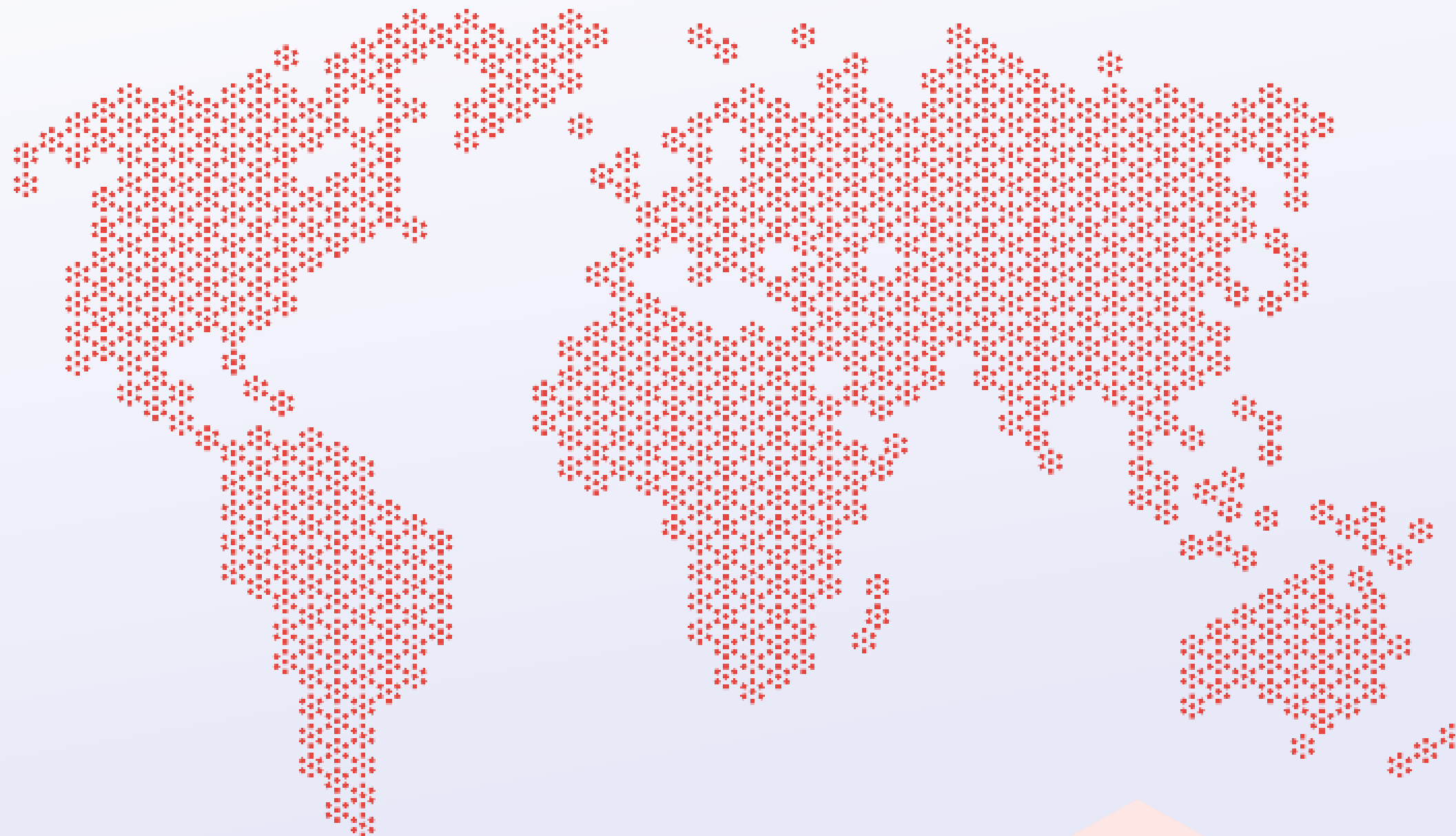
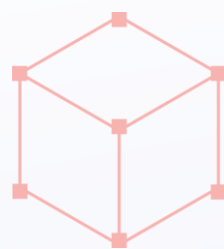
Federated
Data Governance





Q&A





Thanks!



www.denodo.com

info@denodo.com

© Copyright Denodo Technologies. All rights reserved

Unless otherwise specified, no part of this PDF file may be reproduced or utilized in any for or by any means, electronic or mechanical, including photocopying and microfilm, without prior the written authorization from Denodo Technologies.