Pryon and Evans & Chambers

Trusted, Safe, and Proven Path to Implementing
Generative AI in support of CAD/PAD

Integration Partner: Evans & Chambers Technology

At Evans & Chambers, **excellence is our commitment**. We use high-quality, systems-based processes. But more importantly, we develop a **partnership** with our clients.

➜ Cyber Defense

➜ Cloud Engineering

➜ Data Science & Engineering

➜ Human-Centered Development

Trusted by:

Evans & Chambers Technology Corporate Snapshot

DUNS	188303767
CAGE Code	4LH55
Designation	8(a) Graduate, HUBZone, Minority-Owned
Security Clearances	Active Top Secret Facility Clearance (FCL)
Certifications	ISO 9001:2015,CMMI Dev III, ISO 27001 AWS Select Consulting Partner
Industry/Business	IT and Management Consulting
Commercial Clients	Air Force, DHS, DIA, FBI, NCTC, VA Intelligence Community, Veterans Administration, Mack Defense, Cisco, Guidehouse
GWACS and IDIQs	GSA Multiple Award Schedule

NAICS Codes

- 541511 Custom Computer Programming Services
- 541512 Computer Systems Design Services
- 541513 Computer Facilities Management Services
- 541519 Other Computer Related Services
- 541330 Engineering Services
- 541430 Graphic Design Services
- 561110 Office Administrative Services
- 541611 Admin Mgmt and General Mgmt Consulting Services
- 541618 Other Management Consulting Services

Evans & Chambers Technology Domain Expertise

Domain Expertise / Agencies	IC	FBI	Navy	Air Force	DIA	DHS	SSA	B2B
Counterterrorism	●	●			●	●		
Counterintelligence					●			
Personnel Security	●							●
Physical Security	●						●	●
Space Intelligence					●			
Smart Manufacturing			●					
Legacy System Modernization	●							●
Immigration						●		
Intelligence Analysis	●				●			
Cross-Domain Communication	●	●						
Secure Information Sharing	●	●						
Open-Source Intelligence	●				●			
Professional Sports and Entertainment								●

Introducing Pryon

Igor Jablokov shows YAP in 2008 — acquired by Amazon in 2011

Pryon Inc.

FOUNDED BY AI VETERANS

IGOR JABLOKOV
Founder & CEO
Founder, YAP – exit to
Amazon (Alexa)
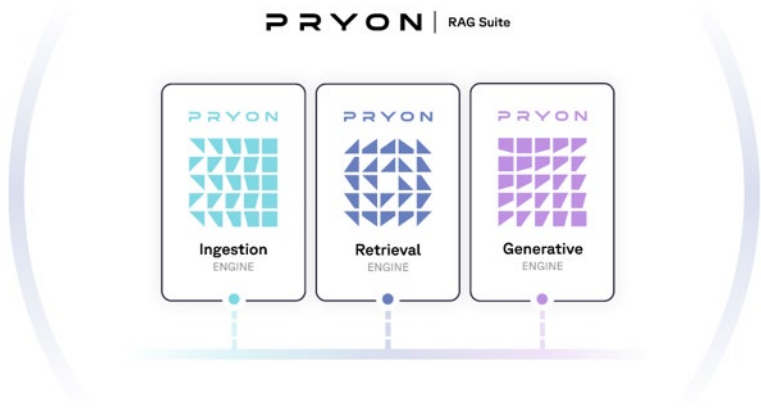
CHRIS MAHL
President & COO
IPOs: Salesforce,
Informatica

DAVID NAHAMOO
Chief Scientist
37 years at Watson Labs

ENTERPRISE RAG PLATFORM

Pryon for Enterprise
and Government

PRYON | RAG Suite

| PRYON | PRYON | PRYON |
| Ingestion ENGINE | Retrieval ENGINE | Generative ENGINE |

USED BY LEADING COMPANIES

NVIDIA

DELL

Westinghouse

WORLD ECONOMIC FORUM

U.S. Department of Defense

Knowledge friction is the disconnect between content authors & consumers

AUTHOR
Enablement
Policies
Manuals
Training
Wikis

KNOWLEDGE FRICTION
Content scattered across silos and formats
Time wasted looking for answers
Content =/= knowledge

CONSUMER
Where do I start?
Who do I talk to?
Which file has the answer?
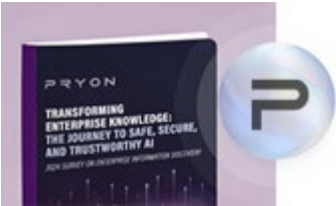Who has the time to read this ?
Is this the latest version?

PRYON

Knowledge friction is a significant problem

470K Hours a year spent by employees of mid-sized companies looking for answers
— *McKinsey*

>50% Of workers spend more time looking for answers than working
— *TechRepublic*

70% Say employees spend more than an hour looking for a piece of information

92% Of respondents agree that fast, accurate information from unstructured content is vital
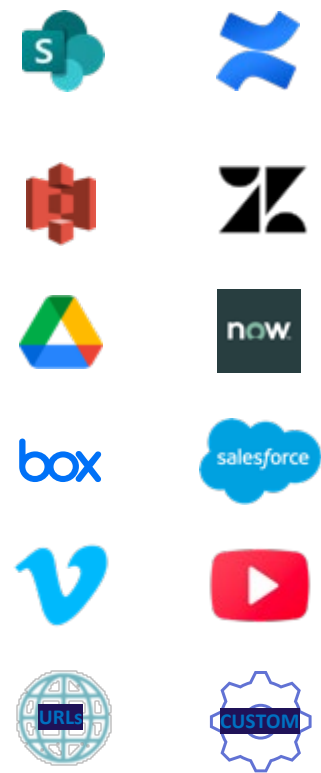
Source: The Survey Toward Safe, Secure, and Trusted AI

IMPACT

x Low employee and operational productivity

x Frustrated customers

x High organizational inertia to changes

x High compliance risk

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Pryon addresses knowledge friction by ingesting enterprise content, retrieving accurate answers, and generating responses where users want them
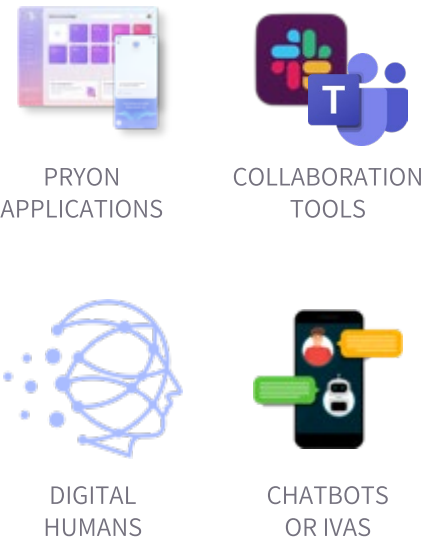

Extensible Connectors to Enterprise Sources

PRYON | RAG Suite

Ingestion ENGINE

Retrieval ENGINE

Generative ENGINE

Flexible Front-End Integration

PRYON APPLICATIONS

COLLABORATION TOOLS

DIGITAL HUMANS

CHATBOTS OR IVAS

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Pryon offers distinct advantages in addressing knowledge friction

ACCURATE

- High-precision ingestion that reads content as humans do

- Accurate retrieval with smart matching

- Grounds generative responses in content retrieved from the source, providing direct attribution

- Continuous ingestion for new and changed content

- No-code interface for updating content

ENTERPRISE SCALE

- Pre-built connectors to most common enterprise source systems

- Full multimodal support

- Supports millions of pages of content per collection

- Serves thousands of concurrent users in milliseconds

SECURE

- Document-level access level control

- Deployable in SaaS, VPC, and On-Premises (Dell)

- Does not train models on customer data
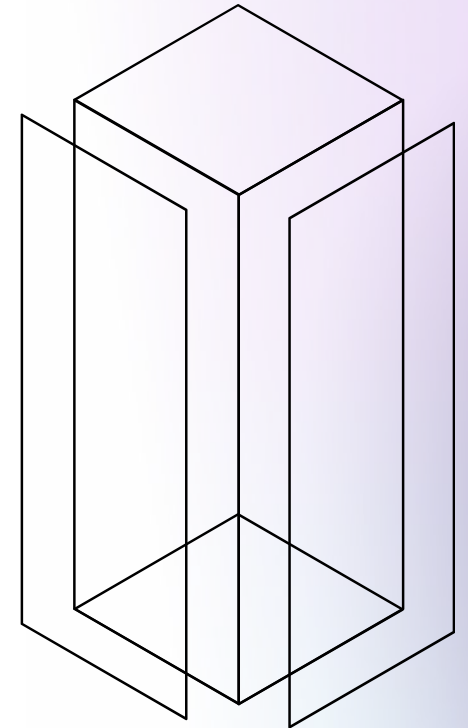
- SOC 2 compliance (Pryon SaaS)

TIME-TO-VALUE

- Deployable in as little as two weeks

- No-code interface for updating content

Where are you in your Generative AI Journey?

GenAI Journey

- Early exploration

- Implementing proof of concepts and pilots

- Adapting use of public LLMs by fine-tuning the model or using techniques such as Retrieval-Augmented Generation (RAG)

- Building enterprise architecture using proven components to support multiple GenAI use cases across the business

- Managing multiple GenAI applications in production

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Generative AI also has significant risks

Key Risks of Generative AI to the Enterprise

Reliability of generated content	Produced answers and content may be inaccurate, low-quality, out of date, etc.
Bias in results	Models may inherit bias in the training data and reflect that bias in generated responses
Privacy & data security concerns	Generated responses may reflect sensitive user or business information inherent in the training data. Applications may use user inputs for further training, which may also expose sensitive information to a public forum
Lack of control	Businesses are unable to control the responses from a generative solution due to a lack of inherent safeguards

ARTIFICIAL INTELLIGENCE

ChatGPT, Generative AI Gets 6-Month Ban in Maine Government

Samsung Bans Staff's AI Use After Spotting ChatGPT Data Leak
- Employees accidentally leaked sensitive data via ChatGPT
- Company preparing own internal artificial intelligence tools

Companies Banning AI Platforms Like ChatGPT in 2023

From Apple to Samsung, these companies (and a few countries) are prohibiting the use of generative AI platforms like ChatGPT.

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Retrieval-Augmented Generation ensures reliable and grounded use of GenAI

Retrieval

Pryon's world-class retrieval engine securely provides accurate and fast answers by **extracting** information directly from enterprise content with **attribution to the source**.

Augmented

+

Generative

Retrieval-Augmented Generation (RAG) leverages generative LLMs to interpret queries, **smooth the responses** provided by Retrieval Engine, and support a conversational UX.

EXAMPLE:

Prompt:
How do I remove a microSD card?

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Retrieval ENGINE

Context 1

Context 2

Context *n*

PRYON

Generative ENGINE

Answer:
To remove the microSD card, push the card to eject it form the slot and then remove it from the system. [1][2]

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Pryon solves for the "R" in RAG

Pryon Ingestion Engine

Pryon accesses, reads, and understands in-scope content like a human would.

● **Ingest & Content Capture Engine**

Accesses the customer's content sources with read-only access, checks for updates, and begins ingestion

● **Optical Character Recognition Engine (OCR)**

Reads each document to identify and label key components (e.g. table of contents, image, header, body, etc.) and extracts textual elements via OCR

● **Content Normalization & Interpretation**

Prioritizes more meaningful text (e.g. body paragraphs) and removes less useful text (e.g. non-ASCII characters), then converts text into machine-interpretable vectors that reflect the content's meaning

Pryon Retrieval Engine

Pryon understands a user's query and rapidly searches through the ingested content to find the answer.

● **Query Processing Engine**

Translates the user's query into machine-interpretable vectors that reflect the meaning behind the query

● **Content Matching Engine**

Rapidly matches the user's query to all ingested content and returns highly accurate responses directly from the ingested content

● **Display Engine**

Returns the response text, contextual text, and metadata so that it's easily interpreted by the user

PRYON

Ingestion
ENGINE

PRYON

Retrieval
ENGINE

PRYON

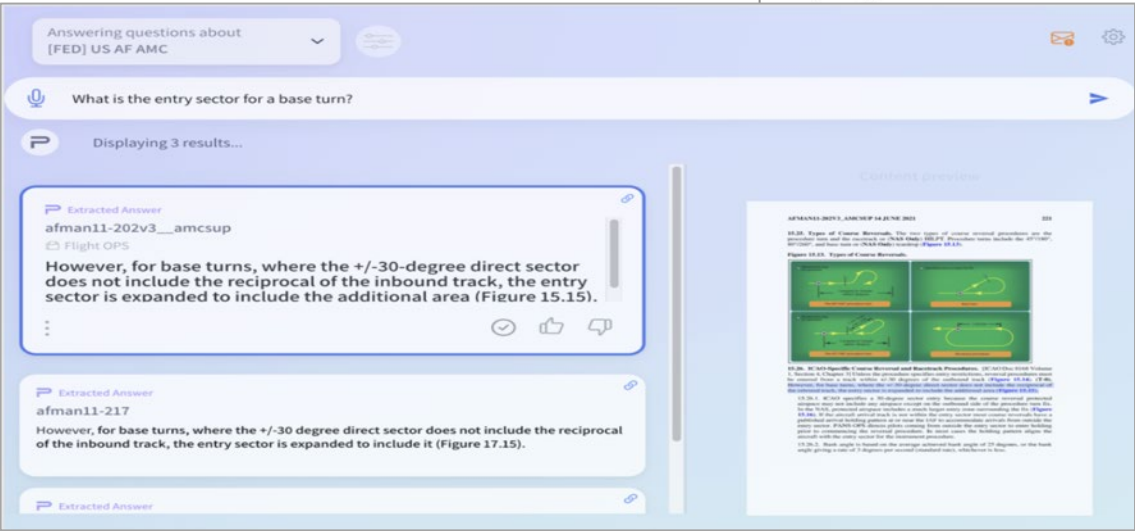# Computer Vision for Images, Safety Documents, SOPs

Computer Vision and Optical Character Recognition

Using a unique visual parsing model, Pryon users can begin asking natural language questions and get an accurate answer in less than second.

Ranked Answer and Summarized Answers

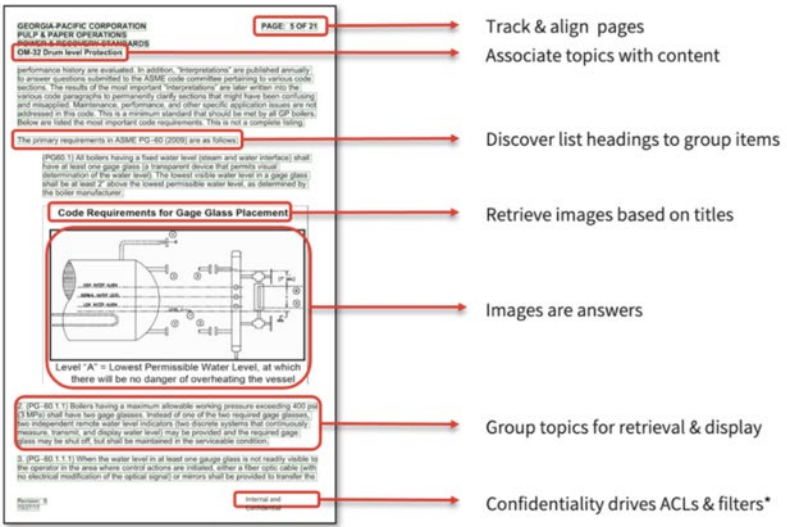Answers delivered in ranked answer cards. The answer is highlighted in the source document (right in blue).

Retrieval Augmented Generative (RAG) mode enables question to be answered in summary format.

Visual Parsing establishes human-like context

Mimicking how humans see context, Pryon's unique visual parsing model & workflow improves accuracy by recognizing:

1. Headings
2. Images
3. Labels for images
4. Lists
5. Paragraphs
6. Tables
7. Confidentiality*

- Track & align pages
- Associate topics with content
- Discover list headings to group items
- Retrieve images based on titles
- Images are answers
- Group topics for retrieval & display
- Confidentiality drives ACLs & filters*

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Pryon provides proven building blocks for Enterprise RAG

Pryon's best-in-class ingestion and retrieval engines can be paired with Generative LLMs to implement retrieval-augmented generation and provide accurate, instant, and verifiable answers at enterprise scale.
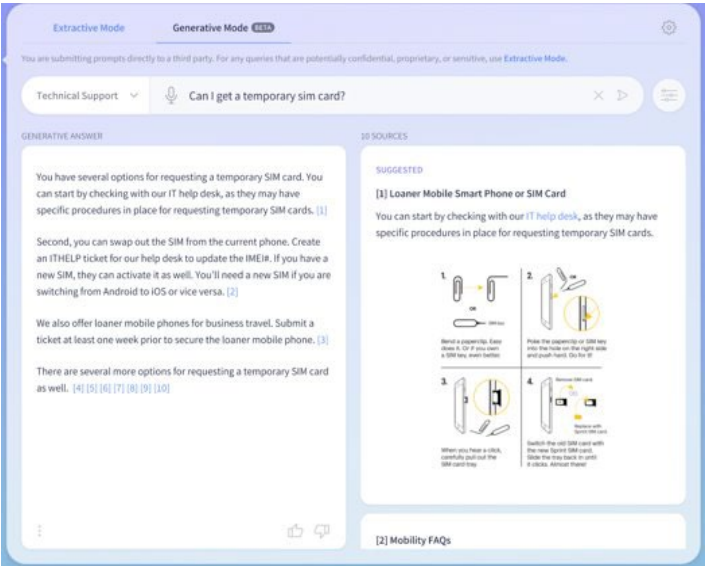
✓ **Simple** ✓ **Comprehensive**

✓ **Performant**

PRYON | RAG Suite

PRYON
Ingestion
ENGINE

PRYON
Retrieval
ENGINE

PRYON
Generative
ENGINE

PRYON

Government-Grade

WHAT & WHEN?

The portable Pryon Platform (RAG + Zeus (Pryon LLM) beta late Q1 2024

WHO?

Customers
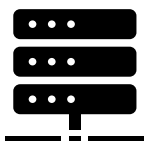
U.S. Department *of* Defense

DoD, DHS, DOJ, Commerce, Fed Health (VA, HHS), IC

HOW?

Air-Gapped   Dell On-Prem

Google Cloud   Azure   aws

GAME WARDEN

IL4/5/6 | FedRAMP Access Q2

Delivered on-premises, air-gapped, or in federal cloud – AWS / Azure GA Q2