[:] HatchWorksAl



[:] HatchWorksAl

Your AI development partner

We build Al-native solutions — and use Al to build software better, faster, smarter.



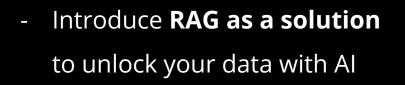
VP of Strategy HatchWorks Al

Jerrik Arango

Principal Software Engineer HatchWorks Al

Today's Goal:

- Emphasize the value of your **proprietary data**





Raise your hand if you use Gen-Al tools like ChatGPT



"Data is the new oil"

- Clive Humby 2006

This statement is **more true than ever before** in the age of gen-Al

AS WE SEE IT

Every company will be a data + AI company

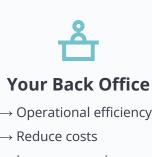
This applies to governments as well...

It will foundationally change...



Your Front Office

- \rightarrow Create novel solutions
- \rightarrow Drive new revenue
- \rightarrow Increase differentiation



- \rightarrow Operational efficiency
- \rightarrow Reduce costs
- \rightarrow Increase margins



- \rightarrow Faster time to market
- \rightarrow Increase quality
- \rightarrow Enable automation

"Every Country Needs Sovereign Al...

It codifies your culture, your society's intelligence, your common sense, your history – you own your own data."

Jensen Huang | Founder & CEO 💿 NVIDIA.

ChatGPT 4o \vee

explain quantum physics to an 8 year old.

Large Language Models (LLMs) are trained on **the entire internet...**

Enabling it to do some truly novel things.

Sure! Let's think of the universe as a giant playground, and everything in it is made of super tiny building blocks, like super tiny LEGO pieces. These building blocks are called "particles." Quantum physics is like the special rules that these tiny LEGO pieces follow, and these rules are very different from the rules we see in our everyday life.

Here are a few fun things about quantum physics:

- Tiny Particles Are Like Magic: Imagine you have a magical ball that can be in two places at once! In the quantum world, particles can do that. They can be in two places at the same time until you look at them. It's called "superposition."
- 2. Particles Play Hide and Seek: These tiny particles can play hide and seek so well that you can't tell exactly where they are. You can only know the chances of finding them in different places. This is called "uncertainty."
- 3. Particles Can Be Best Friends: Sometimes, particles become best friends and stay connected, no matter how far apart they are. If you do something to one, the other one knows instantly, even if they are on opposite sides of the universe! This is called "entanglement."
- 4. Particles Love Surprises: When you try to see what a particle is doing, you might change what it's doing just by looking at it. It's like if you peek at your LEGO pieces and they decide to move just because you peeked! This is called the "observer effect."

So, quantum physics is like a magical playground where tiny building blocks play by their own special, surprising rules. It's a very mysterious and exciting part of science that helps us understand how the tiniest things in the universe work!

ChatGPT 4o 🗸

However, it is not training on one very important thing...

YOUR PROPRIETARY DATA

Which suppliers have the best on-time delivery performance within the Marine Corps Logistics Command network?

- The question "Which suppliers have the best on-time delivery performance within the Marine Corps Logistics Command network?" would provide valuable insights into the reliability and efficiency of the suppliers. By connecting to the Marine Corps Logistics Command's data, this could be answered by analyzing key performance indicators (KPIs) such as:
 - On-Time Delivery Rate: This KPI would measure the percentage of deliveries made on or before the scheduled delivery date. The data could be filtered by supplier to identify those with the highest performance.
 - 2. Average Delivery Time: Analyzing the average time it takes for each supplier to complete a delivery from order placement to receipt.
 - 3. **Delivery Delays**: Reviewing any instances of delayed deliveries, including the reasons for these delays, to determine if they are consistent across certain suppliers.
 - Supplier Reliability Index: A composite score that factors in not just ontime delivery but also the accuracy of orders, communication, and overall service quality.

The analysis could be done over a specific period, such as the last 12 months, to ensure the data reflects current performance trends.

() 口 い ペイ

ChatGPT 4o ~

What items are at risk of stockouts in the next 30 days?

However, it is not training on one very important thing...

YOUR PROPRIETARY DATA

- To identify which items are at risk of stockouts in the next 30 days, you'll typically need to analyze current inventory levels, historical demand patterns, lead times, and any known supply chain disruptions. Here's a general approach to identify those items:
 - 1. Inventory Analysis: Review current inventory levels for each item.
 - Demand Forecasting: Use historical sales data to forecast demand for the next 30 days. Consider seasonality, trends, and any upcoming promotions or events that could influence demand.
 - Lead Time Consideration: Factor in the lead time for each item. Items with long lead times are at higher risk if current stock levels are low.
 - 4. **Supplier Reliability**: Assess the reliability of suppliers. Any known issues with suppliers that could delay deliveries should be considered.
 - Buffer Stock: Identify items with low buffer stock (safety stock) relative to their forecasted demand.
 - Supply Chain Disruptions: Consider external factors that might affect supply chains, such as geopolitical events, natural disasters, or changes in shipping routes.

If you have access to the necessary data, I can help you analyze it to generate a list of at-risk items. Would you like to proceed with that?

今 む む なく

ChatGPT 4o 🗸

However, it is not training on one very important thing...

YOUR PROPRIETARY DATA

which warehouses have surplus inventory that can be redistributed?

- To determine which warehouses have surplus inventory that can be redistributed, you would typically need to review inventory levels across your entire warehouse network. Here's a general approach you could take:
 - Data Collection: Gather inventory data from all warehouses, including current stock levels, reorder points, and average demand rates.
 - 2. Analysis:
 - Identify Surplus: Compare the current inventory levels against the expected demand and reorder points. Warehouses with inventory levels significantly above the demand forecast and reorder points may have surplus inventory.
 - Redistribution Potential: Assess which warehouses are close to their reorder points or experiencing higher demand. These could be candidates for receiving redistributed inventory.
 - Report Generation: Generate a report that lists the warehouses with surplus inventory, including details such as item type, quantity, and potential warehouses for redistribution.

If you can provide the data, I can help analyze it to determine which warehouses have surplus inventory that can be redistributed.

き ひ い なく

How you orchestrate LLMs and integrate them with your proprietary systems and data is where true value resides.

Your proprietary data will be your most valuable asset in this transformation.



- → Foundation models will have a massive impact, but will turn into a utility anyone can access
- → Data will be the true moat builder in the future

But how do you empower your data **with AI**?

And more importantly... How do you do it in a **secure way**?

[:] HatchWorksAl RaaS **RAG AS A SERVICE**

is the answer.



What is RAG?

RAG (Retrieval Augmented Generation) is an advanced approach that combines **information retrieval techniques** with generative models to improve the **quality** and **relevance** of generated content.

(ie. your proprietary company data)



RAG as a Service gives you a better more secure option

Democratize insights for all

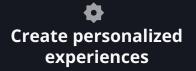
Empower everyone in your organization with relevant, accurate, and real-time insights through natural language.

لے Talk to your data in real-time

Turn your unstructured data, like PDFs and images, into interactive experiences serving real-time, actionable insights

Prevent Al hallucinations

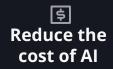
Keep AI hallucinations at bay by retrieving the most relevant and up-to-date information based on your data.



Enable permission-aware access controls creating tailored responses based on your role and what you have access to.

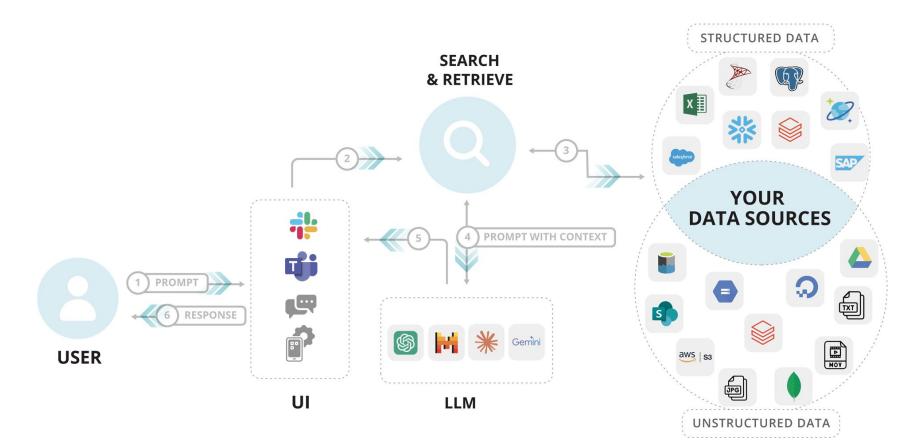
Secure your data

Maintain control of your proprietary data in your environment, ensuring privacy and security without third-party exposure.



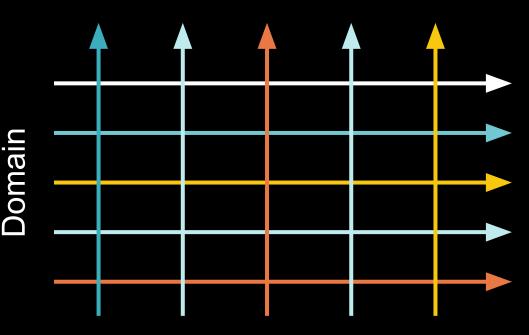
Save on expensive training and regular fine-tuning costs with an AI solution that seamlessly integrates with your existing data.

How does it work?



Let's look at some use cases...

RAG can be applied every **industry and domain** within an organization.



Industry

RAG Use Cases - Logistics

- Predictive maintenance for fleets
- Supply chain optimization
- Optimized route planning
- Inventory management
- Demand forecasting

- Automated documentation & labeling
- Automated contract management
- Logistic training & simulation
- Real time shipment tracking
- Procurement optimization

And you can do all of this in natural language



Morgan Stanley kicks off generative Al era on Wall Street with assistant for financial advisors

Morgan Stanley is a great use case of a RAG based solution

- → Integrated GPT-4 to database of 100K research reports
- → Financial advisors using to address questions related to markets, recommendations, and internal process



HI SEBASTIAN.PINTO Last Login 8/1/2024, 6:06:56 PM Downloads Clear Chat 🕭 AI Assistant Hello, how can I help you today? Rated at 8/2/2024. 1:47:42 PM You how many trips do i have? AI Assistant You have a total of 1828 trips. Rated at 8/2/2024. 1:47:44 PM You which of my employees sped more than 60 mph during their trips? AI Assistant 3 of your employees have exceeded 60 mph during their trips. Rated at 8/2/2024, 1:47:45 PM You how much time did my employees spend idling? AI Assistant Your employees have spent a total of 190 hours, 57 minutes, and 46 seconds idling Rated at 8/2/2024, 1:47:46 PM 📫 📭



Cox 2M Kayo Fleet Management -Trip Analysis Assistant

- → Access real-time insights about customers fleet using natural language
- → Chat interface, and embedded in mobile application
- ➔ Scalable across different cloud platforms

🖭 Hatchy Bot 🗠

Messages About

Matt Paige 10:54 AM

What is the daily per diem when traveling for work?

Hatchy Bot APP 10:54 AM

The daily per diem for meals when traveling for work is up to \$80 per day, with the following breakdown: \$15 for breakfast, \$20 for lunch, \$5 for snack, and \$40 for dinner. However, if you are traveling in other LatAm countries, the daily per diem for meals is up to \$65 per day, with the following breakdown: \$15 for breakfast, \$15 for lunch, \$5 for snack, and \$30 for dinner. It's important to note that this policy may have changed since the publication of the handbook, so it's always best to check with your manager or HR for the most up-to-date information.

Did this message answer your question?



Matt Paige 10:54 AM How do I request travel reimbursed?

Hatchy Bot APP 10:54 AM

To request travel reimbursement, you should follow these steps:

1. Ensure that your travel expenses are eligible for reimbursement under HatchWorks' travel policy.

2. Gather all necessary receipts and supporting documentation for your expenses.

3. Submit a reimbursement request through Expensify in the US, or receipts should be sent into People Operations in LatAm.

4. Wait for the reimbursement to be processed and paid out on the 23rd pay period.

Note: If you are unsure about any aspect of the reimbursement process, you should contact

 $\mathsf{B} \quad I \quad \mathbb{S} \quad \middle| \quad \mathcal{C} \quad \middle| \quad \Xi \quad \boxtimes \quad \middle| \quad \exists \quad \middle| \quad \exists \quad | \quad \exists \quad \forall \quad \forall \exists$

Message Hatchy Bot

Hatchy Bot HR bot for any and all

HR related questions

- → Integrated with all of HatchWorks AI HR and policy documents across all countries
- → Available to all Hatchers reducing dependence on busy HR team

+ <u>Aa</u> © @ C¹ & Z

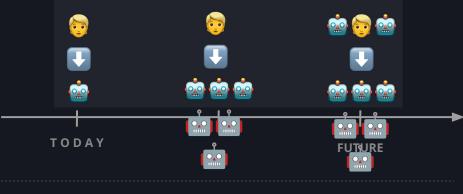
Wednesday, June 12th ~



AI will shift the role of humans from

Doers to 📌 Orchestrators

evolving our relationship with AI from 1 to 1 interactions to fully integrated business critical operations.



Manual \rightarrow \rightarrow \rightarrow

Today

- Synchronous
- Unintegrated
- 1 to 1 \rightarrow
- Nice to have \rightarrow

- Automated \rightarrow
- \rightarrow Asynchronous
- Future → Fully integrated
 - Many to many \rightarrow
 - Critical \rightarrow



AI Readiness in Record Time

Let us guide you through the maze of generative AI to a clear path of innovation.

Partner with HatchWorks Al to become Al-fluent and confidently lead tech innovation.

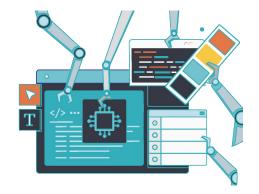
FULL DAY WORKSHOP



Gen Al Innovation Workshop

Apply Gen AI to real-world use cases in your business.

2-8 WEEKS BASED ON SCOPE



Gen Al Solution Accelerator RAG as a Service

Rapidly transform your Gen Al concept into a tangible prototype.

Keep Pace with AI Innovations

AI Newsletter & Blog

Stay Ahead with the Latest in Al

Talking AI Podcast

Conversations with AI Experts and Early Adopters

HatchWorks Al Labs & Community

Elevate Your Team with Expert-Led Webinars







Training, Fine-tuning, Inference... What's the Difference?

with 👔 🖁

David Berrio sr. al/ml engineer @ hatchworks