

Not only ChatGPT... improve the business with hybrid AI.



Peak of Inflated Expectations

ChatGPT has quickly become one of the most significant tech launches since the original Apple iPhone in 2007...

Your daily horoscope for Sept. 13 according to ChatGPT

Harnessing AI And ChatGPT Technology: The Next Industrial Revolution

Who says romance is dead? Couples are using ChatGPT to write their wedding VOWS

ChatGPT can write sermons. Religious leaders don't know how to feel about it

Because of Course, This San Francisco Bar Made a Cocktail Using ChatGPT

Through of Disillusionment

Elon Musk and Apple cofounder Steve Wozniak among over 1,100 who sign open letter calling for 6-month ban on creating powerful A.I.

Artificial intelligence bot ChatGPT in medical research: the potential game changer as a double-edged sword

European privacy watchdog creates ChatGPT task force

Robotics & AI

As NYC public schools block ChatGPT, OpenAI says it's working on 'mitigations' to help spot ChatGPT-generated text

MIT Technology Review Sign in Subscribe

ARTIFICIAL INTELLIGENCE

A watermark for chatbots can expose text written by an AI

The tool could let teachers spot plagiarism or help social media platforms fight disinformation bots.

AXIOS Sections Local news Axios Pro About Axios

Jan 24, 2023 - Technology

What ChatGPT can't do

Robotics & AI

OpenAI begins piloting ChatGPT Professional, a premium version of its viral chatbot

Kyle Wiggers @kyle_l_wiggers / 5:09 AM EST • January 11, 2023 Comment

CBS NEWS NEWS SHOWS LIVE LOCAL Login

MONEYWATCH

AI ChatGPT is helping CEOs think. Will it also take your job?

OPINION

The Carbon Footprint of ChatGPT

This article attempts to estimate the carbon footprint of the popular OpenAI chatbot called ChatGPT

CNET Is Reviewing the Accuracy of All Its AI-Written Articles After Multiple Major Corrections

Big surprise: CNET's writing robot doesn't know what it's talking about.

ChatGPT And Generative AI Tools Face Legal Woes Worldwide

FORBES > BUSINESS

BREAKING

JPMorgan Chase Restricts Staffers' Use Of ChatGPT

What to Expect When You're Expecting ... GPT-4

What comes after ChatGPT? 7 predictions for 2023

Gary Marcus
Dec 25, 2022

84 75

A Still Immature Technology




Structural elements

- **Statistic model, rather than cognitive**
So called "hallucinations" are not a bug. They are a native feature of the system
- **It has no way of finding out when it is making mistakes**
...unless it is supported by human experts
- **Privacy and intellectual property issues with data used for training**
First lawsuits (Midijourney, CoPilot...)
- **Your data property**
Data submitted to the system is used to train or improve the model and... for what else?

Contingents elements

- **Fine tuning costs**
It requires timely and costly tuning cycles, and if you decide to change the model you have to start from scratch
- **High usage costs**
From 10 to 100 times higher than comparable technologies
- **Cloud-bound without any SLAs**
As the cloud isn't always cost-effective, more and more companies are choosing hybrid on-prem/cloud models
- **High resource consumption**
Requires massive compute power and has "slow" response times

A Pragmatic Approach

-  1 Identifying use cases for LLMs application
-  2 Leveraging/adopting hybrid and open platforms
-  3 Being aware that time, resources and investments are needed

Use Cases Selection

Applicable Use Cases

- Documents abstracts/summarization
- Fluent text generation
- Customer care applications (chatbots, mailbots, etc)
- Code writing support
- Fast prototyping of applications related to text analysis

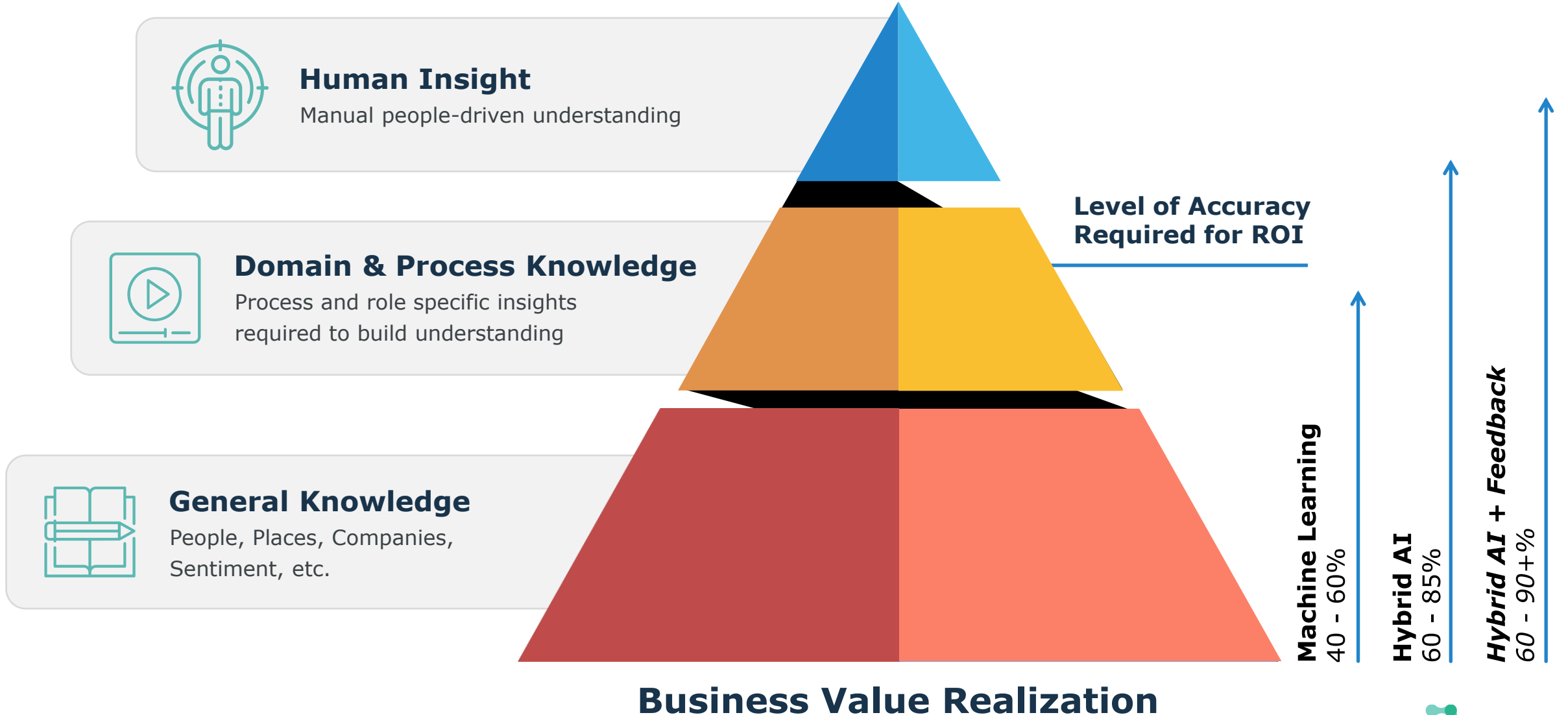
Non Applicable Use Cases

- Text categorization
There are more effective and less expensive technologies
- Metadata extraction
LLMs produce unpredictable mistakes
- Tasks requiring a "reasoning" approach to deliver results
In this case, application layers or symbolic logic are needed to guarantee the quality of the obtained results



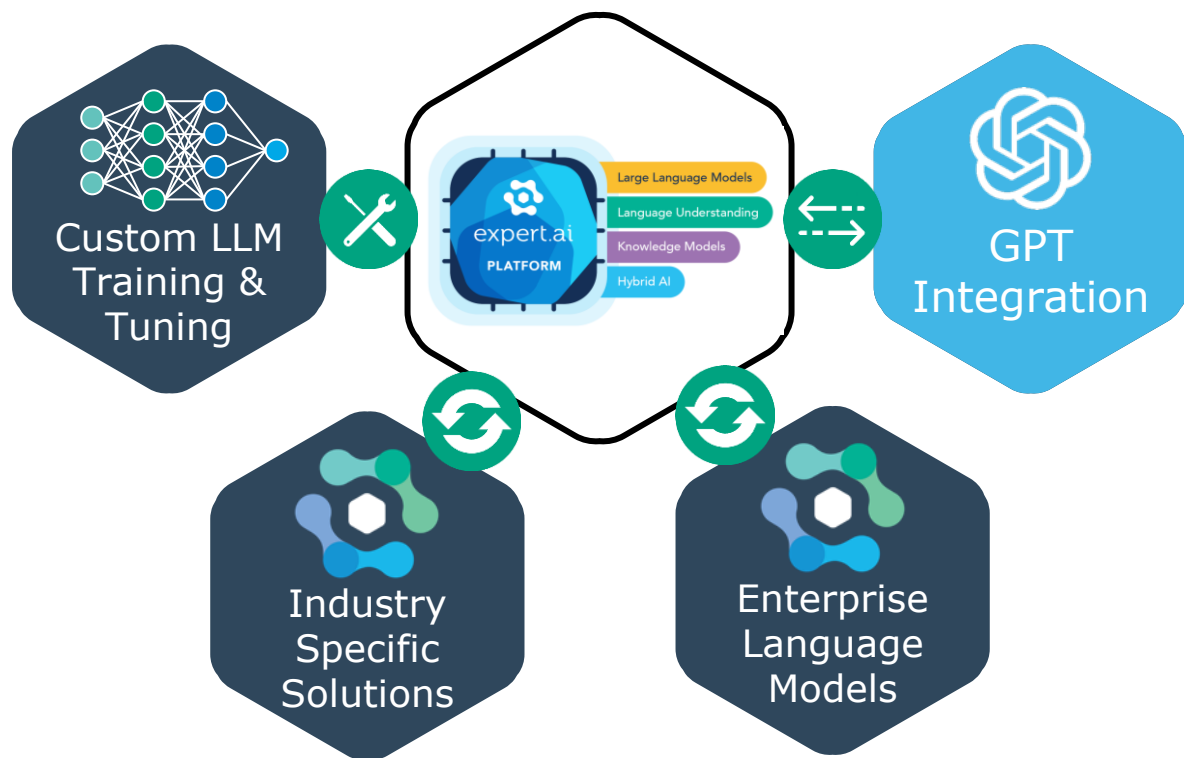
- ChatGPT is just the front-end, the underlying LLM is more versatile (but complex to use)
- There are many LLMs... How can you select the right one? How can you not be tied down in your choice?

Hybrid AI Delivers Highest Levels of Accuracy



Generative AI, LLM and Enterprise Language Models

Expert.ai's Enterprise Language Models (ELMs) provide a fast, safe, cost-effective and highly accurate way to apply LLMs capabilities to proprietary language assets.



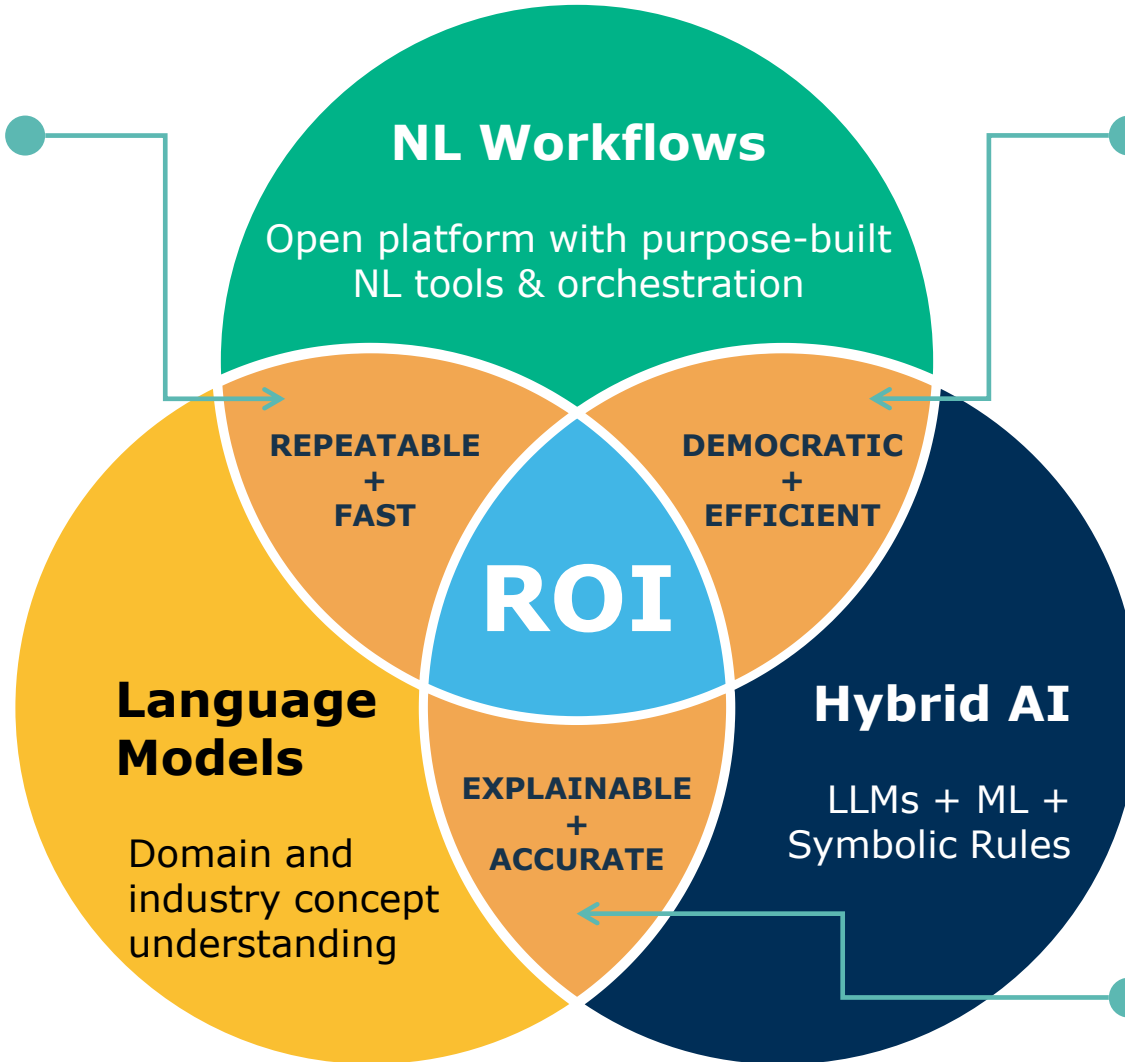
4 Ways to Use Generative AI at expert.ai:

1. Include GPT APIs in expert.ai Platform NL pipeline activities
2. Access OOTB Insurance and Life Sciences solutions powered by ELMs
3. Apply expert.ai Insurance and Life Sciences ELMs to your use case
4. Have expert.ai tune and customize ELMs to a specific process or client need

expert.ai Platform Delivers Successful NLP Projects

REPEATABLE & FAST

Accelerate natural language projects by combining customizable & ready to go domain and business concept models with easy-to-use workflows.



DEMOCRATIC & EFFICIENT

Empower Citizen Data Scientists to experiment easily, apply business expertise, and be computationally efficient.

EXPLAINABLE & ACCURATE

Achieve explainability, the highest degree of accuracy, and flexibility using a combination of LLMs, symbolic, and machine learning approaches.

Forrester Wave Text Analytics



“expert.ai is a great choice for customers looking to build customized text analytics using hybrid AI, or customers looking to leverage knowledge-based AI for OOTB accuracy and model explainability.”

- Hyperscale vendors SaaS only – lack flexibility and integration
- IBM Watson abandoned
- Microfocus acquired by Opentext
- Hyperscience focused on semi-structured data

Language Powers Businesses

Insurance Carriers

- Quotes
- Policies
- Claims
- Risk Reports

Underwriting

Claims

Risk Management

Life Sciences & Healthcare

- Medical Notes
- Articles / Patents
- Clinical Trials
- Drug Safety Data

Discovery & Development

Clinical Intelligence

CI

Information Providers

- News Feeds
- Articles
- Recommendations
- Topic Pages

Product Development

Editorial Workflow

UX

Financial Services

- Mortgage Contracts
- Emails Triage
- Online Inquiries
- Customer Service QA
- Investment Data

Mortgage

Onboarding

Customer Interaction

Language is Part of Every Business Function

Customer Experience

- Trouble Ticket Triage
- Voice of Customer
- Customer Service Analytics
- Competitive Intelligence

RPA

Reputation

Customer Satisfaction

Operations

- Maintenance/Repair
- Knowledge Bases
- Market Intelligence
- Understand RFEs
- Voice of Employee

Operational Efficiency

Employee Insight

RFEs

Knowledge Management

- Taxonomy Management
- Content Enrichment
- Enterprise Knowledge Graph
- Text Analytics & Extraction

Data Discovery

Innovation

KG

Legal and Compliance

- Know Your Customers
- Regulatory Tracking
- Contract Analytics
- ESG Monitoring
- PII, PHI, and GDPR Redaction

CLM Automation

PII

3rd Party Risk Mitigation

Enterprise-wide Use Cases

Use Case	Description	Team	Freq	Benefits
Email Management	Understand the meaning, context, sentiment and urgency of the information within emails and attachments	Customer Experience	Daily	<ul style="list-style-type: none"> • Improve e-mail backlog and response times • Reduce misclassified emails • Optimize both internal processes and CS interactions • Prioritize response based on customer frustration
Conversational Analytics	Analyze social media comments and other digital conversations, free-text surveys or search queries to understand needs, opinions and sentiment	Customer Experience/ Marketing	Daily	<ul style="list-style-type: none"> • Collect valuable data and unfiltered opinions • Leverage analytics to inform marketing strategy and identify new business opportunities • Monitor and quantify sentiment
Digital Customer Interaction Automation	Get customers and operators to the right answer through all of the digital channels where you communicate (web, chats, emails, WhatsApp, phone, etc.).	Customer Experience	Daily	<ul style="list-style-type: none"> • Improve the service quality and the customer satisfaction • Get customers precise and real-time answers • Gain insights to relevant topics and customer feedback
Technical Support	Analyze reports, emails, service requests, technical manuals and internal documentation to automate recurring support operations	Customer Experience	Daily	<ul style="list-style-type: none"> • Extract useful business information • Increase agent productivity and customer satisfaction • Reduce time and costs of customer support activities

Enterprise-wide Use Cases

Use Case	Description	Team	Freq	Benefits
Customer Enquiry Management	Automatically extract intent and data from customer requests to expedite routing and response activities	Customer Experience	Minutes	<ul style="list-style-type: none"> Accelerate CS response times Improve satisfaction with CS interactions Scale response capacity Leverage machine translation capabilities
Customer Service Analytics	Analyze QA Transcripts to measure CSR quality, identify problem areas and trending topics	Customer Experience	Daily	<ul style="list-style-type: none"> Improve satisfaction with CS interactions Reduce churn rates Prioritize training topics
Voice of the Customer	Analyze customer comments to understand concerns and sentiment	Marketing	Daily	<ul style="list-style-type: none"> Quantify sentiment Manage brand and reputational risk Gain insights to concerning topics
Maintenance	Analyze technical information from documents on repairs, malfunctions and maintenance operations to support field experts and technical support team	Operations	Daily	<ul style="list-style-type: none"> Reduced response times Increased ticket processing efficiency Improve knowledge sharing Increased customer satisfaction
Enterprise Knowledge Management	Categorize and organize enterprise content to make information more accessible for business teams and processes	Knowledge Management	Daily	<ul style="list-style-type: none"> Improve content visibility across the enterprise Build reusable enterprise-wide taxonomies + KGs Increase content standardization/governance
Contract Analytics	Read, understand, and extract key legal and business terms and clauses from contracts to minimize risk and improve scalability	Legal and Compliance	On Demand	<ul style="list-style-type: none"> Reduce risk and unintended exposure Stay compliant with regulatory changes Augment the capacity of your legal team

Workers Compensation & Disability Medical Claims

**5
Million**

Medical records
processed annually

95%

Accuracy for
document
categorization

51 Data fields
extracted

14 Types
of Medical
Records

1200+

Active system
users



- 30% of documents eliminated from review
- 40% processing time savings for claims admins
- \$1,000,000/month in “work avoided” savings
- “CIO of the Year” Winner

AI Speeds Up Property Engineering Risk Analysis, Underwriting

10

Risk factors automatically scored

2019

[Novarica Impact Award](#) for Data & Analytics

[CIO Magazine Article](#)

[Insurance Journal Article](#)



- Saved 4-hours per property report
- 40,000 hours in annual capacity gains -> +20 FTEs
- \pm 20% reduction in risk grading variability compared manual scoring
- Faster broker responses times led to higher win rates

AI Automates Underwriting Reviews

10

Hours saved per policy review

+90%

Accuracy eliminating manual extractions



- Augmented underwriter reviews improving capacity
- Eliminated annual leakage of ~€40M
- Improved quality of local policies
- Resulted in overall process reviews and improvements

Legal Contract & Compliance

3,700

NDAs Reviewed

2m+

emails

390k

documents

70%

faster with auto
answers (o365)

3,6 m€

saved



Rabobank



"Expert.ai's technology has brought tangible value to our operations, enabling our teams to be more efficient and provide better customer service through faster response times."

Expert.ai also helped us build a team of artificial intelligence experts who are now working on Rabobank's AI initiatives."

*Dennis Coomans
Product Owner Content Recognition*

Automated Email Triage

100%

Emails
automatically
processed

**NLP + RPA
=
NLP
Robots**

6 Languages

100k
Monthly Tickets

95%+
Accuracy

ING 

- Understands context, request, sentiment and urgency
- Automated answers
- Significant time saving & Fast deployment: 3 months per team
- Easy-to-use and reliable
- High customer satisfaction confirmed by surveys

"AI is critical to our business"

Robert Pashinsky – Director & Content Strategist, Metadata

2.5 Million

Articles per day

90%+

Accuracy

12 Languages

3000

Categories

 **DOW JONES**
FACTIVA

 **DOW JONES**
RISK & COMPLIANCE



- Comprehensive and fine-grained information to support risk management.
- Efficient search & alerting based on DJID taxonomy
- Implement autocoding that reflects "aboutness" of each article rather than "mentions of" topics/entities
- Subsecond processing per article

Medical Invoice Review & Extraction

50k

Medical invoices
processed annually

90%+

Invoice Extraction
Accuracy

50%

Target reduction
in manual review
time and input



- Increase claims efficiency
- Faster invoice review times
- Decrease manual processes and human errors
- Focus SMEs on higher priority tasks
- Cost optimize expense area

QC in Regulatory Submission

40%

Efficiency gain on data check reviews

85%

Identification of data inconsistencies



- Increased trust in risk mitigation for regulatory and reputation purposes
- Minimized risk of discrepancies in biomedical research studies
- Replaced manual effort required by researchers and regulatory experts to prepare submissions

Financial Data Discovery

400

Data points
automatically
extracted

85%+

Data extraction
accuracy

75+

Active system
users

S&P Global
Market Intelligence

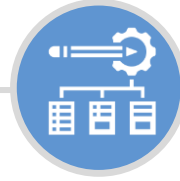
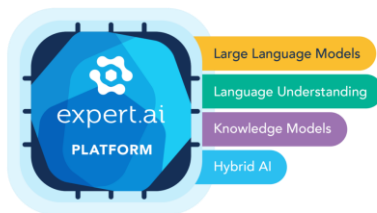
- Expanded coverage of transactions
- Increased number of data points captured per transaction
- Eliminated manual process of source crawling to database input

Why Choose Expert.ai



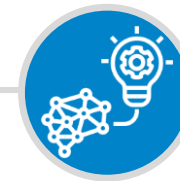
NL Platform

The open platform makes it easier, faster, and less expensive to design, deploy, and operate powerful natural language solutions combining proprietary data, NL workflows and generative AI capabilities.



Hybrid AI

A one size fits all approach does not work when solving NLP problems. Hybrid AI takes the best of machine learning (ML), symbolic AI and large language models (LLMs) in a single NL pipeline.



NLP Experts

30+ years of AI experience solving real world NLP problems that require domain and process knowledge, human intelligence and general knowledge to be solved successfully.



A large, abstract graphic in the center of the slide, composed of several overlapping, rounded shapes in various shades of blue (light blue, medium blue, and dark blue). The shapes are layered, creating a sense of depth and movement. The graphic is centered horizontally and vertically.

Thanks

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