

Teagasc Smarter Food National Conference

Delivering value from AI in Food and
Beverages

Paul Pierotti, EY Data and AI Partner



Building a better
working world

US - Ireland Report

“

EY's innovative AI Labs are bringing the EU and US closer, with game changing capabilities for clients in big data, AI, smart automation, VR/AR and advanced analytics.

Paul Pierotti

EY Ireland

Data & Analytics Partner



Generative AI in Food and Beverages will go beyond R&D and marketing functions to strategy & operations

*Increase productivity of Consumer Products industry by **~2.0%** of annual revenues, or an additional **\$400b to \$660b***

*Food & beverages is **36%** of the **US\$39.2m** global GAI in CP sector, growing at **22.5% CAGR** to 2032*

Food Priorities of today

Marketing campaigns, engaging in rebranding initiatives, leveraging insights for employee engagement and portfolio expansion

Food Evolution tomorrow

Expand to also drive R&D, quality control, supply chain, and after-sales services.

Beverages Priorities of today

*Support flavor and packaging development
Content generation for personalized marketing and engagement*

Beverages Evolution tomorrow

Re-invent their marketing strategy, i.e. how they produce content, speed of iteration and enabling two-way conversations with their customers

The potential for using AI for value has accelerated with the introduction of Generative AI (and subsequently Agentic AI)

Artificial Intelligence

AI, or artificial intelligence, is a field of computer science that focuses on creating intelligent machines capable of tasks requiring human intelligence.

Machine Learning

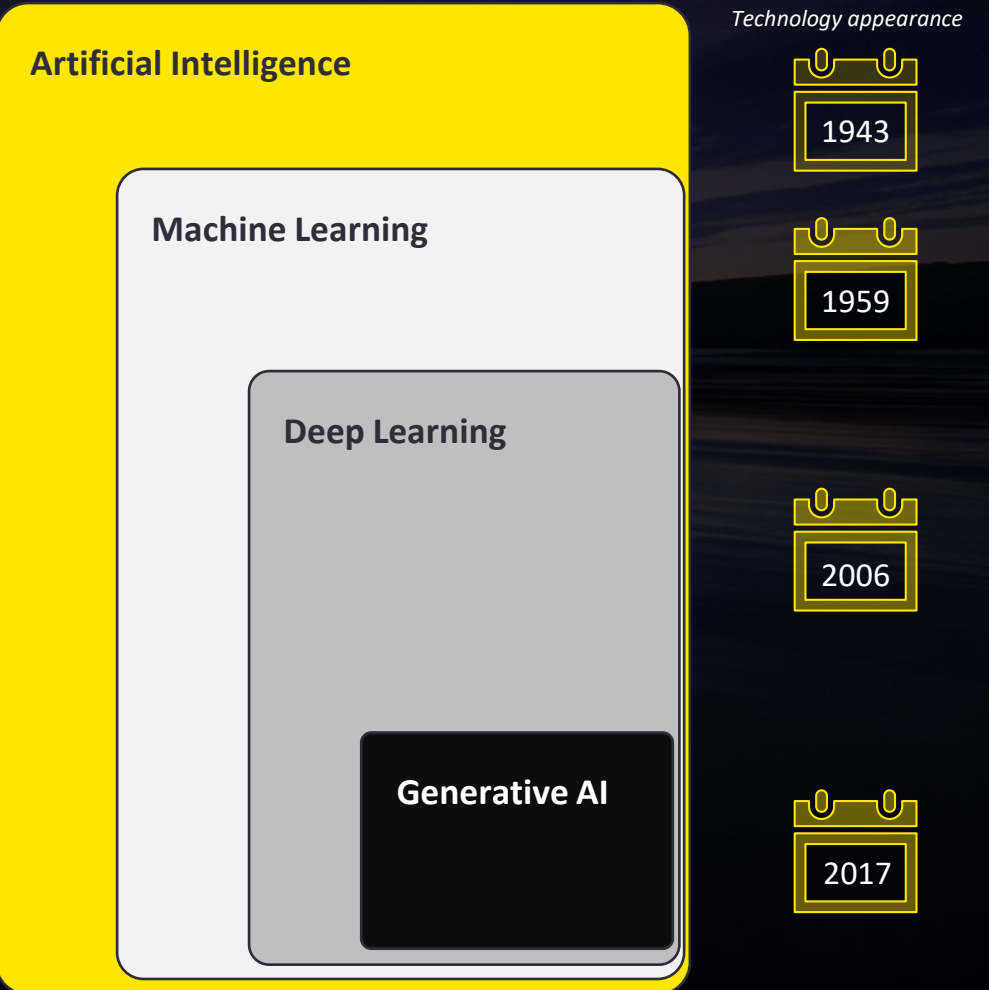
Machine learning is a subfield of artificial intelligence, which is broadly defined as the capability of a machine to imitate intelligent human behaviour.

Deep Learning

Deep learning is a subset of machine learning, which is essentially a neural network with three or more layers.

Generative AI

Generative AI is a type of artificial intelligence that can create new content such as images, text, audio, or video based on the data it has been trained on, using techniques like large language models, transformer neural networks, and generative adversarial networks.



Generative AI is a powerful tool for businesses seeking to innovate and stay ahead of the competition



Adaptive learning

GPT can ingest new information to provide AI services tailored to the industry.



Summarizing

GPT can be used to summarize customer emails, calls transcripts and lengthy documents.



Content Creation

GPT can be used to generate high-quality written content, such as articles, blog posts, and product descriptions.



Code Generation & Correction

Write boilerplate code and explaining what a code section is doing.



Knowledge Management

GPT Models can be trained on large amounts of data and provide answers to questions in natural language



Language Translation

Organisations can use GPT to translate from English to Spanish, French & Japanese.



Text Classification

Organizations can leverage GPT to classify texts using sentiment analysis.



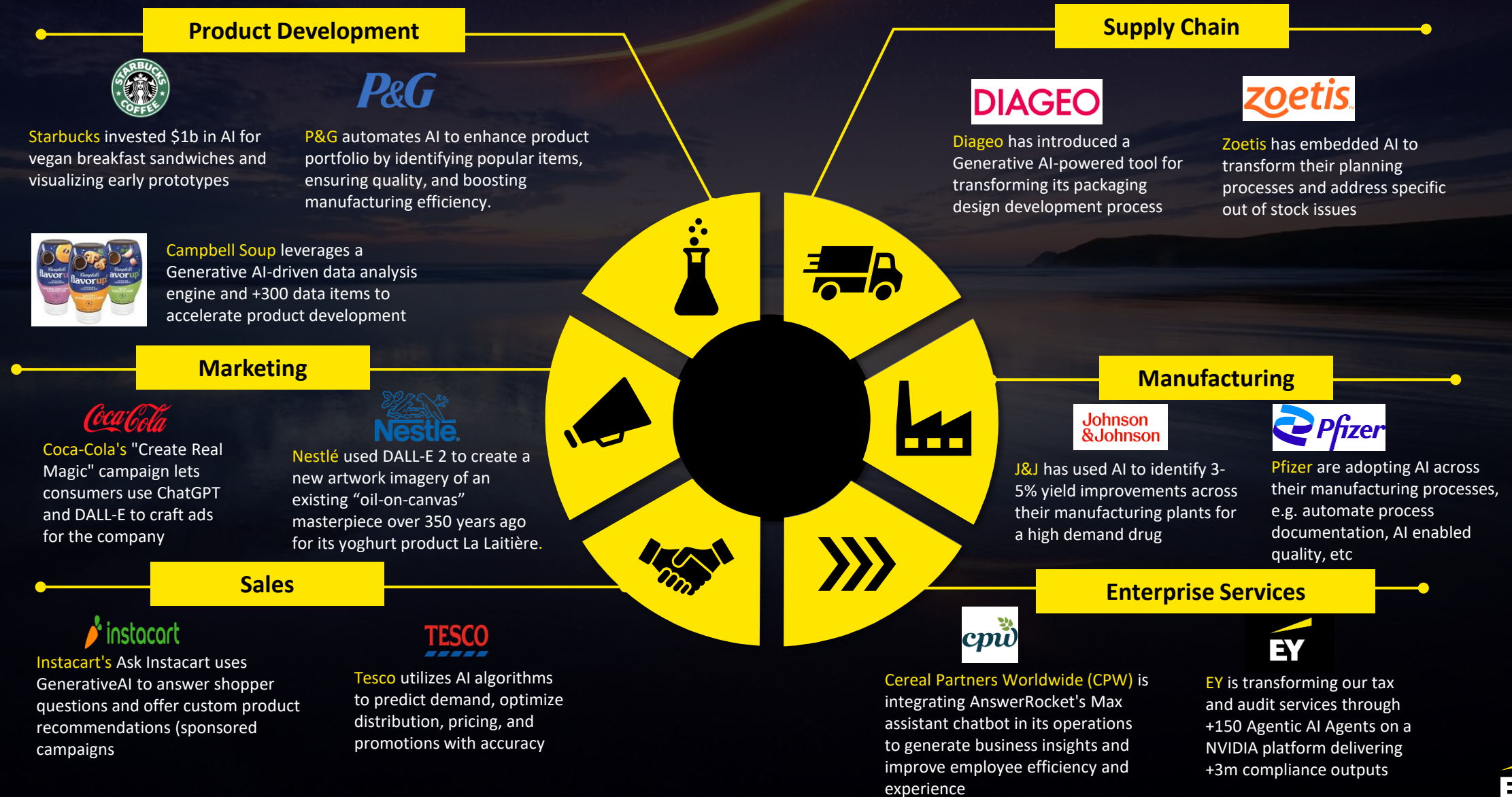
Parse Unstructured Text

GPT allows you to create structured data such as tables or JSON formatted text from raw unstructured data/text.

The potential upside is significant

Marketing	45% increase in targeting accuracy		Supply Chain	10%-20% cost savings	15% improved supply chain reliability
Digital & IT	~30% Cost Savings		Manufacturing	10% Increase in product yield and	15% Regulatory cost reduction
Sales	10% increase in HCP prescribing and	25% sales force reduction	Compliance & Legal	44% task automation	
Procurement	90% increased efficiency in vendor selection and	10% increase in cost savings			

AI is today delivering benefits across the Food and Beverages value chain



RFP Negotiation Assistant

This application assists in processing RFPs and generating negotiation strategies. Follow these steps:

1. **Define** your procurement need with KPIs.
2. **Upload** the RFPs from different vendors.
3. **Review** the generated executive summaries for each RFP.
4. **Generate** and **Review** negotiation strategies.
5. **Generate**, **Edit** and **Save** the outreach emails.

1. Define Your Procurement Need

Objective details and negotiation priorities

Order Quantity:

Budget:

Desired Timeline:

Volume Discount:

2. Upload RFP Documents

Upload RFP Documents



Drag and drop files here

Limit 200MB per file • TXT, DOCX, PDF

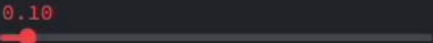
Browse files



Select a Product Category:

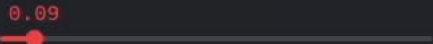
Self-Clinching Pins - Type FH, F...

Hole Size in Sheet



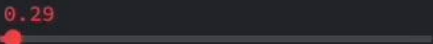
0.09 0.31

P - Nominal Pin Diameter $\pm .002$



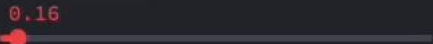
0.07 0.28

L - Length $\pm .015$



0.25 1.50

H - Height $\pm .015$



0.15 0.38

Fastener Material

0

Standard Finish

0

Optional Finish

0

Price Prediction for Bespoke Metal Fasteners

Product: Self-Clinching Pins - Type FH, FHS, FHA - Unified

	Fastener Material	Standard Finish	Optional Finish
0	300 Series Stainless Steel	No Finish	Zinc plated per ASTM B633, SC1 (5μm), Type II, yellow
1	Aluminum (Plain Finish)	Passivated and/or tested per ASTM A380	None
2	Heat-Treated Carbon Steel	Zinc plated per ASTM B633, SC1 (5μm), Type III, colorless	None
3	None	None	None

Enter User Inquiry:

Predict

Creating an Enterprise AI Strategy - Developing Strategy and Innovation simultaneously

Exploratory pathway



Use-case Selection and Technology Roadmap



Technology Analysis

2-6 Focused Short-, Medium-, and Long-term use-cases

Models and acquisition plan, infrastructure, estimated costs and timelines

Strategic pathway



Risk, Governance and Compliance



Organisational Transformation

Policies and procedures, risk report and governance recommendations

GenAI internal adoption strategy and organisational transformation roadmap

Approach built from the learning of delivering actual PoVs

The EY Wavespace™ AI Lab was established in Dublin in 2022 as part of a global network of over 50 [EY Wavespace™](#) locations and is a European hub for **innovation**. The AI Lab provides a location and capability for clients to **collaborate, plan and prototype** how they can take full advantage of this transformative technology.

AI Labs is a multidisciplinary center of excellence for driving **innovation** through the applications of Agentic AI, Generative AI, machine learning and advanced analytics.

Agentic / Generative AI (GenAI)

Revolutionizing customer and employee engagement with Agentic AI and GenAI technology

- Agentic AI / GenAI strategy and roadmap
- Agentic AI / GenAI use case development and rapid prototyping
- AI value realization & responsible AI implementations

Digital Manufacturing

Define and design intelligent Manufacturing, Quality and Supply Chain solutions leveraging data analytics and AI to fit your organisation and enable operational excellence

- Yield optimization and Golden Batch
- Anomaly detection and predictive failures
- Real time CMO and supplier analytics
- Digital quality and audit
- Smart factory / digital twin
- S/4HANA Journey AI accelerator

Commercial & Market Access

Reimagine customer engagement and alignment with cutting edge technologies

- Digital HCP engagement and campaign management
- Commercial analytics (GtN, etc.)
- Intelligent patient services
- Drug launch management
- Next generation market access

Enterprise

Advanced design and solutions across tax, payroll management, procurement readiness and cost efficiency

- Intelligent finance and procurement
- Digital payroll
- GBS control tower
- AI-enabled marketing material



The AI Lab has a partnership with ADAPT, Ireland’s AI collaboration across eight universities and welcomed 75+ clients to our AI Lab capability, including over a dozen Life Sciences sessions. *Watch Bayer take full advantage of our [EY Wavespace™ here](#)*