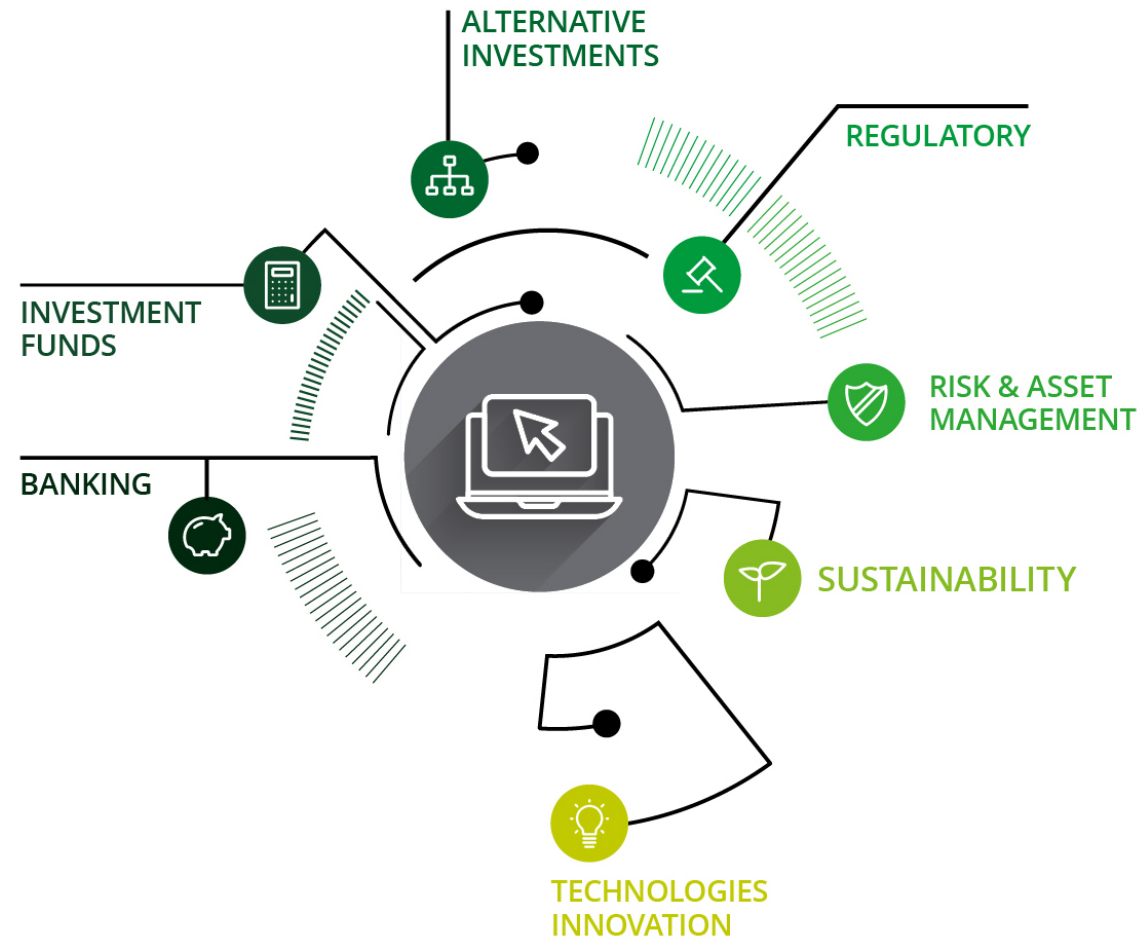




Getting Started

Here with you today from our AI & Data team



Liubomyr Bregman
Senior Manager
Tech & Digital
lbregman@deloitte.lu



Leo Schirvanian
Senior consultant
Tech & Digital
loschirvanian@deloitte.lu

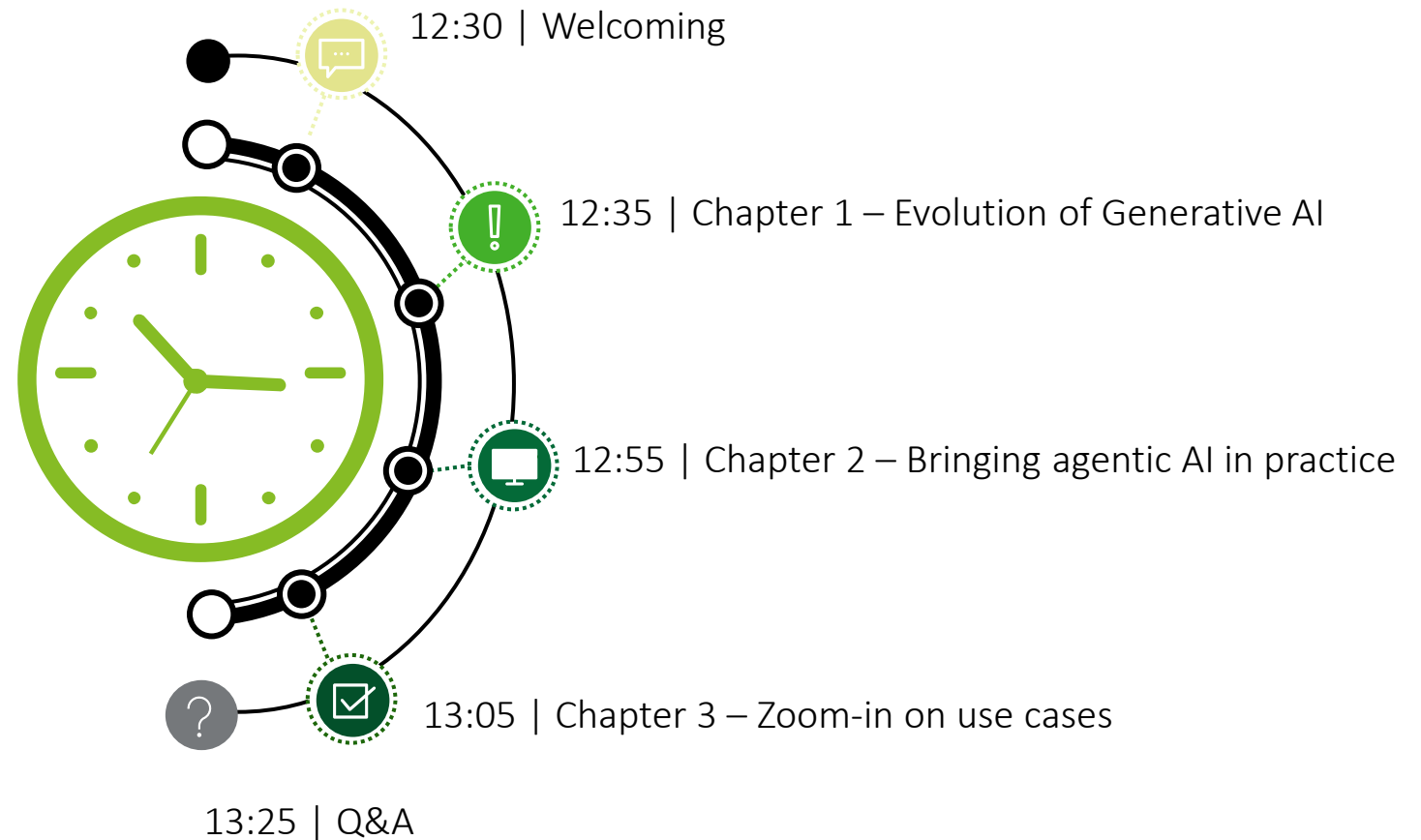


Aishwarya Nair
Senior consultant
Tech & Digital
aishwnair@deloitte.lu



Eléna Fromet
Analyst
Tech & Digital
efromet@deloitte.lu

Agenda



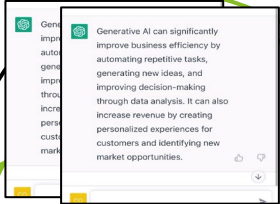
Evolution of Generative AI

What are the capabilities of Generative AI?

Generative AI can produce a wide range of outputs depending on the specific application and type of data that is needed. Here are some common output types that are applicable to business

Text

Prompt: Explain the business impact of Generative AI in 50 words



Video

Prompt: Create a video of a teddy bear painting a portrait



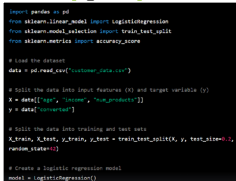
Image

Prompt: A bowl of soup that is a portal to another dimension as digital art



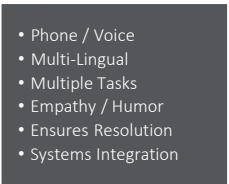
Code

Prompt: In python, code a program that predicts the likelihood of customer conversion



Audio

Generative AI-powered customer service agents



3D

Prompt: A beautiful dress made from garbage bags, on a mannequin. Studio lighting, high quality, high resolution



Currently, text, image and code are the modalities with most straightforward potential for business value generation. Nevertheless, audio, video, 3D, as well as multimodal models are expected to progress fast in terms of quality of output and number of opportunities for application.

Prompt:

Explain generative AI to me like I am a child

Output:

Alright, imagine you have a magic coloring book. This coloring book can create new pictures for you to color based on what you tell it. So, if you say you want a picture of a dog, the magic coloring book will make a brand-new picture of a dog just for you. You don't know exactly what the dog will look like, but you know it will be something new and different each time.

Generative AI example - 2

Prompt:

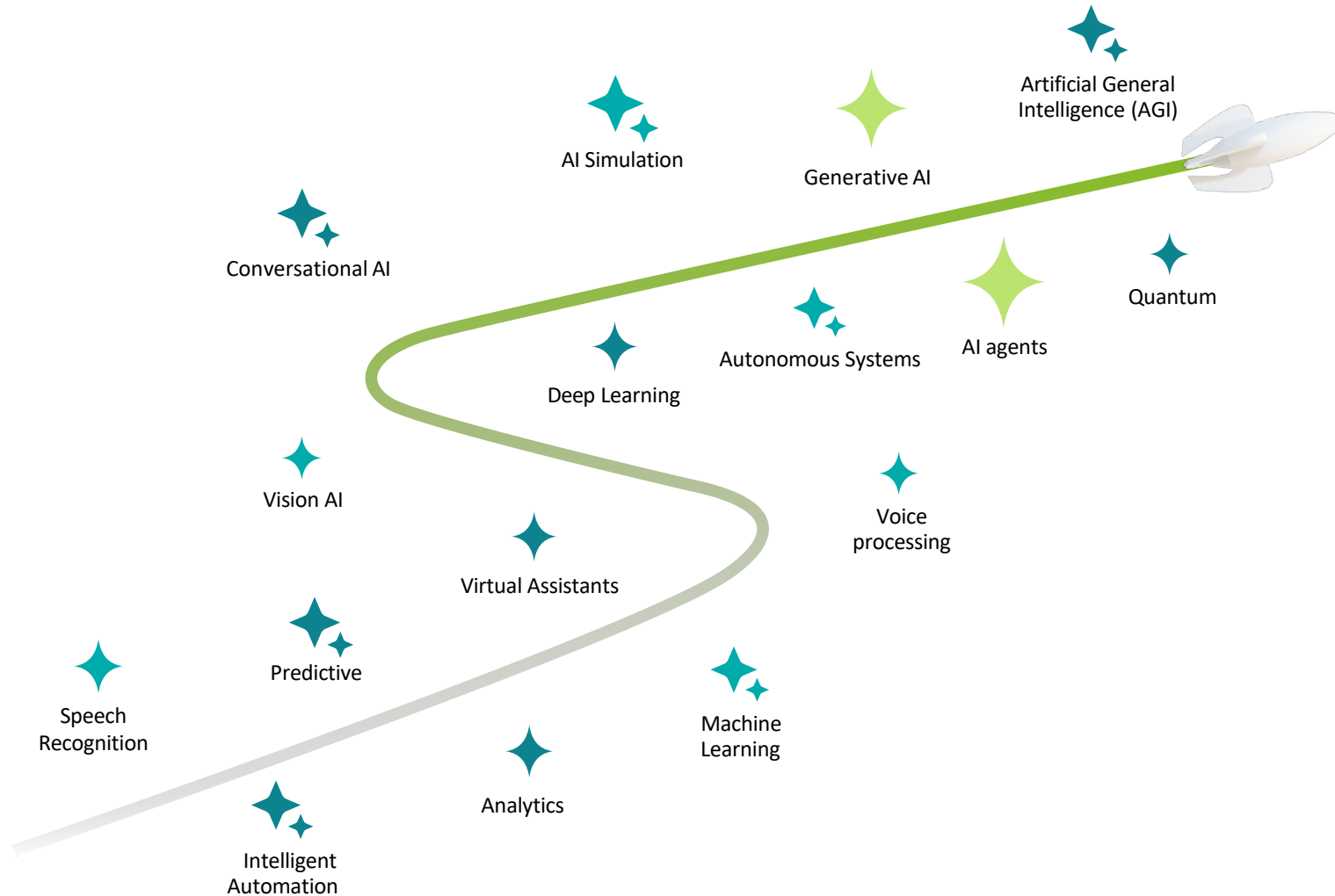
A golden retriever in an astronaut suit in outer space, in a painted style.

Output:



Transition from Generative AI to Agentic AI

Agentic AI is step change for the Industry with implications akin to the impact iPhone had when it was introduced



How does Agentic AI Work?

Agentic AI employs **decision-making algorithms** that **autonomously navigate** complex environments to achieve **specific goals**. These systems learn from interactions with their surroundings to optimize outcomes and adapt to new challenges

Who is involved?

Major **technology companies** (e.g., Google, Amazon, NVIDIA, Microsoft, etc.), **innovative startups** (e.g., OpenAI, AI21, etc.), and leading **research institutions** (e.g., Allen AI, Stanford, etc.) are actively contributing to advancements in agentic AI.

Why now?

The **convergence** of enhanced **computational capabilities**, advancements in **reinforcement learning**, and the accessibility of diverse **experiential datasets** has paved the way for the development of sophisticated agentic AI systems that can operate effectively in dynamic environments

Evolution from the “traditional” generative AI

Agentic AI is more powerful than typical language models, with the ability to perform autonomous tasks

Generative AI

A raw text model (e.g., GPT-4) that produces answers when you prompt it. It does zero planning on its own beyond generating the next best token.



Zero-Shot

LLM relies on its knowledge and reasoning skills to generate responses based solely on the prompt



Agentic AI

AI System where the LLM agent(s) doesn’t just respond once - it repeatedly decides next steps to fulfil the end goal. This includes **forging subgoals, revisiting prior steps, and adjusting the plan.**



Reflection

Agents assess their actions to improve performance



Tool Use

Agents utilize external tools to enhance capabilities



Planning

Agents devise action sequences to achieve goals



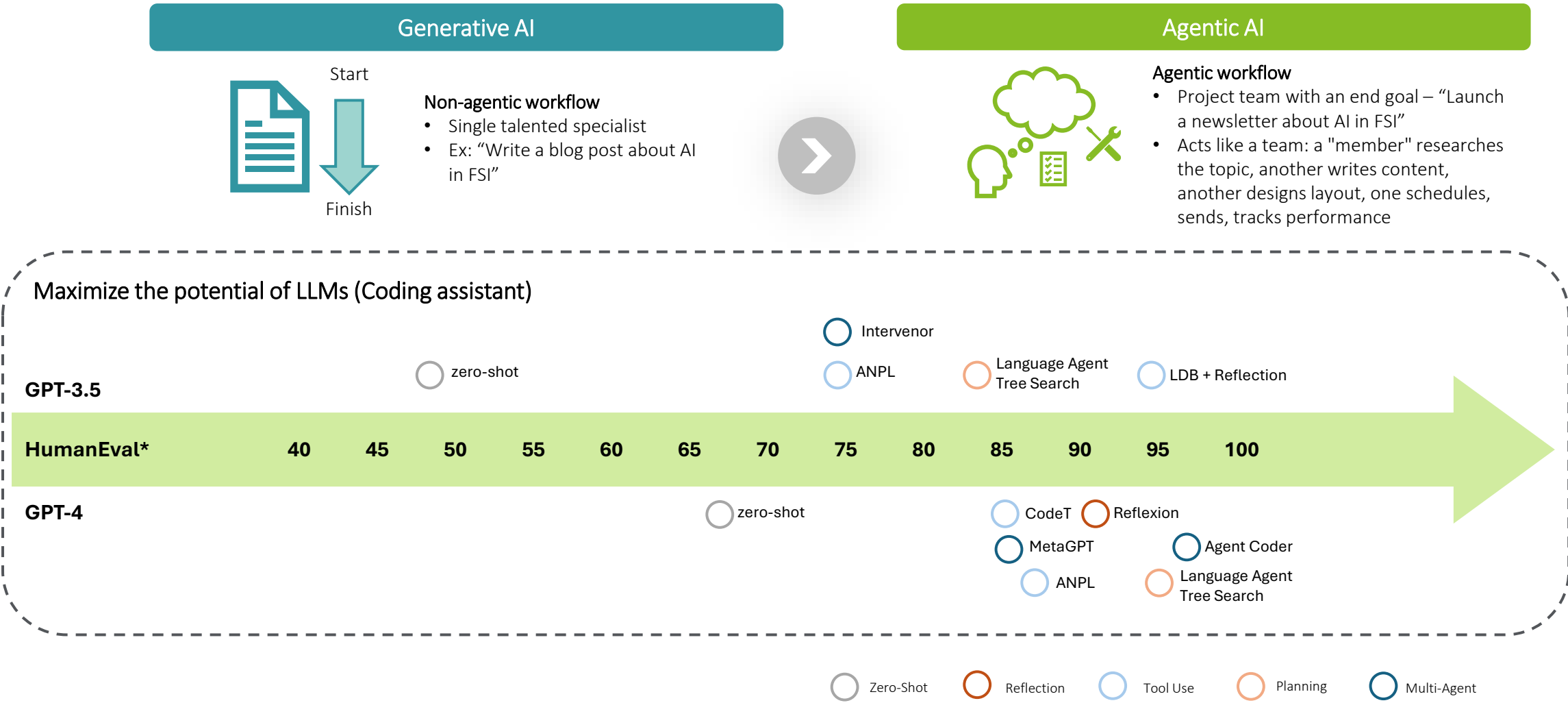
Multi Agent Collaboration

Agents can work together to solve complex tasks

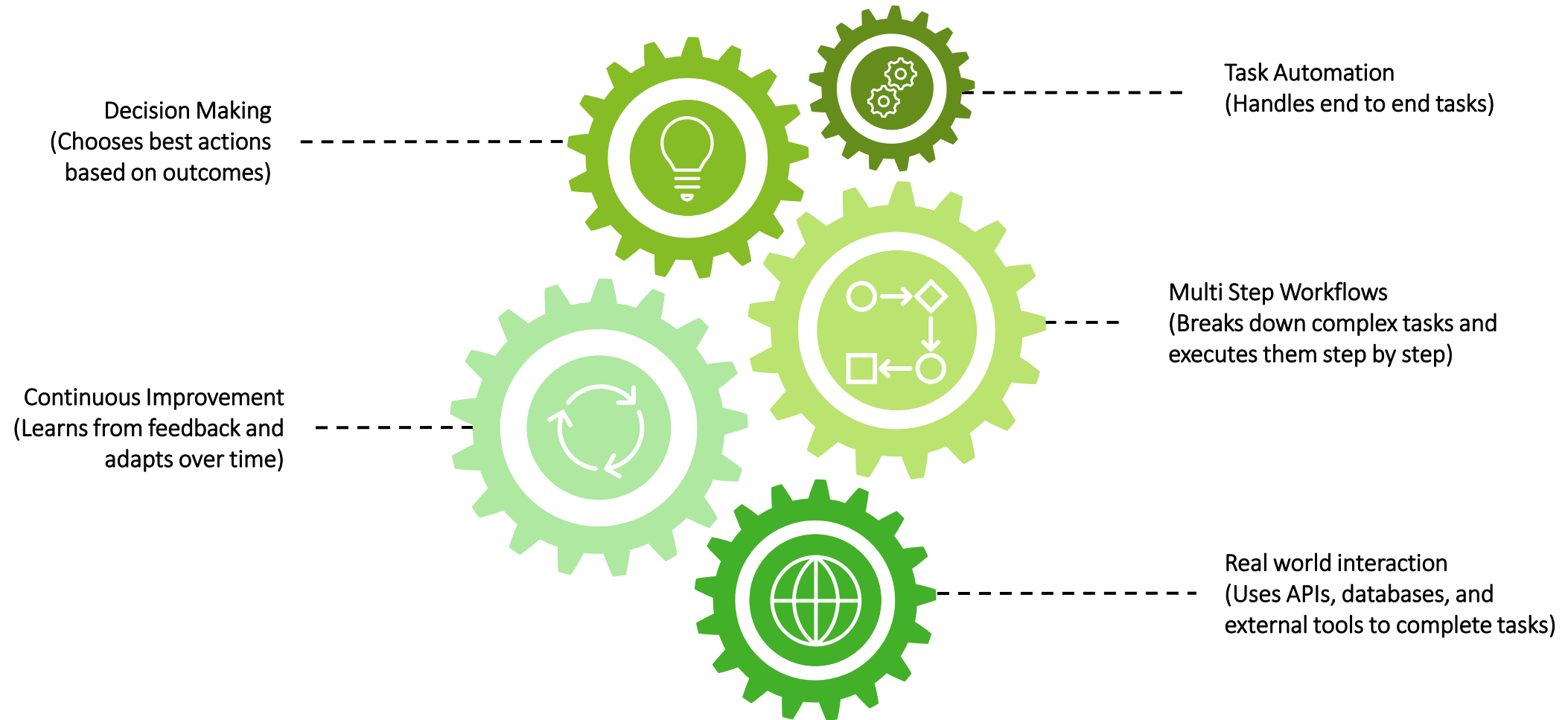
	Generative AI	AI Agents
Use Case Scope	Automate tasks	Automate entire workflows and processes
Planning	Are not capable of planning or orchestrating workflows	Create and execute multistep plans to achieve a user’s goals, adjusting actions based on real-time feedback
Memory & Fine-Tuning	Do not retain long-term memory and have limited fine-tuning capabilities	More research is required, but AI Agents are indicated to utilize short-term and long-term memory to learn from previous user interactions and provide personalized responses; memory may be shared across multiple agents in a system
Tool Integration	Are not inherently designed to integrate with external tools or systems	Augment inherent language model capabilities with APIs and tools (e.g., data extractors, image selectors, search APIs) to perform tasks
Data Integration	Rely on static knowledge with fixed training cutoff dates	Adjust dynamically to new information and real-time knowledge sources
Accuracy	Typically lack self-assessment capabilities and are limited to probabilistic reasoning based on training data	Can leverage task-specific capabilities, knowledge and memory to validate and improve their own outputs and those of other agents in a system

Evolution from the “traditional” generative AI

Agentic AI is more powerful than typical language models, with the ability to perform autonomous tasks



Where Agentic AI approach excels over Generative AI



Bringing Agentic AI in practice

Current risks of Agentic AI



Security Vulnerabilities

Autonomous AI systems are prime targets for cyberattacks. If compromised, they can be manipulated to perform harmful actions undetected



Lack of Transparency

As agentic AI systems make independent decisions, understanding their decision-making process can be difficult, resulting to a lack of transparency



Hallucinations

Hallucinations can produce misinformation and erode user trust which can lead to reputational damage



Ethical Concerns

Autonomous decision-making may not align with human ethical standards, leading to morally questionable actions



Accountability Issues

Determining responsibility for the actions of an autonomous AI can be challenging, as traditional liability frameworks may not apply



Rapid Evolution

Autonomous AI systems can rapidly evolve and adapt, potentially outpacing human oversight, leading to actions that may disadvantage human interests

Potential mitigation strategies



Security Vulnerabilities

- Implement strong encryption, real-time monitoring, and audits against attacks
- Regularly test AI systems for vulnerabilities and ensure graceful handling of attacks



Ethical Concerns

- Develop and follow clear ethical guidelines for autonomous AI decision-making
- Incorporate mechanisms for human intervention in critical AI decisions



Lack of Transparency

- Develop AI with explainability features for user understanding of decisions
- Encourage open communication between AI developers, users, and stakeholders



Accountability Issues

- Create regulatory frameworks outlining AI accountability and liability
- Implement logging systems for AI decision tracking and post-incident analysis



Hallucinations

- Continuous monitoring and retraining to reduce AI errors
- Implementing protocols to ensure AI outputs are factual, verified, and responsibly generated



Rapid evolution

- Establish evolving regulations to ensure human oversight and control over AI development
- Regularly assess the ethical, societal, and cultural impacts of AI agents

Guiding principles for Agentic AI



Collect high-quality ground truth data

Ground truth data allows AI agents to learn accurately. It's essential for reducing bias and improving prediction reliability



Establish Comprehensive Logging and Observability

Detailed logs provides real-time monitoring, allowing for effective issue diagnosis and increased transparency



Define agent scope clearly - Build Small, Focused Agents

Setting specific boundaries ensures agents are efficient and specialized, avoiding complexity and distractions



Implement Robust Testing Frameworks

Comprehensive tests verify reliability and correctness, ensuring the AI meets quality standards

Implementation of Agentic projects



Agentic AI Services	Agentic AI Strategy <i>Setting up the strategic guardrails</i>	POC <i>Getting started</i>	MVP <i>Taking use case to production</i>	Agentic AI Factory <i>Scaling across the enterprise</i>	Business Transformation <i>Reinventing the enterprise</i>
Agentic AI Strategy and Governance <i>e.g., Agentic AI readiness, use case prioritization, op model,</i>	✓	✓	✓	✓	✓
Agentic AI Development and Compute <i>e.g., Infrastructure mgmt., cloud, App dev, model training</i>	↓	✓	✓	✓	✓
Risk Mgmt. & Regulatory <i>e.g., Regulatory compliance, risk & controls</i>		✓	✓	✓	✓
Data and Analytics Services <i>e.g., Data modernization, data science, ML / LLM Ops</i>		↓	✓	✓	✓
Ethical Agentic AI and Legal Oversight <i>e.g., Algorithm assurance, transparency & accountability</i>			✓	✓	✓
Trust, Security, and Privacy <i>e.g., Trustworthy AI, cyber, misuse detection</i>		↓	↓	✓	✓
Value & Performance Enhancement <i>e.g., Embedded Agentic AI</i>	↓			✓	
Workforce & Org Development <i>e.g., Reskilling, organizational change, communications</i>				✓	

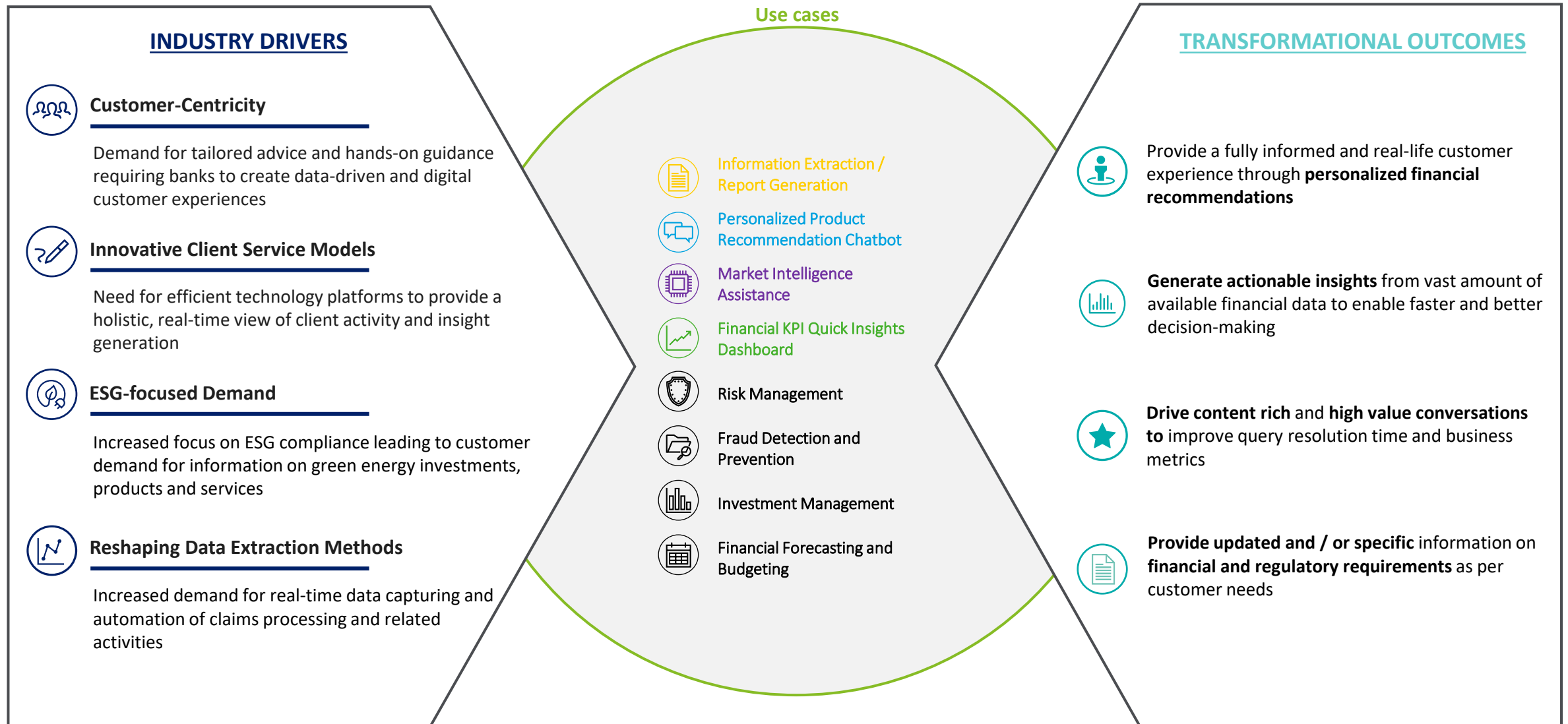


Zoom-in on use cases

Applications tailored to FSI industry

Agentic AI in action in the Financial Service Industry

Multitude of opportunities will transform FSI through agentic AI



Use case #1: Information Extraction and Report Generation

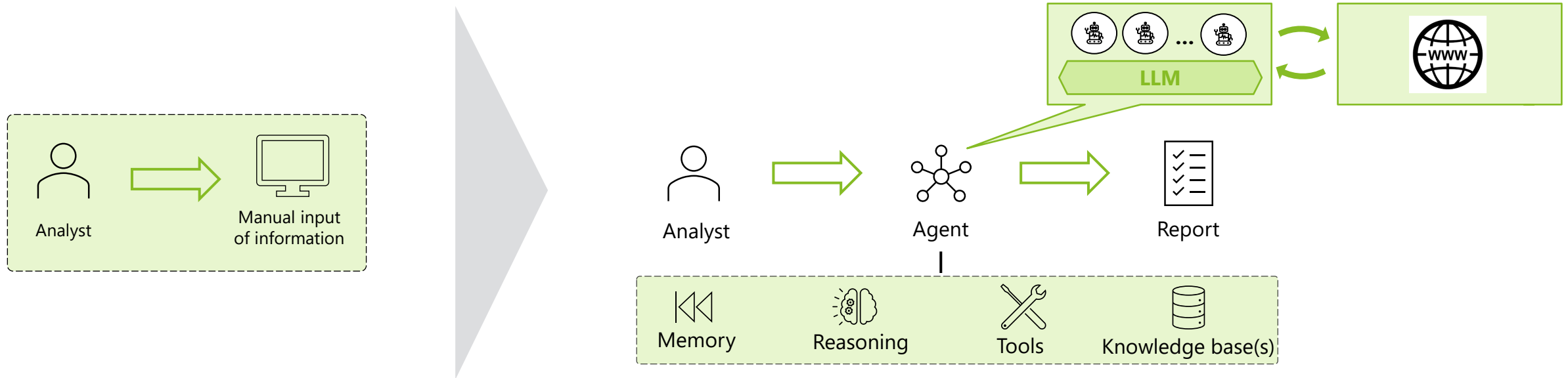


Business challenge:

Team of analysts spend around 200 days for manually entering the information into a system

Solution:

Agentic AI extracts real-time financial news and risk factors from reports and populate the system



Use case #2: Personalized Product Recommendation Chatbot

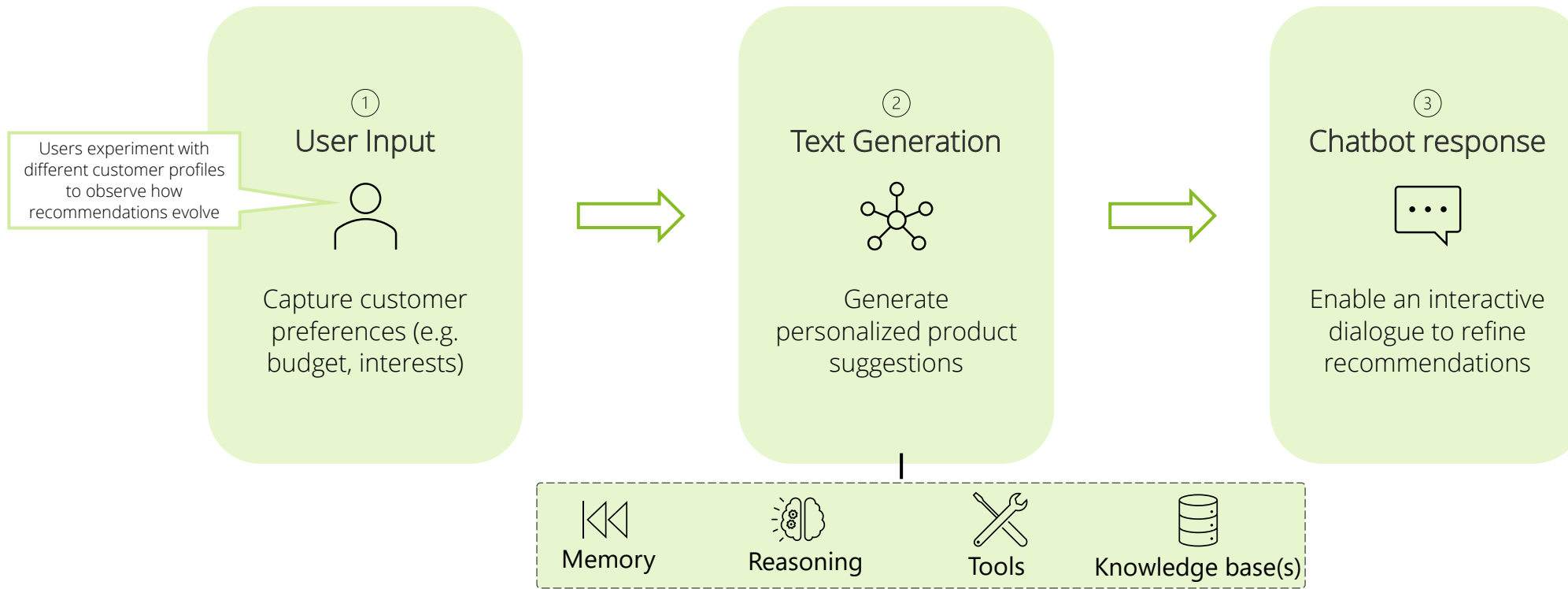


Business challenge:

Developing accurate segmentation models can be complex, requiring access to various data points and analytics capabilities

Solution:

Simulate a sales assistant that provides tailored product suggestions based on customer input



Use case #3: Market Intelligence Assistant

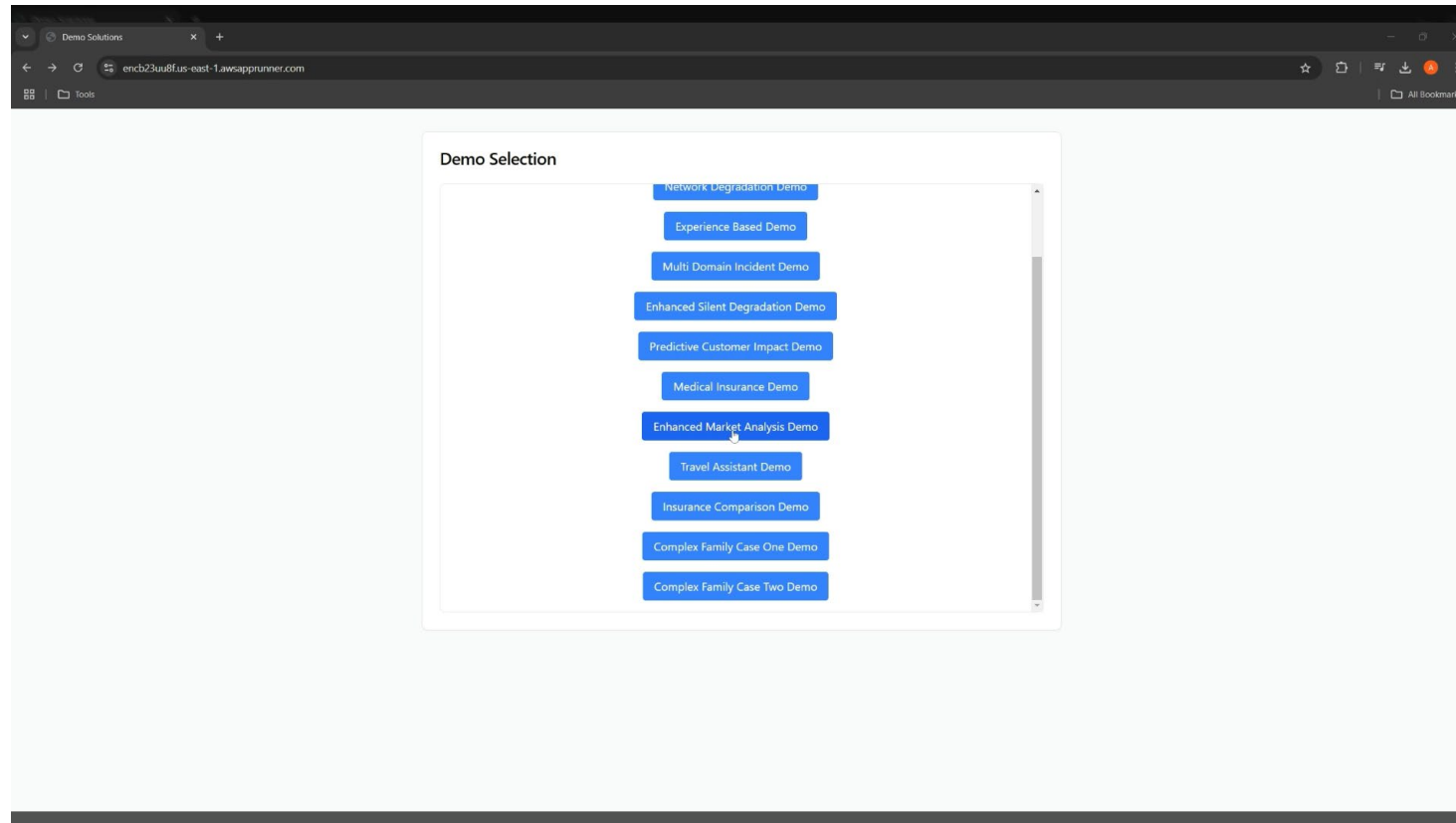


Business challenge:

CEO does not have the time or resources to perform an extensive analysis

Solution:

- Automate data collection and analysis, providing insights without needing extensive manual effort
- Implement AI to generate concise, automated reports



Use case #4: Financial KPI Quick Insights Dashboard

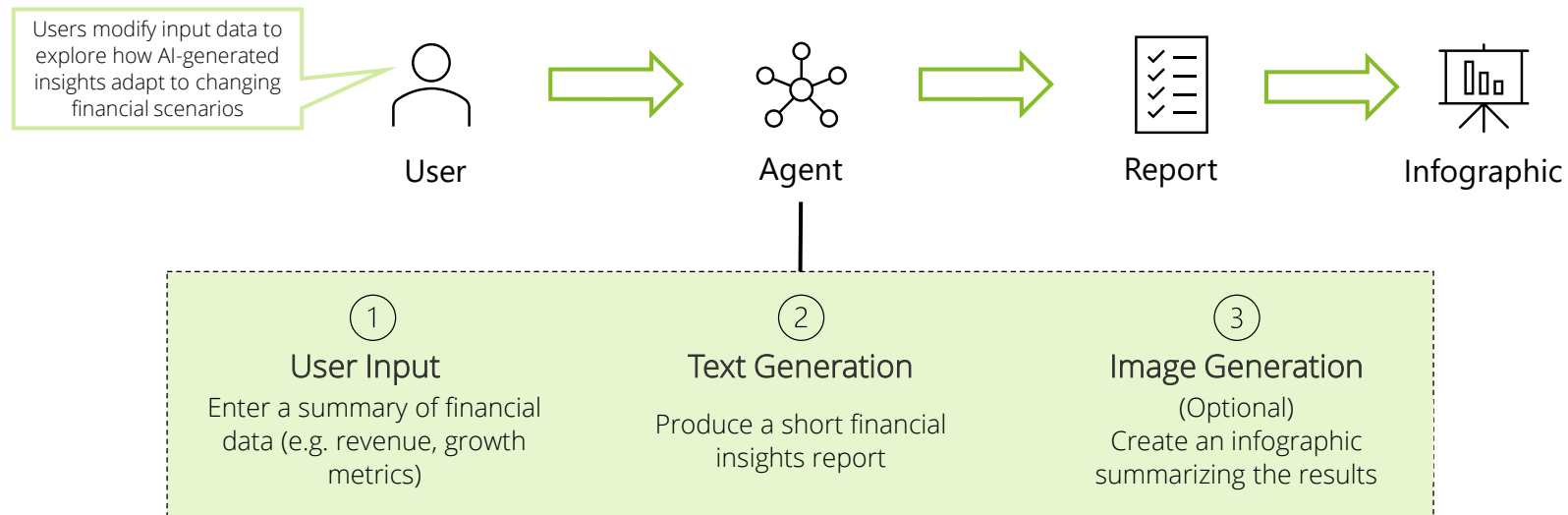


Business challenge:

Developing accurate segmentation models can be complex, requiring access to various data points and analytics capabilities

Solution:

Demonstrate rapid analysis of financial data by generating a concise overview of key performance indicators



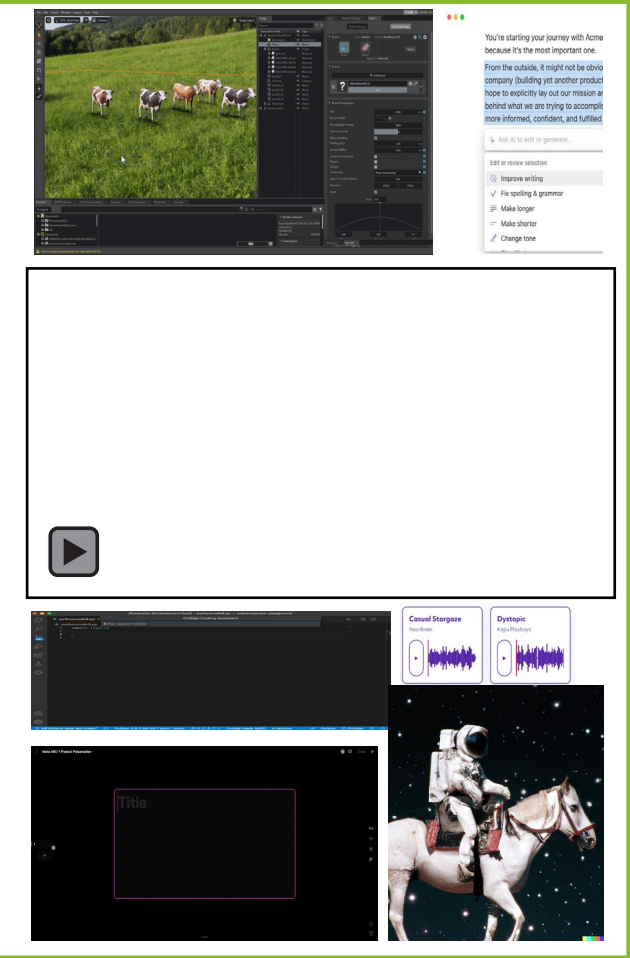
Next: Looking ahead

The future is still unfolding..

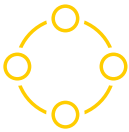
“We are in the first inning of a thousand-inning game and there’s so much to be figured out.”
- Chief analytics officer, Deloitte’s financial service industry



2014



2025



Organizations moving from experimentation to implementation



AI Act adopted in 2024, starting countdown for compliance



Early adopters of these tech will see operational efficiencies and revenue



As technology matures, expect to see novel groundbreaking use cases.

Next Link'n Learn webinar

Date: 25/06/2025

Topic: Risk & Asset management |
Digital processes for improving the
evaluation and monitoring of risk





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