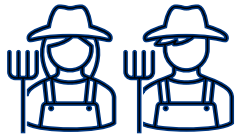


(Gen)AI at Az BnL

AI Insurance day presentation

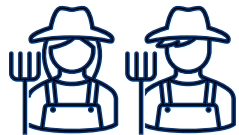
Farming and Division of Labor



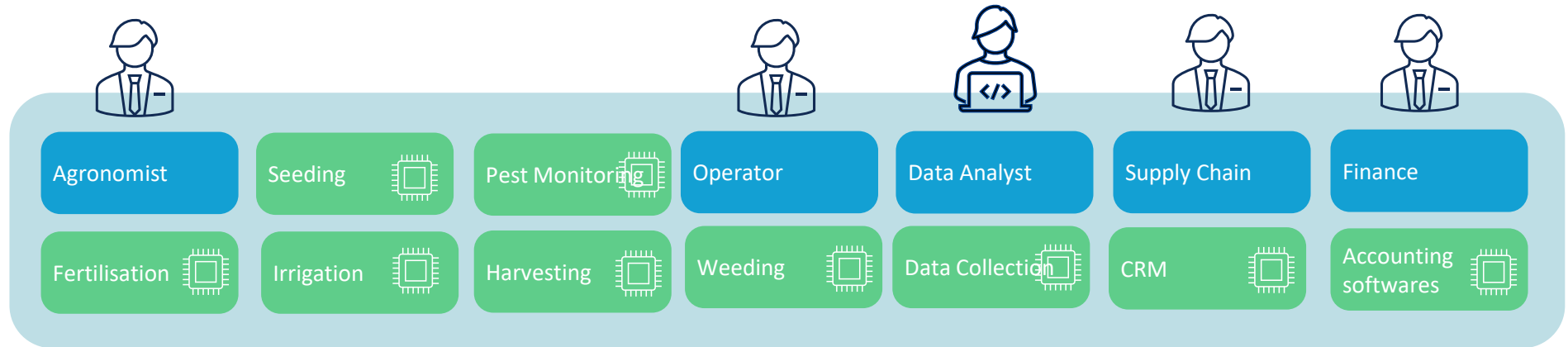
Farmer



Traditional Farming Tasks (Pre-Industrial Era)

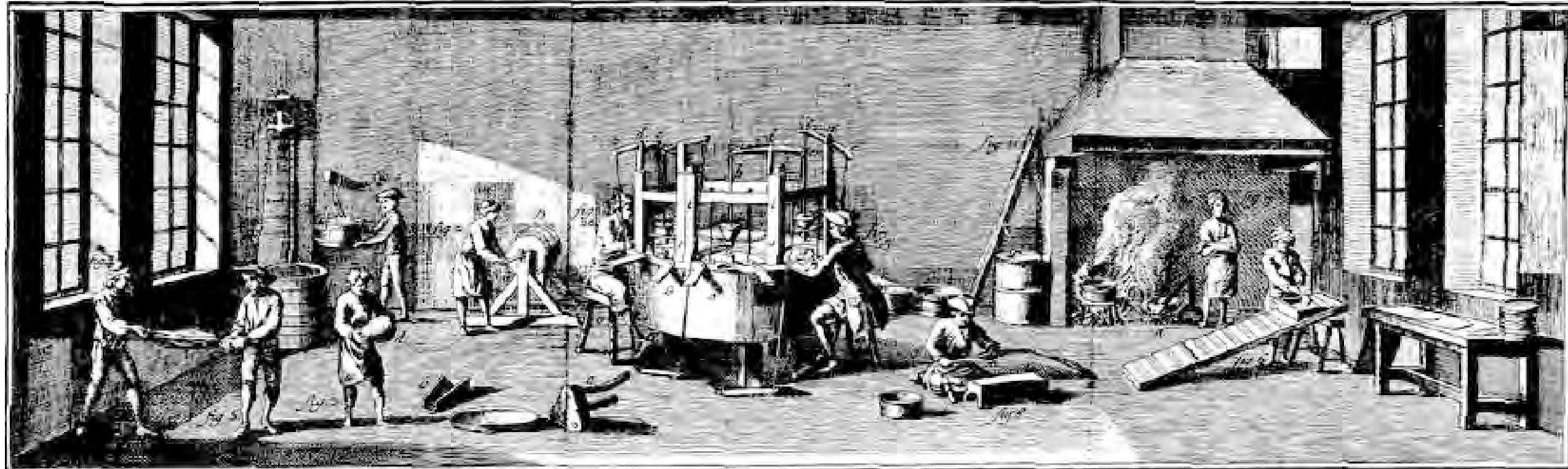


Farm Manager



Modern Farming Tasks (Industrial and Post-Industrial Era)

Adam Smith's division of labor



Benefits

- Productivity
- Innovation
- Quality



Risks

- Alienation
- Over-specialization
- Collaboration

(Gen)AI at Allianz Benelux

1. Introduction
2. (Gen)AI in insurance
3. (Gen)AI at Allianz
4. Challenges in implementing (Gen)AI
5. Conclusion & Future outlook

A century of innovation, unlocking new solutions to complex tasks

Statistics



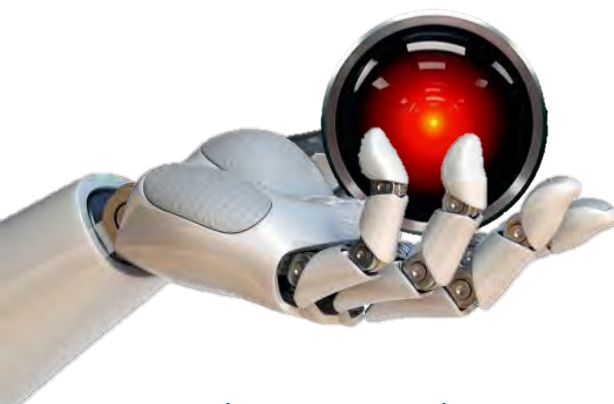
Machine Learning



Deep Learning



Generative AI



1940's

1950's

1960's

1970's

1980's

1990's

2000's

2010's

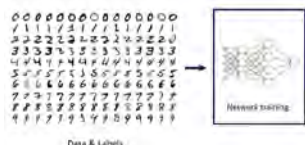
2020's



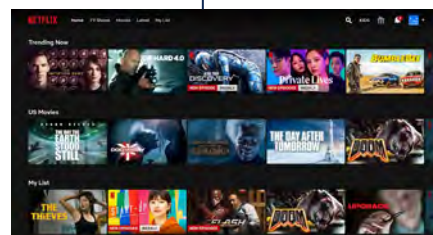
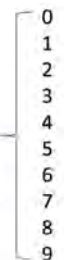
Classification (Fisher, 1936)



Speech recognition (Audrey, 1952)



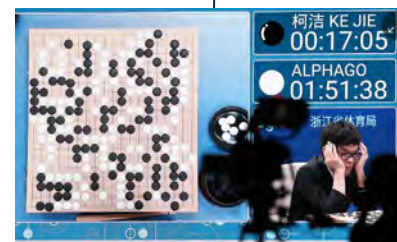
Optical Character Recognition (Perceptron, 1958)



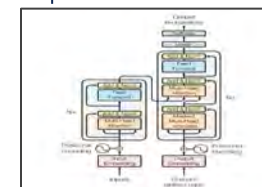
Recommendation systems (Netflix, 2009)



Object detection



Gaming (AlphaGo, 2016)

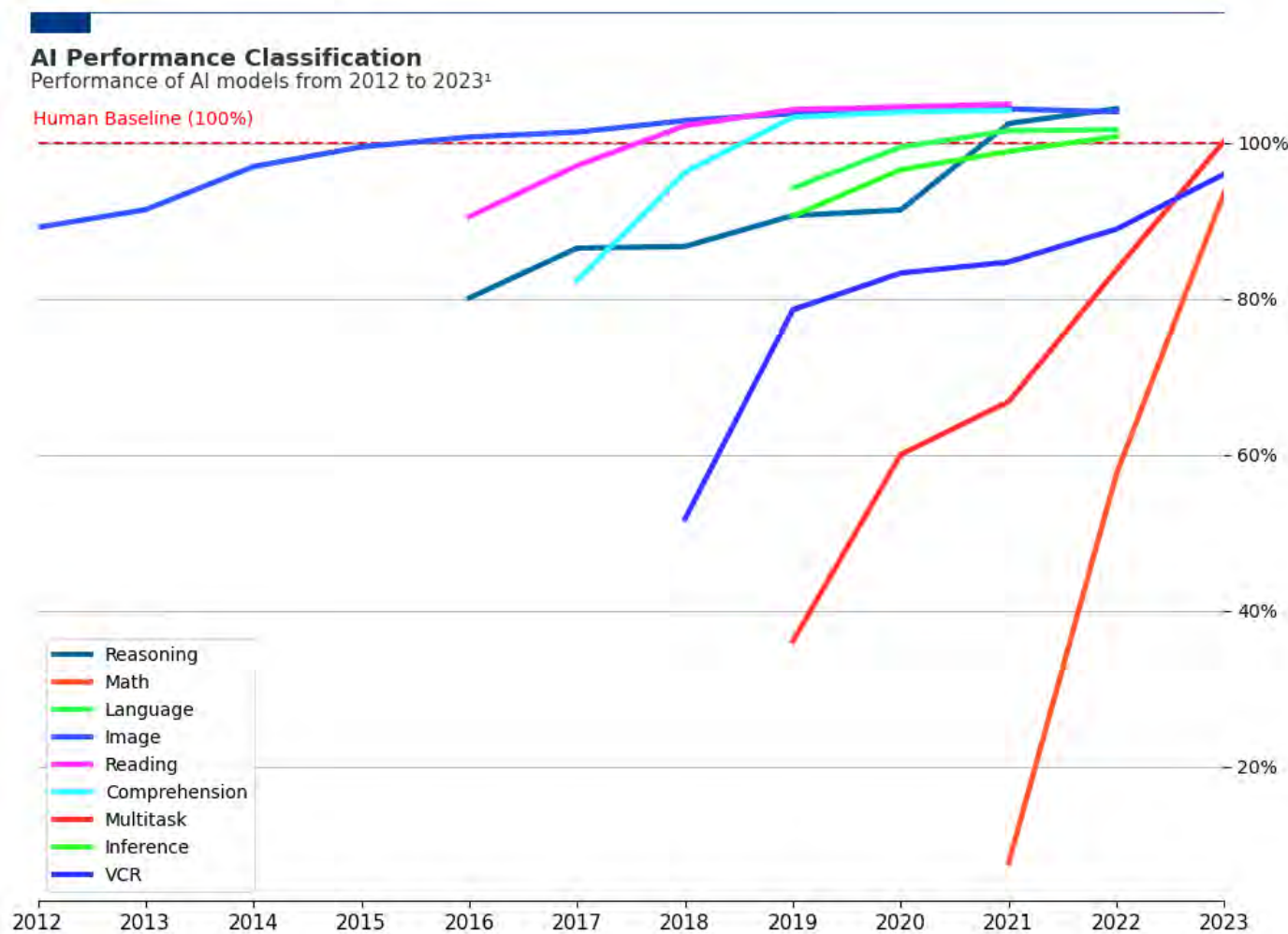


Attention is all you need (Google, 2017)



GPT-3 Launch (OpenAI, 2020)

On specific tasks, AI makes sense



Source: AI Index Report 2024 – Artificial Intelligence Index. <https://aiindex.stanford.edu/report/>

AI has **surpassed** human performance on several benchmarks for specific tasks, including some in **image classification**, **reasoning**, and **language** understanding.

Yet it **trails** behind on more complex tasks like competition-level **mathematics**, visual commonsense reasoning and planning.

Applications suited for GenAI



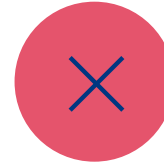
Applications suited for GenAI

Generating content, possibly while taking context or instructions into account

- Personalized image/audio/video generation and editing
- Chat-like customer service applications

Predicting or extracting information from unstructured data

- Synthesis, question-answering, reasoning about text, images, and multi-modal data
- Search, topic/key information extraction



Applications NOT (yet) suited for GenAI

High-stakes scenarios where errors, factual inaccuracies, or value judgements can cause harm e.g., disease diagnostics






Applications involving **heavy volume of requests and/or tight response time limits** (powerful generative models are comparatively costly and slow) e.g., stock trading

Unconstrained, long, open-ended generation that may expose harmful or biased content to users




Applications requiring **explainability** and/or **full understanding of potential failure** modes (e.g., highly regulated environments) e.g., credit scoring

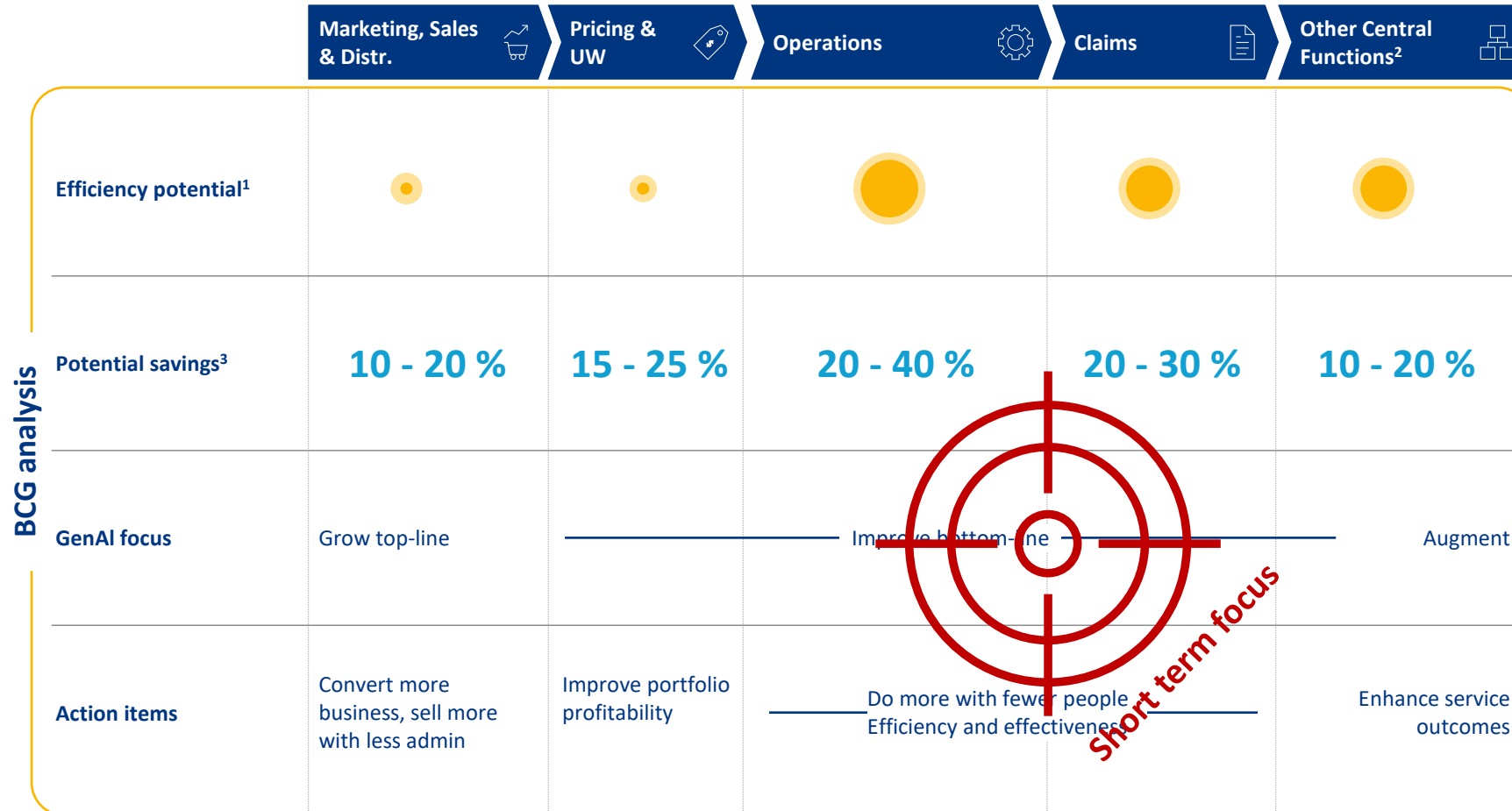
Applications requiring **numerical reasoning** (from basic arithmetic to optimization)

Generative AI: new tasks and capabilities examples

Generative AI in Insurance		example
 Chat	<p>Provide customer service through chat and expand client chatbot usage towards client outreach and data collection.</p> <p>Proactively guide employees and customers through their journeys.</p>	<p>Customer first line chatbots</p>
 Summarize	<p>Summarize and extract insights from unstructured data sources Interpret text/transcripts (i.e., create embeddings).</p> <p>Enable querying and cite relevant sources.</p>	<p>Co-pilot for claims verification</p>
 Coding	<p>Interpret, translate, and generate code (e.g., migration from legacy systems at scale, automated development of tests, documentation, and linting).</p>	<p>Refactor code to accelerate mainframe migration, Github Copilot</p>
 Creation/Generation	<p>Generate text/images/others, e.g., draft contracts, RFPs...</p> <p>Create communication (e.g., outbound marketing).</p> <p>Generate visuals to accelerate R&D processes.</p>	<p>Hyper-personalised outreach</p>
 Conclusion	<p>Generative AI is transforming the insurance industry by automating processes and enhancing customer interactions. At Allianz, utilizing AI for client engagement, data interpretation, code transformation, and content creation can boost efficiency, personalize services, and provide a competitive advantage.</p>	

Market view: where to focus

-  Relative share of workforce (FTE)
-  Current size
-  Size after gross efficiencies



Expected impact⁴: (acc. to McKinsey, BCG, Deloitte)



5-10% growth



15%-20% productivity



2% loss ratio

(Re-)Insurance market is...

Developing use cases similar to AZ identified **GenAI patterns**, **democratizing the usage** of GenAI, **augmenting capabilities** of agents in UW & claims, **automating processes** end-to-end to achieve STP⁵ and increase customer satisfaction

The market (outside insurance) is: Leveraging GenAI for **personalized experiences**, **workflow automation**, supply chain optimization, and **enhanced decision-making**

1. Size depends on distribution channel (e.g., broker, agent, direct) and business model (e.g., retail, commercial)
2. E.g., HR, Finance, IT, Legal
3. Potential savings before reinvestment considerations (e.g., repurposing of Staff towards value-adding tasks), 10-20% for Marketing, Sales & Distrib, is a Weighted average

Source: BCG Insurance Excellence Benchmark

4. Organizational impact, e.g., Cost optimization, operational agility and customer experience
5. Straight-through Processing

(Gen)AI at Allianz Benelux

1. Introduction
2. (Gen)AI in insurance
3. (Gen)AI at Allianz
4. Challenges in implementing (Gen)AI
5. Conclusion & Future outlook

Indexing and Routing

Bring forward pension | Jane Doe

 KEMPYNCK, ABEL (Allianz Benelux)
To  KEMPYNCK, ABEL (Allianz Benelux)
Retention Policy: 3 Years delete (3 years) Expires: 11/18/2027
 Internal

Internal

Good day,

I would like information about bringing forward my pension.

My name is Jane Doe and I am now 63 years old. This can apparently be brought forward 5 years.

I'm the owner of the Allianz insurance product with policy number 503214.

I would like to see the calculations if possible from 2024, 2025, 2026 and 2027.

What is possible and what will the income be? Please for your immediate reply, as last time the delay on your end was very long.

Sincerely,
Jane Doe



Indexing and Routing: Indexing

Bring forward pension | Jane Doe

KEMPYNCK, ABEL (Allianz Benelux)
To KEMPYNCK, ABEL (Allianz Benelux)

Retention Policy 3 Years delete (3 years) Expires 11/19/2027

Internal

Internal

Good day,

I would like information about bringing forward my pension.

My name is Jane Doe and I am now 63 years old. This can apparently be brought forward 5 years.

I'm the owner of the Allianz insurance product with policy number 503214.

I would like to see the calculations if possible from 2024, 2025, 2026 and 2027.

What is possible and what will the income be? Please for your immediate reply, as last time the delay on your end was very long.

Sincerely,
Jane Doe

Indexing: organizing and storing data in a structured format

Customer

Policy



Indexing and Routing: Routing

Bring forward pension | Jane Doe

KA KEMPYNCK, ABEL (Allianz Benelux)
 To KEMPYNCK, ABEL (Allianz Benelux)
 Retention Policy 3 Years delete (3 years) Expires 11/19/2027
 Internal

Internal

Good day,

I would like information about bringing forward my pension.

My name is Jane Doe and I am now 63 years old. This can apparently be brought forward 5 years.

I'm the owner of the Allianz insurance product with policy number 503214.

I would like to see the calculations if possible from 2024, 2025, 2026 and 2027.

What is possible and what will the income be? Please for your immediate reply, as last time the delay on your end was very long.

Sincerely,
 Jane Doe

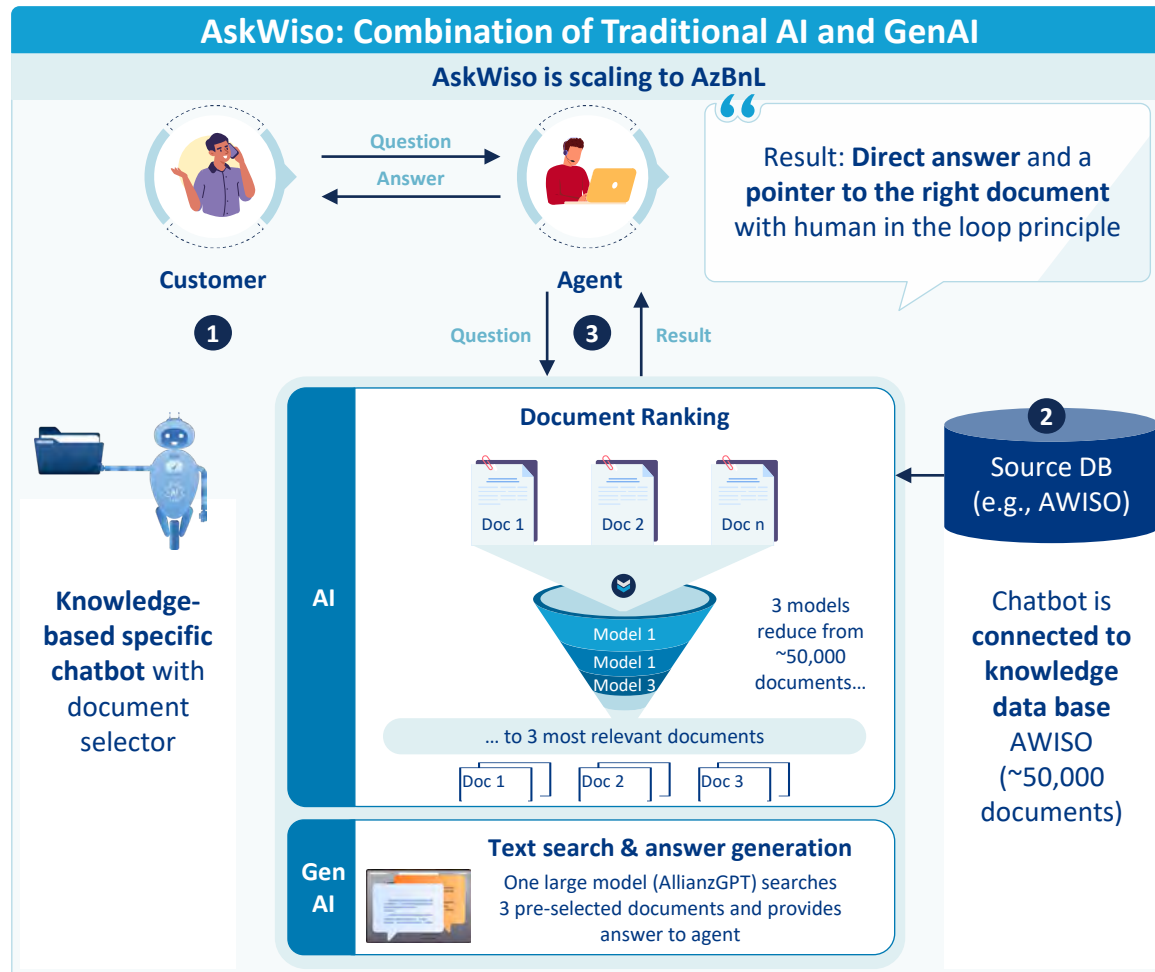


Tasks categories in Life and Health NL



Example “talk to your document”: Enterprise Knowledge Assistant

In production



Enterprise Knowledge Assistant (AskWiso)

OEs engaged

- AZ Leben
- AZ VERS
- US Life
- AZ Services India
- AZ Benelux

Business Impact

- **Customer experience:** Quick and consistent answers
- **One-touch processing:** No waiting time / handovers
- **Call Center efficiency:** More calls can be handled

Selected key milestones




- **AZ-Leben:** Go-live End of June (15-20 users), incrementally extend to broader user base with 50 to 100 users in September
- **AZ-Vers:** Go-live in early September (15-20 users), incrementally extend to broader user base (100+) towards December 2024
- **AZ Services India:** Go-live in July
- **US Life:** Beta-Test with selected user in August

Demo video

(Gen)AI at Allianz Benelux

1. Introduction
2. (Gen)AI in insurance
3. (Gen)AI at Allianz
4. Challenges in implementing (Gen)AI
5. Conclusion & Future outlook

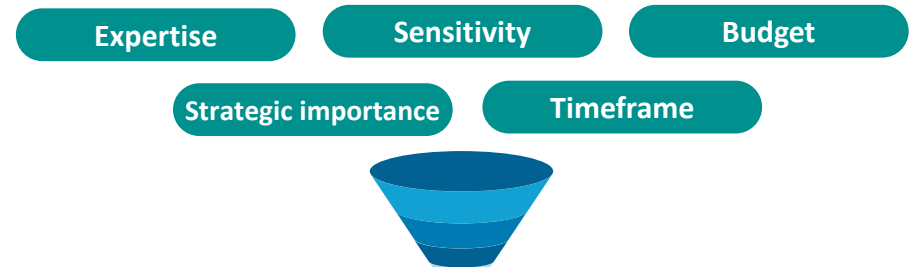
Multiple GenAI solutions available in Allianz

GenAI Chatbots classification			
	Simple		Complex
 Product category	Self-service GenAI for personal productivity mainly AZGPT or MS Office 365	Chat with your data as service from AZ Technology, e.g. “AskRisk”	Business specific GenAI e.g., Enterprise Knowledge Assistant (EKA)
 Description	Secure chatbot designed for AZ colleagues, enhancing workflows, answering inquiries, and providing real-time assistance. Since 2024, it has engaged over 30,000 users and answered more than 1Mn prompts	Customizable API/chatbot for AZ teams to interact with their data. Supports over 30 teams, enables efficient onboarding in under 10 days , and integrates tools like SharePoint and Confluence, for personalized and relevant interactions	EKA simplifies searching large documents, identifying client and contract numbers. Users get instant answers and source links.
 Level of customization	0 %	5-10 %	10-30 %
	For Individuals	For Teams	Enterprise



Company wide **upskilling programs** by AZ Technology, e.g., AI Run, help 8,500+ **GenAI beginners** and **experienced Software developers** to increase their GenAI **proficiency**. Group AI Office in collaboration with Ops&IT Academy will develop mandatory role-specific and general AI literacy trainings to ensure **compliance** with the **EU AI Act**.

Buy or Make ?



Make (PaaS)

- (+) High flexibility / control
- (+) Integration in enterprise architecture
- (+) EU AI Act, Data Privacy
- (-) Slow to build
- (-) Requires teams for maintenance
- (-) Talent management

Examples
Inbound communication management, internal knowledge management system, customer facing ai-powered applications.

Buy (SaaS)

- (+) Fast to build & proven track record
- (+) Managed maintenance
- (+) Outside-in expertise
- (-) Integration in enterprise architecture
- (-) EU AI Act, Data Privacy
- (-) Less flexibility / control
- (-) vendor lock-in.

Examples
Non-core insurance utilities e.g., Microsoft Copilot, Cisco webex AI-features, ChatGPT premium.

EU AI Act: Risk-based governance requirement

Use Case Risk Categorization

Prohibited use cases, e.g.

- Manipulation and harm of vulnerable groups
- Emotion recognition at workplace
- Social scoring for detrimental treatment

High vigilance area, e.g.

- Risk assessment and pricing in life & health insurance
- HR (esp. recruiting and promotions)

Low vigilance area, e.g.

- Chatbots or other automated customer service systems
- AI-produced content, e.g., images or text

Minimal vigilance area

i.e., all other AI systems that do not fall under any of the other three risk categories

Regulatory Provision

- Prohibited in the European Union
- All use cases falling under the prohibited use cases category must be decommissioned by February 2025

- Dependent on role as provider or deployer
- Requirements for risk management
- Human Oversight
- Post-market monitoring and incident reporting

- Transparency requirements, e.g., informing users interacting with the systems about the origin of the respective content / labeling

- Voluntary Code of Conduct modeled after the requirements for high-risk systems and in accordance with industry standards

Art. 5
Unacceptable risk use-cases

Art. 6
High-risk use-cases

Art. 50
Transparency high-risk use-cases

Art. 6 (3)
Exempted high-risk use-cases

Art. 50
Transparency risk use-cases

All AI systems not included

(Gen)AI at Allianz Benelux

1. Introduction
2. (Gen)AI in insurance
3. (Gen)AI at Allianz
4. Challenges in implementing (Gen)AI
5. Conclusion & future outlook

Conclusion & future outlook

- (Gen)AI: rapid unlocking of new tasks thought impossible before
- How to embed in the value chain ? Challenges of division of labor
- Market short term focus on productivity & bottom-line
- Finding the right solution for each problem: architecture, scalability, user-literacy, customization
- Regulation and governance

Thank you!

