

ERGO

Munich RE



Jenseits des Hypes

KI als Teil der Unternehmens-IT?

Dr. Dirk Heiss

Head of Digital Platforms, Data and AI

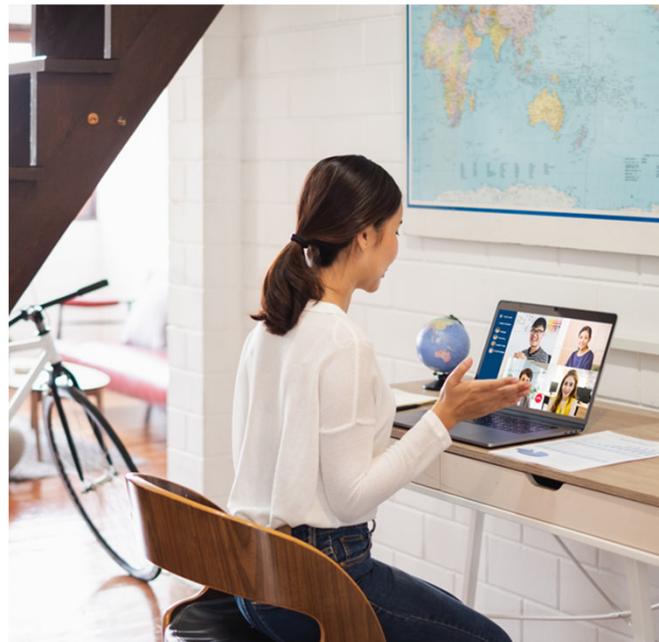
Munich Re Business Technology

01



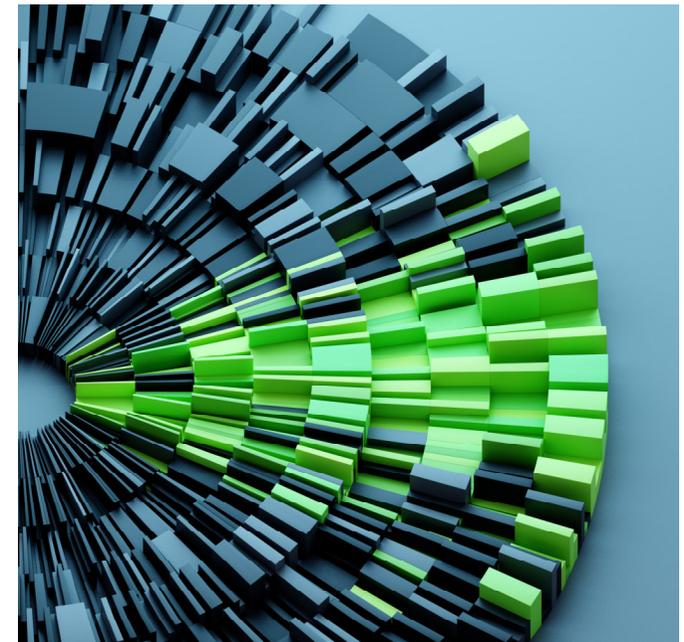
What is Hype, what is Real?

02



AI Use Cases in Insurance

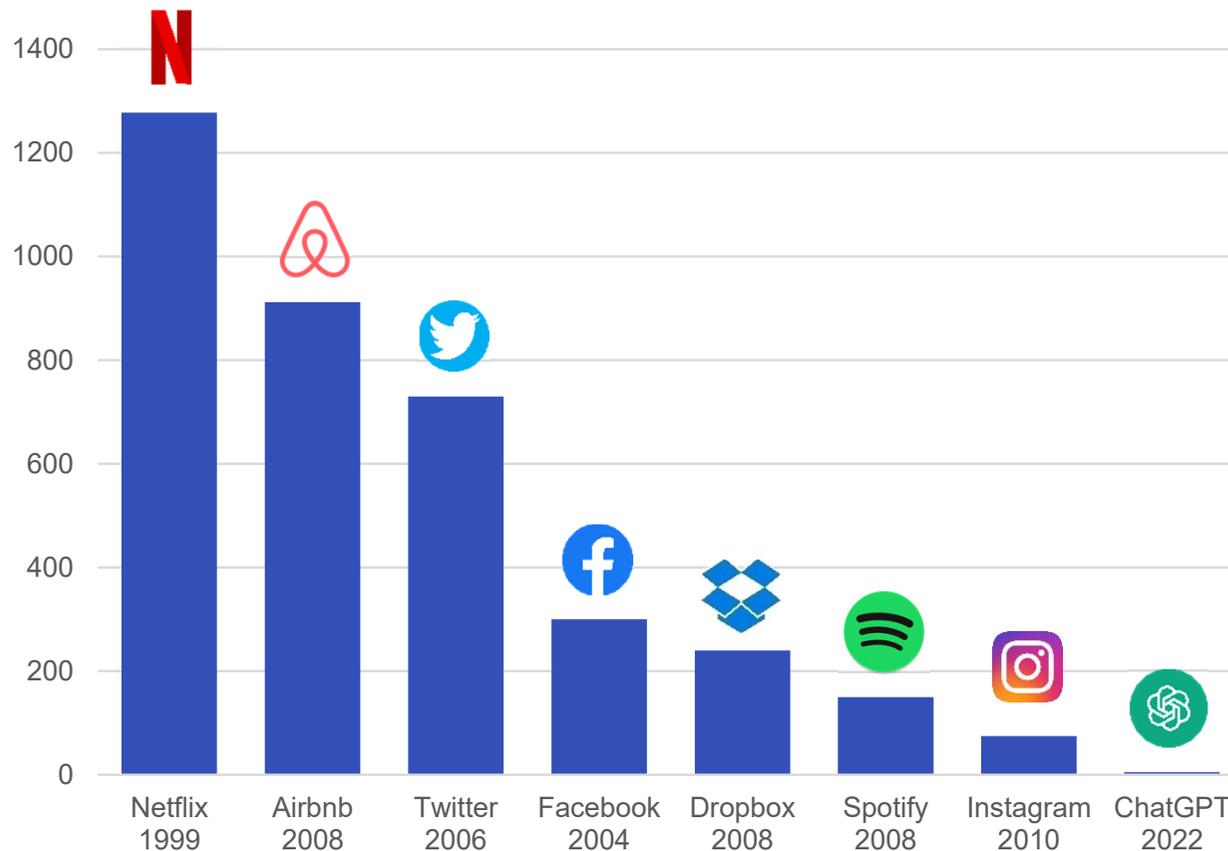
03



What's next in AI?

OpenAI ChatGPT: 1 million users in less than 5 days

Days to reach 1M users



A few reasons why Generative AI like ChatGPT is perceived as such a game changer:

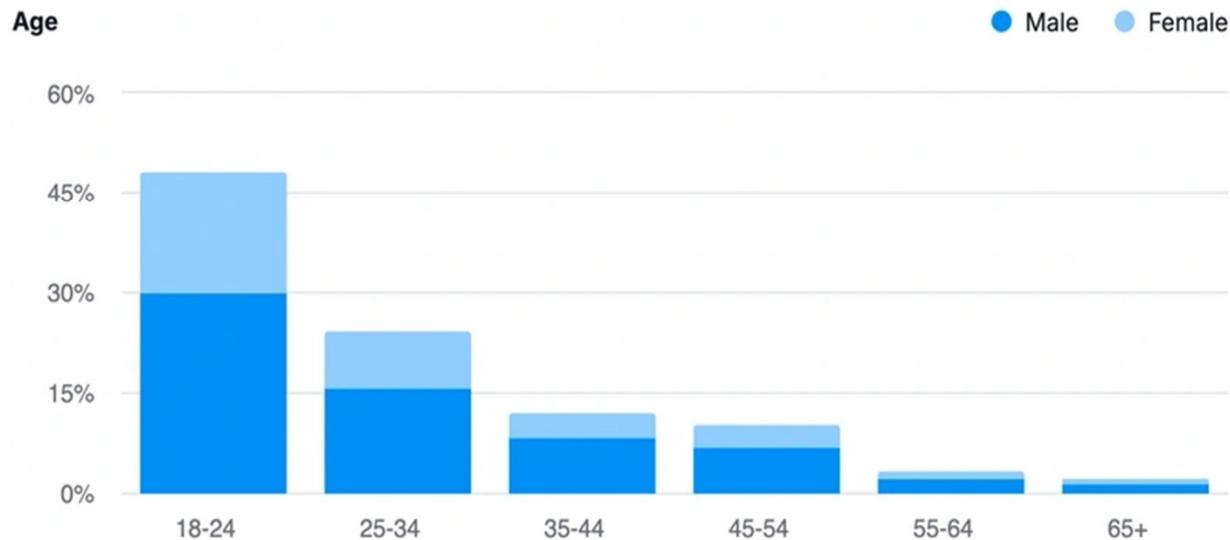
- **“knows everything”**
Pre-trained on large amounts of data (“The Internet”)
- **“out of the box”**
No need for training on specific datasets or outcomes
- **“speaks with me”**
Interaction through natural language, no programming required

ChatGPT Demographics:

More than 45% of its users are under the age of 24

Audience

chatgpt.com | Feb 2025



Source: <https://explodingtopics.com/blog/chatgpt-users>, Feb 2025

- Conversational AI has already been adopted by the **next generation workforce**
- Availability and adoption of AI tools in daily business will also become a **differentiating factor for employers**
- Usage of AI in daily routine is a question of **not if but how**

Munich Re offers a range of production-ready AI platforms for different types of use cases



- Collaborative effort between business units and experts from central units (e.g., DAA1)
- Strategic prioritization done by Senior Management



- Medium to small-sized use cases implemented by BUs
- Leveraging centrally provided self-service tools and GenAI models
- Prioritization through line management



- Using GenAI through embedded capabilities in software solutions and via internal platforms, especially Flamingo



AI Tools currently available (selection)



GenAI at ERGO: Focus on automation and better leverage of available skills and resources

3 levers along E2E processes

1. Manage incoming workload

2. Increase straight-through-processing

3. Supporting skill worker activities

6 use case families

GenAI chat and voicebots

- Call routing and collection of basic information
- Customer self-service (e.g., status of claims processing)

Internal knowledge chatbots

- Assistants for ERGO employees to quickly research in guidelines
- Product support for brokers

Data extraction assistants

- Extracting more data to reduce manual transcription
- Handle more cases fully digital (zero touch)

(Gen)AI classification and extraction in Inputmgmt.

- Increased automation in Input mgmt

Expert copilots

- Accelerating time-consuming activities, e.g., text generation / documentation, summaries, broker offers, etc.

ERGO GPT

- Compliant and secure GPT with ERGO knowledge

Total impact

9%

42%

49%

AI in Health Claims: Increase automation by augmenting the decisioning with AI step-by-step

PAM/SMILE(Health)



	AI 1	AI 2	AI 3	AI 4
5,7m documents Outpatient medical bill	AI-Bouncer	AI-VVA	AI-Regress	
5,3m documents Prescriptions	AI-Bouncer	AI-VVA		
1,8m documents Dental (HKP/invoices)	AI-Bouncer	AI-VVA		
1,1m documents Inpatient medical bill	AI-Bouncer	AI-VVA	AI-Regress	
0,4m documents Hospital invoice	AI-Bouncer	AI-VVA		AI-DRG
0,4m documents Naturopathy bill	AI-Bouncer			
0,3m documents Resource bill	AI-Bouncer			

Potential "outpatient medical bill"

Model prediction

# documents	"dark mode"	"bright mode"	
Pay completely	137,726	198,883	336,609
Pay particularly	1,251	163,286	164,537
	138,977	362,169	501,146

Correct action

Reduction of manual checks of 137,726 documents (~5 FTE)
 Increased payout of ~ €132k due to wrong predictions in 1,251 documents
 Additional potential of 198,883 documents with further model calibration

- Sustainable implementation of AI in Health Claims**
- Realize **stable and compliant IT integration** for AI models in existing, **mission-critical processes** and legacy systems
 - Setup a **cross-functional team** (Value Stream) with the first „AI Bouncer“ use case
 - Once **technical breakthrough** is done and first use case is implemented several following use cases to be **implemented step-by-step** with decreasing marginal costs

Flamingo and ERGO GPT: General purpose, secure and compliant GenAI Chatbots for daily work



Munich RE **Flamingo Chat** [Preview Features in Flamingo Labs](#) [Visit Flamingo SharePoint!](#)

Quick Chat **Document Assistant** MultiDoc Insights

Document Upload

Upload a document to generate a summary and chat with it. The entire text will be extracted, while images and tables will be skipped. [More.](#)

Drag and drop file here
Limit 200MB per file • PDF, DOCX, DOC

[Browse files](#)

SDO MRM - ERGO GenAI...
89.8KB

Document Ready!

[View Document](#) [Summarize](#)

[Advanced](#) [Reset Session](#)

Summary Settings

1000 Words, Professional tone

LLM Model

Llama3-3-70B

Introduction

This document outlines the IT Service Delivery Order (SDO) for the GenAI@ERGO project between Münchener Rückversicherungs-Gesellschaft (MRM) and ERGO Group AG (ERGO). The SDO is a contractual agreement that governs the provision of IT services, cost allocation, and licensing of deliverables between the two parties. This summary provides an overview of the key aspects of the SDO, including its objective, scope, and terms.

The IT Service Delivery Order, as seen on Page 1, is effective as of July 2024 and is set to expire in December 2024, although the exact date is not specified. The agreement is based on the Framework Agreement for the group-wide provision of IT services dated January 1, 2015, which can be found on Page 1.

Objective and Scope

The primary objective of this SDO is to enable MRM to provision IT services and allocate IT service costs to ERGO for the GenAI@ERGO project. The scope of the SDO includes the provisioning and cost allocation of project costs related to the GenAI@ERGO project, as well as the grant of a license for deliverables (including models) developed by MRM to ERGO, as stated on Page 2.

The project aims to develop a standardized process for GenAI services, which can be used to improve the efficiency and quality of business processes. The GenAI@ERGO program is intended to support and automate several processes, relieving the workload of clerks and speeding up customer processes. The program's requirements are outlined in the Project Charter, which is appended to the SDO as Appendix A, and can be found on Page 7.

IT Services Delivered

How can I help you? [▶](#) [⌵](#)

ERGO Einfach, weil's wichtig ist. GPT-4o Mini Konnerth Nicolas (IDTCD)

Das Dokument wurde hochgeladen. Sie können nun mit dem Inhalt interagieren.

Worum geht es in diesem Dokument?

Das Dokument ist ein Whitepaper des ERGO Innovation Lab und bietet eine Einführung in die Anwendung von ChatGPT und großen Sprachmodellen in der Versicherungsbranche. Es behandelt die Entwicklung und den Hype um generative Künstliche Intelligenz (KI), insbesondere ChatGPT, und deren Potenziale, Funktionsweisen, Grenzen und Risiken.

Das Whitepaper zeigt auf, wie Sprachmodelle in verschiedenen Bereichen der Versicherungsbranche eingesetzt werden können, wie z.B. in der Produktentwicklung, Kundenberatung und Schadenbearbeitung. Es diskutiert auch die Herausforderungen, die bei der Implementierung solcher Technologien auftreten können, einschließlich Datenschutz, regulatorische Anforderungen und die Notwendigkeit, die Modelle an branchenspezifische Anforderungen anzupassen.

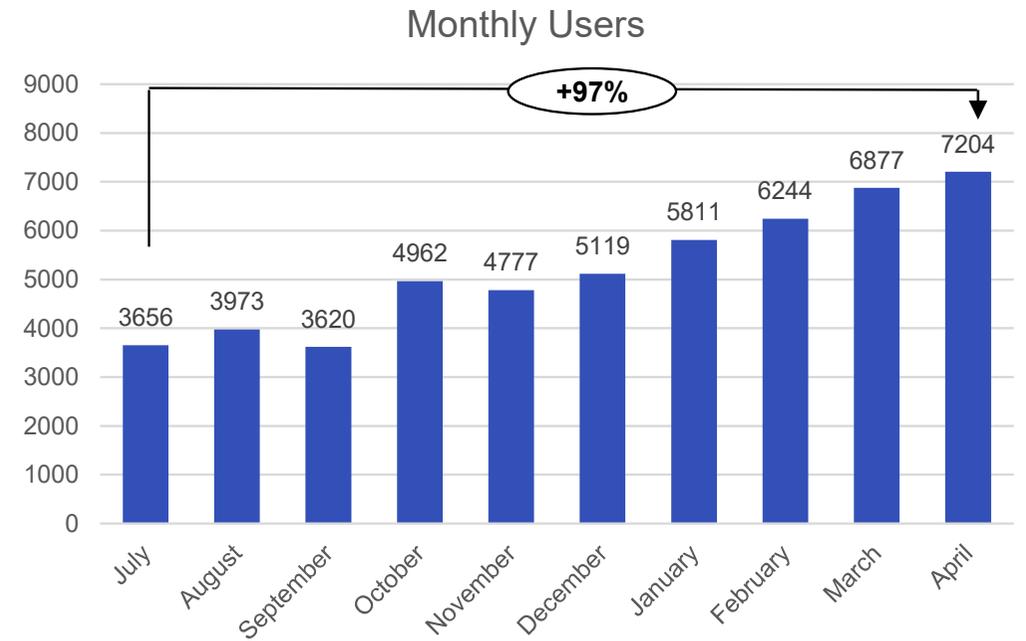
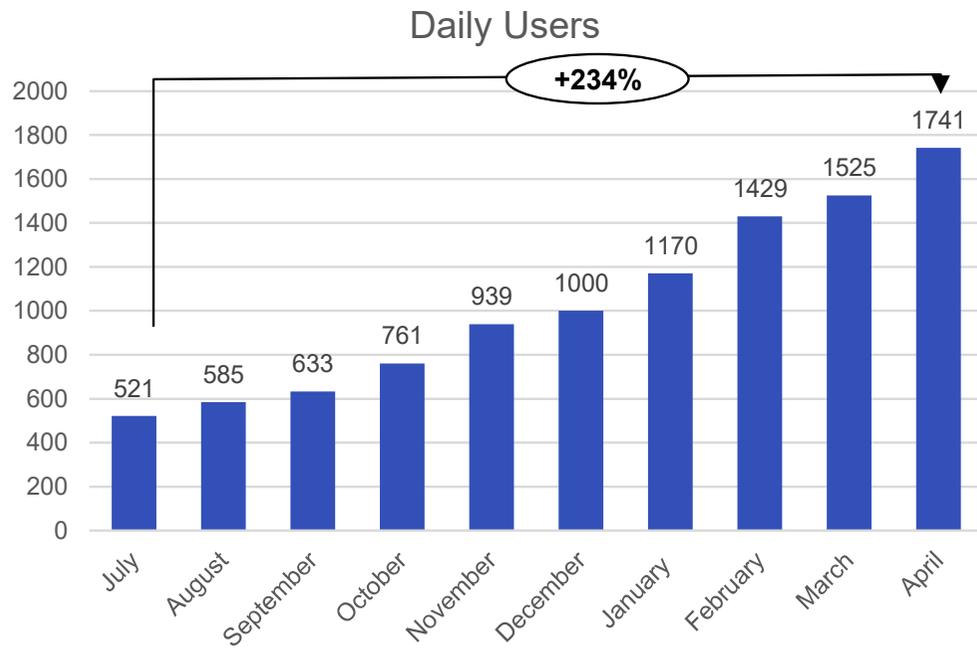
Zusammenfassend wird die Bedeutung von Sprachmodellen für die Zukunft der Versicherungsbranche sowie die Notwendigkeit einer verantwortungsvollen Nutzung und Kontrolle dieser Technologien hervorgehoben.

AI - generierter Inhalt kann fehlerhaft sein

2023-ERGO-Whitepaper-ChatGPT-und-Sprachmodelle (8).pdf

Geben Sie hier einen neuen Prompt ein...

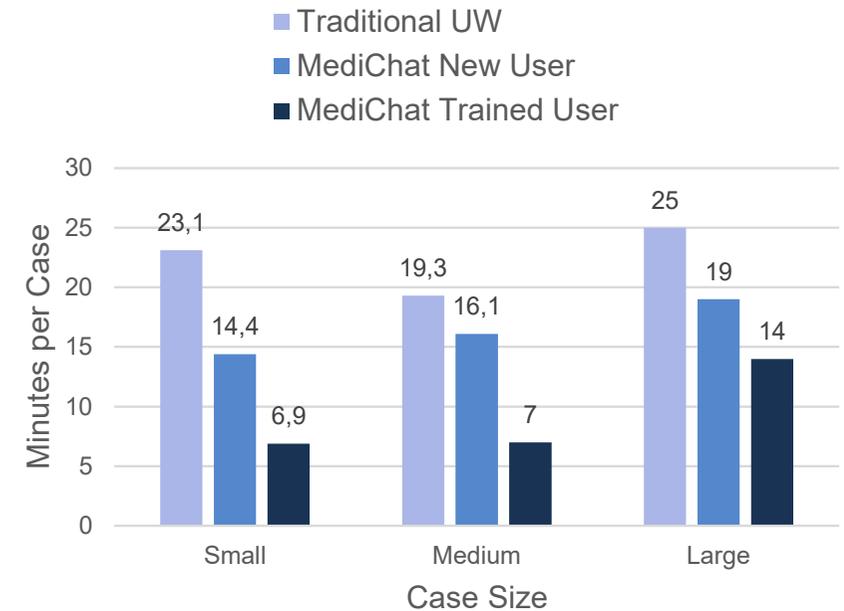
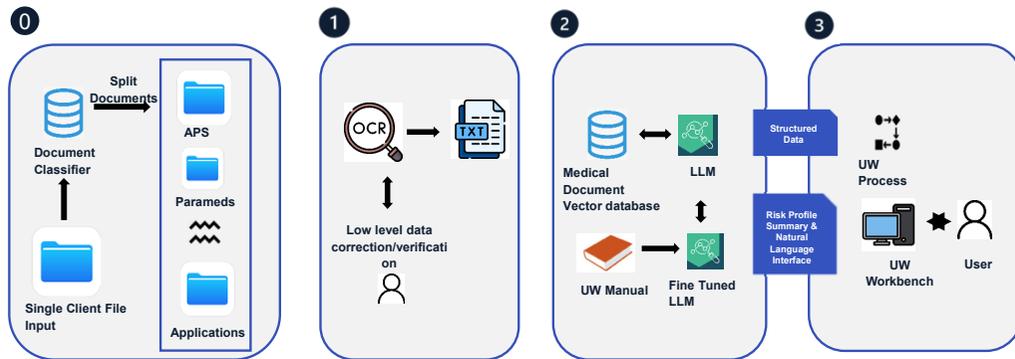
ERGO GPT: Fast and consistent adoption with daily use across all lines of business



AI in Facultative Life Underwriting: Significant efficiency gains, but reskilling of Underwriters required

MediChat AI Application for Life Underwriting

- Extraction of medical information for life underwriting files
- Structured summary of underwriting case
- Comparison with UW manual and similar cases



Lessons Learned:

- GenAI can effectively support analysis of complex, unstructured data
- Reliable extraction of key information from UW files
- Training on prompt engineering can significantly improve value of AI support
- Integration into UW workflow is key for user acceptance



Foto: dpa (Archiv)

Milliardenschaden durch Naturkatastrophen

Überschwemmungen, Wirbelstürme und Co. hinterließen 2024 weltweit enorme Kosten.

Quelle: Munich Re

tagesschau 



Foto: dpa (Archiv)

Naturkatastrophen

Schadensberechnung für 2024 durch Munich Re

- Weltweit lag der volkswirtschaftliche Schaden bei **mehr als 310 Mrd. Euro**, davon versichert waren weniger als 136 Mrd. Euro
- Die Zahlen sind **vergleichsweise hoch** – im inflationsbereinigten **Dreißig-Jahres-Schnitt** sind es **rund 175 Mrd. Euro**
- Wegen der steigenden Schäden könnten **Gebäudeversicherung und andere Policen**, die Unwetter und andere Naturkatastrophen abdecken, **teurer** werden

tagesschau 

NatCatSERVICE: Munich Re databased of natural disasters benefits from AI based data collection

Situation

- Munich Re **NatCatSERVICE** is one of the world's most comprehensive databased on natural disasters
- Munich Re's annual quantitative **NatCat report is widely used in the insurance industry**, but also quoted by mainstream media
- Data collection requires **extracting and aggregating NatCat information** from news articles
- The **number of required features is high and diverse** for different event types
- Traditionally, **information collection has been performed manually**, relying mostly on student interns

AI based Solution

Newsfeeds

Devastating Flood in Brazil Claims Lives, Injures Dozens, and Causes Widespread Displacement in São João, Brazil – A catastrophic flood swept through the small town of São João in southern Brazil on November 24th, leaving 21 people dead, 43 injured, and dozens of families displaced. The following three days of torrential rainfall that overwhelmed local rivers, resulting in flash floods that left the community off guard. The floodwaters surged through the region with little warning, destroying 12 houses and several critical infrastructure, including roads, bridges, and power lines. Emergency responders have tirelessly to rescue survivors and provide aid, but access to some areas remains challenging due to high waters and debris.

1 A Town in Mourning
Residents of São João are grieving the loss of their neighbors and loved ones. Among the families unable to escape as floodwaters engulfed their homes in the early hours of the morning, hospitals have been overwhelmed with injured residents, many of whom sustained fractures



GenAI based information extraction

Is_NatCat: True
Fatalities: 24
Injured: 43
Houses_destroyed: 12
Peril: Flood
...



Metadata extraction and event clustering

Map view (drill down to see single locations within one article)

Article_ID	Article_UID	Article_date	Article_title	Date	Date_parsed_from_article	Peril_Family
1	a152c3	24.11.2024	Flood Devastates São João, Brazil	25.11.2024	TRUE	Flood
2	a85c56	15.10.2024	Earthquake Shakes Northern Chile	16.10.2024	TRUE	Earthquake
3	a78c9	05.09.2024	Wildfires Rage Across California Coastline	06.09.2024	FALSE	Wildfire
4	a12c3	21.08.2024	Tsunami Hits Indonesian Coastline	22.08.2024	TRUE	Tsunami
5	a48e46	12.07.2024	Hurricane Leo Causes Haroc in Florida	13.07.2024	FALSE	Hurricane
6	a78e9	30.06.2024	Severe Hailstorm Damages Crops in Texas	01.07.2024	TRUE	Hailstorm

Article text (english)

Please make sure to select only ONE single article, in order to display it here!

Cluster-Article-Location select

- Select All
- Argentina_Extreme Temperature_06.Jul.2024
- Aruba_Tropical Storm_01.Jul.2024
- Aruba_Tropical Storm_04.Jul.2024
- Aruba_Tropical Storm_07.Jul.2024
- Australia_Connective Storm_02.Jan.2024
- Australia_Fire_18.Feb.2024
- Australia_Mass Movement Dry_07.Jul.2024
- Bahamas_Tropical Storm_01.Jul.2024

09.09.1971 | 19.08.2024 | Generic text search | Show Filters | Map Settings

Conclusions from Munich Re AI Journey so far: definitely transformational, but still waiting for the revolution

Start with AI now

- In (Re)insurance, **insights into data** is key. GenAI can transform **speed and depth of insights** especially into **unstructured data**
- The **next generation workforce** has very quickly adopted AI tools. They will use AI at work, if you like (and manage) it or not → **provide secure, compliant AI platforms**
- **AI Governance** is a mandatory prerequisite. But we are in the insurance industry, so after VAIT and DORA, EU AI Act doesn't need to scare you

Lessons we Learned so far

- While AI-based customer interactions are the big hype, more “boring” topics like **document extraction** and **backoffice automation** provide the faster ROI
- Only 1/3 of project work goes into actual AI development – while 2/3 of effort is needed to get the right business data and automate the business workflow → **data and APIs are key**
- Technology providers have jumped on the AI hype bandwagon. Look beyond the hype and don't let the **license model** eat up all **AI efficiency gains**

Tech Trend Radar 2025

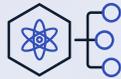
Sneak preview of our top 10 trends



Spatial Intelligence



Digital Healthcare



Generative AI



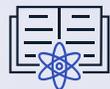
New Energy at Scale



AI Agents



Humanoid Robots



AI Search Engine



Climate Risk & Resilience



Autonomous Interactions



Cyber: Deepfake Defense

(Generative) AI

Where are we heading



Augmented employee experience

(Copilot) Microsoft, Adobe, GitHub, SAP, ServiceNow, Salesforce, ...



Document Cognition and processing

Intelligent document processing is already a **Red Ocean**



Multi-Agent AI Systems → AI Agents

Agentic Reasoning Design Patterns (Andrew Ng)

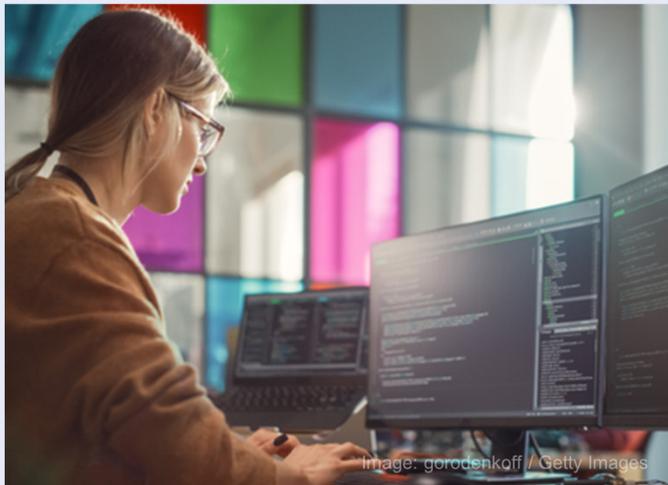
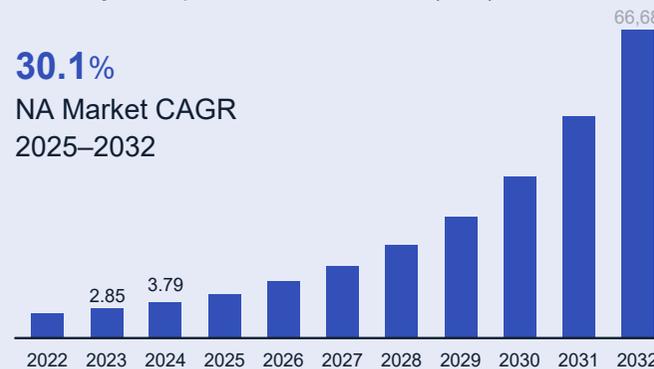


Image: gorodenkoff / Getty Images

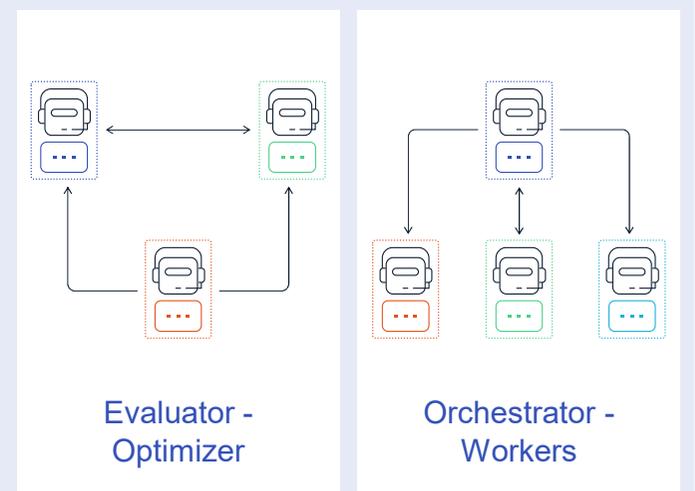
Source: Tech Trend Radar 2025

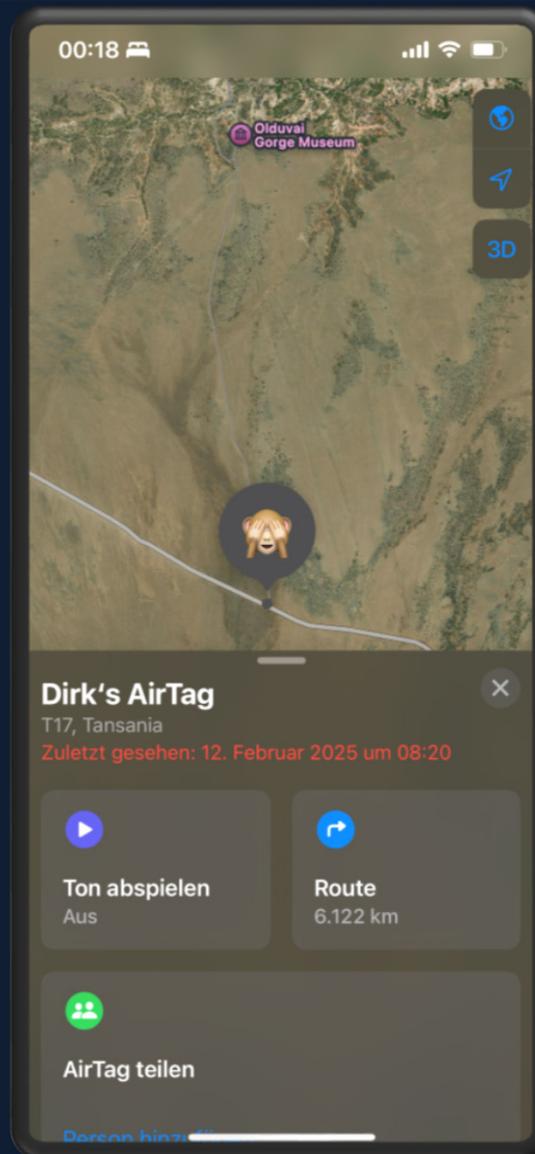
Intelligent Document Processing Market Size, by Component, 2022–2032 (\$bn)

30.1%
NA Market CAGR
2025–2032



Intelligent Document Processing Market Size | Trends 2032







- **AI is a tool**
Humans use tools to enhance their capabilities
- **Act now**
The change is already happening, and still accelerating
- **Make a bigger leap**
Don't be constrained by your starting point and your current way of working
- **Use AI with confidence**
Workers will not be displaced by AI, but by workers using AI

ERGO

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