CERAVISION

25 October 2023

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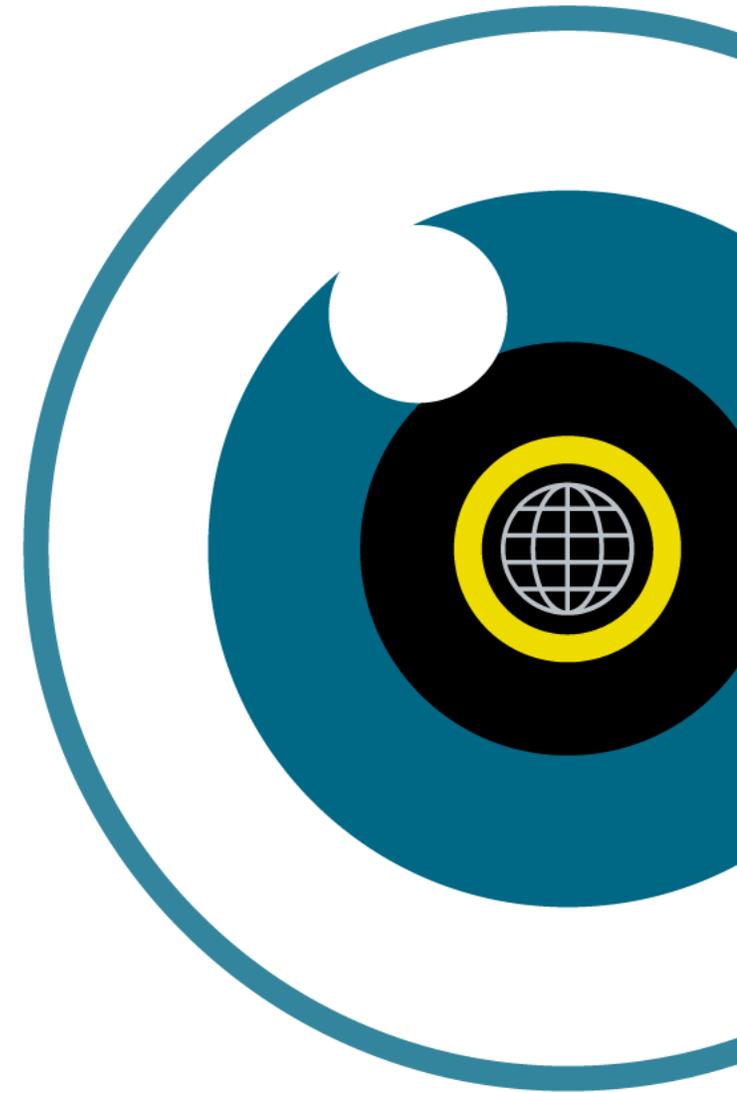
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AI in Insurances: A Revolution or a Threat?

Dr. Karina Schreiber, Chief Risk Officer, Head of Risk & Actuarial

Allianz Versicherungs-AG, Munich

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Welcome!

The Moment that Changed the World…
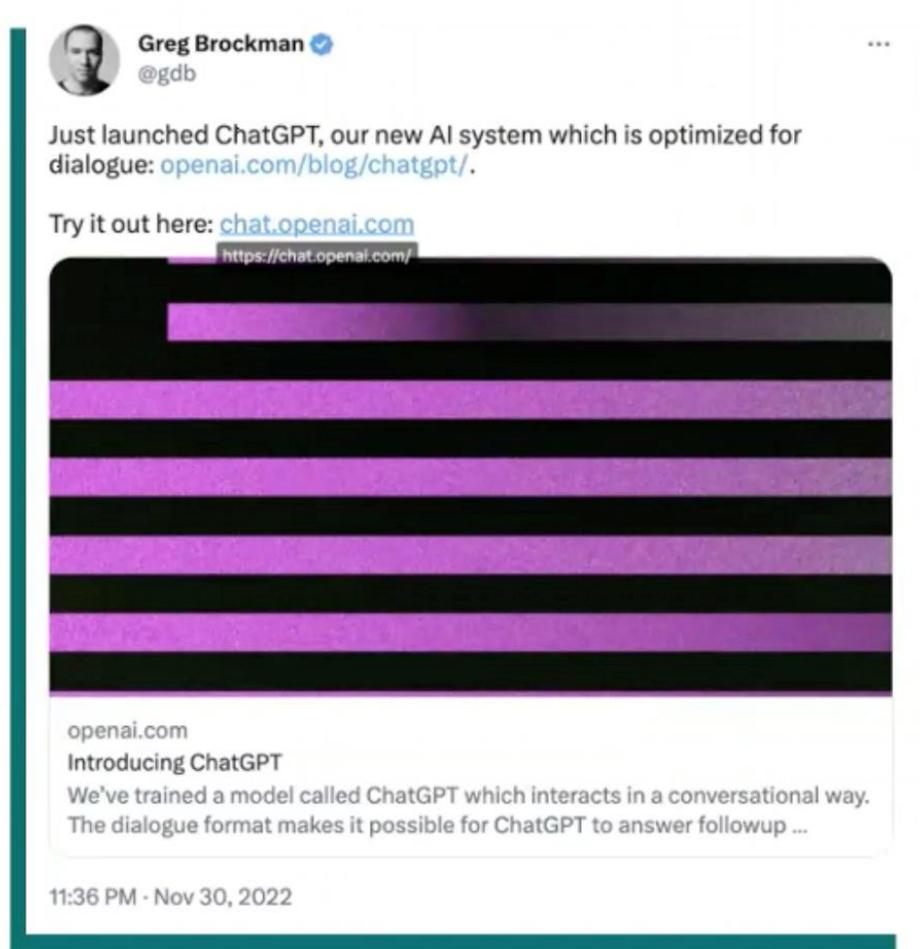
Path to 1 million Users (# of days from launch)

ChatGPT
~5 days

Instagram
~75 days

Spotify
~150 days

1,250,000
1,000,000
750,000
500,000
250,000
0

# of days

0   25   50   75   100   125   150

Sources: Google, Subredditstats, Media Reports

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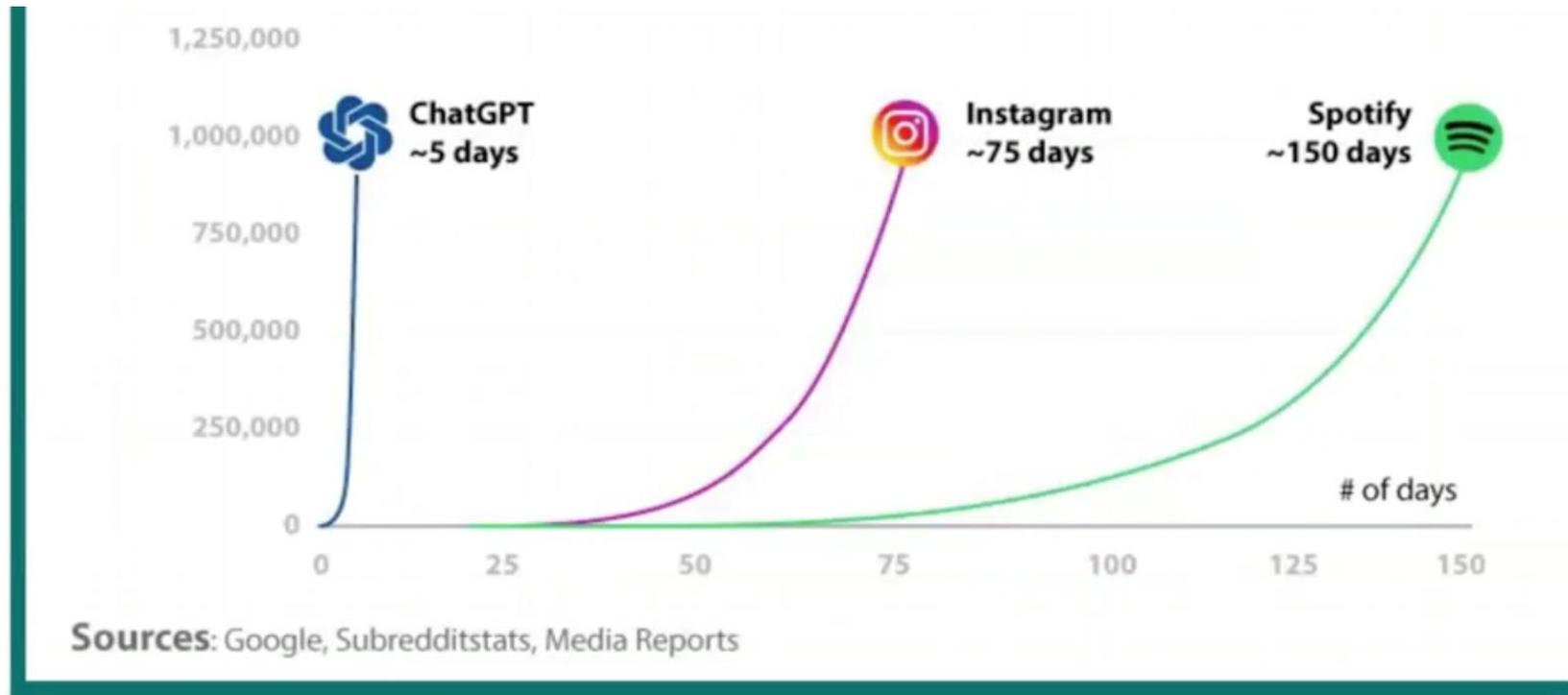
AI Headlines Q1 2023 – Examples

Faszinierend und gruselig

Ist ChatGPT der Anfang der KI-Revolution?

Von Klaus Wedekind
17.01.2023, 09:09 Uhr (aktualisiert)

ChatGPT schreibt aus dem Stegreif wissenschaftliche Texte, kann programmieren und hat anscheinend auf jede Frage eine Antwort. Microsoft investiert angeblich Milliarden, Schulen und Universitäten fürchten Betrug, Journalisten um ihre Arbeit. Ist der Chatbot der Beginn der KI-Revolution?

ACDC THREAT INTELLIGENCE INSIGHTS

WHY NOT SIMPLY USE A CHATBOT TO DEVELOP MALWARE?

Two months ago, AI research and deployment company OpenAI launched a chatbot called ChatGPT. The Chat Generative Pre-trained Transformer (ChatGPT) quickly garnered attention for its detailed responses and articulate answers across many domains of knowledge. It's turning out to be useful in lots of applications: summarizing long articles, for example, or producing a first draft of a presentation that can then be tweaked. One of its more unexpected capabilities is as a tool for helping to write computer code. And this is where the spoiler comes in: It allows threat actors with absolutely no coding experience to develop malware.

TECHNOLOGIE

Artificial Intelligence auf der Spur der Geldwäscher

Einsatz von KI und intelligenten IT-Lösungen im Finanzsektor

von DR. LARS A. LUDWIG — 13. Januar 2023

Reinventing search with a new AI-powered Bing and Edge, your copilot for the web

news.microsoft.com

Google The Keyword

A MESSAGE FROM OUR CEO

An important next step on our AI journey

Feb 06, 2023 · 4 min read

Share

Sundar Pichai
CEO of Google and Alphabet

Technology

Traders See AI Tech Shaping Their Future, JPMorgan Finds

- Over half of survey respondents see machines most influential
- Elsewhere, JPMorgan finds cooled interest in cryptocurrencies

By Greg Ritchie
1. Februar 2023 um 01:01 MEZ *Updated on 1. Februar 2023 um 14:32 MEZ*

David Guetta
@davidguetta

Let me introduce you to... Emin-AI-em 👀

pic.twitter.com/48prbMIBtv

03.02.23, 21:23

MARKETS   BUSINESS   INVESTING   TECH   POLITICS   CNBC TV   INVESTING CLUB   PRO

Brain implant startup backed by Bezos and Gates is testing mind-controlled computing on humans

PUBLISHED SAT, FEB 18 2023·9:00 AM EST

GitHub Copilot   v1.71.8269

GitHub   3,492,685   ★★★★☆ (805)

Your AI pair programmer

Uninstall

GitHub Copilot enables developers to

- **Get AI-based coding suggestions**: Get code suggestions that match a project's context and style conventions, and cycle through different options to decide what to accept, reject, or edit.
- **Use your preferred environment**: Integrate GitHub Copilot with popular editors, including Neovim, JetBrains IDEs, Visual Studio, and Visual Studio Code as an unobtrusive extension.
- **Code confidently in unfamiliar territory**: Code in new languages or try something new, and let GitHub Copilot suggest syntax and code in dozens of languages—so you can spend more time learning by doing.

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AI Headlines Q2 2023 – Examples

☐ **Midjourney Cancels Free Access**   31.03.2023

Midjourney, arguably the most widely-used AI text-to-image generator, recently **halted access to its free trial version due to a rapid increase in viral deepfakes** using their technology.

The most notable deepfakes that prompted this:

1. Pope Francis swagged out in a white puffer [covered in this issue]
2. Former U.S. President Donald being by police, which surfaced during reports of his impending arrest [view]
3. People sharing fake photos of historical events such as the "Great Cascadia" [view]

The acceptable use of deep fakes remains a topic of ongoing debate. Companies such as Midjourney and Playground AI can try to prevent as many deepfakes as possible by removing free tiers. However, **it's probably much too late for that.**

Our recommendation: start educating friends, family, and as many people as possible on the new reality that we will no longer be able to trust images as 'purely authentic' on the internet ever again.

Source: The Rundown.

MARCH 24 2023

Zurich Insurance Group AG

Insurer Zurich experiments with ChatGPT for claims and data mining

Insurance group is the latest example of a long-established business trying out AI to improve productivity

Source: ft.com

D·ID

Meet Aiden — a character completely created with AI. Character Design: @midjourney Message: @OpenAI Voice: @elevenlabsio Video: @D_ID_

Christian Ortner
twitter.com

Source:
https://twitter.com/christianortner/status/16393609831
92723474

COULD AUTO-GPT OUTPERFORM CHATGPT AS THE NEXT POWERFUL AI TECHNOLOGY?

MASA · APRIL 26, 2023

Auto-GPT is The New AI Tool That Overcomes LLMs' Limitations Large language models (LLMs) such as ChatGPT have…

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LLMs – Examples

Name	Company	No of Parameters	Released
GPT - 3	Open AI	175 Bn	2022
LLaMa	Meta	65 Bn	2023
Stable LM	Stability AI	7 Bn	2023
Claude	Anthropic	NA	2023
PaLM 2	Google	NA	2023
Vicuna	UC Berkeley, CMU, Stanford	13 Bn	2023

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The Promise: Insurance in 2030

Seismic shift from DA/AI will impact all aspects of the insurance industry

MARKETING & SALES	RISK & UNDERWRITING	CLAIMS

MARKETING & SALES

- **Highly dynamic, usage-based insurance (UBI) products dominate the market** as these are tailored to the behavior of individual consumers

- **Insurance product purchase in a matter of minutes** (e.g., auto, commercial, or life policy), through AI algorithms creating behavior-based risk profiles

- **Heavily reduced head count of agents** and role shift to a process facilitators and product educators.

RISK & UNDERWRITING

- **Manual underwriting ceases to exist** for most personal and small-business products across life and P&C

- **Automation reduces the process of underwriting to a few seconds**

- **Real-time pricing** on usage and a dynamic, data-rich assessment of risk

CLAIMS

- **Claims processing times reduced to hours/minutes** through intelligent claim routing and automated processes

- **Head count involved in claims processing is reduced by 70-90%**

- **Risk monitoring, prevention and mitigation** through IoT devices that proactively screen and intervene

Source: McKinsey: Insurance 2030 – The impact of AI on the future of insurance

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Developments in the US – Example

USA: Senators introduce bipartisan AI Framework

September 11, 2023

Bipartisan Framework for U.S. AI Act

Senator Richard Blumenthal & Senator Josh Hawley

Chair and Ranking Member of the Subcommittee on Privacy, Technology, and the Law
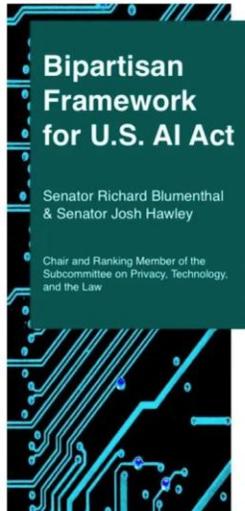
- **Establish a Licensing Regime Administered by an Independent Oversight Body:** Companies developing sophisticated general-purpose A.I. models (e.g., GPT-4) or models used in high-risk situations (e.g., facial recognition) should be required to register with an independent oversight body. Licensing requirements should include the registration of information about AI models and be conditioned on developers maintaining risk management, pre-deployment testing, data governance, and adverse incident reporting programs. The oversight body should have the authority to conduct audits of companies seeking licenses and cooperate with other enforcers, including considering vesting concurrent enforcement authority in state Attorneys General. The entity should also monitor and report on technological developments and economic impacts of A.I., such as effects on employment. Personnel must be subject to strong conflict of interest rules to mitigate capture and revolving door concerns.

- **Ensure Legal Accountability for Harms:** Congress should ensure that A.I. companies can be held liable through oversight body enforcement and private rights of action when their models and systems breach privacy, violate civil rights, or otherwise cause cognizable harms. Where existing laws are insufficient to address new harms created by A.I., Congress should ensure that enforcers and victims can take companies and perpetrators to court, including clarifying that Section 230 does not apply to A.I. In particular, Congress must take steps to directly prohibit harms that are already emerging from A.I., such as non-consensual explicit deepfake imagery of real people, production of child sexual abuse material from generative A.I., and election interference.

- **Defend National Security and International Competition:** Congress should utilize export controls, sanctions, and other legal restrictions to limit the transfer of advanced A.I. models, hardware and related equipment, and other technologies to China, Russia, and other adversary nations, as well as countries engaged in gross human rights violations.

Source https://media.licdn.com/dms/image/D4D22AQG-X65lraQ4VA/feedshare-shrink_1280/0/1694450886294?e=1697068800&v=beta&t=mBzfO3pvn5XqmIhWGyUXdSKKf5p9d3GL0e1slU5ohdQ

TechRepublic.

IBM, Salesforce and More Pledge to White House List of Eight AI Safety Assurances

by **Megan Crouse** in **Artificial Intelligence**
on September 13, 2023, 10:32 AM EDT

Eight AI Safety Commitments

- Internal and external security testing of AI systems before their release.

- Sharing information across the industry and with governments, civil society and academia on managing AI risks.

- Investing in cybersecurity and insider threat safeguards, specifically to protect model weights, which impact bias and the concepts the AI model associates together.

- Encouraging third-party discovery and reporting of vulnerabilities in their AI systems.

Source: IBM, Salesforce Pledge to White House List of Eight AI Safety Assurances (techrepublic.com)

Companies include: Amazon, Anthropic, Google, Inflection, Meta, Microsoft and OpenAI; Adobe, Cohere, IBM, NVIDIA, Palantir, Salesforce, Scale AI and Stability AI

- Publicly reporting all AI systems' capabilities, limitations and areas of appropriate and inappropriate use.

- Prioritizing research on bias and privacy.

- Helping to use AI for beneficial purposes such as cancer research.

- Developing robust technical mechanisms for watermarking.

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Augmented work for an automated, AI-driven world

Augmented work
for an automated,
AI-driven world

*Boost performance with
human-machine partnerships*

IBM

Source: https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/augmented-workforce

AI won't replace people—but people who use AI will replace people who don't.

Impact at Work

varying impacts across different organizational levels. Entry-level positions are already being significantly impacted, while executive or senior management roles are less affected.

People Skills in the AI Era: 40% of the workforce will need to reskill due to AI and automation implementation over the next three years.

Impact on the Workforce

Shift in skills deemed important. While STEM skills were highly valued in 2016, they've dropped in importance by 2023. Time management, teamwork, and effective communication have risen to the top.

Enterprise of Tomorrow: Organizations need to adapt their operating models to support augmented work. This involves adopting product-focused ways of working, leveraging data-driven insights, and enabling ecosystem collaboration.

Impact to Companies

Redefining Work by shifting perspective. Instead of retrofitting automation to fit existing workflows, they are reimagining their business processes.

Making HR central to talent transformation can lead to streamlined work and improved business performance. HR can influence tech investments, augment employees with AI for purpose-driven work, and act as an ecosystem advisor for skill acquisition.

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Risks Related to AI – Examples

LexisNexis is embracing generative AI to ease legal writing and research

Ron Miller @ron_miller / 5:00 PM GMT+2 • September 10, 2023

ast June, just months after the release of ChatGPT from OpenAI, a couple of New York City lawyers infamously used the tool to write a very poor brief. The AI cited fake cases, leading to an uproar, an angry judge and two very embarrassed attorneys. It was proof that while bots like ChatGPT can be helpful, you really have to check their work carefully, especially in a legal context.

The case did not escape the folks at LexisNexis, a legal software company that offers tooling to help lawyers find the right case law to make their legal arguments. The company sees the potential of AI in helping reduce much of the mundane legal work that every lawyer undertakes, but it also recognizes these very real issues as it begins its generative AI journey.

Source: https://techcrunch.com/2023/09/10/lexisnexis-generative-ai/?utm_source=ai.theintelligenceage.xyz&utm_medium=newsletter&utm_campaign=toward-ai-lawyers

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WILL KNIGHT   BUSINESS   AUG 21, 2023 7:00 AM

Scammers Used ChatGPT to Unleash a Crypto Botnet on X

A botnet apparently connected to ChatGPT shows how easily, and effectively, artificial intelligence can be harnessed for disinformation.
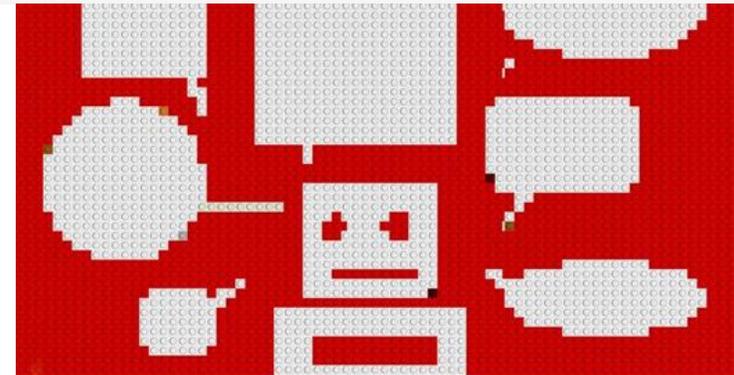
Source:https://www.wired.com/story/chat-gpt-crypto-botnet-scam/?bxid=64b27649e73d5ba29b0968a4&cndid=74447113&esrc=MARTECH_ORDERFORM&mbid=mbid%3DCRMWIR012019%0A%0A&source=Email_0_EDT_WIR_NEWSLETTER_0_DAILY_ZZ&utm_brand=wired&utm_campaign=aud-dev&utm_content=WIR_Daily_082123&utm_mailing=WIR_Daily_082123&utm_medium=email&utm_source=nl&utm_term=P2 Scammers Used ChatGPT to Unleash a Crypto Botnet on X | WIRED

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Risks & Role of the Risk Managment Function

Risks

- **Hallucination - Possible misinformation**: Language models depend on the information they were trained on

- **Fake information**: Spread of fake information (e.g. text, audio, video)

- **Bias and ethical concerns**: Based on the training data, biases could arise and possibly increase.

- **Data protection**: Personal information could be misused.

- **Cyber Security**: AI tools make it easier to create malware

- **Labor market**: There could be a shift in the labor market (e.g. in customer service).

Role of the Risk Management Function

- Stay up to date with the latest AI developments in all different dimensions

- Know your company's AI business cases

- Identify risks and assess existing risks and environment with a new lens from an AI perspective, e.g. methods for authentication

- Identify opportunities for our daily risk management business

- Be an ambassador for responsible use of AI in your company

- Educate management and employees about AI

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And…

Get experience in public
& company AI tools!

Play around!

Stay hungry!
Stay foolish!

(Steve Jobs)