

Die Arbeitswelt der Zukunft

Chancen und Herausforderungen für KMU


KMUconnect: Die Power von 50plus

Zürich, 19. März 2026

TRENDS & FUTURES

GEORGES T. ROOS
ZUKUNFTSFORSCHER



A close-up photograph of a human eye. The iris is a deep, textured brown color. A bright, glowing blue light source is positioned to the left, creating a strong reflection on the surface of the eye and casting a soft blue glow across the surrounding skin and eyelashes. The overall mood is futuristic and intense.

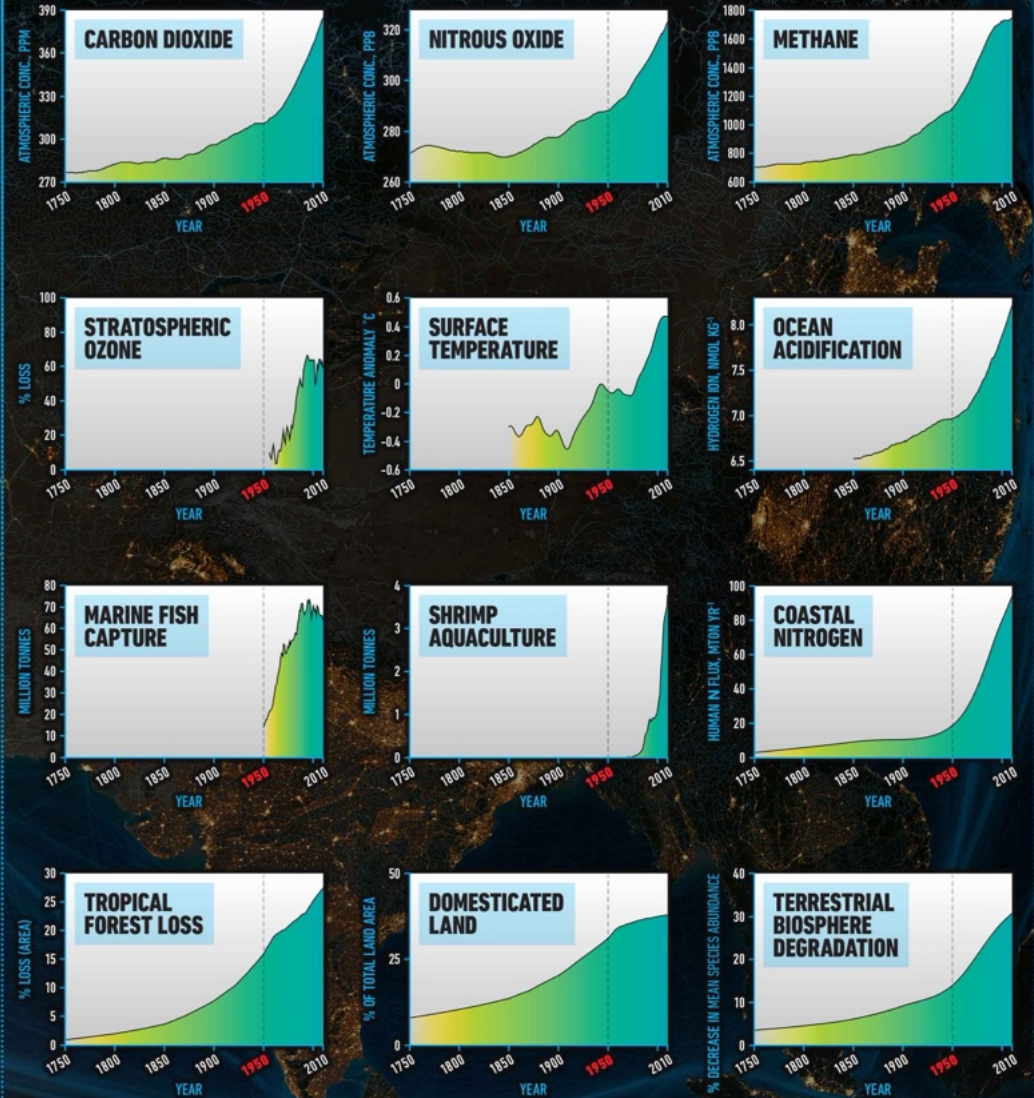
Zwei Arten von Beschleunigung

Unsere Zukunft

SOCIO-ECONOMIC TRENDS



EARTH SYSTEM TRENDS





VUCA:

**Die Zukunft ist offen,
unberechenbar,
überraschend,
unentschieden....**

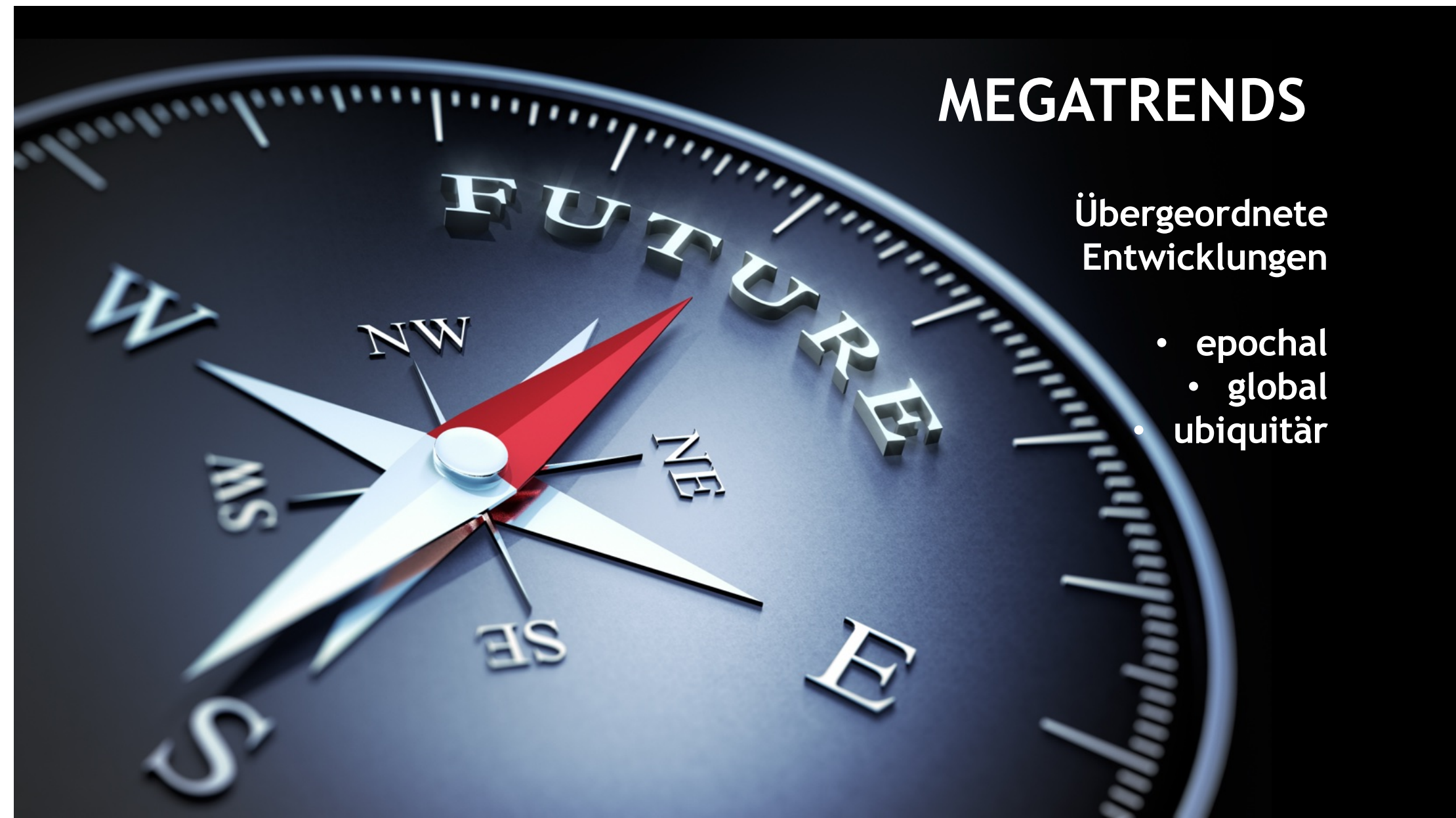
Strategic Foresight



MEGATRENDS

Übergeordnete
Entwicklungen

- epochal
- global
- ubiquitär





Bevölkerungswachstum



Aging Society



Urbanisierung



Individualisierung



Gesundheitsexpansion



Nomadisierung

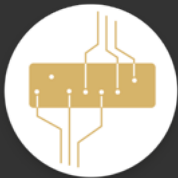


Beschleunigung



Ökologisierung & Ressourcenverknappung

16 MEGATRENDS



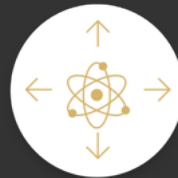
Digitalisierung



Konnektivität



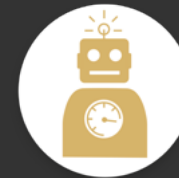
Globalisierung



Wissensexpansion



Transparenz




Künstliche Intelligenz



Blockchain



Bio-Transformation



**Megatrends sind
nicht die ganze
Zukunft...**

**... aber sie beschreiben die wahrscheinlichen
künftigen Rahmenbedingungen.**

Big Picture:

Vier (von fünf) grosse Transformationen

1. Demografische Transformation.
2. Ökologische Transformation.
3. Geopolitische Transformation.
4. Digitale Transformation.



A photograph of a middle-aged man with a grey beard and mustache, wearing a red superhero mask and a red cape over a blue t-shirt. He is looking upwards and to the right with a determined expression. The background is a solid light blue color. A semi-transparent white banner is overlaid at the bottom of the image, containing the text 'Demographische Transformation' in a bold, black, sans-serif font.

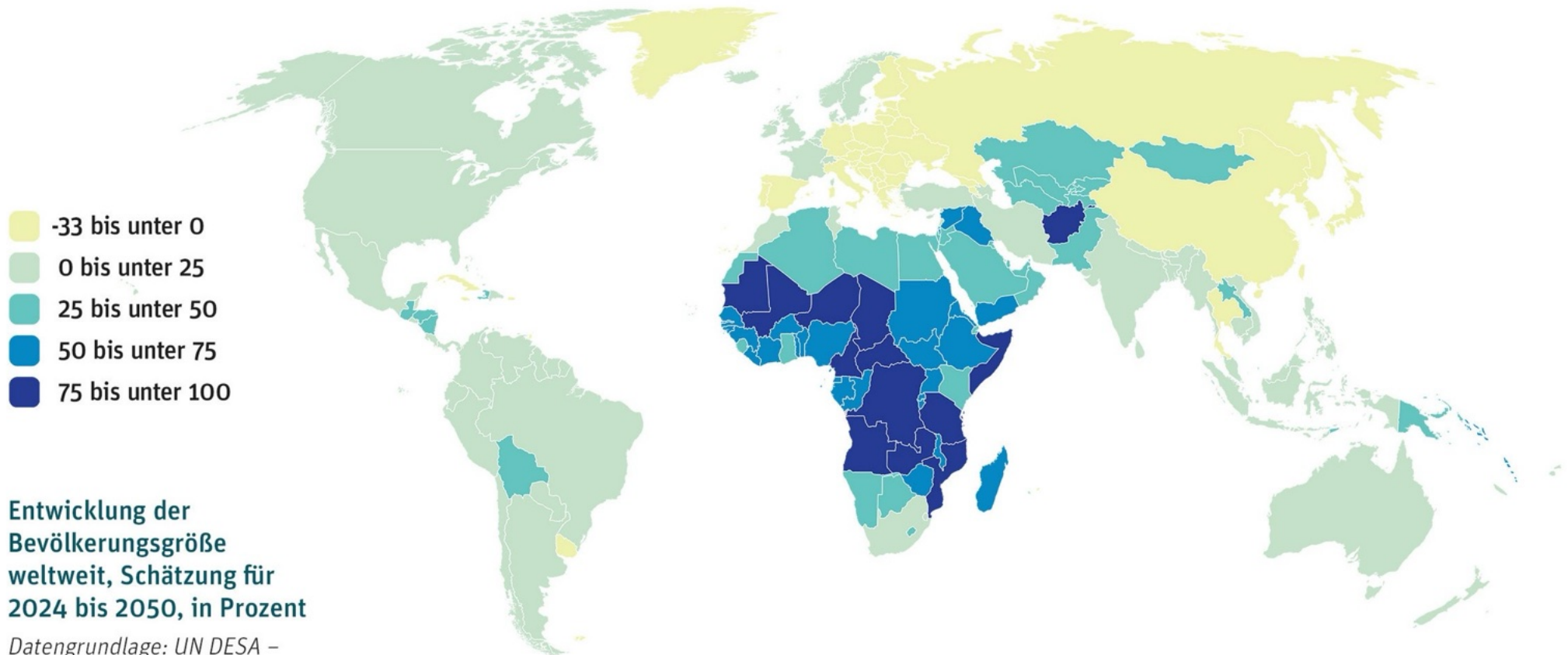
Demographische Transformation

**Das Maximum dürfte
2084 mit 10.4 Mrd.
Menschen erreicht
werden.**

UN Population Prospects



Wo die Bevölkerung wächst



**Entwicklung der
Bevölkerungsgröße
weltweit, Schätzung für
2024 bis 2050, in Prozent**

*Datengrundlage: UN DESA –
World Population Prospects 2024*



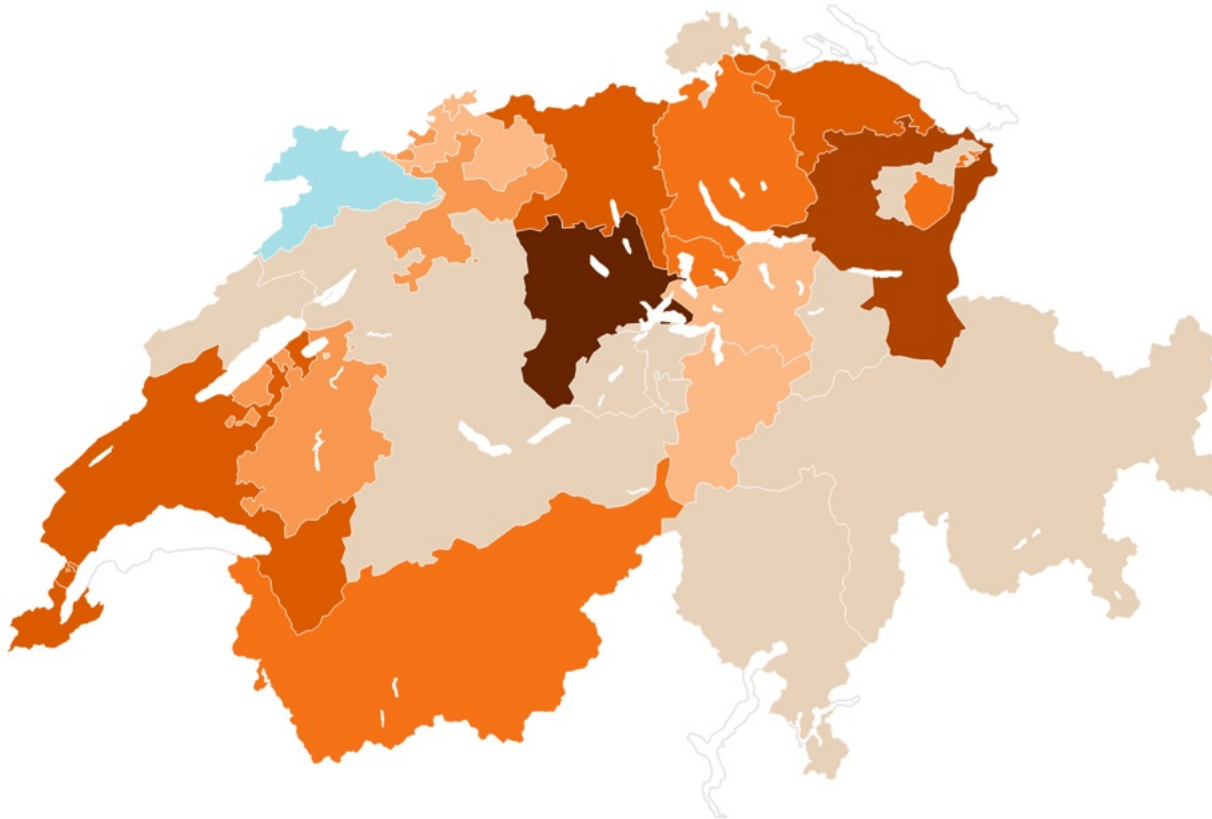
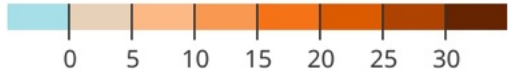
2040 wird die Schweiz 10 Mio.

Einwohnerinnen und Einwohner haben.

Doch die Erwerbsbevölkerung wird stabil bleiben.

Wachstumsrate der ständigen Wohnbevölkerung, 2025-2055

Wachstumsrate in %



Schweiz: 14,9

Datenstand: 15.04.2025
Quelle: BFS – SZENARIEN

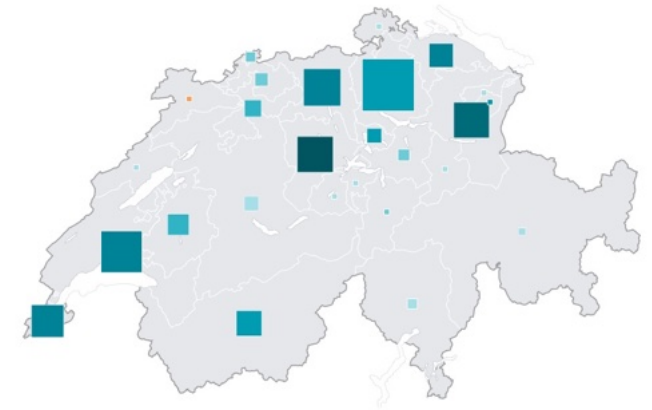
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© BFS 2025

Szenarien zur Entwicklung der ständigen Wohnbevölkerung, 2025–2055

○ "Tiefes" Szenario ● Referenzszenario ○ "Hohes" Szenario

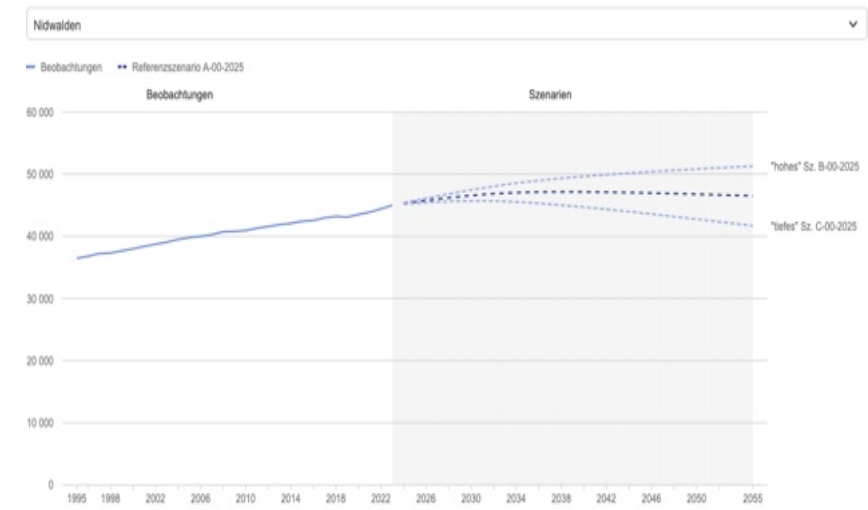
Projizierte Veränderung der ständigen Wohnbevölkerung, in %
-12,8 -5 0 +5 +10 +15 +20 +25 +30 +35 +47,4

Projizierte Zu- bzw. Abnahme der Anzahl Einwohner/-innen
±295 937
±100 000
±43



Datenstand: 15.04.2025
Quelle: BFS – SZENARIEN

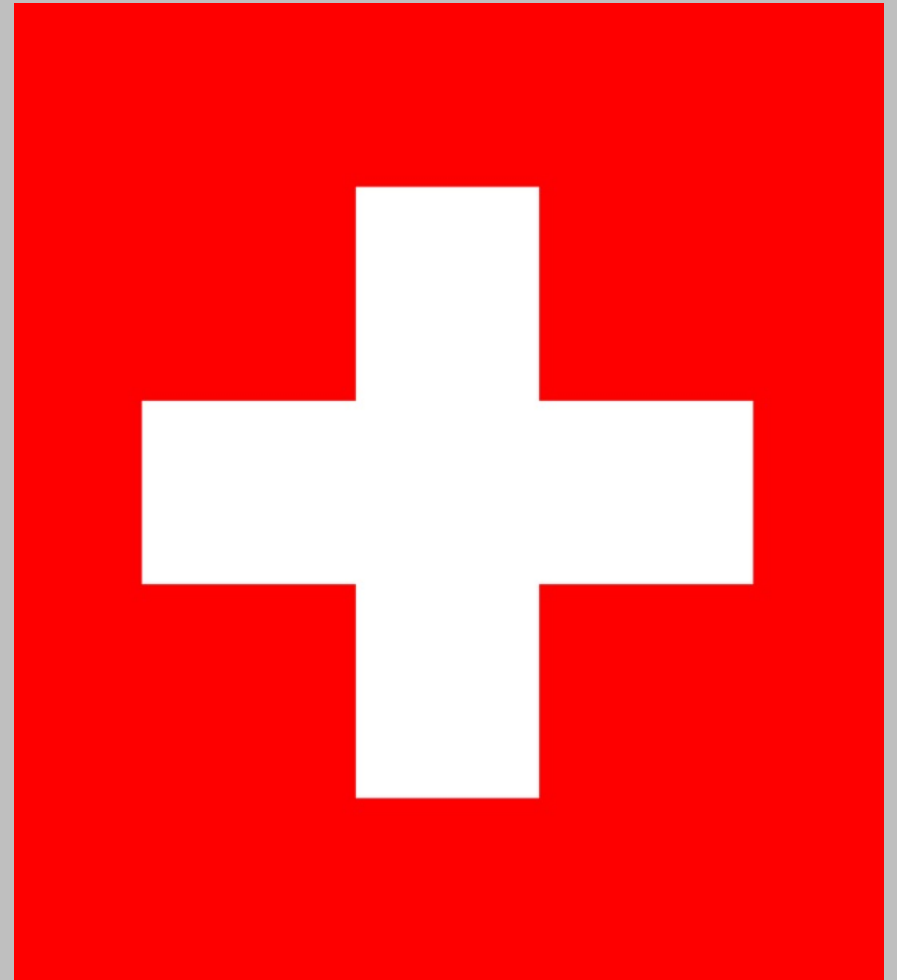
Entwicklung der ständigen Wohnbevölkerung der Kantone gemäss den drei Grundszenarien



Stand der Daten: 15.04.2025
Quelle: BFS – SZENARIEN

gs-01.03.01-037
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Szenarien zur
Bevölkerungsentwicklung
der Schweiz und der
Kantone 2025-2055



**Das Pensionsalter
dürfte höher werden.**

**Neue Modelle sind
gefragt.**



Gen-Z und Gen alpha

**Bald die Mehrheit auf
dem Arbeitsmarkt**



A photograph of a large number of green apples arranged in a grid. One apple in the center-right is red and has a single green leaf attached to its stem. The word "Individualisierung" is written in white text across the bottom left of the image.

Individualisierung

A close-up photograph of two hands clasped together. The hands are weathered and aged, with visible wrinkles and veins. The lighting is soft, highlighting the texture of the skin. The background is dark and out of focus.

Implikationen für:

Demokratie

Wirtschaftsleistung

Gesundheitssystem

Generationengerechtigkeit

Ökologische Transformation

Klimawandel



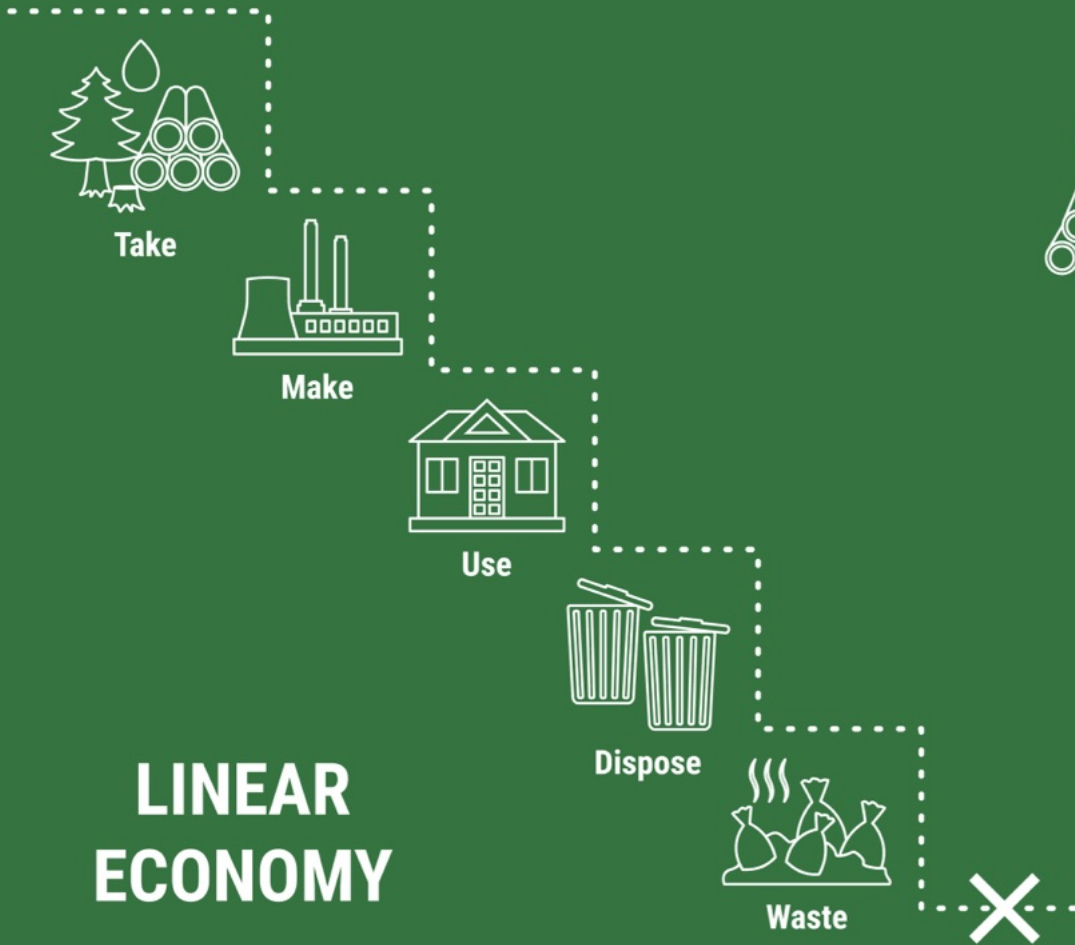
**Die Schweiz ist vom
Klimawandel
überdurchschnittlich betroffen:
Der
Temperaturanstieg gegenüber
der vorindustriellen Zeit ist hier
doppelt so gross
wie im weltweiten Durchschnitt.**




Klimaszenarien für die CH 2050:

- plus 3.6 Grad
- Hitzetage
(Stadt Zürich: 20 statt 8)
- Regen statt Schnee
- Trockene Sommer
(Waldbrandgefahr)





A photograph of a modern building facade. The building features a dark, wavy, layered architectural design with horizontal lines. A large, vibrant green living wall is integrated into the facade, cascading down the side of the building. The living wall is composed of various green plants, including ferns and leafy greens. The building is supported by several white, cylindrical columns. In the background, there are trees with green foliage. The overall scene is bright and modern, emphasizing sustainable architecture.

**Die Schweiz. Bankier-
vereinigung beziffert den
Investitionsbedarf für die
Klima-Transition der CH bis
2050 auf insgesamt 387,2
Mrd. CHF.**

Unterschätzte Klimarisiken?

- Disruption von Geschäftsmodellen
- Neue Krankheiten
- Landwirtschaftliche Wertschöpfung
- Wert von Liegenschaften
- Energiesicherheit
- Gesellschaftliche Erwartung
- Nachhaltige Investitionen





MAKE

AMERICA

GREAT AGAIN

Interessen ersetzen Normen.

**Harte Bandagen statt
internationale Konventionen.**



Kein Konsens mehr:

China, Russland, Indien und der globale Süden
sehen die Welt ganz anders.

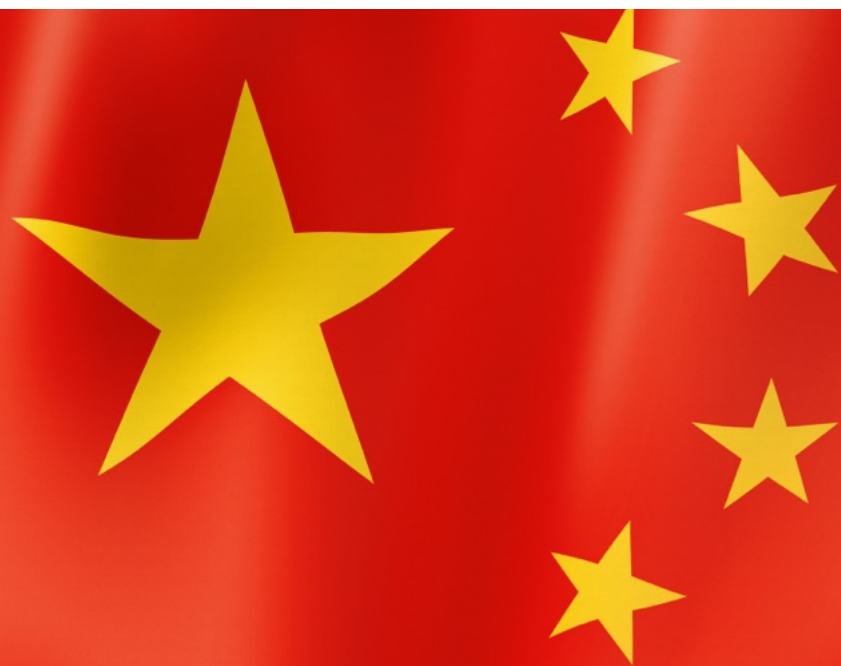


Der Westen verliert an Bedeutung

Die Welt ist extrem
fragmentiert.

LOSS





**Die Spannungen mit
China nehmen zu -
die Folgen eines
Konfliktes wären
viel gravierender!**

Protektionismus

Versorgungssicherheit

strategische

Technologien



The image features two hands, one on the left and one on the right, holding a small globe of the Earth. The hands are painted with a realistic texture and color of human skin, but the colors are replaced by the colors of the Earth: blue for oceans, green for forests, and brown/tan for deserts and landmasses. The hands are positioned as if they are gently cradling the globe, with the fingers of each hand touching the top and bottom of the globe. The background is a plain, light blue-grey color.

**Mehr Produktion
wieder hier?**

Re-Shoring? Friend-Shoring?



**Re-Industrialisierung
dank smarterer
Robotik und KI.**

Digitale Transformation





iPhone 2007

Künstliche Intelligenz



Geschichte der KI



1950 Ideen und Visionen,
mathematische Konzepte

1980: Machine Learning basierend
auf Mustererkennung

2010: Deep Learning mit
selbstlernenden neuronalen
Algorithmen

2020: Generative KI: Bilder, Texte,
Musik, Codes

ChatGPT

Der Hype begann am 30. Nov. 2022

Generative
Pre-trained
Transformers

ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users



* one million backers ** one million nights booked *** one million downloads
Source: Company announcements via Business Insider/LinkedIn



statista

o1 outperforms physicians in medical diagnostics and reasoning.

«Our study suggests that LLMs have achieved **superhuman performance** on general medical diagnostic and management reasoning»

Major LLMs in 2025 are 44% more emotionally intelligent than humans.

«ChatGPT-4, ChatGPT-o1, Gemini 1.5 flash, Copilot 365, Claude 3.5 Haiku, and DeepSeek V3 outperformed humans **on five standard emotional intelligence tests**, achieving an average accuracy of 81%, compared to the 56% human average»

ChatGPT is funnier than humans.

GPT-4's stock selection accuracy is as high as 60% vs humans at 52%

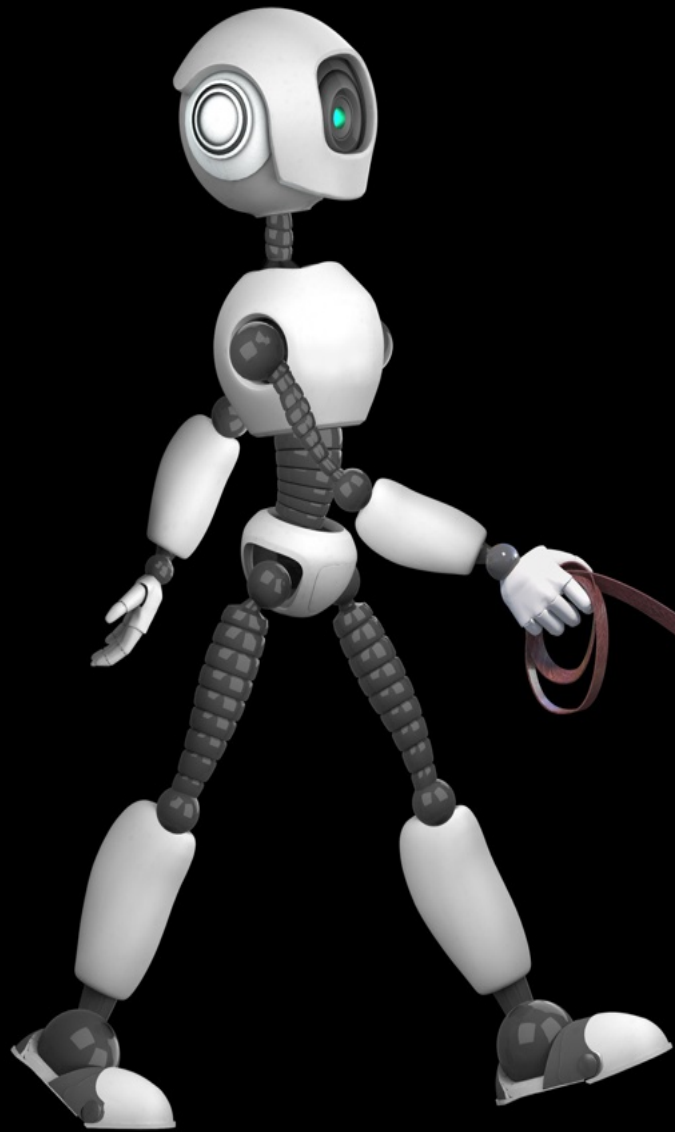
Persuasion: GPT-4 better than human debater

Field	Model	Score	Human Score	Human Outperforms	Engine	Testing date	Peer-reviewed?	Notes
CBRN	LLM	-	-	Yes	-	-	Yes	recovery of live poliovirus
Health reviews	LLM	-	-	Yes	-	-	Yes	multiple high-quality studies to answer specific clinical
Medicine	o1	78.3	34	Yes	o1	May/2025	Yes	"[o1] displayed superhuman diagnostic and reasoning abilities, as well as continued improvement from prior generations of AI clinical decision support. Our study suggests that LLMs have achieved superhuman performance on general medical diagnostic and management reasoning"
Emotional intelligence	Major LLMs	81	56	Yes	GPT-4, etc	May/2025	Yes	"ChatGPT-4, ChatGPT-o1, Gemini 1.5 flash, Copilot 365, Claude 3.5 Haiku, and DeepSeek V3 outperformed humans on five standard emotional intelligence tests, achieving an average accuracy of 81%, compared to the 56% human average"
Persuasion	GP	60.35	52.71	Yes	GPT-4	May/2024	No	"With the step-by-step prompts, GPT-4 achieved a prediction accuracy of 60.35 per cent, significantly higher than the 52.71 per cent accuracy of human analysts. Moreover, GPT-4's F1-score, which balances the accuracy and relevance of predictions, also outperformed that of the human analysts. The average return for the top LLMs used by the GPT investors is as follows: GPT-4: 15.54% (with a corresponding average CSBV return of 9.74%)"
Humor	ChatGPT	-	-	Yes	ChatGPT	July/2024	Yes	"ChatGPT outperformed the majority of our human humor producers on each task. ChatGPT 3.5 performed above 73% of human producers on the acronym task, 63% of human producers on the fill-in-the-blank task, and 87% of human producers on the roast joke task."
Legal	Claude 3 Opus	-	-	Yes	Claude 3 Opus	Jun/2024	No	"Of the 37 merits cases decided so far this Term, Claude decided 27 in the same way the Supreme Court did. In the other 10 (such as Campos-Chaves), I frequently was more persuaded by Claude's analysis than the Supreme Court's..." Adam Unikowsky is a biglaw partner, a
Investment	GPT-4	60.35	52.71	Yes	GPT-4	May/2024	No	"With the step-by-step prompts, GPT-4 achieved a prediction accuracy of 60.35 per cent, significantly higher than the 52.71 per cent accuracy of human analysts. Moreover, GPT-4's F1-score, which balances the accuracy and relevance of predictions, also outperformed that of the human analysts. The average return for the top LLMs used by the GPT investors is as follows: GPT-4: 15.54% (with a corresponding average CSBV return of 9.74%)"
Information security	GP	-	-	Yes	GPT-4	-	Yes	"When given the CVE description, GPT-4 is capable of exploiting 87% of these vulnerabilities compared to 0% for every other model we test"
Psychology	GP	59	39.19	Yes	GPT-4	Apr/2024	Yes	"In ChatGPT-4, the score on the SI scale was 59, exceeding 70% of specialists, whether at the doctoral or the bachelor's levels... the average score on the SI scale was 39.19, which was significantly lower than the score of 59 achieved by ChatGPT-4. This result is particularly noteworthy as representing the highest performance in the field of psychology among the LLMs tested (81.0)... Compared with the performance of 849 physicians who took the board medical examination in 2022, GPT-4 performed above the median physician in internal medicine, general surgery, and obstetrics and gynecology"
Psychiatry	GP	-	-	Yes	GPT-4	-	Yes	"GPT-4 outperforms humans in psychiatry"
Art (via prompting Midjourney)	GP	-	-	Yes	GPT-4	-	Yes	"GPT-4 outperforms humans in art generation"
Persuasion/argument/debate	GP	-	-	Yes	GPT-4	-	Yes	"GPT-4 outperforms humans in persuasion"
Aerospace	GPT-4 and GPT-4V	-	-	Yes	GPT-4	Mar/2024	Yes	"[GPT-4V and GPT-4 was used] to interpret and generate human-like text from cockpit images and pilot inputs, thereby offering real-time support during flight operations. To the best of our knowledge, this is the first work to study the virtual co-pilot with pretrained LLMs for aviation... The increased agreement with their opponents compared to participants who debated humans. Without personalization, GPT-4 still outperforms humans in persuasion"

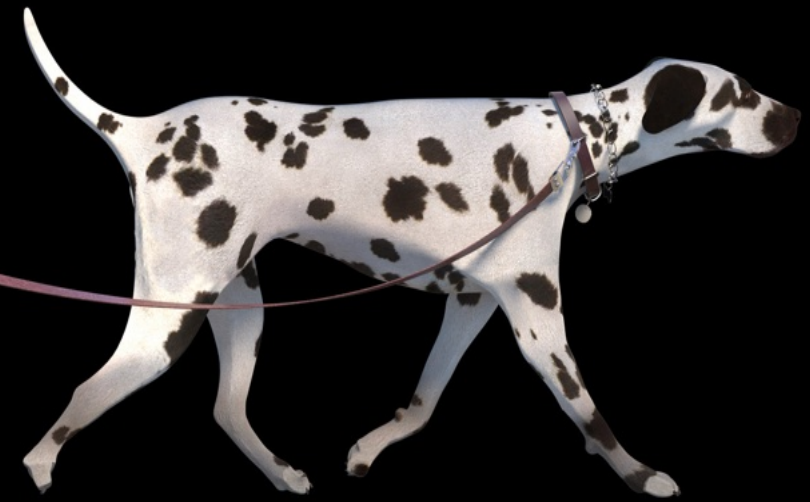


«Die Einführung generativer KI könnte das BIP der Schweiz in rund zehn Jahren um 80-85 Milliarden Franken steigern.»

Martin H. Thelle: «Das wirtschaftliche Potenzial von KI in der Schweiz»
Implement Consulting Group (2024)



**KI als Mitarbeiter
KI statt ich?**



**Neue Jobs:
Akademisch ausgebildete
Fachleute (z.B. in Chemie,
Radiologie, Recht) trainieren KI.**

Verdienst: bis zu \$ 350 / Std.



KI als Lerncoach

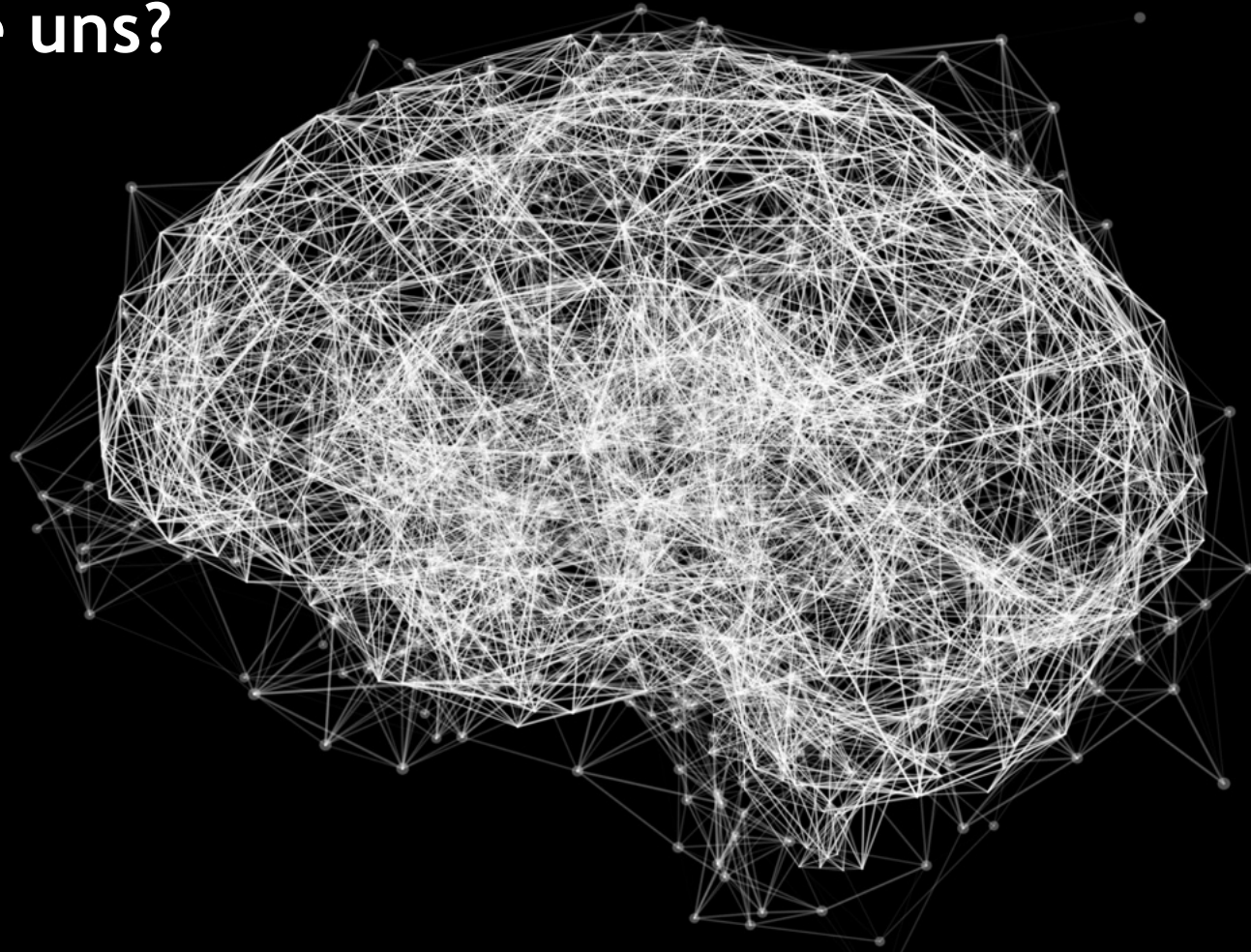


KI-Agenten:

**Autonome Softwaresysteme,
die in ihrer Umgebung
wahrnehmen, lernen, planen
und handeln können, um
vorgegebene Ziele zu
erreichen.**



**Beherrschen wir die Künstliche Intelligenz oder
beherrscht sie uns?**



**Eine KI
künftig in der
Geschäftsleitung?**



1. Demografische Transformation.
2. Ökologische Transformation.
3. Geo-politische Transformation.
4. Digitale Transformation.

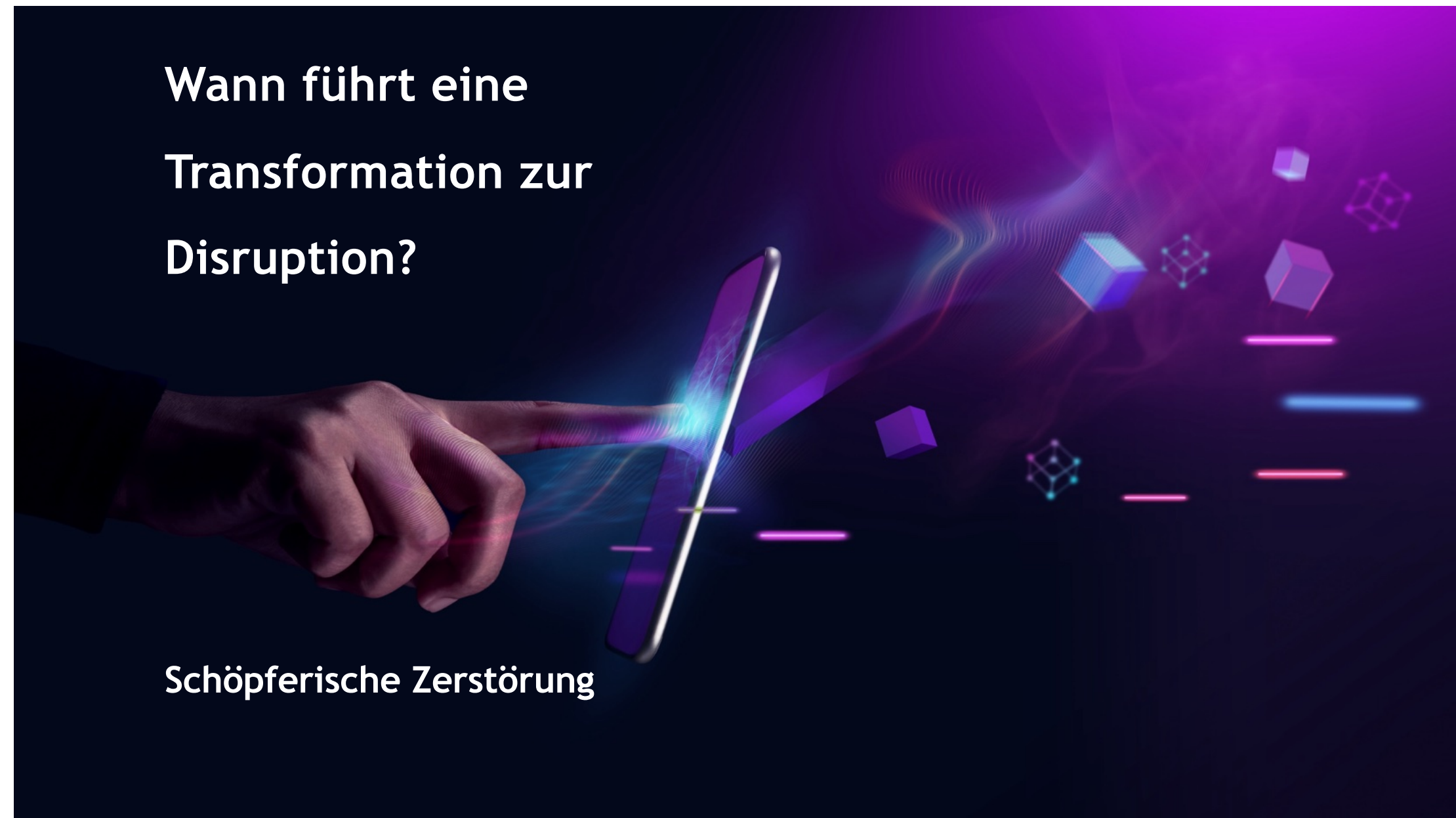
Transformationen 2050



POWER

**Wann führt eine
Transformation zur
Disruption?**

Schöpferische Zerstörung



Herausforderungen

für die KMU

- Beschleunigung
- Mitarbeitende & Wertewandel
- Märkte
- Technologien





Seien Sie Vorbild:

- **Zuversicht**
- **Methodenkompetenz**
- **Unsicherheit, Ambiguität und Mehrdeutigkeit aushalten**
- **Verantwortungsbewusstsein**
- **Gelingendes Leben**

DANKE

Alle Bilder: iStock

TRENDS & FUTURES

GEORGES T. ROOS
ZUKUNFTSFORSCHER

www.kultinno.ch