NIM Nuremberg Institute for Market Decisions

NIM INSIGHTS

VOL. 8

GENERATION CHATGPT:
A New Power Is Shaping Our Consumers. Do We Truly Understand It?

GLOBAL TECHNOLOGY CLIMATE:
Who Embraces and Who Fears New Technologies?

BEYOND ALGORITHMS:
Why Human Values Must Guide the Age of Artificial Intelligence

IMAGE ON COVER: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

EDITORIAL

Dear Readers,

Artificial intelligence is no longer a distant promise; it's transforming how we live, shop, and decide. In this issue of NIM INSIGHTS, we explore what that means for consumers, businesses, and society. Our first story looks at Generation ChatGPT and asks the most critical question for any market leader today: Do we truly understand them?

We also ask why transparency alone doesn't build trust in AI-generated advertising. You'll find insights on conversational commerce and what works or doesn't work when AI becomes your shopping assistant. Another article tackles the challenge of overcoming aversion to AI-based recommendation systems in innovation, showing how human and machine intelligence can work together to improve decisions.

Beyond marketing, AI is reshaping creative industries and even the bookshelf. Consumers still value human creativity more highly, raising important questions about authenticity and emotional connection. At the same time, virtual influencers and agentic commerce point to a future where dialogue itself becomes the storefront.

This issue also takes a global view. A large-scale study reveals striking differences in technology optimism across countries and explains why personal values matter more than demographics. Finally, we turn to healthcare and ethics: AI won't replace the doctor–patient relationship, but it can improve it. And as Dr. Eckart von Hirschhausen reminds us, algorithms must never overshadow what truly makes us human.

We hope this edition inspires you to look beyond the hype and engage with the deeper questions of trust, responsibility, and opportunity in the age of AI.

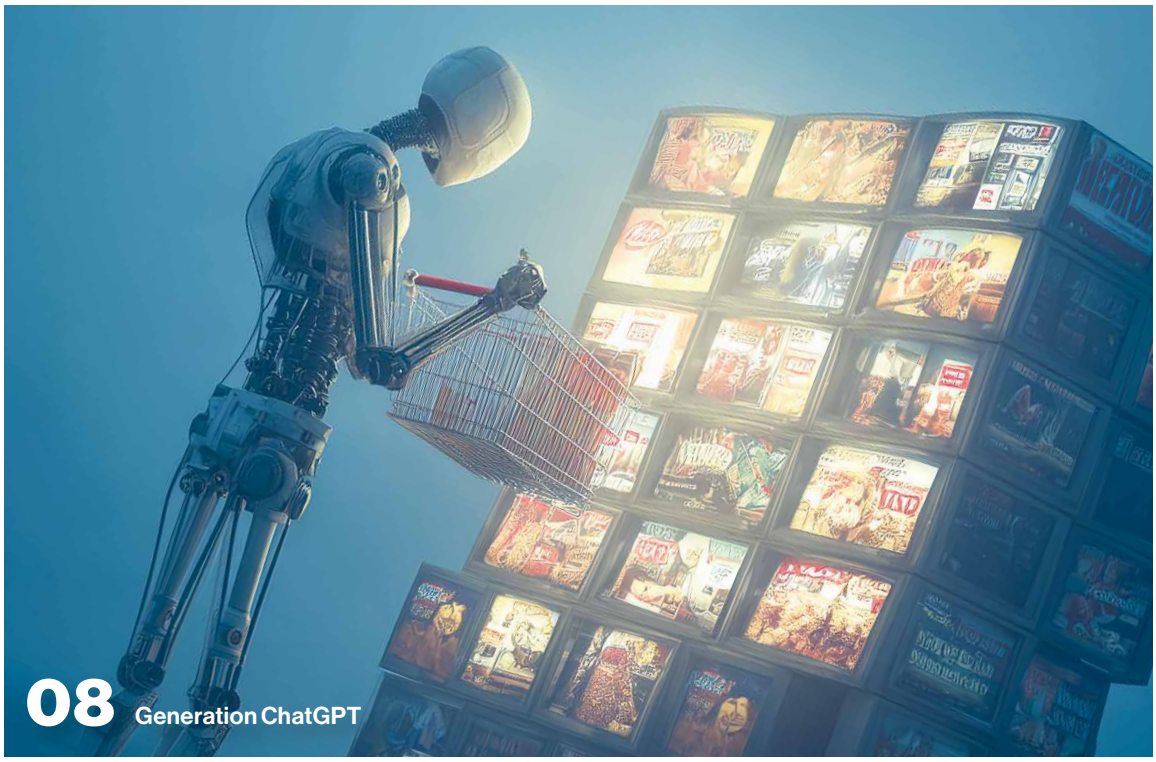
Enjoy the read.

Dr. Carolin Kaiser
Head of Artificial Intelligence

Dr. Fabian Buder
Head of Future & Trends Research

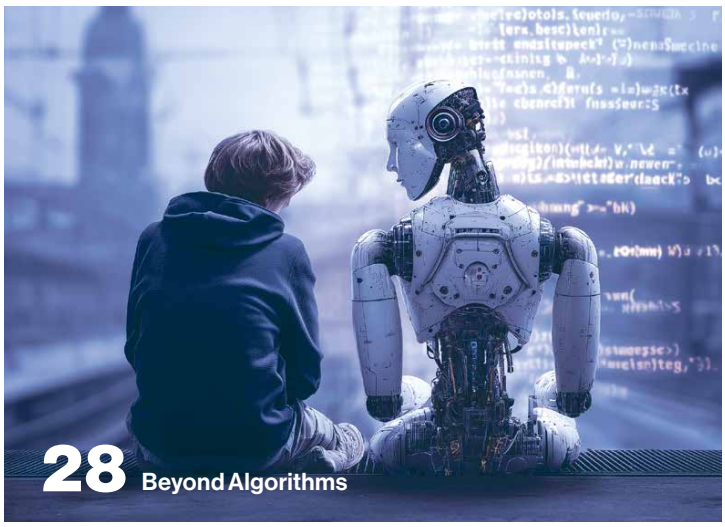
Dr. Matthias Unfried
Head of Behavioral Science

CONTENT



INTRO & OUTRO

NIM MARKET DECISIONS DAY



FOCUS TOPIC: ARTIFICIAL INTELLIGENCE

THE PROBLEM

As artificial intelligence moves from labs into everyday life, it is quietly reshaping the way we consume, decide, and interact. From personalized recommendations to virtual assistants and automated customer service, AI is no longer a distant concept—it is embedded in the very fabric of the consumer experience. Yet this transformation raises critical questions: Where do

consumers truly encounter AI? How does it influence their choices, perceptions, and trust?

AI promises convenience, personalization, and efficiency, but it also introduces new complexities—opaque algorithms, ethical dilemmas, and the risk of eroding autonomy. Transparency alone may not build trust, and generational shifts like the rise of "Generation ChatGPT" challenge traditional models of engagement. Understanding these dynamics is essential for businesses, policymakers, and society to navigate an era where human decisions and machine intelligence increasingly converge.

IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

PHOTO: SCHMITT PHOTODESIGN

GENERATION CHATGPT: A NEW POWER IS SHAPING OUR CONSUMERS. DO WE TRULY UNDERSTAND IT?

A new reality is taking shape before our eyes, symbolized by the seamless interaction between human and machine. This is more than a technological shift; it is the dawn of a new consumer era. A powerful force is molding the habits, expectations, and even the cognitive patterns of a new generation. This brings us to the most critical question for any market leader today: Do we truly understand them?

To explore this new landscape, we asked **Timo Springer**, AI expert and founder of DECAID Studio, for his take on this new reality.

The Wave: A Technology Conquers Daily Life in Record Time

We are witnessing the fastest product launch in history. Just five days after its release, Sam Altman of OpenAI announced that ChatGPT had reached one million users. Today, that number has swelled to over 700 million weekly active users , making its website the fifth most visited in the world , ahead of platforms like X and WhatsApp.

This explosive growth triggered a "Code Red" at Google in late 2022. The management team recognized a fundamental threat to a business model that had dominated the internet for two decades. The reason is a seismic shift in user behavior. For a growing number of people, especially the young, the starting point for their online journey is no longer a search bar; it is an AI.

A 19-year-old student captured this new mindset perfectly: "Why should I Google? The AI gives me the answer, not just links."

This simple statement reveals a paradigm shift from command to conversation. The old world of search was transactional. We entered keywords and received a list of links to sort through.

The new world is a dialogue. We ask questions and receive a curated, synthesized answer. The rules of the game have fundamentally changed because a new generation of consumers is here, and their behavior is different at its core.

The Consequences: A New Reality for Brands, Marketing, and People

This new reality forces us to ask a daunting question: What happens when Google rankings become worthless?

As the principle of ranking for visibility disappears, an entire industry built upon has begun to crumble. Traditional search engine optimization (SEO), an $80 billion market, is predicated on achieving the top spot on a results page. If users receive direct answers instead of links, much of the logic that has underpinned digital marketing for the last 20 years collapses. We are moving from ranking to reference, and this requires a new playbook. Welcome to the era of generative engine optimization (GEO).

With SEO, the goal was to rank number one, and the key metric was the click-through rate. With GEO, the goal is to become the trusted reference within the AI's answer. The new metric is the "reference rate": how often your brand is cited as a credible source.

But this technology's impact goes far beyond search results. It is becoming not just personal but intimate. For many young users, one of the primary use cases for AI is not research but companionship. ChatGPT is becoming a diary, a coach, and sometimes even a substitute for therapy.

This is not an accidental byproduct; it is part of a deliberate vision. Thinkers like Sam Altman envision a personal AI agent as a "co-pilot for life," a companion that understands our preferences and anticipates our needs. Features like ChatGPT's "Memory" function are already making this a reality, allowing the AI to build a foundation of trust that was once reserved for our closest friends. Here lies the critical point for marketers: If a consumer trusts an AI with their most personal thoughts, how readily will they accept its product recommendations? This deep, almost friendship-like trust is the new currency.

From this position of trust, the shop is just a prompt away. AI assistants are evolving into direct shopping advisors, embedding purchase opportunities directly into the conversation.

However, the revolution does not stop at the shopping cart. While we are busy analyzing conversion rates, AI is fundamentally altering how we learn, think, and make decisions. And here, science is raising an alarm. A recent MIT study found that ChatGPT users exhibited lower brain engagement and "consistently underperformed at neural, linguistic, and behavioral levels." Over time, the study noted, users became lazier, often resorting to simply copying and pasting by the end of the experiment.

"When the AI is the primary consultant, the brand becomes a mere transaction. The emotional bond forms with the AI, not with you."

This is leading to what some call an "existential crisis" in education. Anecdotes from universities are telling. Students have requested extensions because ChatGPT was down , or argued that assignments designed to be "AI-proof" were interfering with their "learning styles." One student compared being asked to work without AI to being forced to walk from point A to point B when a car is available. The grim forecast from some educators is that we risk a generation emerging from university with degrees but who are, in essence, functionally illiterate.

A cynical marketer might see this as an ideal scenario: a consumer who no longer compares, questions, or thinks critically. But the opposite is true. A consumer whose critical thinking is diminished will not develop genuine brand preference. Their loyalty will not be to a brand but to the easiest, most convenient AI-generated answer. The result is an erosion of customer loyalty, a decline in customer lifetime value, and the transformation of your brand into a fungible commodity.

This leads us to the Trust Paradox. On one hand, consumer trust in AI is so high that brands absolutely must appear as a reference in AI answers to remain visible. On the other hand, this very reliance makes users cognitively "lazier" and less dis-

cerning. The real danger is not just failing to be mentioned by the AI. The greater danger is becoming an interchangeable information source for a passive audience, thereby losing the direct, human relationship with your customer entirely. When the AI is the primary consultant, the brand becomes a mere transaction. The emotional bond forms with the AI, not with you.

IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

The Outlook: A Four-Step Strategy for the AI Age

So, what should we do? The ultimate goal must be to become so relevant in a user's life that they ask for your brand by name. The mediocre prompt is "What are the best sustainable sneakers?" The ideal prompt is "What are the latest models of the Veja V-10, and where can I buy them?" The crucial question is not "How often am I cited?" but "Can I inspire the user to write my name in the prompt?"

Here is a four-part strategy to prepare for this future:

1.

Build the Foundation: Become an Essential Reference. This is the technical groundwork of GEO. You must optimize your content to be structured, clear, and easily citable for AI models. Analyze how these systems currently perceive your brand and fill the gaps. This is the price of entry to stay in the game.

2.

Develop a Personality: Cultivate a Distinct Brand Voice. AI learns from the entire internet. Ensure it learns not just facts about your brand, but also its personality. Define a clear tonality, a consistent point of view, and unwavering values. The goal is for the AI to convey not just what you are, but who you are.

3.

Deepen Relationships: Create "Post-Chat" Experiences. What happens after a user sees your brand in an AI response? You must guide them from the AI conversation into your own brand universe. Offer exclusive content, build a community platform, and design interactive experiences. Give them compelling reasons to engage directly with you and to stay.

4.

Earn Trust: Be the Human Authority in an Artificial World. This is the highest level of brand building in the AI era. Cultivate trust through radical transparency, authentic content, and genuine value. Position your brand as one that empowers and inspires its customers rather than treating them as passive recipients of information. Become the lighthouse people turn to when they want a voice they can truly trust, even when they begin to mistrust the AI.

The young generation is "ChatGPT-ing" everything. My final question to you is a simple one: Is your brand ready for it?

"TRANSPARENCY ALONE DOES NOT CREATE TRUST"— HOW CONSUMERS REALLY PERCEIVE AI-GENERATED ADVERTISING— DR. FABIAN BUDER IN CONVERSATION

Artificial intelligence is transforming marketing faster than almost any other field. But how do consumers really perceive AI-generated advertising, and can transparency alone create trust? We spoke with **Dr. Fabian Buder**, Head of Future & Trends Research at the Nuremberg Institute for Market Decisions (NIM), about the emotional impact, the "transparency dilemma," and how brands can responsibly build trust in an AI-driven world.

Dr. Buder, AI is rapidly transforming marketing. How far has the technology actually made its way into practice?
FABIAN BUDER: The pace of development is breathtaking. In our study at the Nuremberg Institute for Market Decisions (NIM), 100 percent of the marketing professionals surveyed stated that they are already using generative AI—many of them intensively. The promises are clear: efficiency, speed, and cost advantages. However, the enthusiasm on the corporate side contrasts sharply with the much more cautious attitude of consumers.

PHOTO: SCHMITT PHOTODESIGN

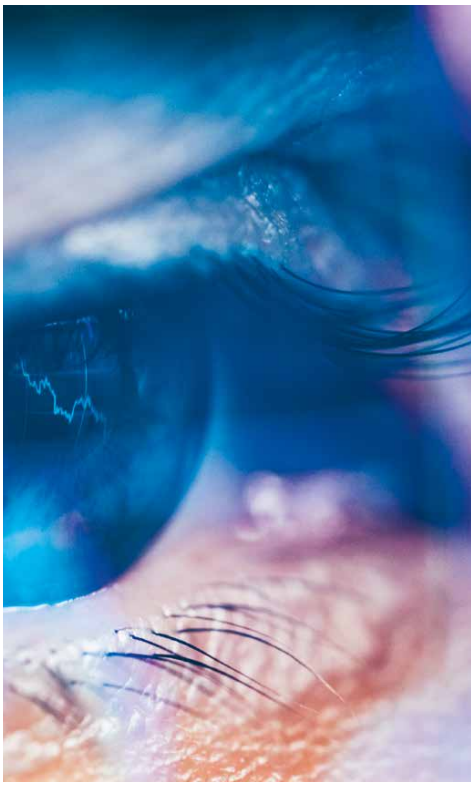


PHOTO: GETTY IMAGES / MARIA KORNEEVA

What exactly causes this skepticism among consumers?
It's a mix of ignorance, mistrust, and a sense of loss of control. Only about one-fifth of people understand how AI personalizes content or makes decisions. Even fewer trust companies or regulators to use AI in consumers' best interests. This creates a general background noise of skepticism that becomes particularly visible in advertising. Consumers demand transparency, but for advertisers, it helps only to a limited extent.

"A key recommendation is: Use AI where it makes sense in terms of content, not just where it happens to be available."

At NIM, you and your colleagues conducted several experiments to examine how people respond to AI-generated advertising. What is the key finding?
In short: When people know that an advertisement was created by AI, they like it less. In our experiments, for example, we showed identical ads—once labeled "created by a photographer" and once "AI-generated." The AI version was rated as less credible, less emotional, and less memorable. Even the willingness to click decreased measurably.

This shows that there is a gap between technical perfection and emotional impact. Transparency—that is, labeling content as AI-generated—does not automatically make advertising more trustworthy; in fact, it can have the opposite effect.

That sounds like a real dilemma—the EU mandates transparency, but it reduces advertising effectiveness. How can this be solved?
I think you can indeed call this a "transparency dilemma." Open labeling is both regulatorily necessary and ethically right. But it exposes a fundamental problem: the lack of trust in AI. Transparency without a basis of trust solves nothing; it merely reveals that trust is missing. Companies therefore need to work on two fronts: First, fulfill compliance requirements; second, actively build trust through education, quality communication, and appropriate context of use.

What do you mean by "appropriate context"?
Our research shows that AI-generated advertising is, for example, better accepted when it fits innovative, tech-oriented products. If a smart home brand or an electric car advertises with AI support, people seem to find it more consistent. Moreover, there seems to be a difference depending on whether the product itself is in the foreground of the ad or the way it is used, which is often portrayed in an emotional way. Here, the AI

label tends to act like a warning signal. Therefore, a key recommendation is: Use AI where it makes sense in terms of content, not just where it happens to be available.

But won't this simply change over time as we get used to AI-generated content?

That's a valid and frequently asked question—and yes, habituation will certainly play a role. Our data suggest that people with more experience and greater trust in technology are also more open to AI-generated advertising. But mere habituation is not enough. Trust does not automatically arise through repetition but through positive experiences and transparent communication. When people see that AI-driven communication is relevant, honest, and high-quality, their perception shifts. In short: Trust through habituation is not a natural law, but it can be learned—if brands actively work on it.

How can trust be built in concrete terms?

In my view, two things are crucial for building trust. First, consumers should be able to understand why AI is being used and what benefits they gain from it. Second, I would recommend emphasizing in communication that AI does not operate autonomously but under human responsibility. Content is still heavily influenced by people—"prompt to publish" doesn't really work yet.

I would therefore recommend embedding labeling within a trust narrative, connecting innovation with human authenticity. In other words, make it clear that content is "AI-supported and designed by our creative team." Companies should not hide behind AI but demonstrate that they use it responsibly.

Your conclusion for marketing practice?

AI is here to stay—but it only works with trust. Anyone who believes that efficiency alone is enough underestimates the emotional dimension of brand communication. The winners will be those who combine technological innovation with human credibility.

This interview was conducted by NIM

IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

PHOTO: GETTY IMAGES / COLIN ANDERSON PRODUCTIONS PTY LTD

FROM CLICKS TO CONVERSATIONS: THE RISE OF CONVERSATIONAL ONLINE SHOPS

Online shopping is entering a new era. Conversational AI assistants, already tested by giants like Amazon and Zalando, promise more intuitive and personalized shopping journeys. But how well do they actually work in practice? In our experimental study with a prototype of a conversational online shop, we explored how these assistants influence customer behavior—and what that means for today's e-commerce strategies.

Authors:
Carolin Kaiser,
Nuremberg Institute for Market Decisions (NIM)

Moritz Langner, Till Carlo Schelhorn und Alexander Mädche,
Karlsruhe Institute of Technology

The way we shop online is changing rapidly. Traditional e-commerce has always been built around clicking through categories, filtering lists, and scanning product pages. But with the rise of AI-powered shopping assistants, a new form of interaction is emerging: conversational e-commerce.

Major retailers like Amazon and Zalando are already experimenting with conversational assistants to make product discovery easier and shopping journeys more personalized. The idea is simple. Instead of endlessly browsing, customers can just ask: "Which dishwasher uses the least water?" or "What's the best washing machine under €500?" And in an instant, they receive tailored recommendations.

Yet integrating these assistants into existing online shops isn't as straightforward as it sounds. Their design plays a decisive role in whether customers find them helpful or frustrating. Research suggests that a promising approach is a

hybrid model, one that lets users fluidly switch between traditional browsing and conversational interactions. This flexibility increases transparency, reduces friction, and supports decision-making.

With this in mind, our study set out to answer two critical questions: How should conversational online shops be designed to enable effective use? And how do they actually influence consumer behavior and decision-making?

Elektroshop: A Prototype for Exploring the Future

To explore how conversational e-commerce changes shopping behavior, we developed Elektroshop, a prototype of an online store blending traditional browsing with an AI-powered assistant (see Figure 1).

On the surface, Elektroshop looked like a regular e-commerce site, complete with categories, filters, and product pages. It offered around 300 real household appliances, with product data drawn from existing retail sources. The difference was that shoppers could also interact with an assistant powered by OpenAI's GPT technology—asking questions using natural language, comparing products instantly, or filtering by specific needs.

This hybrid approach was intentional. Instead of forcing customers to choose between browsing or conversation, Elektroshop let them fluidly switch between the two. That flexibility allowed us to study not just usability but also how consumers actually combine these modes when making purchase decisions.

Putting It to the Test: How Shoppers Really Behave

To see how conversational assistants influence behavior, we conducted an incentivized laboratory experiment with 70 participants, most of them students with digital experience. Their mission was realistic: shop for three household appliances for an elderly family member. They had to meet certain requirements and choose the cheapest option that fit.

Participants were randomly assigned to one of two groups. The baseline group (n=36) could only use the traditional online shop, while the treatment group (n=34) had access to the same shop with the conversational assistant included (hybrid shop). Each participant practiced first, then completed two main shopping rounds. Along the way, we measured their performance and collected feedback through surveys and interviews. Crucially, we also used eye-tracking technology to observe how participants searched, compared, and interacted with the site. This gave us a richer picture of not just what they chose but also how they arrived at their decisions.

Surprises in Shopper Behavior

The experiment revealed some surprising insights.

First, the conversational assistant did not replace the traditional shop; it complemented it. Shoppers continued to browse, filter, and compare products in the usual way, but they also turned to the assistant as an extra tool. This hybrid use shows that, at the moment, conversational e-commerce is about enhancing rather than replacing the old model.

Second, the assistant did not increase mental workload. Participants didn't find shopping to be more cognitively demanding, which is a positive signal for AI adoption. However, efficiency was an issue. Shoppers using the online shop with the conversational assistant were slower than those relying solely on traditional browsing. They often double-checked results or repeated steps to be sure that they were making the right decision. Interestingly, their decision quality and satisfaction remained just as high as the group with the traditional shop. In other words, they didn't make worse choices, they just took longer to get there.

Finally, the eye-tracking data revealed intriguing patterns. Participants who directed more visual attention toward the traditional shop tended to require more time to complete their tasks, whereas actual interactions with the shop were associated with shorter task completion times. This suggests that increased visual attention toward the

IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

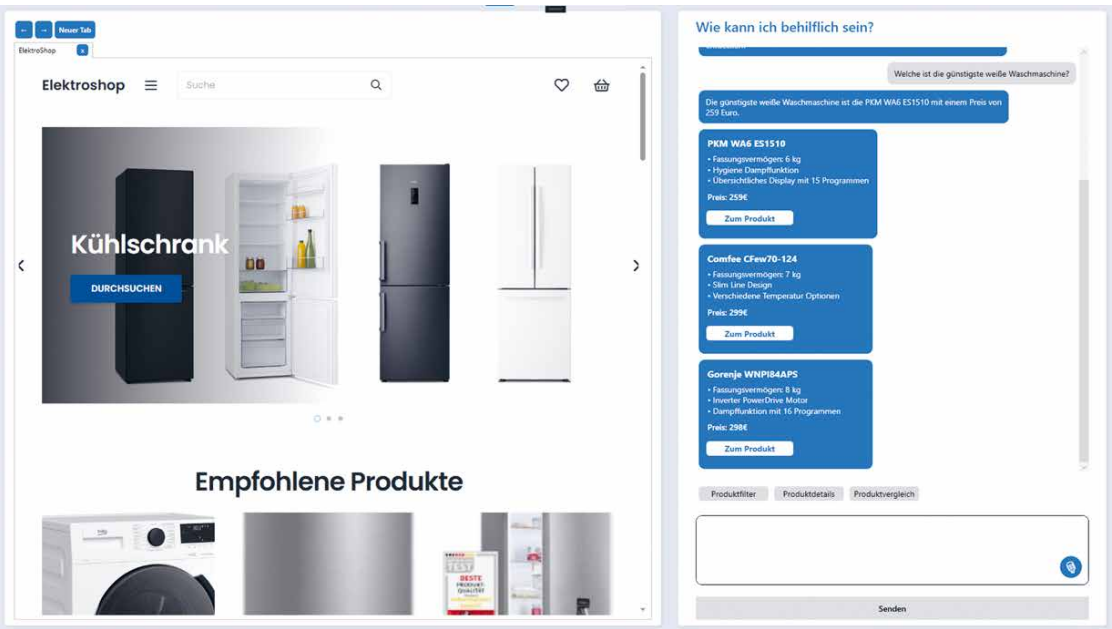


Figure 1. Elektroshop: Where Browsing Meets Conversation

KEY INSIGHTS

- **Efficiency is the main hurdle:** Conversational in-store assistants didn't improve decision quality, but they did slow down the process. For marketers, the challenge is to design assistants that are fast, clear, and reliable.
- **Customer experience depends on speed and clarity:** Shoppers appreciated assistants embedded in online stores that responded quickly and gave transparent, reliable answers. Slow or vague interactions eroded confidence and reduced satisfaction.
- **The marketer's role will shift:** As AI platforms like ChatGPT and Gemini begin to support purchasing directly within the chat, the focus will move from optimizing shop design to embedding brands within conversations – turning dialogue itself into the new storefront.

shop reflects exploratory behavior, whereas direct interaction signifies more goal-directed behavior.

What Shoppers Loved and What Frustrated Them

Numbers tell part of the story, but interviews with participants brought it to life. Shoppers valued the assistant most when it was fast, transparent, and backed by reliable data. They appreciated clear, direct suggestions that helped them narrow down options quickly.

At the same time, trust was fragile. When responses were slow, vague, or incomplete, participants lost confidence and began double-checking, which slowed them down. The assistant's tone also mattered; a friendly, conversational style made the interaction feel more engaging and human.

Conversational E-Commerce: The Next Frontier for Marketers

Conversational assistants are reshaping online shopping, but the results are mixed. They haven't yet made customers better at choosing products, and they often slow down decision-making by adding extra steps. This raises big questions for marketers. Are current AI tools underperforming, or do shoppers still need to learn how to use them effectively? Which categories naturally benefit from dialogue, and which purchases resist it?

At present, retailers are experimenting with hybrid models that combine familiar browsing interfaces with chat-based assistance. This blend reflects a transitional stage: customers can rely on what they know while testing the convenience of conversation. But it may not stop there. Platforms such as OpenAI ChatGPT and Google Gemini are already piloting "buy within the chat," signaling a future where the entire shopping journey—from discovery to purchase—takes place within the dialogue.

If such a future unfolds sooner than expected, marketers will need to pivot from optimizing store layouts to seamlessly embedding brands into conversations, powered by accurate product data, trust, and human-like interaction. The challenge today is to design effective hybrids. The opportunity tomorrow is to master fully conversational e-commerce. The key question is: How fast will the shift come, and will your brand be ready? ←

PHOTO: SCHMITT PHOTODESIGN

TECH, TRUST, AND DECEPTION— HOW AI IS CHANGING CONSUMER BEHAVIOR

At NIM's Market Decisions Day, **Dr. Carolin Kaiser**, Head of Artificial Intelligence at the Nuremberg Institute for Market Decisions (NIM), explored how artificial intelligence is reshaping consumption, trust, and brand relationships. In this interview, she shares the highlights of her keynote and her personal reflections on what AI means for the future of decision-making.

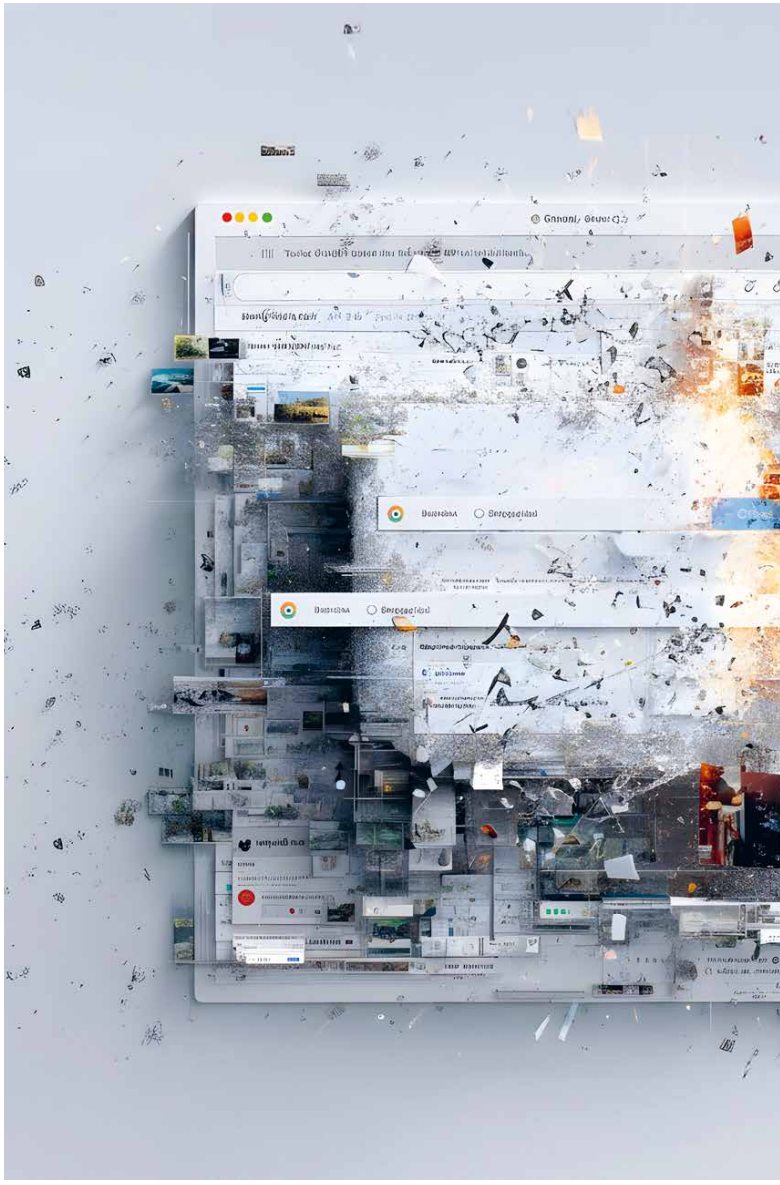
"Mom, did an AI write this?"

It all started with a simple question from her daughter. "We were reading a children's book together when she suddenly asked me: 'Mom, did an AI write this?'" recalls Dr. Carolin Kaiser. "I was stunned. Not just because I didn't know the answer—whether it was written by a human or by an AI—but because it showed me something deeper: our children are growing up reading texts where we often no longer know the origin." That moment sparked a key question: How is AI shaping consumer behavior, and what does it mean for trust in products and brands?

The Silent Invasion of the Bookshelf

Amazon has made publishing easier than ever through Kindle Direct Publishing, and AI is taking advantage. In 2024, hundreds of titles credited ChatGPT as co-author. Many more likely did not disclose it. By 2025, children's books with strikingly similar titles, nearly identical storylines, repetitive illustrations, and generic author names—most likely produced by AI—were climbing Amazon bestseller lists, not in "Children's Literature" but in obscure categories like "Geography Text-

“The search engine is disappearing. The answer engine is emerging.”



books,” where competition is low. “It was a clever placement strategy, but with highly questionable quality,” explains Dr. Kaiser. “And the most surprising part: there is still no obligation to label such content as AI-generated.”

Humans Preferred

In an online experiment with 1,100 U.S. participants, NIM researchers compared reactions to human- versus AI-authored books. The results were clear: consumers valued human work more highly. Their willingness to read and to pay dropped significantly when a book was attributed to AI. The reasons? “People see human creativity as more effortful. And they miss the emotional connection when they know something was created by a machine,” Dr. Kaiser explains. The same pattern emerges in studies on advertising, music, art, and even perfume.

From Search Engine to Answer Engine

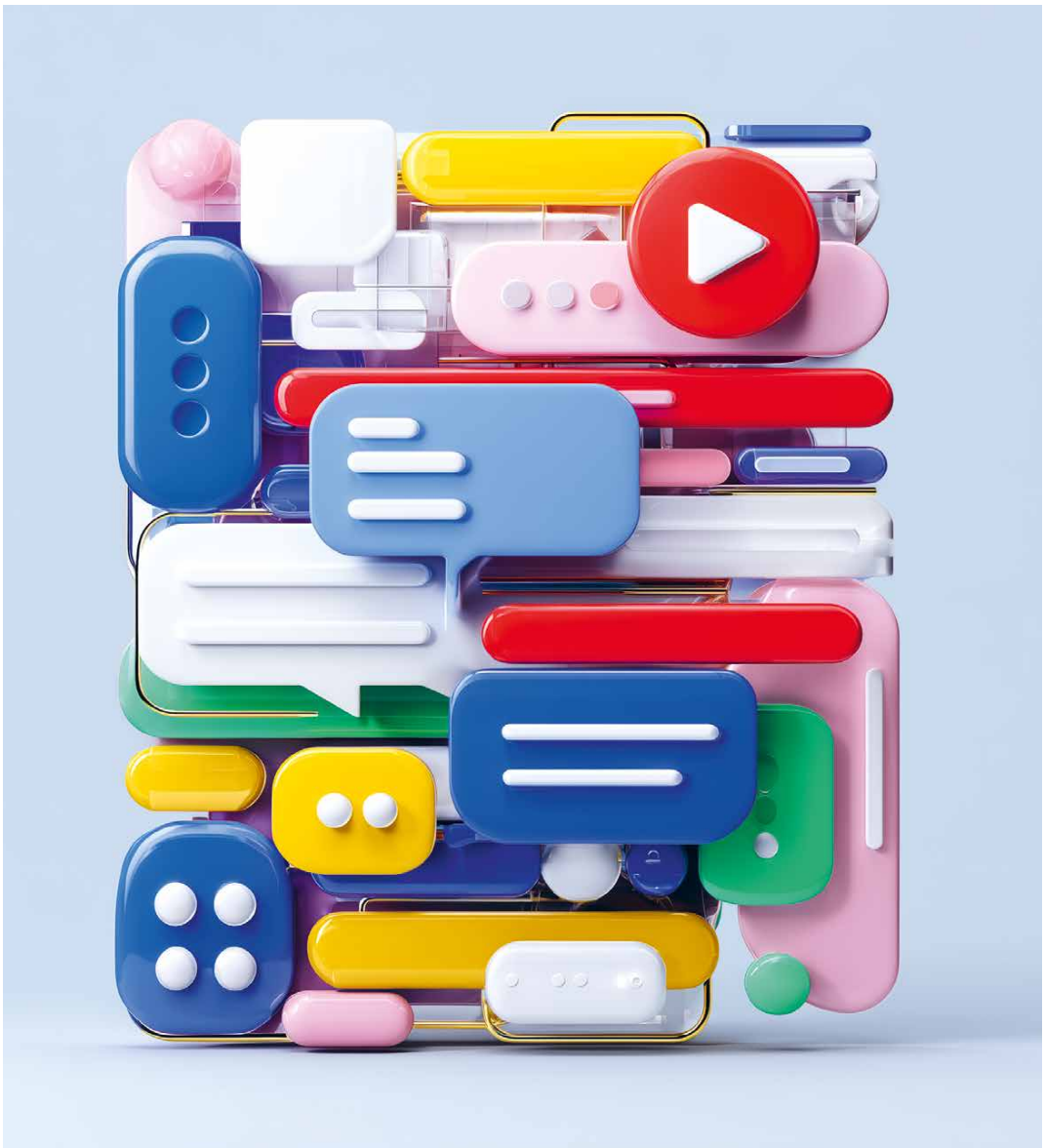
Despite skepticism about AI-generated creativity, consumers increasingly rely on AI as a shopping advisor. In a study with 1,500 U.S. participants, one group used Google to complete shopping tasks while another used ChatGPT. “The ChatGPT group reached better product decisions faster,” Dr. Kaiser notes. “But only 12% bothered to check other websites, compared to 73% in the Google group. People said: ‘I feel like ChatGPT is thinking for me.’ That’s powerful—but also risky.”

Sponsored Advice

The risk grows once money enters the picture. Perplexity already experiments with sponsored answers. NIM explored how disclosures shape trust. In a classic touch interface, consumers lost trust once sponsorship was revealed. But in conversational settings, trust remained stable even when recommendations were paid. “The more immersive the interaction, the less people notice advertising cues,” Dr. Kaiser explains. “That’s a huge opportunity for companies—but also a risk for consumers.”

What Comes Next

AI-driven commerce is moving fast. In the U.S., Google’s “Shop with AI” feature already delivers conversational product recommendations, complete with images and purchase links. With “Visual Try-On,” consumers can test clothing virtually using their own photos. For brands, this means a shift from SEO to AEO, Answer Engine Optimization. Authentic, in-depth content will matter more than keyword tricks. For consumers, it means more convenience but also more respon-



IMAGES: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

sibility. And the next step is agentic commerce: AI agents that autonomously search, compare, and purchase on behalf of consumers. Google, Visa, Mastercard, and Perplexity are already preparing for it.

A Personal Reflection

Dr. Carolin Kaiser closes her reflections with another story from home. "We were reading a book about courage. At the end, my younger daughter hugged her stuffed elephant and whispered: 'Don't be afraid, little elephant. You are a brave elephant.'" That moment made her pause. "Maybe the book was written by a human. Maybe by an AI. But ultimately, that doesn't matter. What matters is the emotion it sparked, the connection it created." Her takeaway: "We cannot stop the machines. But we can decide who we listen to—and who we trust."

FURTHER READING

Kaiser, C., Kaiser, J., Schallner, R., & Schneider, S. (2025).
A New Era of Online Search? A Large-Scale Study of User Behavior and Personal Preferences During Practical Search Tasks with Generative AI versus Traditional Search Engines. Proceedings of the ACM CHI Conference on Human Factors in Computing Systems, Yokohama, Japan.

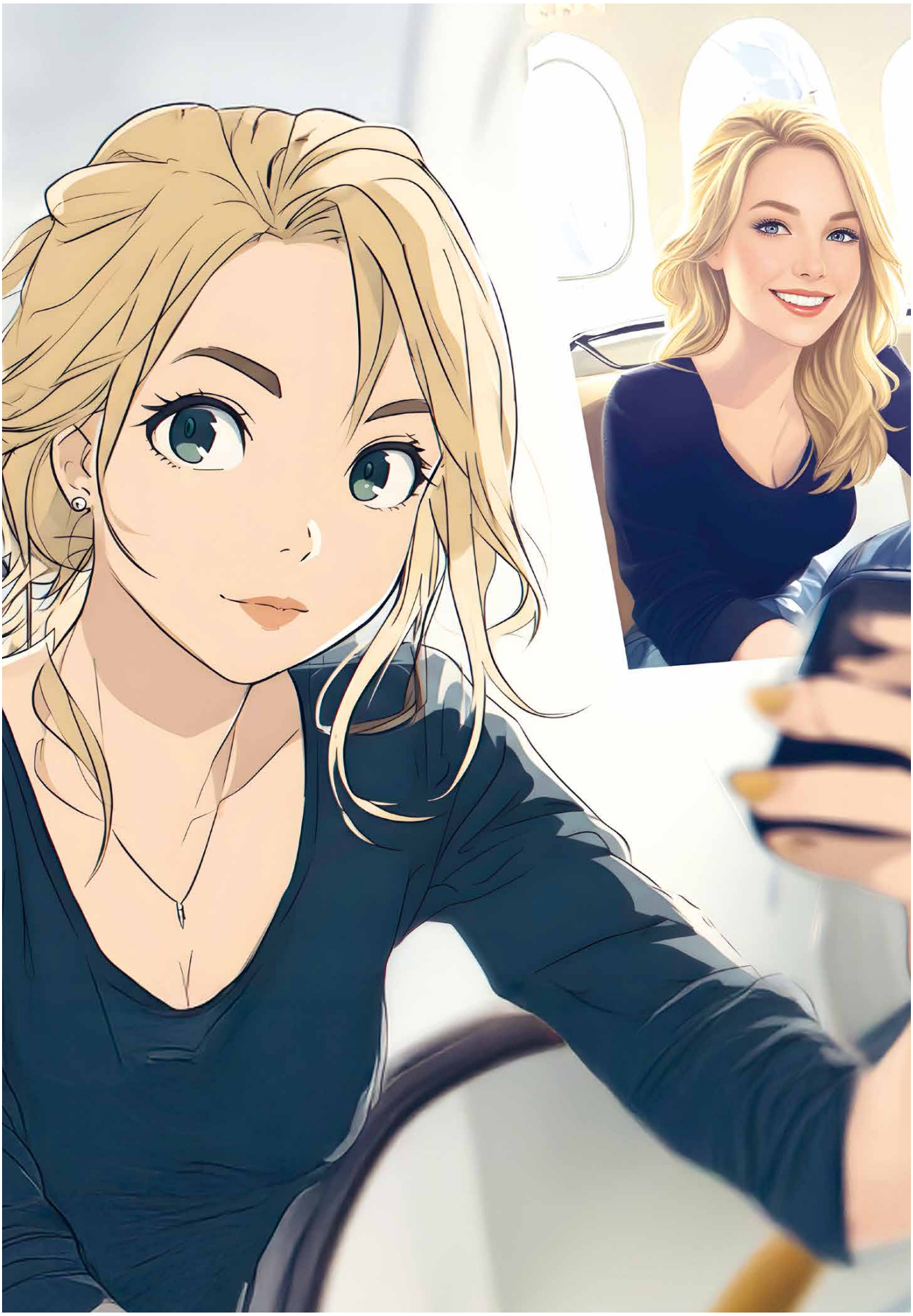


IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

FROM CUTENESS TO CONVERSION: RETHINKING AI IN BRAND COMMUNICATION

New research reveals that anime-style virtual influencers outperform realistic ones, especially in campaigns promoting sustainability and social values. Discover how emotional design and purpose-driven messaging can reshape digital brand communication.

Authors:
Vladimir Manewitsch and Carolin Kaiser, Nuremberg Institute for Market Decisions (NIM)
Linus Biedermann and Anja Dieckmann, Aalen University

Artificial intelligence is rapidly transforming marketing, offering new ways for brands to connect with consumers across digital platforms. One of the most intriguing innovations? Virtual influencers: computer-generated characters that engage audiences on social media in lifelike ways.

These digital personalities are no longer just experimental novelties. With over 75% of U.S. users aged 18 to 24 following at least one virtual influencer, and 60% of marketers reporting collaborations with them in 2023, virtual influencers have become a serious tool in the marketing arsenal. Brands are using them not only to promote products but increasingly to support prosocial campaigns around sustainability, diversity, and social responsibility—values that resonate strongly with Gen Z.

But choosing the right virtual influencer and crafting the right message is far from straightforward. Should your campaign feature a human-like virtual

influencer or a stylized anime-like one? Should the message focus on product features or social values? These decisions aren't just aesthetic; they can significantly impact how consumers perceive your brand, whether they trust the message, and, ultimately, whether they're willing to buy.

IMAGE: CREATED BY MIDJOURNEY AI. PROMPTED BY GCO

Despite the growing popularity of virtual influencers, marketers still lack clear guidance on how visual style and message framing interact to shape consumer responses. While psychological theories suggest that human-like influencers may build more trust, other design theories informed by biology argue that cute, non-human-like characters can trigger stronger emotional engagement. So which approach works best—and when?

How We Tested the Impact of Virtual Influencer Design and Messaging

To explore how virtual influencer design and message framing affect consumer responses, we conducted a large-scale online experiment using realistic social media content. The goal was to understand how different combinations of visual style and message type influence key outcomes like trust, purchase intention, and emotional engagement.

Participants were randomly shown one of four Instagram-style posts featuring a fictional virtual influencer named Ella, promoting a thermal mug from the fictional brand TREKMUG. In some posts, Ella appeared as a realistic, human-like woman; in others, she took on a stylized, anime-inspired look with large eyes and soft features—both common styles in real-world campaigns.

The messaging also varied: some posts focused on functional product benefits (e.g., insulation performance), while others emphasized prosocial values (e.g., environmental sustainability).

More than 3,200 U.S.-based participants took part in the study. After viewing the post, they completed a structured questionnaire measuring their reactions. Using established psychological scales to ensure reliability, we assessed purchase intention, perceived trustworthiness, and emotional perceptions like cuteness.

What Makes Virtual Influencers Effective

Our study revealed that design and message framing matter, and they can be strategically combined for optimal performance.

Anime-style influencers outperformed realistic, human-like ones in campaigns that focused on social values like sustainability. When the message was purely focused on functional product aspects, the difference disappeared—showing that emotional design works best when paired with meaningful purpose.

Messages emphasizing prosocial values consistently led to higher purchase interest than those focused on product features.

Interestingly, in the prosocial condition, anime-style influencers were also seen as more trustworthy than those with a human-like appearance. But trust alone didn't explain their success; emotional impact played a key role.

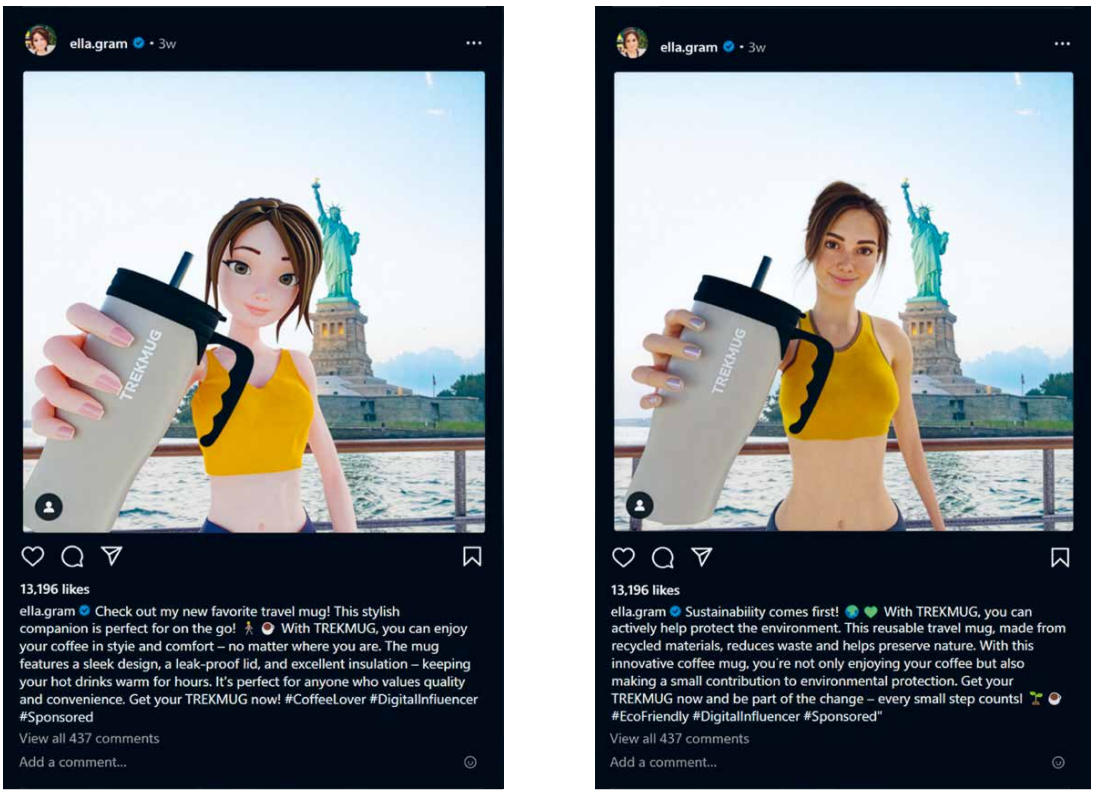


Figure 1. Virtual influencer in an anime-inspired design (left) and a human-like design (right).

The Power of Cuteness

To understand the strong performance of anime-style influencers, we looked at their visual traits. Their large eyes and soft features align with the baby schema, a concept from biology known to trigger feelings of warmth and care.

Participants rated anime-style influencers as significantly cuter, especially when paired with prosocial messages. This cuteness helped build trust and increased purchase interest, creating a powerful emotional response.

Designing Influence with Purpose

As virtual influencers become a fixture in digital marketing, the question is no longer whether to use them but how to use them effectively. Our research shows that emotional design is more impactful than realism, especially when campaigns aim to promote values like sustainability, fairness, or social responsibility.

Anime-style virtual influencers, with their soft features and expressive faces, don't just attract attention; they build trust, evoke empathy, and amplify the emotional power of prosocial messages. Their visual warmth makes audiences more receptive to purpose-driven content, especially when paired with language that activates moral thinking and future-oriented values.

For marketers, this means rethinking design strategy. Virtual influencers offer a flexible way to embody brand values, tell emotionally resonant stories, and connect with audiences on a deeper level. In a crowded digital landscape, what stands out isn't realism—it's relatability, warmth, and emotional clarity.

Ultimately, designing influence with empathy isn't just a creative choice but also a strategic advantage. Especially in cause-related marketing and corporate social responsibility initiatives, emotionally engaging virtual influencers can help brands inspire action, build loyalty, and shape a more meaningful consumer experience. ←

KEY INSIGHTS

- **Emotional design drives impact:** Cute, animated virtual influencers can trigger feelings of trust and care, and they are especially effective in campaigns with a moral or social message.
- **Realism isn't essential:** More realistic, human-like designs are not always more persuasive. Stylized characters can outperform them in cause-related marketing.
- **Align design with message:** Choose the influencer's visual style based on the tone of your campaign. Use animated designs for topics like sustainability, fairness, or social responsibility.

PHOTO: SCHMITT PHOTODESIGN

BEYOND ALGORITHMS: WHY HUMAN VALUES MUST GUIDE THE AGE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is transforming the world across many dimensions. But what changes lie ahead – and how can we ensure that human values remain central as intelligent systems take on more decision-making roles?

We sat down with **Dr. Eckart von Hirschhausen**, physician, author, and advocate for combining medical progress with ethical and ecological responsibility, to explore these fundamental questions.

Dr. von Hirschhausen, you have been advocating for more humane medicine and for climate protection for years. When you look at the current hype surrounding artificial intelligence, do you see more opportunities or more dangers for society?

DR. ECKART VON HIRSCHHAUSEN: In medicine, AI is a great blessing, especially for people with rare diseases. AI can immediately arrive at a diagnosis for which patients are often sent from one practice to another for years. And I would also prefer to have an AI look at a small lung finding on an X-ray – comparing it with 100,000 other images – rather than a sleep-deprived junior doctor who has only seen it once in a textbook during their studies. But to explain what that diagnosis actually means for my life, I want an empathetic human being sitting across from me. That's why we shouldn't select the next generation of doctors based on who can memorize the most facts, but rather on who communicates well, works in a team, upholds human values, and, ultimately, whom I would even want near me in existential moments.

AI is often presented as the solution to complex problems – including climate change. Where can it really help, and where does our belief in technology merely distract from taking responsibility ourselves?

Artificial intelligence can be a valuable tool for climate protection – but it must never replace responsibility and action. With my foundation Healthy Planet – Healthy People, we show in the campaign "Echte Leistungsträger (True Achievers)" how great the real value of nature is. The biodiversity and ecosystem services of our planet are worth almost twice as much as the entire human economic output. This makes it clear: Without bees, insects, and soil organisms, there would be no fruit, no vegetables, no chocolate – and no functioning life.

IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

No AI, no drone, no human with a brush can replace what an intact natural environment provides. But AI can help – for example, in the targeted use of water and fertilizers in agriculture or in species protection, when it analyzes the soundscape of a rainforest to assess biodiversity.

Yet the most important task remains: preserving natural intelligence. We must consistently protect the last contiguous areas of high biodiversity – for example, through the Legacy Landscape Fund. Without biodiversity, humanity is poor, no matter how advanced our technology may be.

Algorithms increasingly decide who gets loans, jobs, or insurance. How can we prevent AI from reinforcing injustice rather than reducing it – and how can we keep humans at the center?

To ensure that AI benefits society rather than exacerbating inequality, we must keep people consistently as our focus – not just as consumers, but as feeling, social beings. What humans truly need is not constant digital stimulation, but real experiences: community, nature, music, and meaning. Every hour spent on a smartphone robs us of a bit of that quality of life. Paradoxically, we are more "connected" than ever before – and yet at the same time, we are experiencing an epidemic of mental health issues, from loneliness to depression and anxiety.

"What humans truly need is not constant digital stimulation, but real experiences: community, nature, music, and meaning."

Human kindness remains analog. When algorithms optimize for attention rather than truth, they promote populism and hatred – thereby undermining the trust that upholds our democracy. I've experienced this myself: Before the Higher Regional Court in Frankfurt, I won a case against Meta, requiring that deepfakes using my face and voice be deleted. Yet they remain online. This shows how urgently we need binding rules and accountability in the digital world. Every serious actor – whether platform or advertiser – should have a fundamental interest in ensuring that the internet does not become a place of disinformation.

The development of AI consumes enormous resources and energy. How can high-tech progress and sustainability go together – or is that a contradiction we should openly acknowledge?

The current multi-billion-dollar race for AI will, I fear, lead to the next major crash. So far, it's completely unclear what sustainable business model could ever justify all these investments. At the same time, massive data centers devour enormous amounts of energy – and no one is speaking openly about where that electricity actually comes from. As long as our energy production isn't clean, AI remains dirty too.

For an ARD television program, I tried to obtain concrete figures on the energy consumption of AI queries – in vain. Everything is a trade secret. That lack of transparency is telling. Of

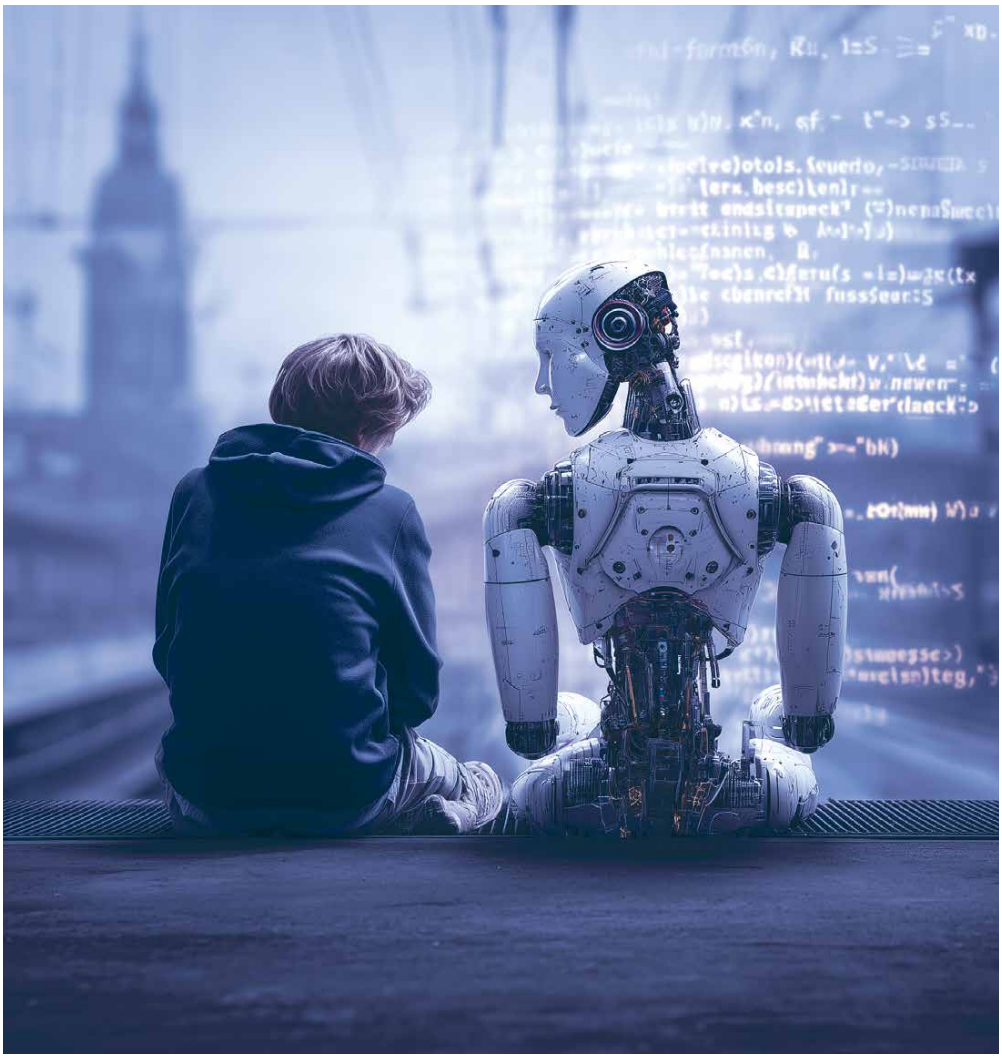


IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

course, I see the advantages: It's impressive how quickly AI systems can now search through vast amounts of data and find relevant information. But the key question remains: Does this faster access to knowledge actually make us wiser and more reasonable in our decisions? At the moment, it doesn't look that way.

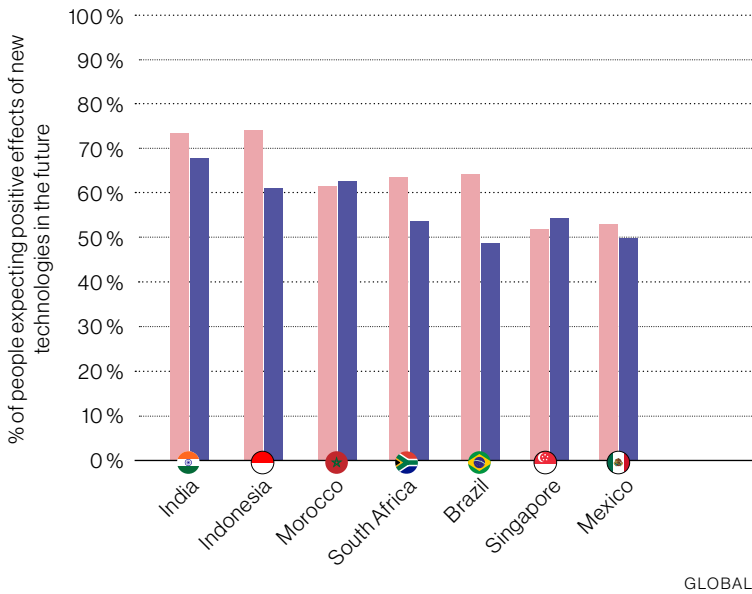
Many people feel overwhelmed by the pace of technological change. How can we ensure that AI does not create fear or leave people behind, but instead builds trust?

Trust is built through transparency. Users need to know what data is being stored about them and how they can easily disable AI features they don't want. Many applications today push automated summaries or text suggestions on us without asking. I think we shouldn't let machines take over thinking and writing entirely – sometimes you just want to express something yourself. At the same time, we must not underestimate the psychological effects of digitalization. The economic costs of mental illnesses in Germany are now on a scale comparable to the revenues of the automotive industry. Yet we constantly talk about the "phase-out of combustion engines" but hardly about the "phase-out of burnout." When people begin forming parasocial relationships with chatbots – seeing them as gods, therapists, or even friends – and tragic consequences occur without any warning, something has gone fundamentally wrong. AI must not foster emotional dependence; it must be designed to strengthen people, not weaken them.

If you look 10 years ahead, what questions should we be asking today to prevent AI from ruling our lives tomorrow instead of enriching them?

Who do I want to have been in my life? What really matters? What should children, grandchildren, and future generations be proud of when they look back on us in 2025? Let's become good ancestors!

This interview was conducted by Florian Ritter (NIM)



GLOBAL TECHNOLOGY CLIMATE: WHO EMBRACES AND WHO FEARS NEW TECHNOLOGIES?

A comprehensive global study reveals a striking paradox. Citizens in wealthier countries are significantly less optimistic about new technologies than those in emerging economies, despite being better positioned to benefit from innovation.

Author: Jakob Kaiser, Nuremberg Institute for Market Decisions (NIM)

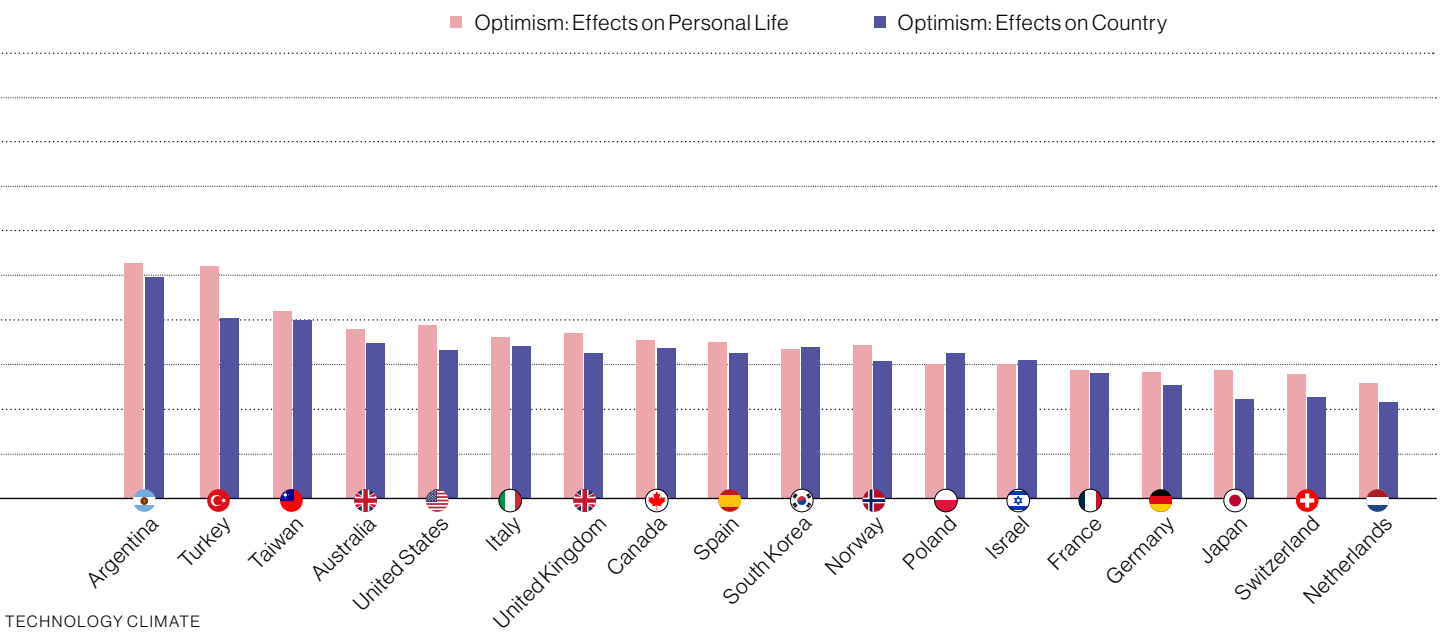


Figure 1: % of people expecting positive effects of new technolgies in the future

The Challenge: What Drives Fast vs. Slow Technology Adoption?

We are living through a period of significant technological upheaval. New technological trends like artificial intelligence may fundamentally alter how we work and interact with each other. Businesses wanting to thrive in the future ignore such changes at their peril. Indeed, business leaders consistently advocate for the proactive integration of new technologies as the pathway to future prosperity.

Yet technological transformation cannot be mandated by decree alone. The decisive factor lies in people's willingness to experiment with innovations and integrate them into their daily work routines. Understanding public attitudes toward technological change has become essential for leaders navigating an increasingly complex global innovation landscape.

But why do new technological trends evoke excitement and optimism in some people, while others are more likely to be skeptical of their potential downsides? A new large-scale study by the Nuremberg Institute for Market Decisions (NIM) sheds light on what really drives attitudes toward current technological trends across the globe.

Research Methodology

The research team conducted a representative global study of over 25,000 people across 25 nations between December 2024 and March 2025. The sample included almost all G20 countries (except China, Russia, and Saudi Arabia). Additional countries were selected to ensure balanced representation of advanced and emerging economies following International Monetary Fund (IMF) classifications. Overall, this study sample represents approximately 40% of the world population and 68% of world GDP. This research thus constitutes a highly unique and comprehensive examination of citizens' thoughts and feelings about new technologies.

The researchers assessed respondents' general expectations about "new technologies" and their anticipated effects over the next five years. Importantly, rather than focusing on specific preselected technologies, participants were asked to identify what they currently see as the most important technological developments. This approach allowed researchers to measure participants' general feelings about current technological developments.

Participants rated the expected impact of new technologies across several dimensions, including their personal economic situation, their personal happiness, and national economic wellbeing. Based on these individual responses across several life domains, the researchers created a summary Technology Climate Score for analysis. This method

provided an empirical measure of how nations on average, as well as individual citizens, feel about current technological trends.

Key Results

Economic Wealth vs. Technology Optimism

Globally, 70% of respondents expect more technological change in the next five years compared to the previous five years. This expectation of acceleration remains consistent across countries, though emerging economies show slightly higher rates of anticipated change.

Notably, on average, citizens in wealthy nations express lower technology optimism despite their countries' often superior technological infrastructure and capabilities. The study reveals a strong negative correlation between GDP per capita and technology optimism. Countries with higher per-capita incomes consistently show lower levels of public enthusiasm for technological change. This relationship remains statistically significant even when controlling for demographic differences between countries such as age and education levels. This pattern contradicts expectations that technologically advanced nations would be most receptive to innovation. This suggests that technical capability and public sentiment operate independently, creating potential misalignments between national technology strategies and citizen support.

Demographics vs. Values

On an individual level, demographic factors predict attitudes toward technology: younger individuals, those with higher education and higher incomes, and, on average, men tend toward greater technology optimism. But the researchers also examined people's personal values using a standardized psychological questionnaire that determines the personal importance of values such as social life, career, altruism, and security.

Interestingly, personal values prove to be more predictive than demographic characteristics alone. Career orientation emerged as the single strongest predictor of technology optimism: individuals who strongly value professional success show consistently higher technology enthusiasm regardless of age, income, or education level. This demonstrates that while sociodemographic factors certainly play a role in shaping individuals' sentiments about new technologies, personal values provide deeper insights into attitudes toward technology.

Artificial Intelligence and Inequality Concerns

When asked to identify specific "new technologies" that are currently highly relevant, respondents mentioned artificial intelligence (AI) more frequently than any other innovation. This shows that AI is top of mind for most people when thinking about the future of technology. However, public sentiments toward AI remain deeply ambivalent. Only 35% of respondents view AI as primarily beneficial, while 45% expect both positive and negative effects, and 18% consider it primarily harmful.

In general, people across the world are currently skeptical that new technologies will improve their lives. Across nearly all the surveyed countries, most respondents expect new technologies to increase unemployment rather than create jobs. This fear represents the most frequently mentioned concern about technological progress. Similarly, most respondents believe that wealthy individuals will benefit disproportionately from new technologies compared to economically disadvantaged groups. This perception exists across countries with varying levels of inequality and social protection, suggesting deep-seated concerns about technology's effects on social cohesion.

How should governments respond to such concerns? A majority of respondents in most countries believe governments should take primary responsibility for ensuring that new technologies benefit citizens. However, significant portions of respondents doubt their governments' capability to fulfill this role effectively. This gap between expected responsibility and perceived capability indicates that politicians need to demonstrate that they can effectively address citizens' concerns regarding the impact of new technologies.

Implications and Strategic Considerations

The global divide in technology optimism presents both challenges and opportunities for businesses operating across international markets. Companies must navigate vastly different public expectations and concerns when deploying new technologies globally. Success requires understanding that technology adoption involves more than technical feasibility.

Organizations should develop differentiated strategies that acknowledge these varying expectations, address specific regional concerns, and leverage the enthusiasm present in emerging markets while managing skepticism in advanced economies. The research suggests that personal values—particularly career orientation—offer more reliable predictors of technology receptivity than traditional demographic targeting, indicating opportunities for more sophisticated market segmentation approaches. ←

FURTHER READING

Kaiser, J., Neus, A., Kaiser, C. (2025). Global perspectives on new technologies: A large-scale international study on the influence of economics and personal values on attitudes towards technological change. In C. Stephanidis, M. Antona, S. Ntoa, & G. Salvendy (Eds.), HCI International 2025. Communications in computer and information science (Vol. 2524). Springer.

PHOTO: GETTY IMAGES / ANDRIY ONUFRIYENKO

KEY INSIGHTS

- **Adoption hinges on sentiment, not just access:** Even in markets with advanced infrastructure, skepticism toward new technologies can slow adoption. Businesses must account for public attitudes, not just technical readiness.
- **Emerging markets are growth opportunities:** High levels of optimism in developing economies mean these regions may be more open to experimenting with new technologies. Companies can position innovations as enablers of opportunity and progress here.
- **Values matter more than demographics:** Career orientation and personal aspirations are stronger predictors of technology acceptance than age, income, or education. This opens opportunities for more precise segmentation and targeted communication strategies.
- **AI is the flashpoint:** Artificial intelligence dominates public awareness but elicits mixed reactions. Leaders should address this ambivalence directly by balancing narratives of opportunity with clear strategies to mitigate risks like job loss or inequality.
- **Trust in governance is fragile:** Many citizens expect governments to ensure that technology benefits society, but confidence in their ability to do so is low. Businesses that demonstrate responsibility, transparency, and fairness can address part of this trust gap and thus strengthen their customer relations.

PHOTO: SCHMITT PHOTODESIGN

AI WILL NOT REPLACE THE DOCTOR–PATIENT RELATIONSHIP, BUT IT CAN IMPROVE IT

Artificial intelligence is reshaping medicine – from molecular diagnostics to personalized therapies. Journalist and author **Thomas Schulz** explains why the real revolution lies in understanding our biology at a deeper level, how data-driven insights empower both doctors and patients, and why the doctor–patient relationship will remain central even in an AI-driven future.

Mr. Schulz, your book *Future Medicine* vividly describes how AI could transform medical diagnoses and therapies. Where do you currently see the biggest leap forward – and where are we perhaps still closer to science fiction than to everyday practice?

THOMAS SCHULZ: I believe the biggest leap forward lies in the fact that, with the help of AI, we are beginning to truly understand our biology. Today we can trace what makes life tick down to the molecular level and see how all these processes interact – something that was not possible before. In recent years our understanding of life and biology has expanded exponentially. This deeper understanding of the body opens up entirely new possibilities in dealing with diseases and in how we treat them.

At the same time, this new knowledge doesn't mean that we already have answers to everything. The vision of fully personalized medicine, where every treatment is tailored to the individual, turns out to be far more complex than originally hoped. I think it will still take quite some time before we truly get there.

Many AI applications in medicine involve personalized diagnoses or treatment recommendations. How does this change the role of patients? Do consumers become active "health managers" – or rather transparent data donors?

The concern that our health data might be used without our control of course stems from the broader data privacy debates of the past two decades. However, health care has always been somewhat different because it's a particularly sensitive and protected area. Lawmakers – especially in Germany but also in other countries – have always placed great emphasis on ensuring that health data is handled with special care and security.

PHOTO: GETTY IMAGES / ANDRESWD

That's why I'm actually less worried about this point at the moment. For patients, the advantages clearly outweigh the risks: They have access to much more information about themselves and can actively integrate it into their treatment – for example, by sharing data between different doctors. The introduction of the electronic patient record is an important step forward in this context.

AI needs data – and in health care, that data is particularly sensitive. How can we reconcile data protection, trust, and innovation without slowing down medical research?

It is primarily the responsibility of policymakers to ensure that data protection and security continue to be guaranteed across all areas. The amount of available information keeps growing, and as more technical processes and AI systems are introduced, legislation must keep pace. It must not be overtaken by technological progress – otherwise, gaps will appear that ultimately disadvantage patients. There's always a risk that personal data might fall into the wrong hands, and that remains a major challenge.

"There are good reasons to protect patient data strictly – but on the other hand, research depends on access to large datasets."

At the same time, this issue is particularly acute in medicine. There are good reasons to protect patient data strictly – but on the other hand, research, for example in oncology, depends on

access to large datasets. To run meaningful analyses, researchers need extensive information, such as sequenced genomes. Without the ability to use this data, research simply cannot move forward. Balancing data protection with the need for open data in research is a real dilemma – one that still lacks a clear solution.

When consumers use apps that measure their vital signs or analyze symptoms, how can we ensure they aren't misled or unsettled by false recommendations – and what responsibility do tech companies bear?

This problem has existed for many years: There's a flood of false or inaccurate information easily accessible online. "Dr. Google" can provide an answer to a medical question, but it's not necessarily correct or applicable to the individual. This underlying issue now extends to AI systems as well – including generative models like ChatGPT – whose answers are not always accurate and sometimes entirely fabricated.

Public education is the first line of defense. Tech companies have a responsibility to clearly communicate that their systems are not infallible and that medical advice from them should be treated with caution.

When it comes to applications that measure vital signs or analyze symptoms, at least there's an important safeguard: Devices with a medical purpose must be certified. Not every app or gadget can claim medical validity without approval. For instance, the Apple Watch's heart monitoring features have gone through medical certification processes. That's an important step – and I believe we'll need even more of these regulated approval procedures to give users confidence.

What impact do you expect AI to have on the health-care system itself – on doctors, health insurers, or pharmaceutical companies? Will AI fundamentally change the traditional doctor–patient relationship?

I don't think the doctor–patient relationship will fundamentally change – but I do hope it will improve. We already see that with AI support, doctors can gain more time for their patients. This is especially evident in fields like radiology or dermatology: Ppattern recognition systems help identify anomalies faster – for example, when a 3D scan automatically highlights problematic skin areas. This allows doctors to work more efficiently and precisely.

Another advantage is the relief from administrative burdens. Writing patient reports often takes up a large part of a doctor's day – generative AI can save significant time here. Of course, the doctor still needs to review the results, but overall, there's more room for direct interaction with patients.

At the same time, the relationship between patients and the health-care system will become more complex. Many new technologies are expensive and not immediately covered by public health insurance. This means patients must navigate a growing number of new offers and therapies on their own. Doctors will increasingly need to act as guides, helping their patients make sense of this more complicated landscape. So there's a lot of movement – with both opportunities and new challenges.

"As we can capture more molecular data, we'll gain an increasingly precise picture of each individual's physical condition."

If you look 10 years into the future, which AI-driven innovations will most profoundly shape people's everyday health-care – and what is being overestimated?

I believe the greatest impact will come from sequencing technologies – not just genetic sequencing but also single-cell and microbiome sequencing. These methods allow us to analyze the most subtle processes in the body, and they are becoming ever faster, cheaper, and easier to perform.

What once was reserved for rare cases is now standard practice in many areas, especially in cancer treatment. This trend will continue: As we can capture more molecular data, we'll gain an increasingly precise picture of each individual's physical condition. I'm convinced this will revolutionize medicine over the next decade.

What's clearly overestimated, however, is the notion that AI will replace doctors – radiologists, for instance. That will never happen, if only because of the trust relationship between doctors and patients. It's an exaggerated debate, in my view.

What I find more exciting are developments where doctors actively co-develop AI systems. These tools don't just make diagnostic suggestions – as seen in dermatology, where systems analyze skin changes – but also explain their reasoning. The AI provides a justification that doctors can review and integrate into their own diagnosis. That's real progress and a meaningful way for AI to support medical practice.

This interview was conducted by Florian Ritter (NIM)

OVERCOMING AVERSION TO AI-BASED RECOMMENDATION SYSTEMS IN INNOVATION

Recommendation systems based on AI can accelerate innovation and improve decision-making. Yet, reluctance remains widespread. Find out how businesses can overcome these barriers, foster acceptance and create efficient new hybrid evaluation systems that combine humand and machine intelligence.

Author: Matthias Unfried, Nuremberg Institute for Market Decisions (NIM)

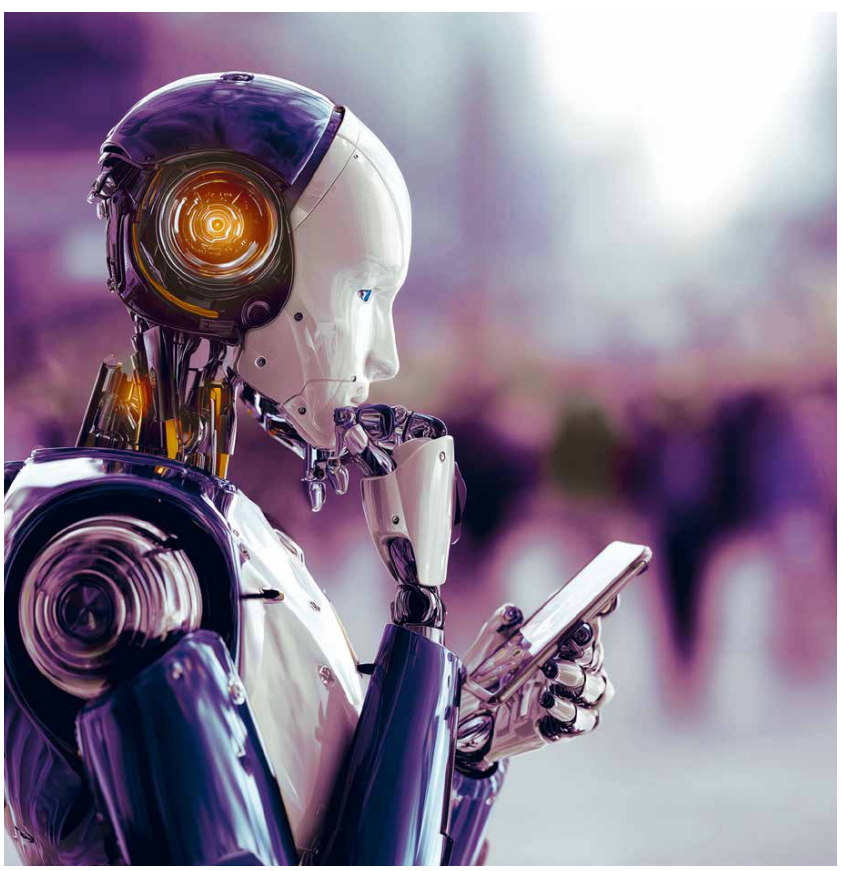


IMAGE: CREATED BY MIDJOURNEY AI, PROMPTED BY GCO

Artificial intelligence (AI) is no longer a distant prospect in innovation management—it is already reshaping how firms generate, evaluate, and select ideas. While most organizations are still experimenting with AI for idea generation (e.g., drafting product concepts or marketing messages), its role in idea evaluation—deciding which ideas are worth investing in—remains less understood. Yet evaluation is where resources are committed, risks are taken, and the future of an innovation portfolio is decided. Traditionally, companies have relied on experts to perform this screening. Experts bring valuable domain knowledge but are expensive, limited in number, and prone to biases.

To overcome these bottlenecks, many firms have turned to crowdvoting, engaging online communities to evaluate ideas on a scale. This approach taps into the "wisdom of the crowd" and has shown results comparable to expert judgment. However, crowdvoting has its

own weaknesses: Participants vary in expertise, attention spans are limited, and herding or strategic voting can distort outcomes. One famous example is Lays' "Do Us a Flavor" contest, where the brand invited consumers to propose and vote on new potato chip flavors. One of the crowd's top choices—cappuccino-flavored chips—failed in the market. Such outcomes highlight the risk of relying solely on crowds: Popularity does not equal viability. AI-enabled evaluation systems could have flagged the flavor as unlikely to succeed, helping the company avoid a costly misstep while still engaging the crowd creatively.

This is where AI-enabled evaluation systems come in. By applying machine learning to historical data, these tools can predict which ideas are most likely to succeed, often outperforming human evaluators. They promise efficiency, scalability, and consistency in screening ideas. Yet relying solely on algorithms can also backfire. For example, AI recruiting tools, which were trained on historical hiring data and inadvertently learned to favor male candidates for technical roles, have been abandoned after producing biased results. This illustrates the opposite pitfall: Algorithms can reproduce hidden human biases when left unchecked. The key lesson from both cases is that decisions might be most effective when humans and machines complement each other.

But there is a catch: People do not automatically trust AI. Research in psychology and management shows a pattern of algorithm aversion, where decision-makers prefer their own judgment—even when the algorithm performs better. In innovation contexts, this aversion could mean that internal innovation managers or external crowdvoters ignore helpful AI tools, leaving organizations unable to fully benefit from them.

In this study, we explore when and how human evaluators in the innovation funnel actually adopt AI-enabled evaluation systems in practice, as understanding this adoption behavior is critical for designing effective hybrid evaluation systems that combine human and machine intelligence. ←

KEY INSIGHTS

- **Initial hesitancy:** Individuals seem to be reluctant to use AI at first, reflecting mistrust or unfamiliarity.
- **Incentives shape behavior:** Bonus payments, peer success stories, and basic information about the AI system all encourage adoption.
- **Control is not decisive:** Unlike in other contexts, giving voters partial control over AI recommendations does not boost adoption.
- **Learning curve:** Over time, adoption rises naturally as voters experience the system's value. Peer influence remains the most effective long-term driver, while fees consistently suppress use.

The findings are particularly relevant as firms increasingly combine human crowds with AI augmentation in innovation. By understanding adoption dynamics, companies can create more effective hybrid systems, balancing algorithmic support with human judgment

MANAGERIAL IMPLICATIONS

For firms, the study offers some lessons on how to successfully introduce AI-enabled decision support systems:

- **Expect initial resistance:** Adoption will not be immediate. Crowdvoters (and employees) may distrust AI until they gain experience with it.
- **Leverage incentives:** Monetary bonuses can motivate initial use, but social incentives – such as highlighting other users' successes – are more powerful and sustainable.
- **Prioritize transparency:** Even simple explanations of how the AI works reduce mistrust.
- **Avoid costs for use:** Fees, however small, reinforce aversion.
- **Be patient:** Adoption grows naturally as users gain familiarity.

AI can enhance the efficiency and quality of idea evaluation, but adoption hinges on how it is introduced. Companies should carefully design incentive schemes, communicate transparently, and give crowdvoters time to build trust. With the right approach, AI-augmented crowdvoting can become a powerful tool for firms seeking to harness collective intelligence while ensuring robust and reliable decision-making.

FURTHER READING

Freisinger, E., Unfried, M., & Schneider, S. (2024).
The AI augmented crowd: How human crowdvoters adopt AI (or not). Journal of Product Innovation Management, 41(4), 865–889. https://doi.org/10.1111/jpim.12708

NIM MARKET DECISIONS DAY 2025

"AI.MEETS. CONSUMER."

Artificial intelligence (AI) has already become part of our everyday lives – often without us even noticing. From personalized recommendations in online shops to smart assistants on our phones, AI is shaping how we discover, choose, and experience products and services. But where exactly do consumers use AI? And how does it influence their decisions – enhancing convenience and personalization on the one hand while raising questions of transparency and autonomy on the other?

July 1, 2025, OFENWERK, Nuremberg

On July 1, 2025, around 400 participants met at the NIM Market Decisions Day in Nuremberg's Ofenwerk to discuss the opportunities and challenges of shopping in the new AI world – with the topics including the latest research insights, inspiring impulses, and practical discussions.

Dr. Peter Gentsch, founder of Retail AI, kicked things off. He pointed out that those who rely on AI tools such as ChatGPT often make decisions faster – but less thoughtfully. The line between inspiration and manipulation is becoming increasingly blurred. Companies are therefore trying to find new ways to secure the trust of consumers in the long term.

Dr. Christian Neuerburg, Director of Data Science & AI at adidas AG, picked up on this idea. He emphasized how important it is to design AI-supported product recommendations in such a way that they remain individually relevant without overwhelming users – especially at the moment of purchase.

Dr. Carolin Kaiser from NIM presented the latest research findings to demonstrate how much consumers

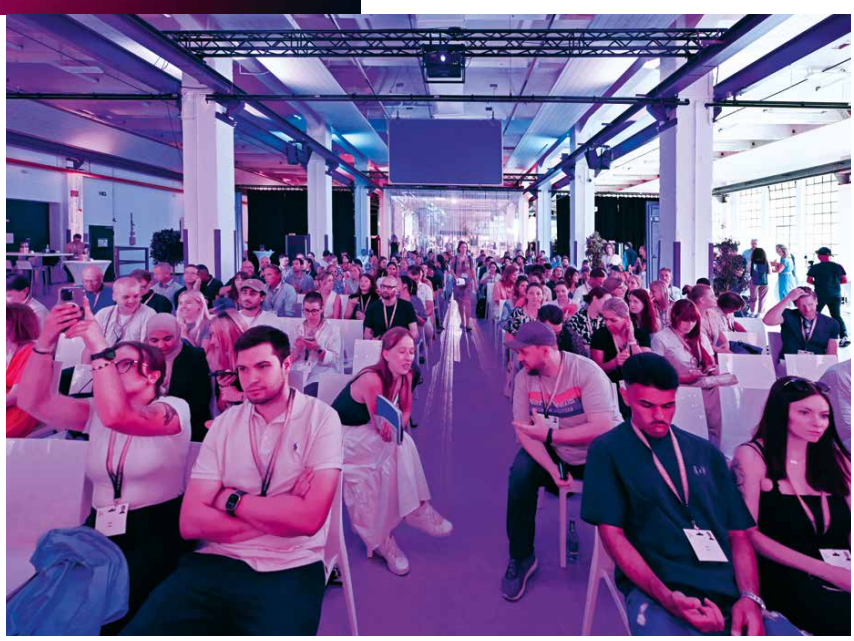


PHOTO: SCHMITT PHOTODESIGN

already trust chatbots such as ChatGPT. Studies have shown that trust in AI is high – but with convenience comes the risk of one-sided opinion formation. This makes it all the more important to transparently label AI-generated advertising.

Timo Springer, AI expert and co-founder of DECAID Studio, pointed out the changing rules of the game in digital marketing. If consumers are more likely to use ChatGPT than Google in the future, this will mean a paradigm shift: Classic search engine optimization

PHOTOS: SCHMITT PHOTODESIGN

Panel discussion: Next Gen Shopping – How will we shop tomorrow?

(SEO) will lose importance, while generative engine optimization (GEO) will gain relevance.

Dr. Martin Korte, neurobiologist and brain researcher, shed light not only on the digital but also on the cognitive dimension of AI use. He issued an urgent warning against surrendering one's own judgment to machines. Creativity, mental fitness, and learning ability must be preserved even in an automated world.

Thomas Schulz, reporter from the SPIEGEL editorial board and best-selling author, took an academic look at the future. He showed how AI is opening up completely new possibilities in areas such as genetic diagnostics for early cancer detection and regenerative medicine.

With humor, depth, and urgency, **Dr. Eckart von Hirschhausen**, physician and foundation founder, struck a thoughtful note: If we treat our world as a mere resource, we lose more than nature – we lose quality of life. It is not algorithms but real encounters that make us healthy. People must not only consume, but also take responsibility – especially with regard to future generations!

The NIM Market Decisions Day also featured a lively panel discussion on "Next Gen Shopping – How Will We Shop Tomorrow?" with **Dr. Frederike Fritzsche**, Chief Tech Transformation Officer at OTTO, and **Anna Kopp**, CIO at Microsoft Germany, offering their distinguished voices.

The day was moderated by Nadia Kailouli-Lipa, who guided participants through the program.

The NIM Market Decisions Day 2025 made it clear that AI is changing consumption and consumers – which is why we need clear values, informed guidelines, and a conscious approach to AI.

ABOUT THE NIM MARKET DECISIONS DAY

The NIM Market Decisions Day is the annual marketing conference organized by the Nuremberg Institute for Market Decisions (NIM). Since 2019, the event has highlighted current trends in consumer behavior and is aimed at decision-makers, researchers, and students.

Further information and photos of the event can be found at

https://www.nim.org/en/market-decisions-day-2025

Conference Speakers

NIM Market Decisions Day 2025 – a short review with the highlights on YouTube (in German):

Retail AI Opportunities and risks of AI: How consumers can benefit and protect themselves

Anna Kopp, CIO, Microsoft Germany

Does AI make us stupid?

Prof. Dr. Martin Korte, neurobiologist and brain researcher

How scientists are decoding our aging

Thomas Schulz, reporter for the editorial board of SPIEGEL and bestselling author

Conference Speakers

AI: the new power in the market? Relevance for marketing, brands, and markets

Prof. Dr. Peter Gentsch, AI scientist and founder

PHOTOS: SCHMITT PHOTODESIGN

Generation ChatGPT: Between consumers and machines in everyday life

Timo Springer, AI expert and founder, DECAID Studio

The secret of choice: How AI understands what consumers like

Dr. Christian Neuerburg, Director of Data Science & AI, adidas AG

Conference Speakers

Healthy earth – healthy people: How artificial and natural intelligence, marketing, and consumption protect our livelihoods

Dr. Eckart von Hirschhausen, medical expert, bestselling author

Tech, Trust & Deception – How AI is changing our consumer behavior

Dr. Carolin Kaiser, Head of Artificial Intelligence, NIM

NIM Market Decisions Day 2025 – a short review with the highlights on YouTube (in German):

Trust 2025: Five deadly sins in dealing with AI

Gregor Schrott, VP, Bosch Digital

NIM MARKETING INTELLIGENCE REVIEW

INFLUENCER MARKETING AND THE CREATOR ECONOMY

In this issue of the NIM Marketing Intelligence Review, guest editor Jenna Drenten, Associate Professor of Marketing at Loyola University Chicago's Quinlan School of Business, brings together top researchers to explore the latest in influencer marketing. They take a look at the big opportunities for brands, but also dive into some of the tougher parts of the industry—like the pressure to always perform and tricky ethical questions. Plus, you'll find plenty of practical tips for making influencer marketing work and handling the bumps along the way.

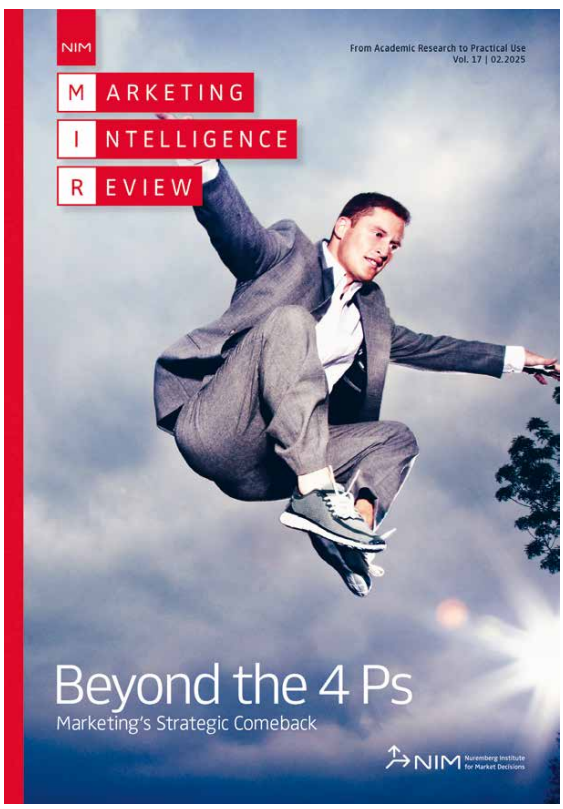
FURTHER READING
NIM Marketing Intelligence Review,
Vol. 17 / No. 1 / 2025

BEYOND THE 4 PS: MARKETING'S STRATEGIC COMEBACK

The current issue of the NIM Marketing Intelligence Review is dedicated to the strategic comeback of marketing. Our guest editor, Frank Germann, Professor of Marketing and Chair of the Marketing Department at the University of Notre Dame, has invited leading scholars to examine the current opportunities and challenges facing marketing. Our contributors discuss how marketing can demonstrate its impact beyond click rates and reclaim its position at the heart of the organization.

FURTHER READING

NIM Marketing Intelligence Review,
Vol. 17 / No. 2 / 2025



PUBLISHING DETAILS

PUBLISHER

Nürnberg Institut für Marktentscheidungen e. V.
Founder of GfK
Steinstr. 21, 90419 Nuremberg, Germany

T +49 911 95 151 997
F +49 911 37 677 872
www.nim.org/en
hello@nim.org

EDITORIAL STAFF

Florian Ritter, Tobias Biró, Sandra Lades

LAYOUT & DESIGN

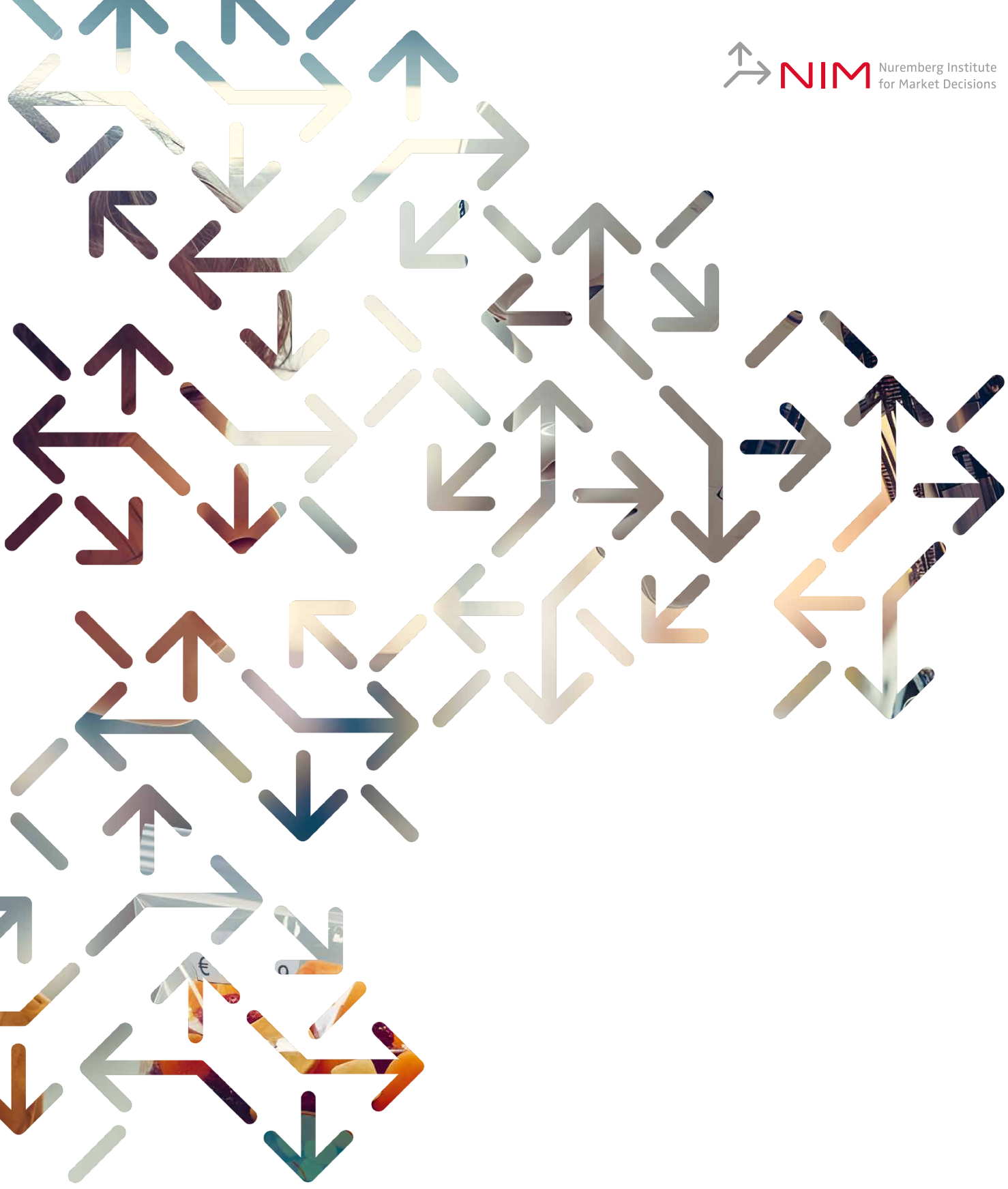
GCO Medienagentur
Martin Reznicek, Art Director
Wibke Ahrens, Design and infographics
gco-agentur.de

NUREMBERG INSTITUTE FOR MARKET DECISIONS

The Nuremberg Institute for Market Decisions (NIM) is a non-profit research institute at the interface of academia and practice. NIM examines how consumer decisions change due to new technology, societal trends or the application of behavioral science, and what the resulting micro- and macroeconomic impacts are for the market and for society as a whole. A better understanding of consumer decisions and their impacts helps society, businesses, politics, and consumers make better decisions with regard to “prosperity for all” in the sense of the social-ecological market system.

The Nuremberg Institute for Market Decisions is the founder of GfK.

NIM Nuremberg Institute for Market Decisions



Nürnberg Institut für Marktentscheidungen e.V.
Founder of GfK