

NIM INSIGHTS

Review 2022 and Outlook 2023

→ The NIM Research Magazine

Issue
2023/1



IMPRESSUM

PUBLISHER

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PHOTO CREDITS

Title: Drazen – stock.adobe.com; p. 2: nonnie192– stock.adobe.com;
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Outlook 2023

EDITORIAL

Dear Readers,

The year 2022 was full of social, economic, and technological events that affected almost all market decisions of consumers, as well as manufacturers, retailers, and politicians. Rising inflation and still challenging supply chains, as well as the uncertainty caused by a war in the middle of Europe that has been going on for more than a year, continue to influence consumer behavior and consumer decisions.



Dr. Andreas Neus

The example of ChatGPT has shown how increasingly intelligent technologies are penetrating further into general society, opening up new opportunities, and also changing consumers' decision-making processes as virtual explainers and advisors. Natural disasters and climate change legislation have demonstrated the explosive nature of climate change and increased the desire of many people for companies and policymakers to commit to greater sustainability in their decision-making. But the opinions have also become more radical and polarized, which is not always conducive to constructive social discourse.

In the 2022 research year, we looked at the influence of new technologies on consumer decisions, the role of sustainability, and the important question of how better decisions can be made from the perspective of consumers and marketers. Through our research, we aim to provide consumers, businesses, policymakers, and society with relevant insights into how market decisions are changing in the face of new technological and societal trends. The aim is to promote an informed dialog based on empirical data and to provide a basis for better decisions – in line with the promise of the social market economy, “Prosperity for All” (Ludwig Erhard).

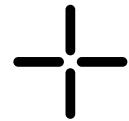


Dr. Carolin Kaiser

The year 2022 was also marked by the end of the COVID-19 pandemic. We seized the opportunity to network and communicate more in real life and on-site. We presented studies and research results at conferences and participated in discussion panels. With NIMCon, we founded our own scientific conference format to intensify the exchange with academic research on the topic of “Consumer Behavior and Consumer Decisions.” In addition, we gained some new cooperation partners from both practice and academia, with whom we are jointly exploring exciting issues around market decisions.



***We want to promote
informed dialogue
and lay the
foundations
for better decisions –
in the spirit of
the social market
economy’s promise of
“Prosperity for All.”***



In December 2022, the Executive Board and the Members’ Council also decided to end the strict austerity budget, which had been in place since 2018 due to the lack of dividends from GfK SE, and made it necessary to pause the large and resource-intensive representative surveys. The end of the austerity budget means surveys of this kind can be carried out again in the future. To this end, we will not only follow up on strategic longitudinal formats but also deepen and further develop them.

Since last year, a new colleague, Tobias Biró, has been strengthening our team in the area of research communication in order to share the results from research even more effectively with our members and the interested professional public. With the new NIMpulse series, we are once again focusing more on population-representative survey studies and getting to the bottom of decisions in the context of current issues in order to help consumers, corporate decision-makers, and political actors find their way in increasingly fast-changing, dynamic markets.

The founding of the Gesellschaft für Konsumforschung e. V. in 1934 as a noncommercial research institute by Prof. Wilhelm Vershofen and Dr. Ludwig Erhard, among others, will be celebrated for the 90th time in 2024. This is also an occasion for us to delve into the still highly topical concepts, research approaches, perspectives, and methods of the founding period in order to “make the voice of the founders heard.” For innovative concepts such as Vershofen’s analysis of the “conceived benefit,” his transaction model underlying the purchase and sales decision or the understanding of the visible market decision based on the (initially invisible) attitude and habits of the consumer are still highly relevant and worth revisiting with the distance of history.

In NIM INSIGHTS, the present NIM Research Magazine, we have compiled for you what has particularly moved and excited us in terms of research and studies over the past year.

We wish you an interesting and insightful read.

Dr. Andreas Neus
*Managing Director
and Vice President*

Dr. Carolin Kaiser
*Head of Artificial Intelligence
Editor NIM INSIGHTS 2023/1*

RESEARCH PROJECTS



How important
are the dimensions
of purpose beyond
profit?

Brand Purpose: The Relationship Between Brand Purpose and Brand Performance

“Purpose beyond profit” seems to have taken a front-row seat in many brands’ strategic thinking. However, whether a purpose beyond profit can actually improve brand performance is still an open question. Partially, the lack of a satisfying answer hinges on missing approaches to objectively conceptualize and assess brand purpose.

The German Supply Chain Act became law on January 1, 2023. It obliges companies to not only adapt their own business activities to ecological and social standards but to also comply with these standards along their supply chains. In addition to binding laws, there sometimes appears to be an intrinsic motivation to conduct business in a fair, sustainable, and responsible manner. In brand management, the purpose of a brand has become a central issue in recent years. Obviously, it is no longer enough to strive solely for profit. But it is much less obvious how such a purpose beyond profit can be conceptualized and

empirically assessed. NIM has done pioneering work to solve this conceptual problem.

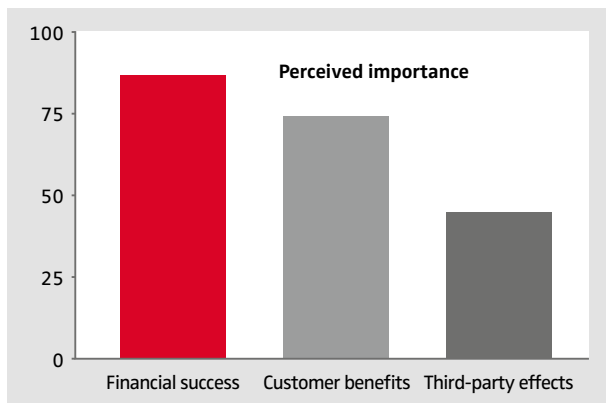
THREE DIMENSIONS OF BRAND PURPOSE

NIM researchers have identified three dimensions in which brand purpose can be classified. A brand’s purpose can be conceptualized in terms of the importance assigned to each purpose dimension.

- The first dimension concerns the financial success of the organization, essentially covering the traditional shareholder value approach.

- The second dimension involves the customers as another group of stakeholders and focuses on the benefits a brand provides for them.
 - The activities of a brand not only have an impact on the organization and its customers but also on third parties. These externalities can be both negative (for example, environmental pollution) and positive (for example, providing services to the community) and represent the third dimension of brand purpose.
- In the second step, the research group developed a questionnaire to empirically assess brand purpose. The questionnaire contained a selection of goals (each corresponding to a purpose dimension) for which the test subjects (n = 1,531) were asked to indicate how important they deemed these goals for a given brand. From the subjective impressions, the perceived purpose of more than one hundred brands was determined. The results confirmed that the newly developed measurement instrument has excellent psychometric properties and is therefore well suited for measuring perceived brand purpose.

The dimension of the company's purpose



A CLEAR HIERARCHY OF DIMENSIONS

The studies showed that consumers see a clear hierarchy between the purpose dimensions. Financial success was seen as the most important dimension for almost all the brands studied, followed by customer benefits. Third-party effects was perceived as the least important purpose dimension. Moreover, brands perceived as more profit-oriented were perceived as less concerned with third-party effects. At the same time, brands that focus on the benefits for their customers tend to be perceived as also caring about the welfare of third parties.

KEY FINDINGS



- Purpose remains an important topic in brand management, but its conceptual and empirical treatment has so far been unsatisfactory.
- Financial success, customer benefits, and third-party effects are the fundamental dimensions of brand purpose.
- Financial success is perceived as the most important purpose dimension, while third-party effects are perceived as least important.
- Brands that consumers perceive as focusing more on the impact their business activities have on third parties perform better.

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IS DOING GOOD ALSO GOOD FOR BUSINESS?

With the systematic classification of brands in terms of their purpose, it is now possible to answer the initial question of whether doing good – in the sense of taking into account third-party effects – is also good for business. Therefore, the net promoter score (NPS), which is considered a key indicator for brand performance, was assessed for one hundred brands as well as their perceived purpose. The result: Brands that consumers perceive as focusing more on the impact their business activities have on third parties tend to have a higher NPS. This tentatively suggests that it economically pays off to design business models that are socially and ecologically sustainable.

The newly developed measure for brand purpose can certainly be used in further scientific investigations of the antecedents and consequences of brand purpose. It could also be useful in practice, for example, when evaluating the effectiveness of various branding strategies or for analyzing brand positioning in a competitive environment. NIM plans to supplement the explicit measure developed here, with implicit procedures for measuring the perceived brand purpose, and to further validate it using additional indicators of brand performance. ■

Trust: How Does Eye Contact Influence the Relationship Between Humans and Robots in Purchase Decisions?

Eye contact is one of the most effective ways to establish contact and rapport with people – whether on a first date, with an old friend, or with potential customers. It does not only signal attention but also builds trust. Both of these mitigate perceived risks and can speed up decision-making. But what happens when we interact with artificial intelligence? Are robots and other intelligent agents able to gain human trust and influence human decisions through eye contact?

With the increasing use of intelligent agents in interactions with consumers, this question is of crucial importance for future customer interaction in many industries. The financial industry is a pioneer because so-called robo-advisors have established themselves as a new tool for digital asset management.

The use of artificial intelligence in the form of virtual agents and humanoid robots as financial advisors, rather than the purely text-based interfaces that currently dominate the market, has the potential to change the quality of interaction with customers and their purchasing decisions.

The question of what effect the increasingly anthropomorphic appearance of intelligent agents has on customers' trust in the advice and financial products offered is important for providers, consumers, and also us as a society.

Research on robots and recommendation agents shows that higher levels of anthropomorphism tend to lead to greater trust and increased intent to use. However, there are also conflicting research findings, and the interplay of all influencing factors has not yet been fully investigated.

EFFECTS OF DIFFERENT HUMANLIKE APPEARANCE AND BEHAVIOR

This project aims to shed light on the research question of how different humanlike appearances and behaviors of a robot advisor affect consumer trust and investment decisions. The project team focuses primarily on eye contact as the most important nonverbal signal of social interaction between humans.

To this end, an online experiment was conducted in which test subjects were invited to deal with the topic of investing money. They had a virtual consultation with a financial advisor, who also made an investment proposal. Afterward, the test subjects were asked to decide on the amount of their investment and the type of asset management (human or machine). To make the incentive as realistic as possible, the chosen investment was simulated and paid out – converted into a participation fee.

CONSULTING WITH A PROFESSIONAL ACTRESS AND SOCIAL ROBOT FURHAT

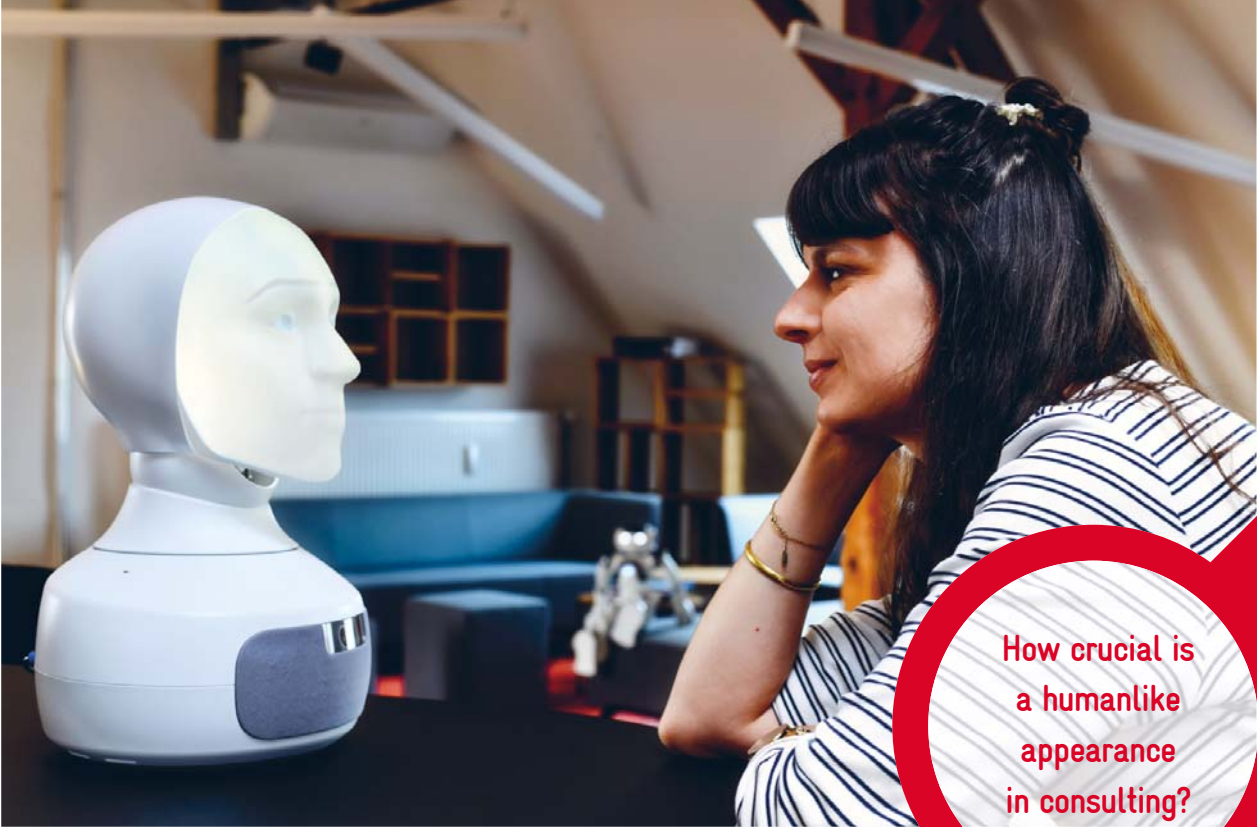
As robo-advisors are already widely used in the U.S., the experiment was conducted online with around 4,500 people from the U.S. who were randomly distributed into one of nine experimental groups. The groups differed in the conditions of "eye contact of the financial advisor" (with and without eye contact) and "design of the financial advisor," in which the categories human, filmed physical robot, virtual robot with humanlike face, virtual robot with plastic face, and simple website were used.

The consulting sessions were realized with a professional actress and the fully programmable social robot Furhat. Typical speech segments of a financial consulta-

MORE ON THE TOPIC

Project video





How crucial is a humanlike appearance in consulting?

tion were filmed and then put together to form a seamless virtual consultation dialogue.

In the questionnaire, participants provided information on their perceptions of financial advice, their own reactions and decisions, and their technical, financial, and sociodemographic backgrounds.

KEY FINDINGS



- The humanlike appearance of the consultant is crucial when it comes to trust and decision satisfaction.
- Virtual social robots are considered more trustworthy than robo-advisors based on purely text-based websites.
- Eye contact matters – even with robots. For developers of human–robot interactions, this means paying attention to eye contact with consumers is important. Consumers should be aware that advice from more “human” artificial intelligence may also lead to more willingness to follow its recommendations.

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HUMANLIKE APPEARANCE MAKES THE DIFFERENCE

The results show that the humanlike appearance of the advisor is crucial. Robots were trusted less than humans, but compared to the text-based website, the robots led to a better assessment of the relevance of the recommendation, higher satisfaction with their own decision, greater overall satisfaction, and a higher likelihood of choosing the machine-managed investment.

It also becomes clear that eye contact with robots has a smaller but similar effect as eye contact with a human advisor – yet is essential for trust and satisfaction. Participants who had eye contact with a robot advisor rated the advisor as more competent, felt a higher level of trust in the advisor, liked the advisor more, were more satisfied overall, and were more willing to recommend the advisor to others. However, eye contact alone does not immediately lead to higher investments. There is only an indication of a weak indirect coherence as eye contact increases trust, and higher trust, along with increased risk affinity, goes hand in hand with higher investments.

Providers, including those in other industries, have the opportunity to use the new technology to increase the perceived quality of their touchpoints with their consumers when compared to text-based agents. Consumers should be aware that they tend to respond to anthropomorphic artificial intelligence with more trust – and possibly more willingness to follow advice – and take this into account when making decisions. For a fact-based and constructive sociopolitical discourse on the future role of artificial intelligence, it is important to know the possibilities and limits of supporting and manipulating human consumption decisions. ■

Anthropomorphic Chatbots and Investments

What impact do conversational agents have on financial decisions?

Conversational agents (CAs) are now used almost everywhere, using text, speech, and other channels to communicate with users. But how do CAs influence decision-making when they show features that usually only humans have?

When we search for information, browse the Internet, or use entertainment platforms, we use CAs consciously and almost naturally. Besides conscious usage, we also interact with CAs in places where we don't expect them. In call centers, for example, voice-based CAs capable of processing and using natural language are deployed for routing users to the right contact. Another application of CAs is chatbots welcoming visitors on websites, providing initial assistance, or guiding them through the web offering.

We know from different studies that human decision-makers tend to attribute human characteristics (for example, a consciousness or emotions) to objects if they have human-like features, such as a voice or a name. This phenomenon, known as anthropomorphism, has consequences. The anthropomorphic design of CAs may influence behavior in human-machine interactions, for example, by increasing trust and emotional attachment, and thus, increasing for instance the willingness to pay.

ACCEPTANCE OF CONVERSATIONAL AGENTS IN FINANCIAL DECISIONS

In different experimental studies, NIM currently investigates the extent to which CAs are perceived as anthropomorphic, depending on their human characteristics, especially when using speech. The central research question is whether CAs are accepted in different financial decision-making contexts. In our studies, participants make investment decisions either on a standard microcredit platform (rational decision) or on a prosocial microcredit platform (intrinsically motivated emotional decision). In both cases, a CA with different anthropomorphic features serves as a filter and decision support system that guides through the preference selection process. ■



KEY FINDINGS



- A conversational agent increases service satisfaction with a website.
- CAs have implied social presence to a certain degree, and this can have both positive and negative effects.
- Social presence has a positive effect because it increases trust in the CA.
- However, the social presence of CAs can also have a negative effect if users feel observed by the CA.
- The presence of a voice at the CA has no effect.

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The Future of Marketing in Virtual Worlds

Interview study: How do the world's most valuable consumer brands use the metaverse for their marketing today?

The metaverse is a hype topic in marketing – not just since Facebook's renaming as Meta and Mark Zuckerberg's associated bet on the metaverse as the next generation of the Internet.

Unlike websites today, future metaverses will be virtual, immersive worlds in which thousands of users can be online at the same time and communicate, dance, create, and above all, consume beyond gaming. The offerings range from analog to hybrid to completely virtual products and services. And they do so across a wide variety of devices and hardware genres. New technologies such as NFTs and blockchains are also expected to enable completely new business models in the metaverse. However, it is still completely unclear what these will be and whether the vision of the metaverse will be realized at all.

WHAT IS THE METAVERSE?

Beyond mind games, there are currently hardly any concrete definitions or standards regarding what the metaverse actually is or what it will be. Nevertheless, many companies have jumped on the bandwagon and presented their own metaverses or at least marketing campaigns in virtual environments. However, many of the supposed future applications still seem half-baked, and it remains unclear what value they generate for users.

Against this background, the following questions arise: What concrete role does the metaverse already play in marketing today? And what role can it play in the future from the perspective of marketing experts? To answer these questions, NIM launched an interview study at the end of 2022 with high-ranking marketing managers who work for some of the most valuable consumer brands in the U.S. and Europe. The study focused on companies that already use the metaverse in some form for their marketing.

The preliminary results show that some brands are reluctant to explore the marketing potential of the metaverse, while others are already deriving value from their metaverse activities by establishing new communication channels with their customers and realigning their branding. However, the potential of the metaverse is still limited by several barriers, such as lack of consumer access, lack of control, and lack of protection for brands.

Our study will contribute to a better understanding of the role of the metaverse in modern marketing and identify the challenges that need to be overcome in order to fully realize its potential. The results will be published and presented at conferences in 2023. ■



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Marketing Strategy Made by AI?

What role does AI play in strategic decision-making?

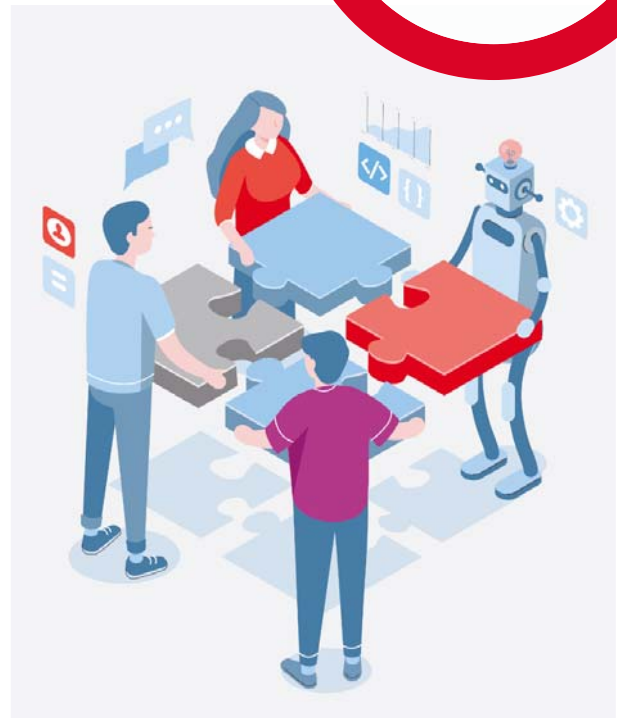
Artificial intelligence (AI) is already being used in a variety of ways in marketing, usually at the operational level. As the technology evolves, the question arises: Is AI also about to make the leap to the strategic decision-making level?

Whether personalized product recommendations, chat-bots in customer service, or sentiment analyses in social media, the applications of artificial intelligence in marketing are already diverse today. Numerous tasks and decisions at the operational level can already be automated by AI tools. Developments such as increasing computing capacities and advances in machine learning are also constantly improving the capabilities of intelligent machines. As a result, AI is becoming applicable to increasingly complex issues, meaning it could also change how strategic decisions are made. This refers to decisions that are long term, difficult to revise, and, moreover, often have to be made on a small or opaque database. In science and practice, the view is increasingly being expressed that AI has the potential to support marketing professionals in decision-making at the strategic level, to augment, or even replace them.

THE ROLE OF INTELLIGENT MACHINES AT THE STRATEGIC DECISION-MAKING LEVEL IN MARKETING

To date, detailed insights into whether and how humans and intelligent machines already work together in making strategic marketing decisions have been lacking, and many questions remain unanswered: What role do intelligent machines play at the strategic decision-making level? What are marketing professionals' desires and preferences going forward, and are they willing to share decision-making power with or even relinquish it to machines? What obstacles do they see to elevating AI to the strategic decision-making level? To get to the bottom of these questions, NIM interviewed five hundred high-ranking executives from companies on the Forbes Global 2000 list (C-suite or Direct Reports) related to marketing and strategy by telephone (CATI) as part of a standardized survey study.

"Assistant" or "Manager" – what role does AI play?

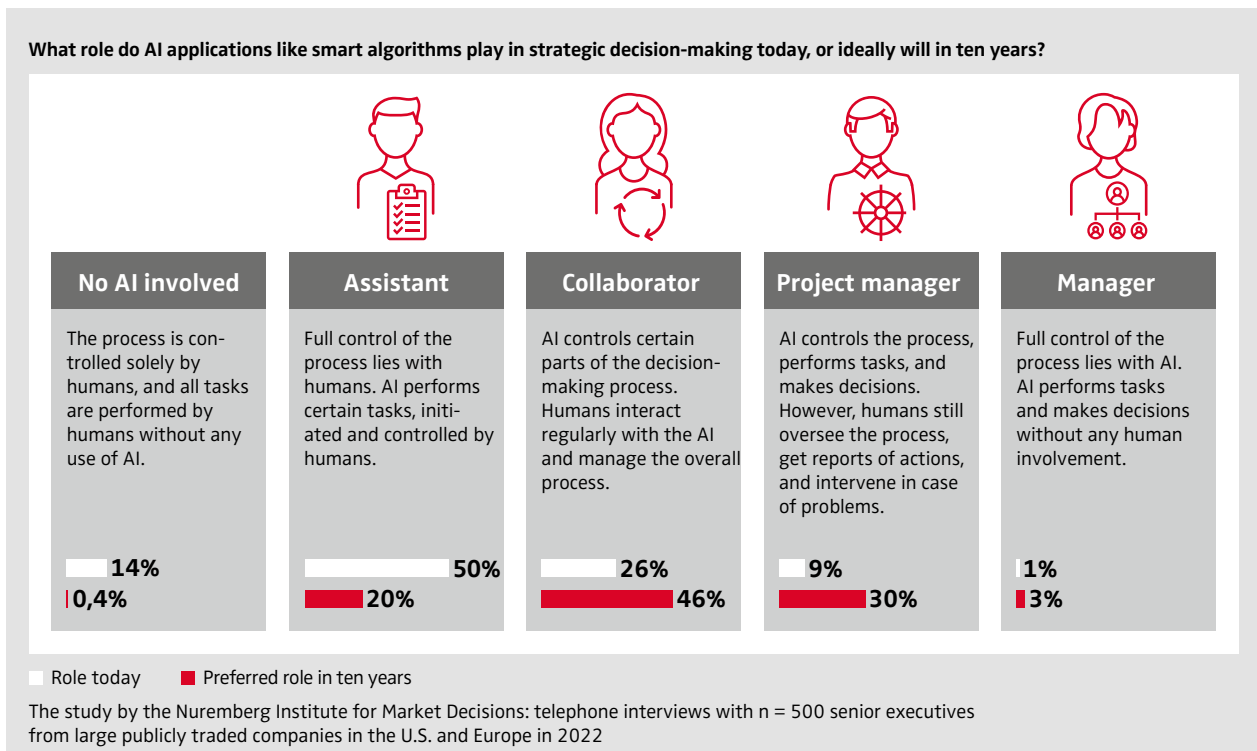


KEY FINDINGS



- 56% of companies already have use cases of AI in strategic marketing decisions.
- Managers are predominantly open to hybrid decision-making processes in which they make decisions together with intelligent machines. However, they want to retain control.
- There are a variety of obstacles that prevent, or at least complicate, the rapid implementation of AI in strategic marketing decisions.

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OPEN FOR HYBRID DECISION PROCESSES IN STRATEGIC MARKETING

For most of the respondents, AI in strategic decision-making was not completely unknown: 56% of the managers stated that there are already corresponding use cases in their companies (83% stated that they already use the technology at the operational marketing level). It turns out that managers are basically open to working with intelligent machines, but they want to have the upper hand. Thus, the respondents are willing to include AI in strategic decision-making processes in marketing and would like to give intelligent algorithms an average of 43% weight in the future, with 57% consequently remaining with human decision-makers.

WISHFUL THINKING: AI IN THE ROLE OF A "COLLABORATOR"

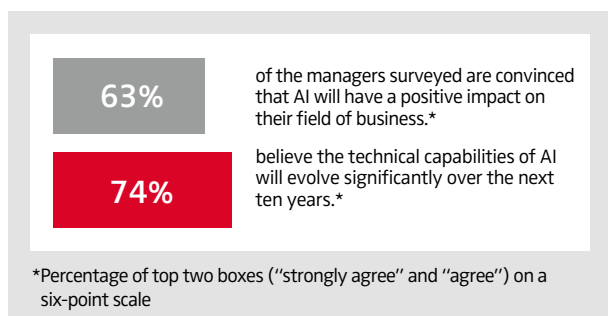
The largest group of respondents currently describe AI as an "assistant" that takes over certain decision-support tasks. In the future, 46% would like to see AI in the role of a "collaborator" that controls certain parts of the decision-making process itself and is in constant interaction with human decision-makers. Even in this constellation, humans retain control over the overall process.

STILL A LONG WAY TO GO

However, there are also obstacles that prevent or at least complicate the rapid implementation of AI in strategic marketing decisions. The nature of the obstacles depends on the company's experience with AI and the number of use cases. Companies with little AI experience see the biggest obstacles as insufficient budgets, a dismissive attitude among employees, a lack of the right tech-

nological infrastructure, a lack of expertise within the company, and a shortage of skilled workers. AI pioneers also see the last point as a hurdle. However, the biggest challenges for these companies lie in data-related issues, such as dealing with an insufficient database, a lack of transparency of algorithms, and problems in standardizing complex strategic decisions.

The majority of the top decision-makers surveyed are positive about the future.



OPTIMISTIC VIEW OF THE FUTURE

The majority of the top decision-makers surveyed in the study are positive about the future. They believe that AI will have a positive impact on their business area. This also assumes that the technical possibilities of AI will develop significantly and that AI will play an increasingly important role in shaping business and marketing strategies. Companies should address these developments in order to be prepared for a future in which humans and algorithms work together "with combined forces." ■

De-Biasing of Marketing Management Decisions

How aware are leaders of their cognitive biases?

Cognitive biases can have significant consequences for companies – from poor decision-making to negative impacts on corporate culture and morale. Managers subject to cognitive biases may overlook important information, use incorrect assumptions as a basis for decision-making, or not consider alternative options at all. To avoid costly mistakes and foster a culture of informed decision-making in their organizations, leaders should understand and mitigate their own cognitive biases.


Are managers aware of their cognitive biases in decision-making? To answer this question, NIM, in cooperation with the Institute for Media and Communication Management (MCM) at the University of St. Gallen, conducted a survey with five hundred high-level managers. They all work for companies in the U.S. and Europe that are listed in the “Forbes Global 2000” list of the world’s largest companies. The participants hold high-level man-

agement positions and have responsibility for important business decisions. The survey was conducted using a mixed-method approach of computer-assisted telephone interviews and screen-sharing for questions with longer lists of items. The goal was to find out which biases are most relevant to people in marketing and strategy today, which ones they recognize in the behavior of others, and which ones they recognize in their own behavior. In addition, extensive information on decision-making styles was collected.

BLIND SPOT FOR OWN BIASES

According to the results, the most frequently perceived bias is the so-called in-group bias, i.e., the preference for members of one’s own group. Other frequently perceived cognitive biases include confirmation bias and illusory superiority, e. g., the overestimation of one’s own skills and abilities.

The study also found that managers notice significantly more biases in others than in themselves. On aver-

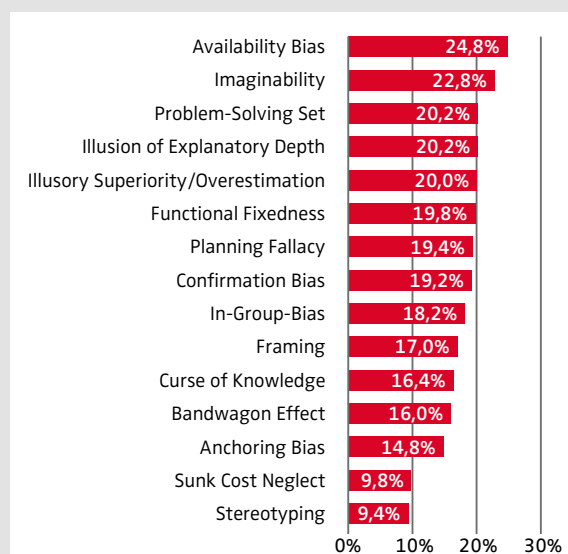


Common Biases
in the Decisions
of others and in
own Decisions

Common Biases in the Decision of others



Common Biases in own Decisions



age, respondents noticed 3.1 biases in others, while they recognized only 2.7 biases in their own behavior. This so-called blind spot could cause them to overlook their own decision-making biases and, as a result, make decisions that are not in the best interests of the organization. At the same time, as the study also shows, certain decision-making styles seem to be more susceptible to certain biases. There are also individual differences in

susceptibility to blind spots. The study results suggest that individuals who know and understand their own decision-making style are better able to recognize the blind spots described. This underscores the importance of self-awareness and the need for leaders to be aware of their own cognitive biases in order to make more informed decisions.

THIRTEEN RELIEF TECHNIQUES

In the study, NIM and MCM also evaluated thirteen so-called de-biasing techniques based on how helpful they are to decision-making practices and how often they are actually used. The results show that managers know about these techniques, but they do not use them regularly. Thus, indicating a need for training and education. ■

KEY FINDINGS



- Managers are aware of cognitive biases in decisions. In surveys, they identify significantly more biases in others than in themselves. This is an indication of a blind spot that could lead them to overlook their own decision-making biases and make decisions that are not in the best interests of the company.
- The so-called in-group bias is the most frequently perceived cognitive bias, followed by confirmation biases and the illusion of cognitive superiority. Managers need to be aware of these biases so that they do not overlook important information, make inaccurate assumptions, or disregard alternative options.
- The blind spot among managers depends on the individual decision-making style. The rational, dependent, and spontaneous decision-making styles have a larger overall blind spot for cognitive biases.

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How Do Risk Perception and Past Experience Shape the Future Business Model?

The role of market opportunity and threat for innovation behavior and the role of experience.

Business model innovation – which, in addition to product innovation, also includes innovative sales channels, new payment models, etc. – has a strong impact on corporate success, according to recent studies. Nevertheless, there is evidence that management often shies away from it. The reason for this may be, among other things, the previous experience of the managers.

The literature on this topic is ambiguous. Some researchers argue that companies are more risk-averse when faced with external threats and stick to the established (threat rigidity). Other work shows that companies tend to be more risk-averse when faced with potential losses because they generally have less to lose. However, it is not only the perception of a current event that influences decisions but also previous experience. For example, decision-makers are shown to be more risk-seeking if they have realized profits in the past. If losses were realized in the past, decision-makers become more risk-averse.

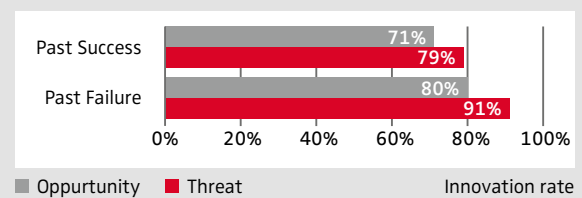
THREAT OVER OPPORTUNITY, PAST OVER FUTURE?

To investigate their risk-taking behavior, NIM conducted an experimental study with top managers from large companies and with individuals without professional management responsibility in large companies. In a hypothetical scenario, the research team experimentally varied both past company performance (past gains vs. past losses) and the current event (opportunity with potential gains vs. threat with potential losses). Participants were then asked whether the business model should be innovated given the scenario (which meant potentially higher profits with some risk) or not (the safe option with lower profits).

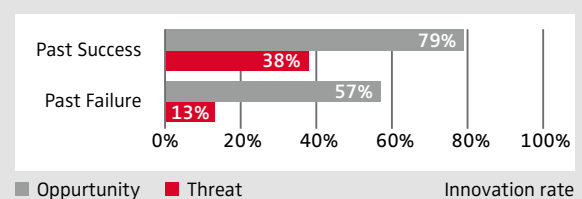
DOES TOP MANAGEMENT SEE THE WORLD THROUGH DIFFERENT EYES?

Regardless of the company's past performance, individuals without professional management responsibility

Individuals without professional management responsibility in large companies are more willing to take risks under threat.



Top managers, on the other hand, show risk-averse behavior in the face of threats.



ity in large companies showed a clear preference for the riskier option, i.e., innovation. This was slightly amplified when they were confronted with a threatening event. Top managers, on the other hand, showed significantly different risk behavior in the study: When faced with market threats, they are more risk-averse and more likely to stick to the current business model. If they had suffered losses in the past, they were even less willing to innovate. ■



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Innovation in Good Times and Bad Times

The psychological basis of innovation decisions has been studied experimentally to uncover the causes of systematic bias.

In the face of threatening events, companies too often avoid innovation. This systematic bias in decision-making can put a company's survival at risk.

Innovation is one of the most difficult decisions companies make. Whether it is the right decision in a particular situation can obviously not be determined generally. But as soon as the decision is distorted systematically, some innovations will be held back, even though they would have been successful.

A systematically lower willingness to innovate in the face of negative business prospects has recently been the subject of several NIM studies. In behavioral experiments, participants imagined deciding whether or not their company should implement an innovation. Six scenarios each described a business model, an event that could impact the company, and a potential innovation. Two versions of each scenario were created by varying the event so that the company faced either a threat or an opportunity.

According to previous research, pending losses stimulate risk-taking and might therefore even promote innovation but only if innovation is seen as the riskier strategy. However, results show that innovation is less likely to appear as the riskier alternative compared to maintaining the status quo when companies face a threat. Consequently, a threat-induced change in risk perception may prevent risk-seeking from translating into a willingness to innovate.



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Moreover, innovation requires an active deviation from the status quo. However, previous findings suggest that many passively maintain the status quo to avoid regret. When making innovation decisions, people anticipate more regret after the failure of an innovation than after the non-implementation of an innovation that would ultimately have been successful. Crucially, because losses generally loom larger than gains, anticipated regret is amplified when innovation decisions are made in the face of events threatening the business. The results of the experiments support these hypotheses and suggest that threats also hinder innovation by making people even more fearful of making the wrong decision.

The NIM research report "How the Past and the Present Shape the Decisions for the Future" also outlines further implications for managers. For example, the mere knowledge of a systematic bias often already triggers corresponding judgment corrections. Furthermore, making possible innovation plans more concrete might prevent decision-makers from unduly regretting their own decisions. ■

RESEARCH IN BRIEF



PERCEIVED AND OBJECTIVE DECISION QUALITY

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What makes a good decision? Results of a literature review by NIM show that both subjective and objective criteria play a role in market decisions. Objective criteria are based on normative theories and partly depend on the preferences of the decision-makers. They usually focus on the decision-making process. Subjective criteria are often independent of theories and consider the outcome of a decision from the perspective of the decision-maker. But for the assessment of the decision quality, the decision situation as well as the evaluating person is central.



Although the outcome is subjectively considered as one of the main criteria, it is often subject to coincidence and, thus, often not influenceable by the decision-makers. According to studies, a decision-making process that makes optimal use of all available information is fundamental to a good decision. The optimality criteria will be the subject of further research at NIM.

DOES ACUTE TECHNOSTRESS INFLUENCE DECISION-MAKING BEHAVIOR?

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As part of a master's thesis, NIM, together with the Chair of Health Psychology at the Friedrich-Alexander-University of Erlangen-Nuremberg, investigated how so-called technostress influences our decision-making behavior. During an experiment, the participants had to work on decision-making tasks on the computer. Half of them were exposed to so-called stressors with a large number of interruptions through pop-up windows. Heart rate and cortisol level, and thus stress level, were measured. Even though the heart rate indicated a significant increase in the stress level, the participants did not feel any more stressed than those without stressors.



The experiment shows that many people are already so used to technology-related interruptions that they no longer feel stressed, although physiological measurements show the opposite. Technostress also had no influence on decision-making behavior.

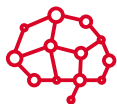
MOTIVATIONAL CONFLICTS DUE TO MULTIPLE PRODUCT LABELS

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Many foods have several labels, which are often an expression of conflicts of interest between different market players (manufacturers, retailers, and government). Usually, labels indicate positive product attributes, but due to the increasing number of so-called multi-labels – for example, the Nutri-Score or the husbandry label – negative aspects of a product can also be highlighted. When labels signal both positive and negative aspects of a product, consumers are more likely to experience internal conflict when making purchasing decisions. NIM researchers have conducted a systematic literature review. It thereby becomes apparent that whether or when multiple labels lead to behaviorally effective motivational conflicts has not yet been conclusively clarified. Hardly any empirical studies are available.



However, existing literature suggests such motivational conflicts. Reported psychological effects of discrepant labels include attitude changes toward the product or labels as well as halo effects, confusion, and cognitive dissonance. At the behavioral level, a wide variety of consumer responses reportedly go beyond mere weighing and preference change, ranging from heuristic or impulsive purchase behavior to information seeking, change in habitual consumption behavior, or consumption reduction.



LABS

AT NIM



New Technologies and Opportunities in the NIM Technology Lab

Using innovative technologies to gain even more realistic insights into consumer decisions.

Technology is rapidly changing the customer journey and increasing the complexity of customer touchpoints. At the same time, it promises to facilitate and improve decision-making. In the NIM Technology Lab, the research focus is on high-end online surveys and experiments to close the attitude-behavior gap. New technology, such as innovative customer interfaces, is tested in the lab. Finally, the lab also focuses on projects in the context of “cutting through the hype,” i.e., a technical method and hype check for emerging technologies and tools.

SOCIAL ROBOT MISTY

Social robots are intelligent robots that replicate human behavior and mimic gestures, facial expressions, and speech. They can respond to stimuli in their environment and thus influence – or even manipulate – human decision-making processes. Social robots are increasingly being used by companies for consulting or at the point of sale as a customer interface to enable natural, lifelike interaction between humans and machines.

With their special properties, social robots are also particularly well suited for designing replicable experiments on human decision-making. Mainstream technology is also clearly moving in the direction of giving artificial intelligence a moving body: Smart speakers such as Alexa are now available as the “rolling robot” Astro, which can move around at home.

The newest member of the “new customer interfaces/ social robots” category, Misty from Furhat Robotics, joined NIM in 2022. Misty has a display on her moving head to customize her eye area. She is capable of motorized guidance through space, avoiding obstacles, and creating virtual maps of space. She can even perform small gestures with her arms. Via her camera, she detects faces and keeps them in view. She also has voice input and output. In practical use, Misty can guide customers to shelves, show visitors the way at trade shows, or even act as a mobile voice assistant at home.

PREPARATION FOR RESEARCH ASSIGNMENT

With this range of functions, Misty lies between the very realistic but immobile Furhat, whose form is limited to a bust with an expressive face, from Furhat Robotics, and the typical android robot NAO, which has an immutable face, from Softbank Robotics. Misty and her extensibility capabilities are being tested in the NIM Technology Lab to best prepare her for use in future experiments.

DIGITAL STORAGE OSCILLOSCOPE

Research experiments in the laboratory offer the advantage of direct access to the test participants. Test subjects can be connected here to various sensors –



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for example, to determine heart rate and skin conductance – which continuously record the various parameters during an experiment. In this way, physiological reactions, such as a rise in heart rate at a certain point when watching a commercial, can be recorded.

However, with sensors as a data source in experiments, new problems arise. It is important to explain how the signals from sensors relate to the interactions in the computer experiment over time. The common practice of standing behind test subjects with a stopwatch or push button is extremely imprecise and can falsify research results – if only because human reaction time is in the tenths of a second. Moreover, this approach is difficult to scale.

PROPRIETARY DEVELOPMENT: NIM SENSOR SYNC

The problem of synchronizing separately recorded sensor data with experiment data exactly in time is solved electronically in the NIM Technology Lab with an in-house development, the NIM Sensor Sync. This was successfully used for the first time in the project, “Does acute technostress influence our decision-making behavior?” With the digital storage oscilloscope, we have had a high-precision measurement instrument since 2022 that can record and visualize signals in the nanosecond range.

Measurements and profiling with the oscilloscope have helped reduce the response time of the Sensor Sync by a factor of 6.7, enabling the requirement to respond in the millisecond range (human comparison: tenths of a second range). In the further development of the NIM Sensor Sync, the proven digital storage oscilloscope will play an important role. ■

News From the Market Decision Labs



Research at NIM focuses on the decisions and decision-making processes of market actors on both sides: on the side of consumers as well as on the side of companies. An important resource here is the Market Decision Labs network. This is a network of (currently) three experimental laboratories. In addition to the mobile lab in Nuremberg, there are two labs at international universities. These were set up together with the University of Pretoria in South Africa and the Business School of the Central University of Finance and Economics (CUFE) in Beijing, China.

RESTARTING OPERATIONS AFTER THE COVID-19 PANDEMIC

During the past two years, behavioral experiments in strictly controlled decision-making situations in the laboratories were impossible due to the pandemic. Fortunately, operations could be resumed in 2022. The starting point was an experiment conducted as part of a master's thesis. The aim of this study is to determine the effect of so-called technostress on decision-making behavior (see page 19). Biometric sensors that measure heart rate variability are used to draw conclusions about the respective stress levels.

THE MARKET DECISION LAB AT THE UNIVERSITY OF PRETORIA UNDER NEW MANAGEMENT

A fundamental part of the NIM Market Decision Lab network is the experimental laboratory at the Department of Marketing Management at the University of Pretoria in South Africa. This lab was also able to resume operations in 2022 after the interruption of work due to COVID-19. At the turn of the year 2022/2023, Prof. Adré Schreuder took over as head of the Market Decision Lab at the University of Pretoria. Prof. Schreuder led a business and market research company for several years after holding various academic positions, including one as an associate professor in Pretoria. He is currently a Professor of Customer Experience Management at the University of Pretoria. ■



STUDY RESULTS



Decisions and Decision Patterns From the Consumer Perspective

A qualitative perspective.

What causes people to make a particular purchase decision? How exactly do they go about it? NIM has investigated this question in depth and asked consumers to report on their own experiences. The results are lively and profound insights into the subjective purchase decision process.

As a basis, thirty men and women between the ages of eighteen and sixty-five were interviewed on behalf of the NIM project team. In order to make the interview as practical as possible, the respondents were first asked to describe in detail how the decision-making process for their most recently purchased smartphone went. Subsequently, questions were increasingly asked at the meta level so that the interviewees could reflect on their general purchasing behavior.

THE SUBJECTIVE VIEW OF CONSUMERS IS IMPORTANT FOR THE CORRECT INTERPRETATION

According to the statements, most decision-making processes are not linear but consist of several loops, waiting, maturing, and resting phases. Sometimes, there are shortcuts or even aborts. Linear decisions are mostly made on the basis of predeterminations or latently matured desires.

However, this is particularly important here: If the subjective view of buyers is excluded, a completely false impression can be created. A concrete example: There are consumers who have been observing the market for a long time and have made a decision to buy. If such people discover a suitable offer and immediately grab it, others may get the impression that an impulse purchase has taken place. But this is

not the case. Another factor influencing the buying process – one that is difficult to recognize from the outside – is also already inherent in the initial situation, namely in whether the purchase is subjectively a “happiness maker” or an “annoyer” for the people concerned.

All respondents agreed that consumers also approach purchasing decisions differently on the basis of personal characteristics. These characteristics relate to abilities and attitudes but also personality traits. If purchase-decision pattern types can be derived from this, new dimensions of understanding purchase decisions can emerge.

THE INTERNET HAS INCREASED THE PSYCHOLOGICAL PRESSURE ON THE INFORMATION EFFORT

For the majority of respondents, the Internet has increased the pressure on the parameter “information effort” in order to feel satisfied with their own decision-making quality. The result, however, is a paradox: On the one hand, people prescribe sufficient research for themselves, but on the other hand, this also increases their desire for relief from the extensive choices available.

The various findings of this exploratory qualitative study will stimulate further research projects. ■



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Voices of the Leaders of Tomorrow 2022

How does the passing of the baton take place?

The situation is serious. Financial debts and the looming climate collapse pose threats to the freedom, health, and security of the next generations. To solve this situation, there is an urgent need for approaches to a fruitful dialogue between older and younger generations. The project “Voices of the Leaders of Tomorrow 2022” aims at helping to achieve this.

Since 2014, NIM has published the “Voices of the Leaders of Tomorrow” study in cooperation with the St. Gallen Symposium, which gives a voice to top talents and young professionals from more than eighty countries. In 2022, the perspective of a selected group of Leaders of Today was additionally examined for the first time. For this purpose, three hundred top managers over the age of forty-five from the world’s two thousand largest listed companies were surveyed. They answered the same questions as the young Leaders of Tomorrow.

Titled, “Passing on the Baton? Transfer of Decision-Making, Priorities, and Collaboration across Generations of Leaders,” the specific focus was on the conflicts and commonalities between two generations of (potential) leaders who, in the face of global challenges, are dependent on cross-generational collaboration. The aim was to clarify where and how much common ground exists, which challenges need to be addressed with the highest priority, and what the situation is regarding the transfer of responsibility and decision-making authority.

On May 6, 2022, Dr. Andreas Neus presented the insights at the St. Gallen Symposium and subsequently discussed them with younger and older executives present. In this way, the study was able to make a very concrete contribution to the cross-generational dialogue. ■

The detailed study report
is available for download.



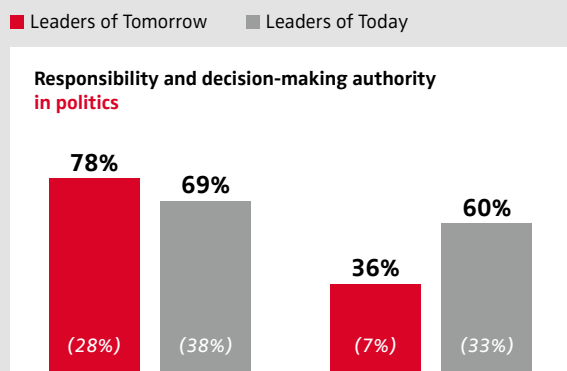
MORE ON THE TOPIC



Agreement that the older generation **does not want to relinquish** decision-making powers. **Disagreement** that the younger generation **does not want** to take on responsibility.

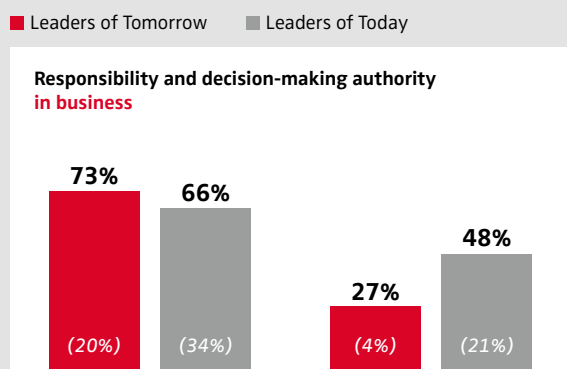
What is your opinion of the following statements regarding the delegation of decision-making authority?

Statements provided: top two boxes ("strongly agree," "tend to agree") out of four possible responses (+ n. a.); numbers in parentheses ("strongly agree")



The **older generation** does not show enough willingness to give the younger generation more decision-making power in **politics**.

The **younger generation** does not show enough willingness to take on real responsibility in **politics**.



The **older generation** does not show enough willingness to give the younger generation more decision-making power in the **economy**.

The **younger generation** does not show enough willingness to take on real responsibility in the **economy**.

KEY FINDINGS



- The polarization of society and the financial burden on the next generation are perceived by both groups as currently important problems. These topics could be a good starting point for a dialogue on how to deal constructively with such conflicts.
- Both groups see the conditions for intergenerational collaboration as good, which gives hope that it can be successful.
- Both groups believe that the other generation is making too many sacrifices. It is necessary to arrive together at a realistic assessment of what are "justified" demands in each case.
- Today's leaders are skeptical about whether the younger generation is really ready to take on more responsibility in politics and business. The younger ones themselves see it differently. A reality check through quickly transferring more decision-making power to the younger generation is needed.
- Both groups agree on the need for greater participation of the younger generation in institutional decision-making. Minimum quotas are seen as a key instrument for ensuring this.
- The climate crisis, the future of education, and health care are common topics on the intergenerational agenda. These are prime starting points for dialogue. But the Leaders of Tomorrow see other pressing issues as well, such as the fair distribution of wealth and pension systems. The older generation should not ignore this.

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New Edition of the NIM Smart Speaker Study



Field reports on influences on decision-making behavior and on possible development potential, this time in a three-country comparison.



Smart speakers, such as Amazon Alexa or Google Nest, have the potential to change the habits and search and information behavior of their users. As a result, they also influence market-relevant decisions. The extent of this influence in the three countries studied and what is still seen as potential for improvement were investigated in an ongoing NIM project.

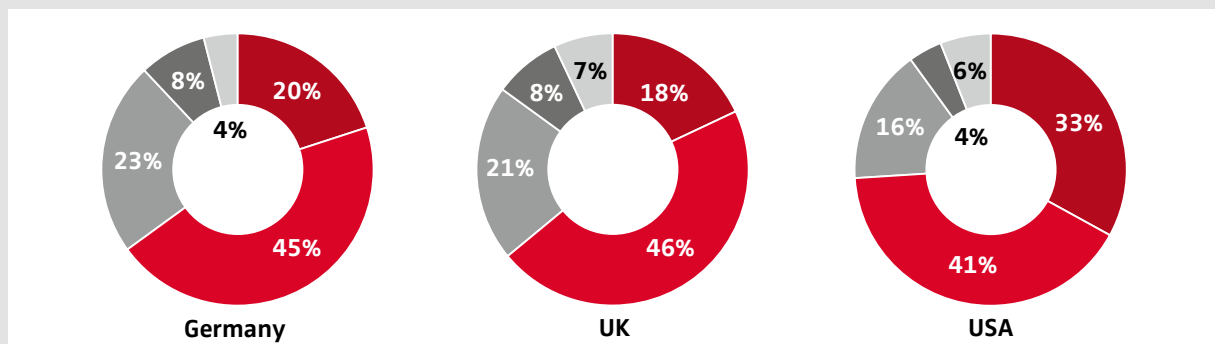
In December 2022, the second survey of smart speaker users was conducted by NIM. This time, the study covered not only Germany but also the U.S. and the U.K., where the technology had been available for several years before it was in Germany.

As part of the study, around 1,100 active users of smart speakers were surveyed in each country. The aim was to learn about the experiences, evaluations, and wishes of the users and thus to understand the influence on their decision-making behavior as well as possible development potential for smart speakers and voice assistants.

The majority of users in all three countries can imagine delegating some regular purchases completely to their smart speakers in the future.

What is your opinion of the following statements regarding the transfer of decision-making authority?

If you think five years into the future, can you imagine having some of your regular purchases/orders completely organized by a smart speaker with a voice assistant?



Basis: n = approx. 1,100 people per country who use (at least one) smart speaker with voice assistant in the home

■ yes, sure ■ yes, probably ■ no, rather not ■ no, certainly not ■ do not know



SMART SPEAKERS ARE NOT YET PERFECT

Basic experiences and assessments are shared in a similar way by the respondents in all three countries. Among other things, the users agree that smart speakers are not yet perfect. In all three countries, at least half of the users complain that the wording of instructions is sometimes complicated and that applications do not work well from time to time.

Nevertheless, the influence of smart speakers is huge. For example, other channels and devices – including even smartphones and tablets – are losing importance among most respondents. Smart speakers therefore have the potential to become a game changer in the area of media. There is also a strong willingness to delegate decisions to smart speakers: Seven out of ten users in Germany and the U.S. and six out of ten in the U.K. let smart speakers make at least some decisions about their music choices. Other consumer decisions are also influenced by the interactive speakers. Although only some of the owners make purchases via the smart speakers, these buyers have a very high level of trust in the product suggestions of the voice assistants.

IMPACT ON THE REQUIREMENTS FOR PRODUCT SUPPLIERS

In the future, the majority of respondents in all three countries can imagine having some of their regular purchases organized via smart speakers. In the U.S., the number is particularly high. This is likely to have a significant impact on the demands placed on product providers. This is because either they make it into the top-of-mind list of human customers and thus become a fixed part of their shopping shortlist, or they have to stand their ground in the battle for the best product placement with the new gatekeepers and algorithms of the smart speakers, respectively.

DEVELOPMENT POTENTIAL “VOICE”

In the future, the influence of smart speakers could well become even greater. After all, there is development potential for increasing their appeal. The voices of voice assistants offer considerable room for improvement. For a start, not even half of those surveyed like the tone of the “standard voice”; in fact, the proportion is particularly low in Germany. Second, at least seven out of ten respondents in all countries would like to be able to select a voice. They would like to be able to choose the voice of a well-known person or generally have a large selection of possible voices available. Many would be interested in both options.

Conclusion: More innovation and intensive work on the weak points could give the future of smart speakers a new boost. ■

KEY FINDINGS



- Despite some differences in detail, the respondents in all three countries agree on the basic statements.
- There is still a lot of room for improvement and development in the production of smart speakers, both in terms of voice commands and voice.
- In the areas of media use, ordering, and shopping, the survey reveals that smart speakers have the potential to become new gatekeepers for their users.

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NIMPulse – What Moves People?

The new series examines the relationships between values, knowledge, and market decisions.

How do values determine Christmas consumption in times of severe crisis? What role does the best-before date play in the handling of food? NIM is investigating these and similar questions in its NIMPulse survey series, which was launched at the end of 2022.

NIMPULSE 2023-1: CHRISTMAS AND VALUES

Christmas is the festival of charity and reflection on values. In 2022, however, it took place under exceptional circumstances: War, inflation, and uncertainty made it difficult for many to get into the Christmas spirit. In the NIM survey, "Christmas and Values," Germans also indicated in December that they were spending less on gifts and festive meals than in the previous year but were still paying attention to values such as sustainability, climate protection, fairness, and ethics when shopping.

A representative sample of 1,002 people aged eighteen to seventy-four was surveyed for the NIM study. The result: Values play an important role for most people when buying Christmas gifts, even if inflation makes restrictions necessary. For almost three-quarters of respondents, criteria such as sustainability or fairness are important when buying gifts. The same applies to food for preparing Christmas dinner at home. Here, too, more than 70% of consumers make sure that meat,



vegetables, and other products meet one or more value propositions. Almost 80% of respondents also stated that they make no distinction in their value orientation between their shopping behavior in general and Christmas shopping.

Values: A question of income?

Values play a particularly important role for young people when shopping. This is confirmed by the survey. For example, only 18.2% of respondents aged eighteen to twenty-nine said that none of the values available for selection in the survey were important when buying Christmas presents. This is well below what the survey finds for the general population, where the proportion is almost 30%.

When shopping, one must not only be able to afford values but also want to afford them. Unsurprisingly, a disproportionately large number of people with a net household income of less than 1,000 Euro states that none of the values available for selection is a criterion when Christmas shopping (36.8%). Only from those whose monthly incomes are more than 3,000 Euro does the proportion of value-oriented people increase. However, even people with a household net income of more than 5,000 Euro say in just over one-fifth of cases that none of the available values is important to them when shopping for Christmas.





NIMPULSE 2023-2: FOOD WASTE AND BEST BEFORE DATE

Eleven million tons of food ended up in the trash in Germany in 2020. Retailers and manufacturers account for a small proportion of this. The majority comes from private households, and here it is often due to the best-before date.

A representative survey of 1,003 people aged eighteen to seventy-four shows that almost half of people in Germany throw away food at least once a month because this date has been exceeded. Only 20% of respondents say they never dispose of food for this reason, with people over sixty disposing of particularly little. One in seven even throws away food on a weekly basis, with people under forty and those with children in the household being particularly conspicuous here.

Not only do older people take more measures to avoid food waste, but they are also significantly less likely to have conflicts in the household. Only 8% of older households have disagreements about this issue. Among forty- to sixty-year-olds, a good one in five reports such conflicts. Younger people and couples with children are particularly likely to argue about best-before dates and food waste.

Less food for the garbage can

The respondents agree that throwing away food is basically a problem: Four out of five agree with this statement. But what strategies do they use to curb food waste? It is



people over sixty who stand out due to better planning, both in terms of the purchase itself and in terms of consumption. Younger people, on the other hand, make greater use of technical and organizational infrastructure, such as apps and collection points. One in seven people under forty, for example, say they hand in leftover food at drop-off points where food can be shared.

The vast majority would like to see retailers and manufacturers banned from throwing away food, while the majority rejects their own obligations. People are just as critical of higher prices, which would provide an incentive for avoiding food waste, as they are of bans on private individuals throwing away packaged food that is still edible. Popular among the population, on the other hand, is a requirement for manufacturers, retailers, and businesses to donate unsold food to food banks or other charitable organizations. The planned legalization of containerization is also welcomed.

Today, a number of product labels that encourage people to examine food with their own senses before throwing it away already exist. How such a label would have to be designed in order to best support consumers in their decision will be investigated by NIM together with Aarhus University and Copenhagen Business School in an international research project. ■



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TRANSFER AND DIALOGUE

INTERVIEW

“It’s About Future Viability”

Which role does the topic of “sustainability” play in consumers’ purchasing decisions? Elena de Punzio, assortment manager at dm-drogerie markt, explains this in an interview with NIM.

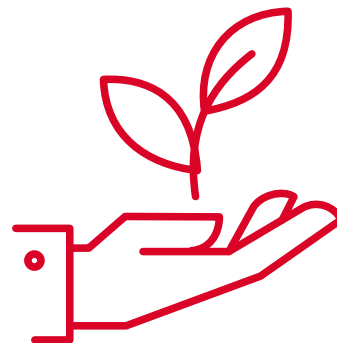
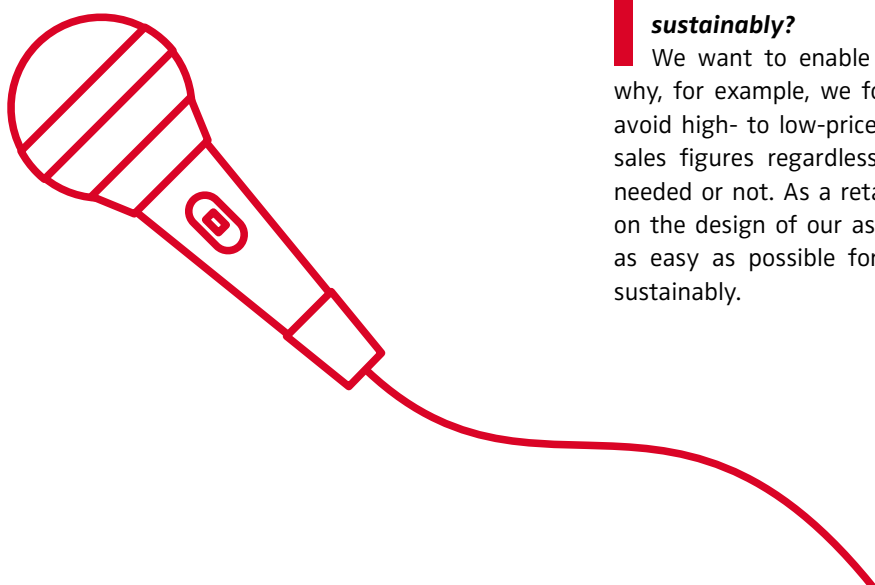
What measures does dm rely on to strengthen environmental protection and sustainable business?

At dm, we understand sustainability as more than simply environmental protection and resource conservation. We are also concerned with the social and economic aspects of our society. We always want to make our customers a sensible offer, and that also means providing a product range that is socially, economically, and ecologically oriented. Götz W. Werner, dm founder and member of the Supervisory Board, once summed it up like this: “People will want to associate with companies in the future that provide a meaningful range of products and at the same time encourage conscious consumption; these companies make the difference.” That’s why sustainability isn’t just about environmental protection. It’s about future viability.



How does dm enable its customers to shop sustainably?

We want to enable conscious consumption. That’s why, for example, we focus on permanent pricing and avoid high- to low-price promotions that only drive up sales figures regardless of whether the products are needed or not. As a retailer, we have a direct influence on the design of our assortment and can help make it as easy as possible for our customers to shop more sustainably.



We were also the first company to develop products that not only offset CO₂ emissions but also do much more to protect the environment. These products are part of our journey toward becoming an environmentally neutral company: We have prepared comprehensive life cycle assessments for them, covering the five main environmental impacts from raw material procurement to disposal. With this knowledge, we can minimize our impact on the environment right from the start. In doing so, we do not only reduce CO₂ emissions but also the impact on the categories of eutrophication (the accumulation of nutrients in an ecosystem) – acidification, summer smog, and ozone depletion. In the third step, we compensate for these impacts in a “cause-related” manner and work on renaturation. Together with our partner HeimatERBE, we are enhancing former industrial sites with valuable biotopes to promote biodiversity and manage climate impacts.

How important are sustainable business practices and product ranges to customers?

These are very important to customers and are increasingly in demand in the retail sector in general. Surveys and studies have shown that we offer our customers the right products and services and that we come out top in these surveys. We offer sustainable alternatives in our product range, and it is always the customer who ultimately makes the choice. In doing this, we attach great importance to refining the trust our customers have placed in us.

How do you involve suppliers and partner companies in the dm sustainability strategy?

Being able to offer a sustainable product range only works with the right partners and suppliers. We have been working with our partner companies for many years because sustainability is just as important to them as it is to us. We have developed together and used our potential for improvement. We take an active approach to this, with all partners contributing their suggestions and initiatives. With the dm product journey, for example, we have created a transparency service that allows customers to trace the origin of a textile product without any gaps – across all stages, from raw material to finished product.

What challenges do you see for sustainable consumption currently and in the future?

Sustainability is a very complex topic that has an impact on a wide variety of levels. Everyone has different ideas of what sustainability means. Some focus on animal welfare or fair working conditions. For others,



*The Interview
was Conducted by
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sustainability is organic farming. Getting all these facets across to our customers is the real challenge. They should be able to shop and consume consciously, and we want to inform them about this without lecturing them. It's a question of communication and credibility. We work on this every day.

Another area of tension is current inflation, which is weighing on many people. The question here will be how it will influence customers' shopping behavior in the future.

Which research topics from the field of sustainability that you can investigate with NIM are of interest to dm?

When asked, almost all customers state that they would spend more money on sustainable products. So far, the substance of such statements is still lacking. It would be exciting to work with NIM to investigate exactly what offers motivate consumers and what information they want. We would like to understand much better how customers make decisions with respect to sustainability. ■



PUBLICATIONS 2022

at a Glance

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Freisinger, E., Unfried, M., Schneider, S. (2022). The Adoption of Algorithmic Decision-Making Agents over Time: Algorithm Aversion as a temporary Effect?, *ECIS 2022 Research Papers*, 82.

Gaspar, C., Dieckmann, A., Neus, A., Kittinger-Rosanelli, C. (2022). Voices of the Leaders of Tomorrow: Passing on the Baton? Transfer of Decision-Making, Priorities and Collaboration across Generations of Leaders. *Nuremberg Institute for Market Decisions and St. Gallen Symposium*.

Gerten, J., Zürn, M. K., Topolinski, S. (2022). The Price of Predictability: Estimating Inconsistency Premiums in Social Interactions. *Personality and Social Psychology Bulletin*, 48(2), 183–202.

Hesel, N. (2022). Neue Kanäle, neue Paradigmen und neue Player. *NIM INSIGHTS: Die Zukunft der Customer Journey (2022/2)*, 15–17.

Hesel, N. (2022). Künstliche Intelligenz – so kann sie wirkungsvoll zur Optimierung der Customer Journey genutzt werden. *NIM INSIGHTS: Die Zukunft der Customer Journey (2022/2)*, 18–20.

Hesel, N., Buder, F. (2022). Trends und Technologien, die zukünftige Kundenreisen prägen könnten. *NIM INSIGHTS: Die Zukunft der Customer Journey (2022/2)*, 5–13.

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Hesel, N., Buder, F., Unfried, M. (2022). The next Frontier in intelligent Augmentation: Human-Machine Collaboration in Strategic Marketing Decision-Making. *NIM Marketing Intelligence Review*, 14(2), 49–53.

Kaiser, C., Schallner, R. (2022). Shopping-Experimente: Warum Deep-Learning-Verfahren und künstliche Sprachassistenten Kaufverhalten analysieren helfen. *Jahrbuch der Marktforschung, BVM*, 2022.

Kaiser, C., Schallner, R. (2022). The Impact of Emotional Voice Assistants on Consumers' Shopping Attitude and Behavior, *Wirtschaftsinformatik 2022 Proceedings*.

Kaiser, C., Schallner, R. (2022). Wie künstliche Aufmerksamkeit menschliche Absichten formt. *NIM INSIGHTS: Die Zukunft der Customer Journey (2022/2)*, 32–33.

Stoltenberg, B., Unfried, M., Manewitsch, V. (2022). Better Product Labels for better Consumer Choices, *NIM Marketing Intelligence Review*, 14(1), 49–53.

Unfried, M. (2022). Chatbots – Kundenbindung oder Abschreckung? *NIM INSIGHTS: Die Zukunft der Customer Journey (2022/2)*, 34–35.

Zürn, M., Unfried, M. (2022). Markenzweck – Gutes tun und erfolgreich sein. *Markenartikel 10/2022*.

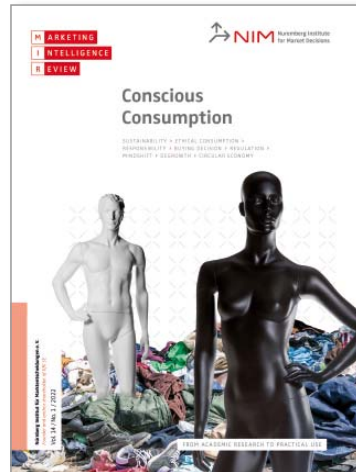


NIM Marketing Intelligence Review

Issues 2021



Issues 2022



Issues 2023



Our journal is published twice a year and is designed as a themed issue. Each issue focuses on a current topic in marketing and market decision making. The articles present academic research and findings that are translated for practical use. They provide marketing knowledge and impulses from top international experts for the marketing business – also with the aim of improving market decisions. All issues are also available in German.



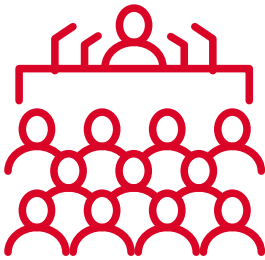


THE NIM AT CONFERENCES AND EVENTS

As part of scientific and practice-oriented research, NIM makes a significant contribution with presentations that make the latest findings known to the public and deepen discussions with experts. In 2022, NIM researchers were represented with contributions at many high-profile events. A small selection includes the following:

NIM CONTRIBUTIONS AT SCIENTIFIC CONFERENCES

Conference Name	Date/Place	Authors	Contribution Title
17. Internationale Tagung Wirtschaftsinformatik, WS 07: Conversational Customer Interaction: Dialog zwischen Praxis und Wissenschaft	02/20/2022 Online	Carolin Kaiser René Schallner	The Impact of Emotional Voice Assistants on Consumers' Shopping Attitude and Behavior
29th IPDMC: Innovation & Product Development Management Conference	07/17/2022 Hamburg	Matthias Unfried Elena Freisinger Sabrina Schneider	The Adoption of Algorithmic Decision-Making Agents over Time: Algorithm Aversion as a temporary Effect?
2022 European Conference on Information Systems (ECIS 2022)	06/18/2022 Online	Matthias Unfried Elena Freisinger Sabrina Schneider	The Adoption of Algorithmic Decision-Making Agents over Time: Algorithm Aversion as a temporary Effect?
Futures Conference/Finland Futures Research Centre	06/15/2022 Online	Fabian Buder	Radically Rethinking the Future – a Workshop Approach to overcome “Toxic Assumptions” in Organization
ISMS Marketing Science Conference 2022 (INFORMS Society for Marketing Science)	06/16/2022 Online	Nina Hesel Fabian Buder	The Role of AI in Strategic Marketing Decision-Making: How will Managers collaborate with Smart Machines – today and tomorrow?
Advances in Decision Analysis Conference 2022 (ADA)	06/22/2022 Hybrid: Washington DC, USA, and online	Nina Hesel Fabian Buder	The Future of Strategic Decision-Making: What will Human-Machine Collaboration look like on a Strategic Level?

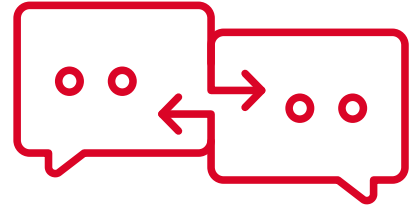


NIM CONTRIBUTIONS AT PRACTICE-ORIENTED CONFERENCES

Conference Name	Date/Place	Authors	Contribution Title
St. Gallen Symposium 2022	05/05/2022 St. Gallen, Switzerland	Claudia Gaspar Andreas Neus	Voices of the Leaders of Tomorrow: Passing on the Baton? Transfer of Decision-Making, Priorities and Collaboration across Generations of Leaders
Kongress der Deutschen Marktforschung 2022	06/20/2022 Frankfurt/ Main	Carolin Kaiser René Schallner	Shopping-Experimente: Warum Deep-Learning-Verfahren und künstliche Sprachassistenten Kaufverhalten analysieren helfen
Die Woche der Marktforschung 2022	05/11/2022 Online	Carolin Kaiser	Diskussionspanel: Künstliche Intelligenz – der große Game-changer für die Marktforschung?
Association of Professional Futurist (APF) Conference: Exploring Next – the Futures of Human Experience	06/22/2022 Online	Fabian Buder Nina Hesel	Human-Machine Collaboration in Strategic Business Decisions: Management Perspectives on the Role of AI in Strategic Marketing Decision-Making – today and in the Future
Marketing Club Nürnberg	09/20/2022 Nuremberg	Fabian Buder	Herausforderungen und Trends im Marketing – die Top-Management-Perspektive
Predictive Analytics World for Financial	10/05/2022 Berlin	Carolin Kaiser René Schallner	How Eye Contact with a Robo-Advisor shapes Investment Decisions
Research plus	07/19/2022 Nuremberg	Carolin Kaiser René Schallner	Verführt von Alexa: wie emotionale Sprachassistenten das Käuferlebnis beeinflussen
16. Mediensymposium	11/28/2022 Stuttgart	Carolin Kaiser René Schallner	Verführt durch Alexa?
16. Mediensymposium	11/28/2022 Stuttgart	Matthias Unfried	Past over Future, Threats over Opportunities?
KIT Adaptive Systems Talks	12/15/2022 Karlsruhe	Carolin Kaiser	Blickkontakt mit einem Roboter: Kann er unsere Entscheidungen beeinflussen?



INTERVIEW



NIMCon – The NIM Market Decisions Research Meeting

Three questions for Dr. Matthias Unfried, Head of Behavioral Science.

With NIMCon, Dr. Matthias Unfried has initiated a new format within the NIM event cosmos. In an interview, he explains what makes the new series special.

What makes NIMCon different from other events at NIM?

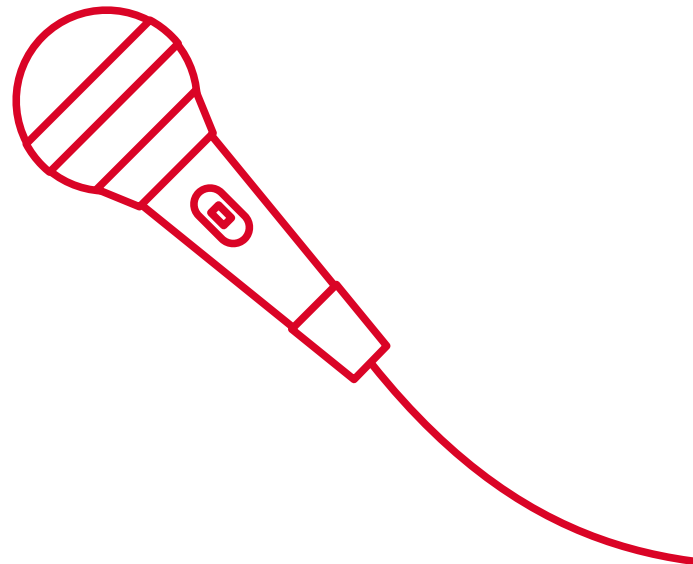
NIMCon is all about in-depth scientific exchange on the topic of consumer decisions on a broad, interdisciplinary basis. Here, researchers from universities and colleges as well as from non-university institutions come together to talk about the latest findings from (behavioral) economics, psychology, data science, and research on artificial intelligence – always in the context of our core topics around market decisions.

Who is participating in NIMCon?

Participants include renowned researchers as well as up-and-coming young scientists. Together with the experts at NIM, research results and innovative approaches with a focus on the topic of market decisions will be discussed.

What were your main topics at the start?

The first NIMCon took place at the end of September 2022 with the theme, “Behavioral Insights on Market Decisions.” The talks covered a wide range of topics, from the use of emoji in customer interactions to the advantages and pitfalls of using artificial intelligence in companies. We had top-class guests, all of whom provided us with many in-depth insights. ■



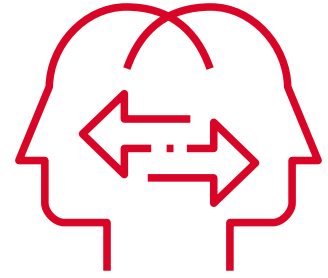
OUR SPEAKERS:

- **Dr. Thorsten Erle**
Assistant Professor, Tilburg University
Emoji in Online Consumer Contexts: Boon or Bane?
- **Dr. Elena Freisinger**
Assistant Professor for Innovation Management,
Ilmenau University of Technology
*Past Over Future? How Managerial Cognition of the
Past Shapes the Business Model Innovation Decision
for the Future*
- **Dr. Carolin Kaiser**
Head of Artificial Intelligence,
Nuremberg Institute for Market Decisions
How Artificial Attention Shapes Human Intention
- **Dr. Anand Krishna**
Post-doc Researcher, University of Würzburg
*Asymmetric Effects of Regulatory Focus on
Consumer Behavior*
- **Dr. Sven Laumer**
Professor for Information Systems,
particularly Digitalization in Business and Society,
Friedrich-Alexander-University Erlangen-Nuremberg
*Algorithms in Decision-Making:
Examining Individuals' Perceptions of Algorithms
That Aim to Balance Gender Ratios in Management*
- **Dr. Martin Matzner**
Professor for Digital Industrial Service Systems,
Friedrich-Alexander-University Erlangen-Nuremberg
*Mining Businesses Using Digital Trace Data for
Insights on Organizations and Human Behavior*
- **Dr. Jella Pfeiffer**
Justus-Liebig-Universität Gießen
*Conversational Agents with Voice:
How Social Presence Influences User Behavior
in Microlending Decisions*
- **Dr. Sabrina Schneider**
Professor for Management, Strategy, and Innovation,
MCI Management Center Innsbruck
*The Human-Algorithm Connection in Decision-Making:
In Whom We Trust*



- **Dr. Sascha Topolinski**
Professor for Social and Economic Cognition,
University of Cologne
Maybe Favors: Nudging a Better World
- **Dr. Matthias Unfried**
Head of Behavioral Science,
Nuremberg Institute for Market Decisions
*There's Fair and There's Fair –
Social Interaction Between Humans and Machines*
- **Dr. Tobias Vogel**
Professor, Darmstadt University
*Any Publicity is Good Publicity?
On the Relations Between Brand Exposure,
Brand Familiarity and Brand Attitudes*
- **Dr. Michael Zürn**
Researcher,
Nuremberg Institute for Market Decisions
*Responding to Market Disruptions with Innovation:
The Psychological Foundations of Threat Rigidity*

INTERVIEW



A Dialogue Between Science and Practice

How can science and practical application be merged?

We talked to two new employees who recently joined NIM about the challenges and opportunities of working at the interface of academia and practice. Before joining NIM, Nina Hesel worked as a marketing manager at NürnbergMesse GmbH and Bertelsmann and knows the demands of practice very well. Dr. Michael Zürn holds a PhD in Psychology from Julius-Maximilians-University Würzburg and worked as a postdoctoral researcher at the University of Cologne.

What market decisions have you made or studied in the past?

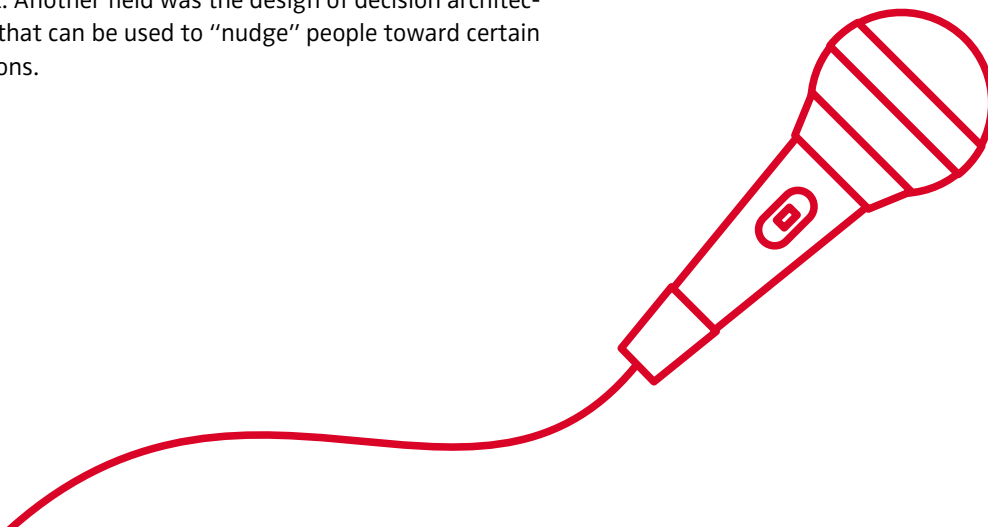
Nina Hesel: My field of activity was very communication-driven. It was mainly a matter of deciding how we could best reach our target groups, i.e., via which communication channels and with which messages. However, topics relating to branding and strategic brand positioning also fell within my remit. In the market research and business intelligence projects, the focus was on providing analyses to support decisions on the adaptation of products and the product portfolio as well as the right customer approach.

Dr. Michael Zürn: A central topic of my research so far has been trust, especially the rather intuitive formation of trust, for example, in purchasing decisions on the Internet. Another field was the design of decision architectures that can be used to “nudge” people toward certain decisions.

What were the opportunities and challenges in doing so?

Dr. Michael Zürn: The exciting thing about research is continuously being confronted with new impulses and exciting ideas. At the same time, you sometimes get the feeling that the questions you deal with have little relevance for people outside the academic ivory tower. Without question, solid basic research is very important. For me, however, it is even more fulfilling when the insights gained also resonate beyond the professional journals.

Nina Hesel: In my experience, the challenge in marketing practice is striking a balance between data-based decisions, creative brainstorming, and intuition. You want to inspire your target groups and pick them up emotionally, but of course, the whole thing should also be measurable. This is a big challenge, especially away from online channels. In addition, there are always new trends and technologies that can influence the behavior of the target group. It is important to maintain an overview in the midst of all the buzzwords and hype topics and to correctly assess the relevance of one's own business field. What is often neglected in the project- and deadline-driven daily routine is the opportunity to delve deeper and in a more theory-based way into interesting topics.





What topics are you researching at NIM?

Dr. Michael Zürn: The overarching theme is currently sustainability. For example, we are investigating how to get consumers to voluntarily offset the emissions associated with their market decisions. Another project focuses on the credibility and authenticity of sustainability claims (CO₂-compensated, microplastic-free, fair trade, etc.). I also continue to work on measuring brand purpose based on consumer perceptions.

Nina Hesel: I research how social and technological changes influence the decision-making of consumers and marketers. In my first projects at NIM, I worked on the role of artificial intelligence in marketing and the potential of metaverse applications for brands. In the future, I also see my focus being increasingly on the question of what role sustainability plays in consumer decision-making. One example of this is our current research collaboration with the drugstore retailer dm on the interplay between sustainable brand perception and purchasing decisions.

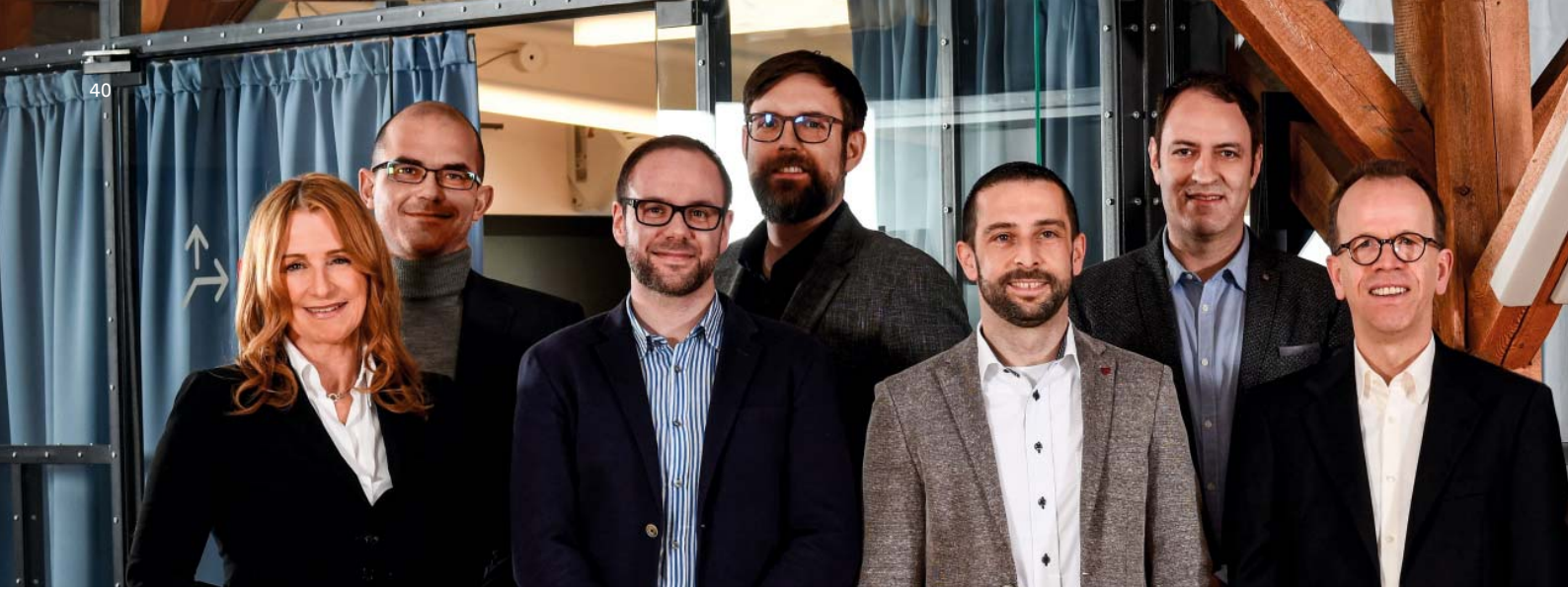
What role do your earlier experiences play today?

Nina Hesel: On the one hand, understanding how decisions are made in companies and what challenges decision-makers face in practice helps generate ideas for practice-relevant research projects. On the other hand, my experience as a marketing manager helps me speak a common language with marketing professionals in companies in order to create relevant insights for both sides – science and practice.

Dr. Michael Zürn: My methodological expertise in experimental research and data analysis allows me to design valid experiments that allow drawing correct conclusions. My experience also strategically enriches NIM's research, for example, by using my network from academic research to initiate new collaborations with academic research institutions. ■



**The Interview
was Conducted by
carolin.kaiser@nim.org**



Sandra Lades
Dr. Vladimir Manewitsch

Tobias Biró
Dr. Fabian Buder

Dr. Matthias Unfried
Sven Schmidt

Holger Dietrich

PORTRAIT OF THE NIM TEAM

Many renowned academics from a wide range of disciplines are part of the team conducting research at the Nuremberg Institute for Market Decisions. They are working to understand how better decisions can be made. In various projects, they are investigating how decisions made by consumers and companies change in the face of new technological and social trends and what are its consequences. NIM would not be able to act without a professional organization and administration team. Our dedicated professionals take care of matters such as membership administration, marketing and communications, contracts, and accounting.

Sandra Lades

Head of Communication and Events

The business graduate has many years of experience in marketing and press and is responsible for the communicative approach of NIM. She is also responsible for the organization of events.

Dr. Vladimir Manewitsch

Senior Researcher

He is a business economist and statistician who focuses on sustainable consumption and research of consumer decisions by analytical methods in the field of choice modeling and causal inference.

Tobias Biró

Research Communication Specialist

The political scientist is an expert in the field of communication of complex scientific topics. His main task is to prepare findings from research for practice and the mass media.

Dr. Fabian Buder

Head of Future & Trends

The sociologist and marketing researcher studies how technological innovations such as artificial intelligence (AI) and social trends such as sustainability affect decisions in markets.

Dr. Matthias Unfried

Head of Behavioral Science

The behavioral foundations of market decisions are the field of the economist. His focus is on influencing factors and their effects on the interaction between humans and machines.

Sven Schmidt

Head of Finance & Administration

The graduate of business administration has many years of experience in all major fields of finance management. In his previous positions, he drove forward topics such as internationalization and digitalization.



Dr. Michael Zürn

Dr. Carolin Kaiser

Dr. Christine Kittinger-Rosanelli

Nina Hesel

Jelena Ples

Birgit Stoltenberg

Dr. Andreas Neus

René Schallner

Claudia Gaspar

Holger Dietrich

Senior Researcher

The graduate statistician uses all types of models and methods for his research interests in modeling consumer preferences and advanced statistics and method development.

Jelena Ples

Office Management

The certified business administrator plans, coordinates, and organizes all administrative tasks of NIM. She also works on the further digitalization of our processes.

Dr. Michael Zürn

Researcher

He is a social psychologist and behavioral economist who mainly uses experiments to better understand how people decide, why they do things, and how behavior can be changed. He is particularly interested in the influence of comparisons on decision-making. Several of his current research projects focus on sustainability.

Birgit Stoltenberg

Senior Researcher

The business mathematician's main areas of expertise are mathematical models, statistical methods, and optimization. Her focus is on sustainability, especially on sustainable consumer behavior.

Dr. Carolin Kaiser

Head of Artificial Intelligence

The business informatics specialist is interested in the interface between humans and machines. Her research focus is on human-centered artificial intelligence, conversational user interfaces, and human-robot interaction.

Dr. Andreas Neus

Managing Director and Vice President

He is a psychologist and economist who is interested in how people can make better decisions using new technologies and with more transparency.

Dr. Christine Kittinger-Rosanelli

Managing Editor of the *NIM Marketing Intelligence Review*

In addition to her position as the managing editor of the *NIM Marketing Intelligence Review*, the business economist holds assignments as an undergraduate lecturer at the Institute for Marketing, Branding, and Retailing at the University of Innsbruck.

René Schallner

Senior Researcher and Technology Lab Manager

The computer scientist's research focuses on the interfaces between artificial intelligence, machine learning, robotics, and human-machine interaction in the context of decision-making in markets.

Nina Hesel

Researcher

The marketing expert conducts practice-oriented research into how technological and social trends influence market decisions. She is particularly interested in the areas of sustainability marketing and sustainable consumer behavior.

Claudia Gaspar

Head of Surveys

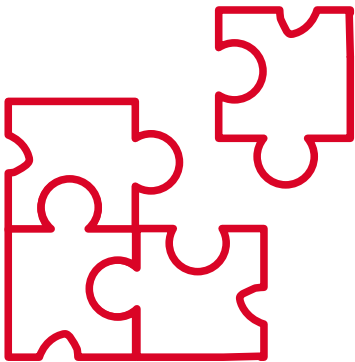
She is involved in all facets of research relating to consumption, consumers, and female consumers. Previously, she worked for many years in financial market and economic research at the GfK Group.

PARTNER- NETWORK



Contact us:
research@nim.org

OUR COOPERATION PARTNERS



Active exchange with experts from science and practice and intensive cooperation with researchers in Germany and around the world are anchored in the statutes and are key success factors for the work of NIM. NIM has a long tradition of cooperation with universities and innovation drivers in think tanks, and this will continue to play an important role in the future for new insights, exchange with the best experts, and transfer between science and practice.



AARHUS UNIVERSITY, SCHOOL OF BUSINESS AND SOCIAL SCIENCES – MAPP CENTRE

The MAPP Centre at the Business School of Aarhus University, led by Prof. Dr. Jessica Aschemann-Witzel, conducts research on customer behavior in the food and beverage sector and on the implications of these findings for industry and public policy. In joint research projects, NIM and MAPP are investigating, for example, how social nudges can change purchasing behavior and prevent unnecessary food waste and how sustainable packaging must be designed to make it easier for customers to make purchasing decisions in line with their values.



BAVARIAN FORESIGHT INSTITUTE, TECHNICAL UNIVERSITY OF INGOLSTADT

The Bavarian Foresight Institute focuses on technology-oriented future research, particularly in the areas of artificial intelligence, sustainability, and mobility, as well as on the associated economic and social interdependencies. The director of the institute is Prof. Dr. Jan Schwarz, with whom the NIM cooperates on several research projects. The focus is, for example, on the question of how methods of strategic foresight can be used to anticipate changes in consumer behavior and in the resulting corporate decisions.



CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS, PEKING

NIM cooperates with the Business School of the Central University of Finance and Economics (CUFE) in Beijing, China, in order to understand new trends in consumer behavior on a cross-cultural level. An experimental laboratory is operated jointly, in which, for example, the influence of factors such as social norms or anthropomorphism in human-computer interaction on purchasing decisions is investigated.



DATANIZING GMBH

A relatively new research partner is datanizing GmbH, a provider of automated solutions for AI-based analysis of large amounts of text data. Together with its founder, Prof. Dr. Christian Winkler, and Prof. Dr. Stefanie Scholz, Vice President of Research at the SRH Wilhelm Löhe University of Applied Sciences, NIM is investigating the connection between the purpose of brands communicated on the web and the purpose perceived by consumers.



DM-DROGERIE MARKT GMBH + CO. KG

The retailer dm-drogerie markt is Germany's top-selling drugstore. Sustainable action is an essential part of the company's self-image. In order to give customers the opportunity to consciously choose sustainable products, dm is continuously working on optimizing its assortment and dm-branded products. In a joint research project, NIM and dm-drogerie markt are investigating value-oriented purchasing decisions. The aim is to gain insights into which product characteristics lead to brands being perceived as more sustainable and to what extent this brand perception also influences customers' purchasing decisions.



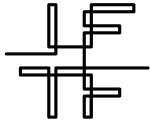
FRIEDRICH-ALEXANDER-UNIVERSITY ERLANGEN-NUREMBERG

Since 2007, NIM has been in cooperation with Prof. Dr. Nicole Koschate-Fischer from the GfK Chair of Marketing Intelligence. Since the expansion of the cooperation in 2022, NIM has also been cooperating with Prof. Dr. Sven Laumer, Schöller Endowed Chair for Business Informatics, as well as with Prof. Dr. Martin Matzner, holder of the Chair for Digital Industrial Service Systems.



UNIVERSITY ANSBACH

Together with Dr. Alexander Piazza, Professor of Digital Communication and Applied Artificial Intelligence at Ansbach University, the NIM investigates, how to design conversation-based recommendation systems with social robots which help consumers make purchasing decisions, provide meaningful support, and are perceived by them as useful and appealing. The focus is on the use of social robots in retail and in tourism.



INSTITUTE FOR THE FUTURE

INSTITUTE FOR THE FUTURE, PALO ALTO

The Institute for the Future (ITF) and NIM are cooperating as research partners and conducting joint research on topics such as the value of foresight for corporate market decisions and the future of corporate decision-making processes. The nonprofit think tank, based in Palo Alto, California, is regarded as the world's leading organization for foresight and future research.



JUSTUS-LIEBIG-UNIVERSITY GIESSEN

Together with the Chair of Business Administration, in particular, Digitization, E-Business, and Operations Management, headed by Prof. Dr. Jella Pfeiffer, NIM investigates issues around human-machine interaction and the voice-based customer journey. It is about emotions and the social exchange of experiences, the evaluation of methods for real-time measurement of emotions, and the effect of digital voice assistants on rational and emotional decisions.



KARLSRUHER INSTITUTE OF TECHNOLOGY

Together with the Chair of Business Informatics of Prof. Dr. Alexander Mädche at the Karlsruhe Institute of Technology (KIT), NIM is shedding light on the question of how the design of and interaction with a social robot influence consumers' purchase decisions for high-involvement products such as smartphones. The focus is on the difference between the emotional and rational behaviors of the robot-based sales assistant.



MCI MANAGEMENT CENTER INNSBRUCK

With Prof. Sabrina Schneider from the MCI Management Center Innsbruck, NIM is researching what role AI and algorithms can play in the innovation process of companies.



TECHNICAL UNIVERSITY OF ILMENAU

Together with Dr. Elena Freisinger, Junior Professor at the Faculty of Economics and Media at the Ilmenau University of Technology, NIM is investigating how trust in AI-based decision systems can be strengthened and how it can be regained after an AI-based algorithm makes a wrong decision. At the same time, joint research is being conducted into how perception influences decisions about business model innovations.



UNIVERSITY OF PRETORIA

Workshops and PhD seminars on experimental economics, decision theory, and behavioral science are part of the cooperation with the University of Pretoria, South Africa, that has been in place since 2012. In addition to teaching, the cooperation also includes research in the jointly operated Market Decision Lab.



UNIVERSITY DI SIENA

In a joint project with Prof. Alessandro Innocenti, Head of the Department of Social, Political, and Cognitive Sciences at the Università di Siena, NIM is researching how humanlike characteristics in digital assistants influence the decision-making behavior of people in a human-machine interaction. The research focuses on voice as a communication medium and on the effect of computer agents with virtual avatars.



UNIVERSITY ST. GALLEN

The University of St. Gallen – School of Business, Law and Social Sciences, International Relations, and Computer Science – is a partner in research on the prediction of behavior and decisions beyond the premise of rational behavior. With Dr. Martin Eppler, Professor of Media and Communication Management, NIM is investigating, for example, how cognitive biases work in management decisions and how they can be reduced.



TECHNICAL UNIVERSITY INGOLSTADT

In a joint research project with Dr. Michael Jungbluth, Professor of Artificial Intelligence in Consumer Commerce at Ingolstadt University of Technology, and Dr. Patrick Cato, Professor of Big Data Technologies at Ingolstadt University of Technology, NIM is researching the use of digital avatars at the stationary point of sale. Using the example of machine aggregation of available online reviews of a retail product from the consumer electronics sector, the project investigates how the stationary shopping visit can be improved with a novel digital touchpoint to support purchase decisions.



ST. GALLEN SYMPOSIUM

The St. Gallen Symposium is one of the world's leading initiatives for cross-generational dialogue on economic, political, and social developments. For more than fifty years, established leaders and visionaries have been brought together with exceptional young talent in St. Gallen and global locations. Since 2014, NIM has published the "Voices of the Leaders of Tomorrow" study in cooperation with the St. Gallen Symposium, giving voice to top talent and young professionals from more than eighty countries and focusing on key societal trends and intergenerational challenges.



TECHNICAL UNIVERSITY OF BRAUNSCHWEIG

In cooperation with Prof. Dr. Susanne Robra-Bissantz, Chair of Service Information Systems at the Institute of Information Systems at the Technical University of Braunschweig, NIM is researching the effectiveness of digital companions for consumers (so-called shopping companions) in shopping processes. The focus is on the question of the extent to which these can support consumers in shopping according to their own preferences.



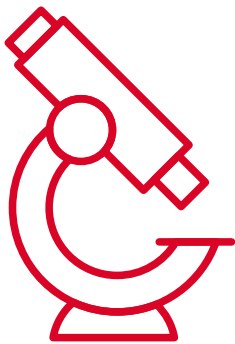
TILBURG UNIVERSITY

Together with Prof. Dr. Thorsten Erle from Tilburg University, the Netherlands, NIM is investigating the influence of emojis in the communication of sustainability in social media.

OUTLOOK 2023



Contact us:
research@nim.org



OUTLOOK FOR RESEARCH AND STUDIES 2023

Due to the end of NIM's austerity budget, which is valid until 2022, it is now possible to conduct representative studies on the topic of "consumer decisions" again, in addition to ongoing research in cooperation with partners from academia. A first step was taken with the new study series "NIMpulse," which now regularly generates findings on current topics in the field of consumer behavior and is also picked up by the popular and trade press.

OUR RESEARCH GENERATES INSIGHTS INTO HOW PEOPLE CAN MAKE BETTER DECISIONS

In a decade that the Intergovernmental Panel on Climate Change has called the Decade of Decisions, companies are faced with the gigantic challenge of reconciling entrepreneurial action with ever louder calls from society and politics for greater sustainability. At the same time, they must keep pace with radical technological developments in the field of artificial intelligence, which are gaining influence on market decisions of both companies and consumers.

Addressing the multiple challenges of an increasingly complex and uncertain decision-making environment, NIM's research aims to generate new and relevant insights into how people can make better decisions in markets. To this end, NIM's research this year will answer the question of how interactions with smart ma-

chines affect the market decisions of consumers and management decision-makers. In addition, NIM is analyzing consumer needs and influences on their decision-making behavior to support decision-makers in their efforts to create a more sustainable future. Furthermore, NIM investigates the reasons for systematic wrong decisions by market participants and develops decision support tools to improve decision quality. To answer these questions, NIM collaborates with strong partners from academia and practice.

PROJECTS PLANNED FOR 2023 INCLUDE:

- Projects**
- **Artificial intelligence at the point of sale: improving the customer experience in stationary retail through new interaction possibilities (in cooperation with Technical University Ingolstadt)**
 - **Sustainable brands: the relationship between product attributes, brand perception, and consumer decisions (in cooperation with dm-drogerie markt GmbH + Co. KG)**
 - **Better decisions in product development: attention allocation of experts and novices in idea selection (in collaboration with Technical University Ilmenau and Aarhus University)**

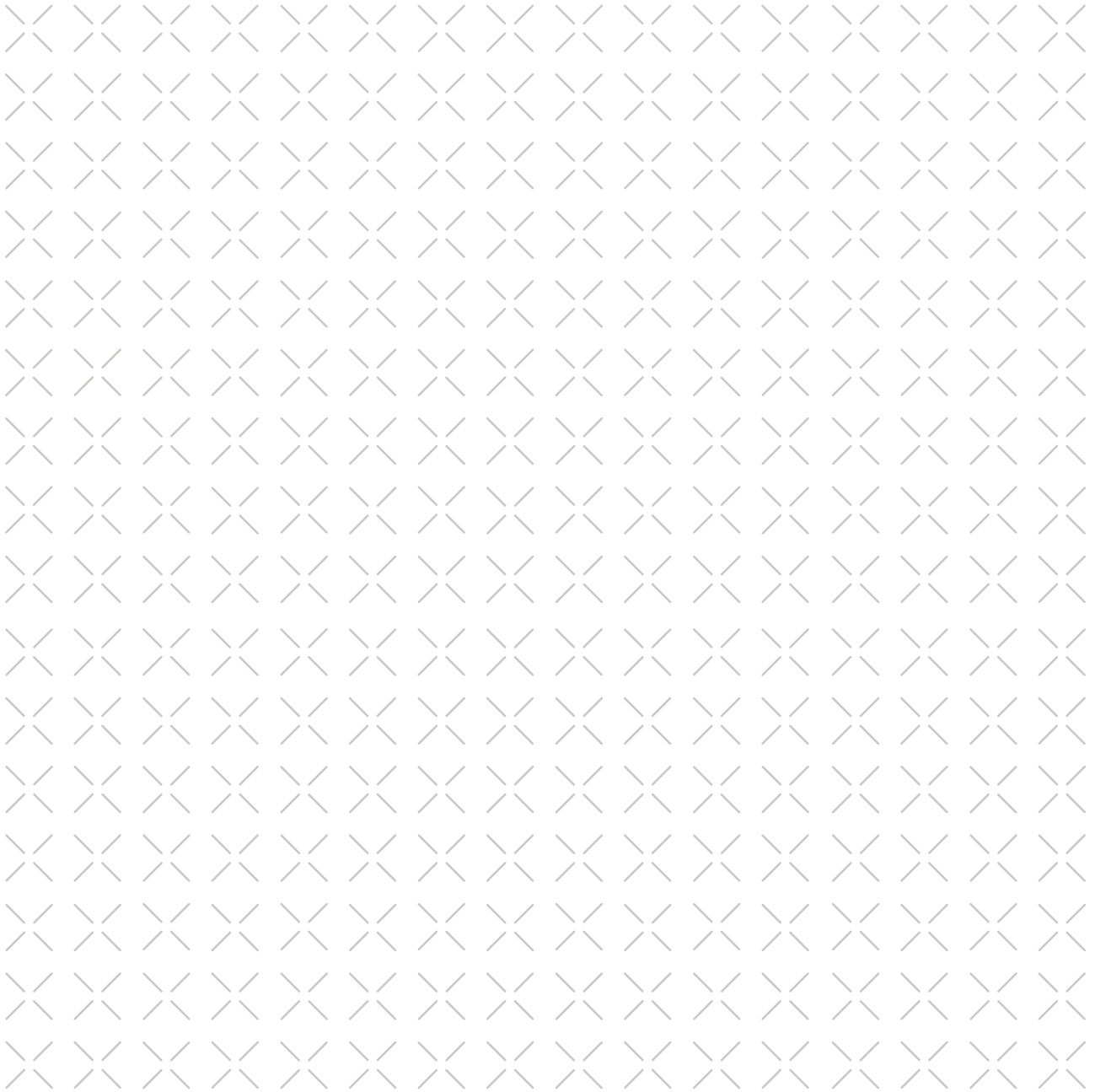
REPRESENTATIVE STUDIES GET TO THE BOTTOM OF DECISIONS IN THE CONTEXT OF CURRENT ISSUES

How do values in Christmas consumption go hand in hand with declining purchasing power and great uncertainty? What role does the best-before date play for consumers in the context of (avoidable) food waste? What requirements would a product have to meet in order to be credibly perceived as sustainable? These are the kinds of questions that NIM is addressing in its new "NIMpulse" series, which was launched at the beginning of 2023. The idea behind this is to regularly analyze attitudes representative of the population on current topics. The insights gained are intended to help consumers, corporate decision-makers, and political actors find their way in an increasingly rapidly changing world.

PROJECTS PLANNED FOR 2023 INCLUDE:

- Projects**
- **Consumer electronics: planned obsolescence and "right to repair"**
 - **Purchasing decisions and household constellations**
 - **CO₂ offsets: understood by consumers and accepted as a bridge**

We will kick off 2023 with a study on "Greenwashing vs. Greenacting," which will be presented at the NIM Market Decisions Day on July 5th. In 2023, we will also revisit the earlier longitudinal studies suspended during the austerity budget and examine how best to develop this valuable tradition methodologically and conceptually. In particular, this involves understanding consumers' attitudes, habits, and market choices – the why behind the what. To do this, NIM can draw on many years of experience in contrasting challenges from the perspective of consumers (challenges of nations) and the perspective of marketers (challenges of marketing). Our goal is also to enrich the socio-political dialogue.



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