NIM INSIGHTS

The Future of the Customer Journey

→ The NIM Research Magazine

Issue **2022/2**

CONTENTS

IMPRESSUM

EDITORIAL

Dear Reader,

The digital revolution has changed the way we shop—forever. The customer journey, i.e., the ''journey'' customers go on with brands across various touchpoints, has been increasingly shifting toward the Internet. This shift not only affects the purchase itself but has also begun to create new needs and extends to the development and cultivation of long-term customer relationships. With the advent of the mobile Internet, the connection of the physical world of in-store shopping to the digital world, and with the lockdowns in the wake of the COVID-19 pandemic, online shopping has achieved a breakthrough even among previously skeptical target groups.

And the next revolution is already underway. With the rapid technical advancements in the field of artificial intelligence (AI), the customer journey can become even more personalized and automated. Where will the journey lead from here, what do providers and customers have to prepare for, and where is there already a need for action today? And from the customer's point of view, the following question arises: How much freedom of choice will humans still have in the AI-dominated world of tomorrow?

These questions were discussed with top-class speakers at the NIM Market Decisions Day 2022. The topics addressed there also serve as the starting point for this issue of NIM INSIGHTS magazine, which provides an overview of the trends and developments that are important for marketing and business decision makers. We also highlight where successful companies are already using AI to optimize the customer journey and the obstacles and issues they face. Join us in taking a look back at the NIM Market Decisions Day 2022.
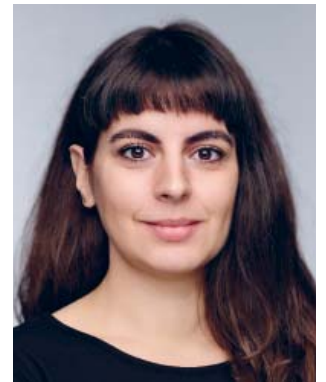
We wish you an exciting and entertaining reading of the insights on the ''Future of the Customer Journey.''

Dr. Fabian Buder
Head of Future & Trends Research

Nina Hesel
Researcher Marketing Insights & Strategy

THE FUTURE OF THE CUSTOMER JOURNEY: TRENDS AND CHALLENGES

→ → →

Trends and Technologies That Could Shape Future Customer Journeys

THE CUSTOMER JOURNEY UNDERGOES CONSTANT CHANGE

The core task of marketing is to build and maintain long-term relationships between brands and consumers. If you want to inspire customers with a brand and retain their loyalty, you have to keep a constant eye on the entire customer journey. This journey comprises the sum of all experiences that customers have with a brand across all touchpoints. These touchpoints include everything: from first contact with the brand, for example via an ad on social media, to the customer experience at the point of sale, the joy (or frustration) of using a product, the sharing of these experiences with other potential buyers, and the development of a long-term customer relationship. Companies need to take a

DEFINITIONS

→ **Trends** are developments that can already be observed, at least in their early stages, and are expected to have an impact in the medium- to long-term.

→ The **customer journey** is the sum of all experiences that customers have with a brand across all touchpoints.

holistic view of the customer journey and identify key moments that are crucial to the customer experience. And above all, they need to constantly optimize these "moments of truth" and continue to develop them in an agile manner.

That last point in particular is crucial. The web of touchpoints between suppliers and consumers is complex and subject to constant change. This applies not only to consumers' needs and desires but also to the way they interact with brands, how they use products and services, and how they share their experiences with other users. Changes in consumer behavior, media usage, or technological innovations can present new challenges even to previously successful customer journey management. It is therefore important to keep an eye on relevant trends and to consider them when optimizing the customer journey for the future.

For example, looking back over the last few years, we can see how the increasing use of algorithms in customer targeting is having more and more influence on which brands consumers shortlist for their purchasing deci-

sions. Online search results, for instance, are prefiltered by algorithms, and advertising displayed in the context of the search is often tailored to users based on tracking data. In addition, the expansion of online channels in communication and sales has led to greater complexity in the customer journey and more pressure to link the individual channels in the best possible way in line with the omnichannel concept. This development has been intensified by the COVID-19 pandemic and the resulting increase in the use of online and delivery services.

The exciting questions are now as follows: Where do we go from here? What trends are currently emerging that could shape the customer journey in the future, and what will that look like? There are many buzzwords surrounding marketing trends. And it is not uncommon for hype to flatten out again without having brought the disruptive change that was predicted. In order to provide some orientation and clarity in the jungle of market changes, we have identified eight trends with the potential to sustainably change customer journeys across industries.

EIGHT TRENDS THAT COULD SHAPE FUTURE CUSTOMER RELATIONSHIPS

On the corporate side, technological trends in particular are changing the way brands interact with (potential) customers.

1 SMART AUTOMATION OF THE CUSTOMER RELATIONSHIP THROUGH AI

Increasingly advanced algorithms are enabling companies to address their customers in a more personalized way along the entire customer journey with the help of artificial intelligence (AI), allowing them to create individualized offers in real time. The idea of one-to-one marketing, which was already being discussed before the early 2000s, involves addressing each customer individually and is now gaining new relevance thanks to advances in AI applications.

 Highly personalized product recommendations, with the right tone and message for the individual customer, are becoming theoretically possible thanks to AI. In this respect, large tech firms such as Amazon, Netflix, and Apple have already come a long way. With the huge amounts of data they generate, they can create highly personalized customer profiles, advertising measures, and product suggestions, among other things. In practice, however, very few companies have reached this level of maturity in the AI-based customer journey. This is because the use of AI across applications along the entire customer journey poses many challenges. Creating an adequate database, implementing appropriate algorithms and tools, realigning cross-departmental processes, and training and recruiting capable employees are just some of these challenges. However, it is important to address them in order not to fall behind and be outpaced by more digital competitors.

#Automation #ArtificialIntelligence #Personalisation #RealTimeMarketing

LEARN MORE

Article ''Artificial Intelligence: How It Can be Used Effectively to Optimize the Customer Journey'' in this magazine, p. 18

Article ''Challenges of Marketing Automation: Linking MarTech & SalesTech'' by Bernd Skiera, NIM Marketing Intelligence Review, Vol. 14, No. 2, 2022

2 NEW DIMENSIONS IN CUSTOMER DIALOGUE THROUGH CHATBOTS AND VOICE ASSISTANTS

For many people, communicating with computers via conversational interfaces is now a part of everyday life. For example, we experience this when we communicate via text input with a chatbot that greets us when we visit a website or deals with our complaint in customer support.

 Current advances in the use of AI to process natural language, known as natural language processing, will open up many new opportunities for dialogue between brands and consumers in the future. This is because communication via voice input will become even more intuitive when, for example, people use smart speakers or smartphones to interact with digital voice assistants (voice assistants or smart assistants) such as Alexa, Siri, or Google Assistant.

Voice assistants are already being used from time to time by 47 % of German Internet users, according to a study by Bitkom, and the trend is rising. Voice-based interaction between companies and customers with the help of intelligent voice assistants offers brands a wide range of opportunities in the context of voice marketing. Using their own applications such as Alexa Skills or Google Actions, they can inform customers about products, entertain them via entertainment applications, control smart household appliances, and, last but not least, enable them to purchase products directly via voice commerce.

But voice commerce in particular still faces numerous hurdles and raises unanswered questions about data privacy, user experience, and consumer trust. Only the future will show whether and in what form voice commerce can really establish itself and whether the currently propagated ''mobile first'' could become ''voice first'' in the future. At present, developments in this area are still very uncertain, as shown, for example, by the recent layoffs in retail giant Amazon's voice assistant division. Although the company was able to sell millions of devices equipped with its voice assistant Alexa, it is likely that too few users could be persuaded to actually buy goods via these devices.

However, the increasing use of voice assistants is already influencing the way companies now have to structure their content on the Internet in order to optimize it for voice search and voice output. Voice is opening up a whole new ecosystem with its own rules and implications for the entire customer journey and with the potential to permanently change how people search, compare, and shop online.

#ConversationalAI #VoiceAssistants #VoiceMarketing #VoiceSearch #VoiceCommerce

LEARN MORE

Article ''The Robot and I: The Rise of Hybrid Service Teams''
by Jochen Wirtz et al.,
NIM Marketing Intelligence Review, Vol. 14, No. 2, 2022

Talk ''Hacking the Customer Journey''
by Christian Hildebrand
at the NIM Market Decisions Day 2022

Study on the future of consumer technology 2022
by Bitkom (available in German only)

3 IMMERSIVE CUSTOMER EXPERIENCES IN REAL AND VIRTUAL SPACES

The use of augmented reality (AR) and virtual reality (VR) is increasingly leading to a fusion of analog and virtual shopping experiences. For example, with augmented shopping, customers scan a QR code at the point of sale to see product information. Or they use AR applications to project pieces of furniture into their own living rooms (try-out) or try on a pair of sneakers before making a purchase (try-on). The shopping experience is therefore becoming increasingly immersive and the boundaries between online and brick-and-mortar retail are becoming increasingly blurred.

When shifted completely into the virtual space, immersive retail experiences become completely free of physical boundaries. Previously, we saw this with gaming fans who went online to buy clothing for their avatars in the virtual space, not to wear it in the analog world. Now, more and more companies are investing in marketing activities in the so-called metaverse. The underlying idea is to create virtual worlds in which players interact with each other and their environment, possess virtual identities, carry out transactions, and create content themselves. For companies, this opens up a wide range of possibilities: They can offer hybrid or even completely virtual products alongside analog ones and create entirely new customer interactions and retail spaces.

Along the entire customer journey, the virtual space opens up new opportunities for communication and interaction with customers. There are many prestigious metaverse pilot projects from well-known companies, but the platforms that will prevail and what this will mean for marketing on a concrete level are still open questions. One thing is certain, however: Investing in immersive customer experiences means integrating new touchpoints into the customer journey, making it much more complex.

#ImmersiveTechnologies #VirtualReality #AugmentedReality #Metaverse

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Article "Metaverse Marketing"
by Thorsten Hennig-Thurau and Björn Ognibeni,
NIM Marketing Intelligence Review, Vol. 14, No. 2, 2022

Press release from car manufacturer Hyundai on virtual customer experiences in the metaverse
www.hyundai.com

Article "Marketing in the Metaverse: Conceptual Understanding, Framework, and Research Agenda" by Kevin G. Barrera and Denish Shah, Journal of Business Research, Vol. 155, 2023

4 GAMIFICATION OF THE CUSTOMER JOURNEY

Online games are no longer just a leisure activity for young target groups—they enjoy great popularity across almost all age brackets. Companies are aware of people's "gaming instinct" and have been using it for their marketing activities for many years. In the past, the focus was primarily on in-game advertising, i.e., ad placement in online games, and so-called advergames, i.e., games specially developed to promote a brand.

Other new forms of game-based marketing are currently gaining ground. Serious games, for example, are particularly well suited to imparting knowledge by focusing on the educational aspect. They offer companies the opportunity to train employees or inform customers about topics such as sustainability. The broad trend of gamification has particular relevance for future-oriented marketing. Through gamification, marketers can use typical game elements for their marketing activities, e.g., tasks to be completed (quests),

measurements of success based on rankings and scores, and users' constant drive to reach the next level. The goal: to increase awareness, engagement, and customer loyalty. Gamification thus involves more than using game mechanisms for purely advertising purposes. A quiz, for example, can convey information in a fun way while generating relevant user data. Or a minigame can directly boost sales by allowing customers to play for discounts in the online store.

Moreover, gamification offers the opportunity to transfer positive emotions generated during the gaming experience to one's own brand, thus ultimately improving the customer experience. The areas of application seem endless—and the positive prospects for customer interaction are far from exhausted. AR and VR offer promising opportunities in this area to make customer experiences even more immersive. The connection of this trend with the metaverse is particularly interesting. We expect that the latter will be permeated by gamification mechanisms that adapt to users in a data-driven manner.

#Gamification #UserEngagement #Metaverse

LEARN MORE

Article in the magazine "planung&analyse" with many gamification practice examples,
www.horizont.net (available in German only)

Article "What is the Metaverse?"
by McKinsey & Company,
www.mckinsey.com

Article "2022 Digital Media Trends, 16th Edition: Toward the Metaverse" by Deloitte,
www2.deloitte.com

5 INTENSIFIED COMPETITION FOR CUSTOMER ACCESS

The power of the big platforms is still unbroken. Google, Amazon, and Facebook, in addition to their original respective functions as a search engine, online retailer, and social network, are also media companies that earn money via advertising on the platforms and control access to information, for example by letting algorithms optimize the appearance and the order of displayed options for users. Companies such as Meta, PayPal, Klarna, and Snapchat are also trying to expand their services and create so-called super apps, where a single multifunctional app contains wide-ranging functions. For example, users can obtain information, obtain experiences of products and brands, make purchases, and pay and contact vendors, all in one app. This means new sales channels for both suppliers and retailers, but crucially also a loss of direct contact with their customers.

These already familiar challenges are currently being further intensified by additional bottlenecks in customer access. For example, voice assistants with highly restricted search lists that are tied to individual platforms' ecosystems represent new barriers to access to (potential) buyers, even for established brands.

Another development influencing access to potential customers is the boom in the so-called subscription economy. More and more companies are trying to keep their customers in their own ecosystem via subscription models. Marketers are therefore increasingly faced with the challenge of gaining access to their target groups and to relevant customer data in the first place.

Looking at the FMCG market, we can also observe how new players are entering the market in the form of delivery services such as Flink and Gorillas. They pose high barriers to entry even for established brand companies as they offer only a very limited range of products.

It will be exciting to see which channels succeed and establish themselves in omnichannel sales and marketing in the long term.

#PlatformEconomy #WalledGardens #SubscriptionEconomy

LEARN MORE

Article ''New Channels, New Paradigms, and New Players'' in this magazine, p. 15

Talk ''I Think, Therefore I Buy'' by Dirk Ploss at the NIM Market Decisions Day 2022

Article ''PayPal Wants To Be A Super App'' by Ron Shevlin, www.forbes.com

On the consumer side, desires, preferences, and behaviors are changing, and this impacts how companies can best reach their customers and create positive experiences at brand touchpoints.

6 NEW MEDIA USE: MOBILE, SOCIAL, SNACKABLE

Driven by the media use of Gen Z (born between 1995 and 2010) and Gen Alpha (born after 2010), companies must prepare for lasting changes in communication with their customers. The trend toward mobile first, the use of the smartphone as the main access point to online services, remains unbroken. The time consumers spend on their smartphones continues to rise. In Germany, according to a study by data.ai, people spent an average of 3.4 hours a day on their phones in 2021. In 2019, it was only 2.6 hours. So it is important for companies to optimize communication and the shopping experience for the small screen. But what else is changing besides mobile screen time?

First, people's attention spans are decreasing. This means that short, attention-grabbing content, so-called snackable moments, helps keep people's attention. Video content is a must for staying relevant in social media. Here, too, the maxim is short, to the point, and catchy—just right to generate those snackable moments. The popularity of short videos on TikTok and Instagram reels reflects this trend.

Second, more and more parts of the customer journey are shifting to social media. For example, social commerce—buying directly via social networks—is becoming increasingly popular among consumers. On some networks, as they scroll through their newsfeed, getting inspiration from friends or influencers, they can make purchases directly with just a few clicks within the platform. Social commerce is already very popular, particularly in Asia, but shopping on social networks is also on the rise worldwide. Two billion users are said to have already made at least one direct purchase via social media. According to forecasts by management consultants Accenture, sales from social commerce could almost triple from 2021 to 2025 to reach as much as USD 1.2 trillion. If the purchase is concluded via social media and not, for example, the company's own web store, this results in further touchpoints that need to be analyzed, monitored, and integrated into the existing customer journey management. In addition, customer contact is shifting even further into the spheres of large platforms' ecosystems and making providers even more dependent on them.

#MobileFirst #SocialMedia #SocialCommerce #VideoMarketing

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Talk ''To Hope Is Not a Strategy''
by Stefan Wenzel
at the NIM Market Decisions Day 2022

Study ''State of Mobile 2022''
by data.ai (2022)

Study ''The Future of Shopping and Social Commerce''
by Accenture (2022)

7 INTELLIGENT ASSISTANTS AS PERSONAL SHOPPERS (MARKETING TO MACHINES)

While companies are increasingly able to use AI to address customers in a personalized manner, AI-supported smart assistants are also taking over parts of the purchasing decision for consumers. The prerequisite for this is that smart assistants are not perceived as ''manipulation machines'' but as helpful support in the jungle of choices. Smart assistants such as Amazon's Alexa already allow the (partial) automation of purchases.

Going one step further, companies have to prepare for marketing to machines. They must bear in mind that in many places their communications will no longer reach human customers directly and must therefore be optimized for their smart assistants, intelligent refrigerators, or other smart home devices. This results in a certain tension—people want to be addressed with emotional messages, while algorithms require data that is as structured and machine-readable as possible. The challenge for companies is therefore to consider and optimize communication along the customer journey with regard to both target groups.

#SmartAssistants
#MarketingToMachines

LEARN MORE

Article ''Marketing to Machines –
When AI Becomes the Customer''
in this magazine, p. 40

Blog post ''Marketing to Machines: What It Is & How You Can Use It in Your Company'' by Steven Van Belleghem, www.stevenvanbelleghem.com

8 SUSTAINABILITY AS AN IMPORTANT FACTOR IN PURCHASING DECISIONS

Ecological ingredients, packaging made from recycled materials, and CO_2-neutral delivery—these are the demands of a growing number of consumers. Sustainable consumption, and thus the protection of humans and the environment, is increasingly becoming a crucial purchasing criterion. Above all, this is likely to change which products and services are purchased, what information must be given priority in customer communication, and what prices or, in particular, what price premium customers are willing to pay.

The way in which products are acquired and used is also changing. For example, products, whether e-scooters, desks in co-working spaces, or software licenses, are increasingly only being borrowed or rented for a limited period instead of being acquired as property. In addition, some companies are focusing more and more on ways to reuse and recycle resources. Fashion brands, for example, offer services such as re-dyeing, repairing, recycling, or reselling clothing as second-hand fashion.

In addition to the demands of consumers, the trend toward sustainability is also being driven by the fact that more and more companies are striving to fulfill a corporate purpose that goes beyond profit, and by stricter political regulations. It is important that companies incorporate the topic of sustainability strategically and implement and communicate it credibly and authentically. Greenwashing does not help anyone; what is needed is long-term and consistent corporate commitment.

#Sustainability #GreenMarketing
#ConsciousConsumption
#SharingEconomy #CircularEconomy

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Issue on ''Conscious Consumption''
of NIM Marketing Intelligence Review,
Vol. 14, No. 1, 2022

Book ''Sustainability Marketing: A Global Perspective''
by Frank-Martin Belz and Ken Peattie, 2012 (2nd edition),
Wiley

Book ''Sustainable Marketing – A Holistic Approach''
by Mark Peterson, 2021 (2nd edition),
SAGE Publishing

PREPARING FOR THE CUSTOMER JOURNEY OF THE FUTURE

The customer journey is becoming increasingly complex due to new communication and sales channels. New technologies offer companies endless opportunities to make their customer interactions more data-driven, personalized, and intuitive across all touchpoints. Above all, it is important to keep an eye on wishes and needs on the consumer side and to account for changes such as the increasing focus on the mobile use of online services, entertaining social content, the growing use of smart assistants, and consumers' increasing focus on sustainability.

But which trends should companies address first? In the graphic below, we aimed to divide the presented trends into three categories reflecting the pressure to act from a cross-industry perspective: trends with acute need for action (ACT), trends for which concrete preparations should be made (PREPARE), and developments that do not need action now but should be observed and tracked (WATCH).
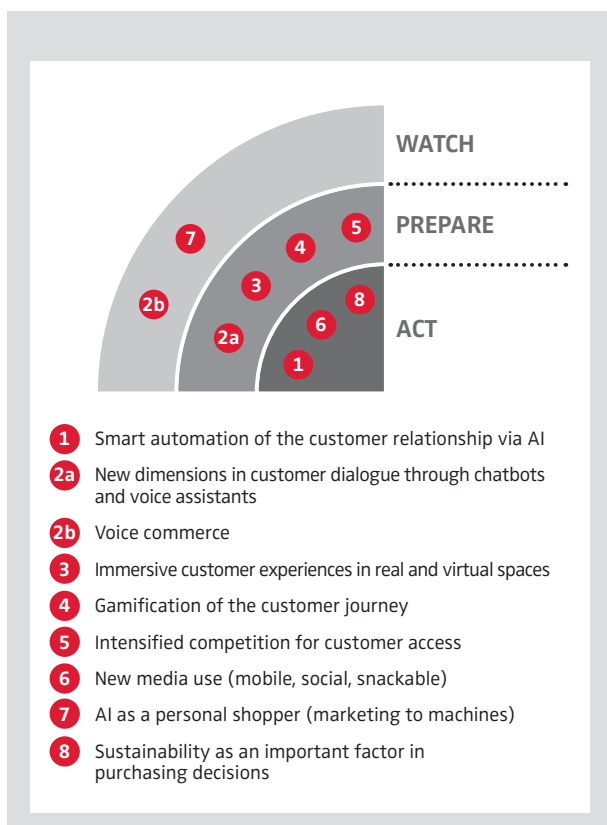
But of course, the relevance of trends is highly dependent on the industry, product, and business model. So it is essential that companies stay constantly informed about current developments in order to identify potential challenges for their own customers' journeys at an early stage. For each identified trend, it is important to ask yourself the following questions:

- **What influence does this trend have on the customer journey and the individual touchpoints?**
- **What opportunities and risks arise from this trend?**
- **In what time horizon will this trend unfold?**

On this basis, it is possible to prioritize which trends marketers and top management should act on immediately and which developments they can continue to observe for the time being.

To sum up, in general, in addition to establishing holistic customer journey management with regard to the current customer journey, it is an absolute must for companies to keep an eye on trends that could disrupt this journey in the future. ■

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1 Smart automation of the customer relationship via AI
2a New dimensions in customer dialogue through chatbots and voice assistants
2b Voice commerce
3 Immersive customer experiences in real and virtual spaces
4 Gamification of the customer journey
5 Intensified competition for customer access
6 New media use (mobile, social, snackable)
7 AI as a personal shopper (marketing to machines)
8 Sustainability as an important factor in purchasing decisions

THE FUTURE IS ALREADY HERE: WHY MARKETING MUST ACT NOW AND HOW

→ → →

New Channels, New Paradigms, and New Players
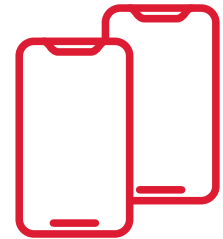
How can target groups still be reached in the future?

Media usage and consumer behavior have changed dramatically in recent years. The massive consequences of this for the customer journey have not yet been internalized by many organizations. This can threaten the very existence of a company.

Stefan Wenzel, Independent Advisor and former CEO of eBay Germany, sees marketing teams under permanent stress. Whether it is new technologies like virtual and augmented reality or the promise of Web 3.0, the task is to keep these trends on the radar and assess their relevance for one's own marketing activities. But more profound changes, such as the increasing shift of user interactions to digital channels, especially to mobile devices and social media, still pose major challenges for many marketers. They need to assess the impact on the customer journey of their own target groups and—if necessary—take action.

MOBILE IS KING: MEDIA USE IS SHIFTING TO THE SMALL SCREEN

Today's consumers are predominantly using mobile devices. On smartphones and similar devices, they research products, get inspired, and buy the goods that have convinced them. Whether waiting at a bus stop or looking at the second screen while watching TV, here and in many other places, people are looking for entertaining experiences and quick, amusing encounters with brands and products. As a marketing team, it is important to design these snackable moments to attract the attention of the target group at precisely these moments throughout the day and to stay in touch.

NOT ALL SOCIAL MEDIA IS THE SAME

When it comes to these snackable moments, social media—not just in the sense of social commerce—plays an increasingly relevant role. But along with opportunities, social networks also offer challenges. These networks are themselves subject to constant change. Social media platforms that are heavily used today may be obsolete tomorrow and abandoned by target groups with purchasing power; just two prominent examples of this are Myspace and Clubhouse. In addition, the structure of user groups is changing. Whereas a few years ago the youngest were on Face-

book, now it is predominantly their parents' and grand-parents' generations.

An essential point for successful platform use is an understanding of how the platforms work. Users click according to their individual interests, but the algorithm of the respective platform decides what they see. How these algorithms make their decisions in detail is difficult for advertisers to track and is also constantly changing. The platforms usually optimize content feeds purely according to engagement and stickiness—the length of time a visitor stays on the platform—in order to monetize their activities in the best possible way. According to Stefan Wenzel, this "game" needs to be understood because the algorithms do not always decide according to the advertisers' wishes.

INTENSIFIED COMPETITION FOR CUSTOMER ACCESS

The rise of new social media networks such as TikTok and the entry of other players into the upper levels of the marketing funnel[1] are intensifying the competition for quick access to customers.

Online marketplaces like Amazon and retailers like Zalando and others are also fighting for customers' attention. In addition, payment services formerly launched as single-purpose apps are striving to cover large parts of the customer journey in the future as super apps, thus further drawing their users into their ecosystem. The question of how companies can secure access to customers in the future is pushing many marketing teams and the sales infrastructure of companies to their limits.

FOMO IN THE MARKETING TEAM

On top of this comes FOMO, the fear of missing out, of not recognizing important developments in time and missing an opportunity. The consequence of this FOMO effect, also experienced by users, is that marketing often jumps on bandwagons in the competition for customer access without really being familiar with the mechanisms of the respective platform. Or, in its overzealousness, the marketing team relies on platforms that do not fit the brand. TikTok, for example, is essential for reaching Gen Z, but many brands and prod-

Stefan Wenzel
Hoffen ist keine Strategie – die Zukunft der Customer Journey ist heute
5. Juli 2022

Pitch

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[1] The marketing funnel refers to the representation of the ideal-typical buying process of (potential) customers from the company's perspective. This is the fundamental difference to the customer journey, which places the customer perspective in the foreground. The shape of the funnel was chosen because the number of customers decreases with each phase.

In the awareness phase, there are many potential customers, not all of whom can be transferred to the consideration phase. In turn, fewer can be converted into buyers (conversion phase), retained in the long term (retention phase), and made advocates for the brand (advocacy phase). Therefore, the marketing funnel becomes narrower from stage to stage.

ucts do not really do well there. If they do not fit into the strategic direction of the company or if the team does not have the necessary expertise, not all social media channels should necessarily be used.

TAKE ACTION NOW—
BUT DO IT RIGHT!

Hoping for a sudden standstill in developments is not a strategy. What is needed is decisions and measures that address the changes described. It is therefore essential to understand that "online" is not a single channel. Each individual online or social media platform is its own channel and must be used and optimized accordingly while following the respective rules of the platform. Stefan Wenzel gets nervous when he hears marketers say things like "We do 360-degree campaigns and present the artwork in the appropriate format on the individual channels." According to him, that falls far too short. Vertical optimization of marketing measures must be carried out across the entire marketing funnel, and this requires teams of experts with specialized know-how of individual concepts.

"BUSINESS AS USUAL" IS NOT A SOLUTION,
BUT A PROBLEM

The customer journey is and remains highly dynamic. Rapid changes radically increase the pressure on companies to adapt. The previously valid management and marketing strategies fall short, given this new complexity and increased speed. Straightforward thinking, linear explanatory models, and inflexible management that is unwilling to adapt are not a solution in a highly dynamic and volatile world, but a major burden for companies.

To hope is not a strategy, so Stefan Wenzel's call is to act now because speed is the decisive factor here. "Speed matters," says Wenzel, and speed takes precedence over perfection when it comes to successfully managing this extensive change process in marketing. The challenge is great, but so is the opportunity for innovation and success. ■

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*"It's about,
managing
each platform
in a vertically
optimized way."*

Stefan Wenzel
at the
NIM Market Decisions Day 2022

On the other hand, it is crucial to work together across functions and to always think through marketing processes from the customer's point of view. It can help to slip into the role of your own customers, i.e., to regularly go through the customer journey yourself as a consumer, and thus experience their possible gain and pain points first-hand.

THE KEY LEARNINGS

Key learnings from Stefan Wenzel's talk:

→ The leading media are mobile and social—if you don't happen there, you don't happen at all.

→ "Online" is not a channel—each online platform is an independent channel with its own rules.

→ A high degree of cross-functional specialization per platform is crucial for marketing success.

→ Operational excellence of the marketing team is critical to success, not necessarily the use of the latest technologies.

→ #eatyourownlunch: Becoming a customer of your own brand on a regular basis offers real aha! experiences.

→ Speed is better than perfection: So get going and act now!

Artificial Intelligence:
How It Can Be Used Effectively
to Optimize the Customer Journey

The new world of shopping sounds seductive: Thanks to optimization by artificial intelligence (AI), everything is perfectly tailored to the wishes and needs of customers. Every single customer journey is a genuine and unique experience.
All processes in a company are optimally aligned to this end and run automatically and cost-efficiently. However, the reality of the situation often looks quite different. What is preventing companies from relying even more heavily on AI, and how can the various challenges be overcome?

The traditional model of the customer journey describes a simple, linear path from initial contact with a brand to an actual purchase all the way to post-purchase customer loyalty. In the digital world, however, this simple pattern no longer applies. Linear processes are being replaced by complex interactions across different channels and touchpoints. The magic word for the success of companies in this context is personalization. In other words, potential and current customers must be addressed via their preferred channels—whether the channels be online or offline—in a manner that corresponds to their personal preferences through individual and tailor-made offers. From the company's point of view, this would work best if automated. The use of intelligent algorithms promises the solution here.

A MULTI-LAYERED RELATIONSHIP
BETWEEN A COMPANY AND ITS CUSTOMERS

However, the new possibilities of an AI-based customer journey pose major challenges for many companies. And there are many organizations that do not consider themselves optimally prepared for this development.

Talk "Are Companies Prepared for the
Customer Journey of the Future?"
by Jenny Fleischer
at the NIM Market Decisions Day 2022

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Customers who follow recommendations for related products and apparently suitable accessories for goods they have already bought online are often disappointed. One of the reasons for this disappointment might be that some of these products were already purchased in the past or the system just offers something that is almost identical again. Conversations with supposedly helpful employees who turn out to be chatbots with limited communication skills can also lead to frustration. In short, disappointment is literally pre-programmed.

MIND THE GAPS IN THE PROCESS

The source of negative customer experiences often lies in the marketing operations gap. A high level of complexity in the individual sales and communication channels as well as great efforts to control them are offset by insufficient capacities in marketing departments. In short, requirements and processes exceed resources. This is where intelligent automation for process support can help.

Jenny Fleischer, CEO of babymarkt.de GmbH, has been working on the integration of AI systems into marketing for many years. Even though companies are increasingly addressing the issue, not everything works smoothly in practice. For example, sometimes the AI offers the wrong accessories for ordered products or advertisements appear in completely inappropriate editorial environments that are guaranteed not to encourage clicks. Why does this happen? According to Fleischer, the main causes are the lack of a proper database, the incomplete evaluation of it, and a lack of system integration.

## FOUR KEY SUCCESS FACTORS FOR AI IN DATA-DRIVEN MARKETING

A database and its structure are extremely important but are by no means the only keys to an all-round successful customer journey. For Jenny Fleischer, the efficient and effective use of AI is based on four success factors:

- **First – Love your data:** With the large amount of data available, it is essential to always keep an eye on the big picture and to know the relevant correlations in the buying behavior of customers. Then the AI must be constantly "fed" with data according to predefined criteria. However, even great amounts of relevant data are not enough for AI to make accurate predictions and appropriate recommendations if this data is purely related to the past. Therefore, human and machine interaction is needed. Employees contribute their expert knowledge, experience, sense for changing trends,
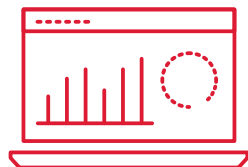
intuition, and creativity, and smart algorithms contribute their computing power.

- **Second – Organize:** AI does not work on its own. It requires clarification about some fundamental questions about customers. The data must also be linked in a meaningful way and the company's organizational units and their tasks along the customer journey must be cross-functionally connected and controlled. Otherwise, AI will only be optimized in its respective individual area, similar to a silo, and not across multiple areas. It is essential that this process of linking different data sources and AI tools remains in the hands of the company in order to retain sovereignty over the data and to prevent its misuse by external parties.
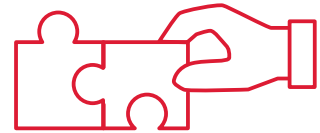
- **Third – Crawl, walk, run:** Effectively integrating AI is a lengthy process. It resembles a marathon rather than a sprint. That's why the basics are elementary and the various degrees of personalization must be tested, from single-message mailing to rule-based segmentation and behavioral recommendations to the supreme discipline of a completely personalized customer journey based on a personal ID. The adjustments to the variables must be made as singular measures and in separate test stages. Another crucial point is that the AI must not learn or develop faster than the employees who control it. Here, too, people must remain involved during all the automation and keep an eye on the big picture.

- **Fourth – Empower:** Corporate culture is crucial. An important guarantor of success is the involvement of all employees—not just those members of staff who are directly involved with AI. It is critical that the team members who communicate directly with customers are involved. Using AI takes companies beyond the typical thought models adopted by traditional companies as it requires a continuous focus on hiring and equipping employees with the necessary skills to work with those new technologies. AI invites a plethora of new questions: Do the existing teams still fit into the organizational environment or do they need to be further developed or restructured? How do I root out the employees' aversion to new
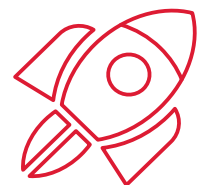
technologies and how do I motivate them to remain constantly curious in order to provide the best customer experience?

If diversity is taken seriously in a company, then this will be a great advantage when working with algorithms. It makes it easier to prevent or detect biases in AI at an early stage. AI biases can occur due to an already biased database or its incorrect processing. In the worst-case scenario, they are damaging to the brand. A diverse team will help prevent this through its different perspectives and skills.

THE KEY TO SUCCESS LIES IN
THE COLLABORATION BETWEEN AI AND HUMANS

Basically, there are two limiting factors for the successful use of AI in optimizing the customer journey: humans and algorithms. The use of AI is therefore always about optimizing processes and interfaces. In other words, it is primarily about identifying data points that can be matched and defining criteria that can be meaningfully differentiated. The goal must be to avoid data discontinuities in order to constantly optimize marketing for a customer journey that both companies and consumers want. "We're only about 1% of the way there," says Jenny Fleischer. "There's still a lot to learn—even for AI." ■

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Nina Hesel
Researcher Marketing Insights & Strategy
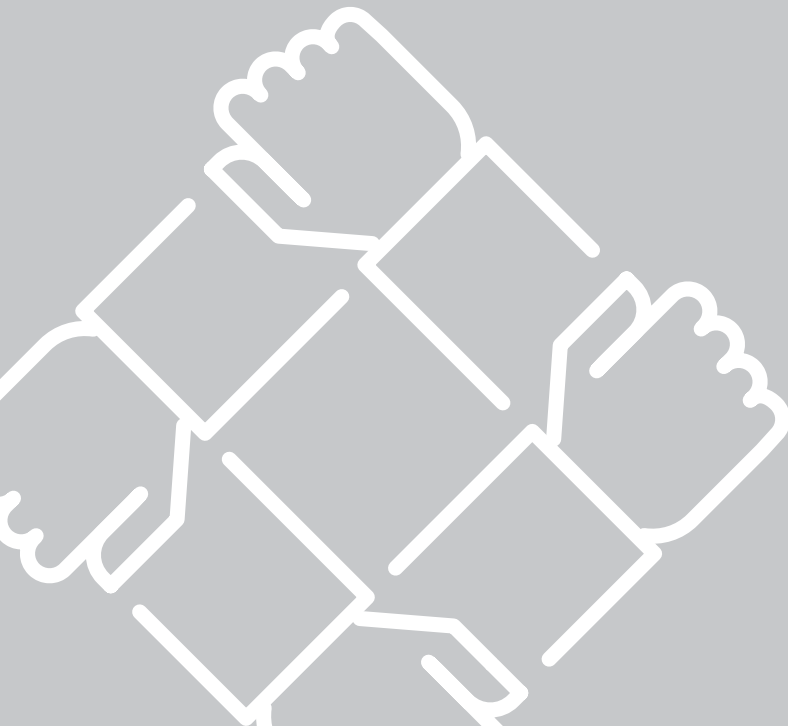*nina.hesel@nim.org*

INTERVIEW

"People Require
Better Communication"

AI in practice:

Jenny Fleischer, CEO of babymarkt.de GmbH, on opportunities and challenges

WHAT ARE THE BIGGEST BARRIERS WHEN
IT COMES TO USING AI?

The greatest challenges for the successful use of AI are a properly managed database with an appropriate structure for AI applications and the targeted linking of individual applications. This is the only approach that really allows the process to be automated along the entire customer journey. However, this data is not available in many companies, or at least not in the required quality. At babymarkt.de, we rely almost exclusively on our own customer data and less on the data of the major GAFA platforms (Google, Apple, Facebook, and Amazon). We accompany our customers primarily during the phase of becoming new and young parents, rather than across all phases of life. The resulting constant evolution of and change in our customer base offers an opportunity in terms of data—we are constantly generating new cus-

tomer data, touchpoints, and customer profiles that we can restructure according to our requirements so that we can continue to learn from the data.

WHAT ROLE DO CHATBOTS PLAY IN CUSTOMER SERVICE AT BABYMARKT.DE?

The experiences and expectations of customers are very diverse. In our case, for example, we have parents-to-be and people who are already parents. Responding correctly while in direct contact with these customers is a real challenge. Chatbots are a critical hurdle for the enterprise in this regard.

While chatbots and automated system emails can help with simple questions and standardized processes such as the timing of parcel deliveries, complaints, for example, are often very complex cases. It gets even more difficult when it comes to product defects that require the involvement of other parties, such as suppliers, to resolve. AI simply cannot handle that yet. Here, humans still find better solutions—especially those with a positive mindset. AI is, therefore, well suited for dealing with simple cases and standard situations, but humans still handle complex individual cases better. What all cases have in common, though, is that people require better communication.

WHAT WERE THE REASONS BEHIND BABYMARKT.DE'S EARLY AND STRATEGIC USE OF AI?

It was due to our corporate culture; permanent development is in our DNA. babymarkt.de was fully digitally oriented from the very beginning. Our team is made up of young, motivated employees from all over the world who add value through their different ways of thinking. There is no limiting legacy thinking like in large traditional companies. E-commerce is small-scale: It requires a will to evolve and people who are interested in the future.

WHAT ROLE DO EMPLOYEES PLAY IN THE USE OF AI?

Addressing customers is becoming increasingly complex; it must be tailored to a wide range of factors, such as customer segmentation and previous customer behavior and preferences, but also to the current season and fashions. AI can only do this to a limited extent because it cannot anticipate or perceive changing fashion trends and colors, for example. Only humans can do that. AI behavior, on the other hand, is determined by statistical models and predefined business processes.

Personalization, the determination of the optimal time to approach customers, and similar critical parameters must first be defined by humans. This requires a fair amount of sensitivity. It needs people who understand statistical models and at the same time have knowledge about markets and target groups. Their technical work and their intellectual engagement with diverse topics are the basis for a truly intelligent customer approach. As a result, there is always clever and well-planned control by the people behind effective AI.

In addition, the cooperation of employees within the entire organization is particularly important. The different departments must be interlinked, and higher-level processes must be considered. Only those who think cross-functionally can achieve optimization along the entire customer journey. ∎

This interview was conducted by
Nina Hesel.

THE DARK SIDE OF MARKETING IN THE FUTURE:

THE END OF CHOICE

→ → →

LEARN MORE

Buder, F., Pauwels, K., & Daikoku, K. (2021):
The Illusion of Free Choice
in the Age of Augmented Decisions.
The NIM Marketing Intelligence Review, Vol. 13, No. 1

Talk ''Machines of Power'' by Thomas Ramge
at the NIM Market Decisions Day 2022

Talk ''The End of Choice'' by Matthew Griffin
at the NIM Market Decisions Day 2022

When Freedom of Choice Becomes an Illusion: Making Decisions in the Age of Algorithms

More and more people are relying on technological support for decision-making when navigating a digitally augmented world. Artificial intelligence (AI) integrated into smart assistants and recommendation algorithms has become ubiquitous by offering support in everyday decision-making—but AI might even be making decisions for us.
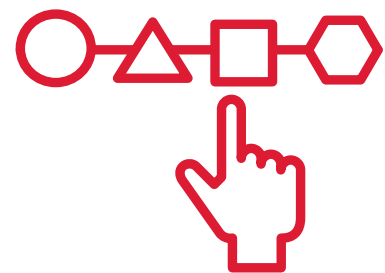
Anyone planning a car trip will likely end up using the navigation app on his or her smartphone or car heads-up display, as opposed to using a classic printed road map. Usually, it is most convenient to follow the route suggested by the app. Other examples of AI-based decisions might include the selection of news stories that people see on their social media feeds, movie recommendations, or suggestions for which products to buy. AI systems on digital platforms usually already make decisions for users or, at the very least, prepare them.

THE DAY AND AGE
OF DIGITAL CONVENIENCE

Of course, digital support in decision-making processes has clear advantages: AI helps reduce information overload, filters relevant information, and narrows down the overwhelming abundance of options into a manageable set of choices. The recommendations and suggestions of intelligent algorithms help people save time while still making decisions that match their preferences.

However, those benefits represent only one side of the issue; the other side seems much more ominous and usually goes unnoticed. Decision-making situations supported by algorithms can make a truly free decision an illusion by simply reducing the number of options. The loss of freedom of choice is apparently the price we are willing to pay for more convenience—and this loss has unforeseen consequences for both everyone and society as a whole.

THE DARK SIDE
OF DIGITAL CONVENIENCE

Hardly anyone notices that we no longer receive a complete picture of a situation; rather, we often have only a snippet of reality that was curated for a specific purpose. In terms of consumption, this could mean the limitation to certain advertisements or offers. Massive amounts of user data are integrated to create what appear to be highly individualized recommendations that bring specific options closer to their respective users. In all these situations, though, freedom of choice becomes an illusion. From a social perspective, this issue becomes relevant when, for example, social media feeds primarily display posts that generate high attention due to the extreme opinions they express.

Although algorithms may make life more convenient, their primary purpose is to serve an organization's goals, including generating interest, maximizing sales, or influencing political opinions. Positive user experiences and convenience are therefore only a means to an end, not the actual goal.

THE DUAL ROLE
OF ARTIFICIAL INTELLIGENCE

AI plays the dual role of information provider and sales agent. On the one hand, AI systems can make large amounts of information accessible, but, on the other hand, they simultaneously highlight the sale of certain options. The same can be said of human sales assistants working in a shop, but, unlike the salespeople in brick-and-mortar environments, AI systems can make precise predictions concerning consumer preferences and even user behavior based on large amounts of data. The relationship between humans and AI is thus usually asymmetrical because only the company behind the AI knows what information is available, which aspects of it are used for predictions, and which objective functions the algorithm optimizes.

To redress this imbalance, the goal should be for us, as intelligent beings, to use smart machines intelligently. To take an emancipated approach to AI, it is necessary to develop a sense of whether learning systems represent the interests of users or are just well-disguised salesmen espousing ''the sweet poison of convenience.''

EMPOWERMENT
INSTEAD OF MANIPULATION

AI can consequently be both a manipulative machine and a helpful decision-making assistant for humans. For the latter scenario to materialize, and therefore reliable machine decision-making, at least two conditions must be met. First, the system must prove that it can select the right option from various possibilities based on the data and proven statistical methods. Second, when delegating, it must be ensured that AI systems know the individual user preferences and represent their respective interests. This is very often not the case with algorithmic decisions or decision recommendations today. As a result, systems must make their own inadequacy known. Only then does AI become a machine of empowerment that allows people to make better choices. ■

Dr. Fabian Buder
Head of Future & Trends Research
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''AI can consequently be both a manipulative machine and a helpful decision-making assistant for humans.''

✕ ✕ ✕

What can people do today to attain these self-determined and value-added uses of algorithms?

Suitable measures (examples):

- The development of algorithmic competence, also known as algorithmic literacy: Based on the concept of literacy, algorithmic competence is about basic competences for the digital world. It includes a basic understanding of AI and how algorithms running in the background work. Users should therefore recognize the output optimized by algorithms and what this means for them. Algorithmic literacy also requires that users understand the role and value of the personal data they are providing to platforms in exchange for algorithmic decision-making support. Such understanding allows them to be attentive to and critical of the results of AI-driven recommendations and pre-selected information.

- Make decisions more consciously: Most decisions involve risk. The degree of risk also depends on whether the decision is automated, algorithmically supported, or purely based on human actions. Individuals should develop an awareness of their own risk tolerance with regard to the different options and their goals.

Those who are aware of the illusion of freedom of choice in the age of algorithms can take countermeasures by using machines intelligently through competent and self-determined actions.

COMPETENCE

INTERVIEW

Instead of People Using Technology, Technology Is Using People

Interview with Douglas Rushkoff, author and media theorist

The progress of AI and new technologies triggers hot debates about the future of human life. While fans of the singularity say that AI will become smarter than human beings and should take over the world, for others, such a vision is a sheer nightmare. Douglas Rushkoff is clearly part of the second group and takes a passionate pro-human stance. In our interview, he explains why giving too much way to technologies is a mistake and why humans deserve a place in the digital future.
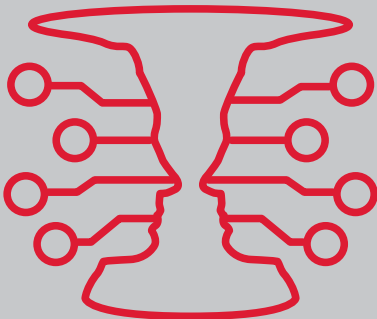
IN YOUR MOST RECENT BOOK "TEAM HUMAN," YOU ARGUE THAT DIGITAL TECHNOLOGIES, SOCIAL MEDIA, AND AI-POWERED APPLICATIONS ARE ACTUALLY ANTI-HUMAN. HOW CAN TOOLS THAT ARE GENERALLY PRAISED FOR EMPOWERING PEOPLE AND MAKING OUR LIVES MORE CONVENIENT BE ANTI-HUMAN?

Under the pretense of solving problems and making people's lives easier, most of our technological innovations just get people out of sight or out of the way. We no longer have control of programming the technologies; instead, the technologies are programming us. We are strategized and optimized by the leading tech companies toward purposes we don't even know.

**WHY DO YOU BELIEVE THAT THE TECHNOLOGIES ARE PROGRAMMING US?**

Technology users are subjected to a constant assault of automated manipulation. America's leading universities teach and develop "persuasive technology," which is then implemented on platforms from e-commerce sites and social networks to smartphones and fitness wristbands. The goal is to generate "behavioral change" and "habit formation," most often without the user's knowledge or consent. According to design theory, people don't change their behaviors because of shifts in their attitudes and opinions. It works the other way around: People change their attitudes to match their behaviors. In this model, we are more like machines than thinking, autonomous beings. Or at least we can be made to work that way.

"We are strategized and optimized by the leading tech companies toward purposes we don't even know."

Douglas Rushkoff
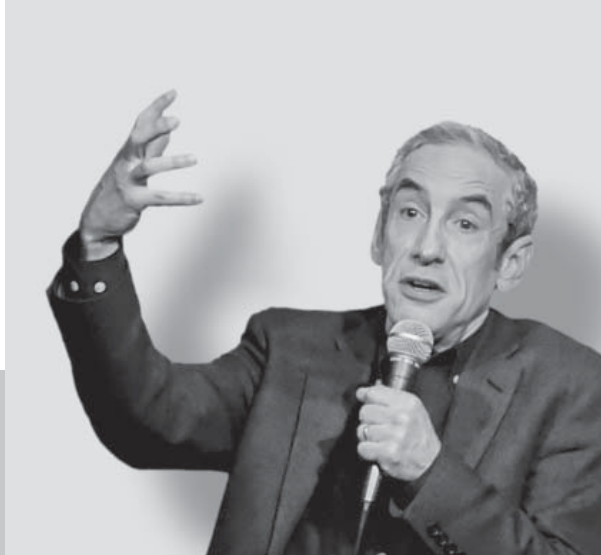
DOUGLAS RUSHKOFF

Douglas Rushkoff is a research fellow of the Institute for the Future and founder of the Laboratory for Digital Humanism at CUNY/Queens, where he is a Professor of Media Theory and Digital Economics, named one of the "world's ten most influential intellectuals" by MIT. He studies human autonomy in a digital age, and his work explores how different technological environments change our relationship to narrative, money, power, and one another.

https://rushkoff.com

MOST PEOPLE DON'T SEEM WORRIED TOO MUCH, THOUGH. THEY ENJOY AND USE THE SERVICES WITHOUT FEELING MANIPULATED. WHAT'S THE PROBLEM, IF USERS ARE HAPPY?

The problem is that helping people is no longer the main agenda of the tech companies. Technologies are seen as mere investments that require growth and growing share prices. Users and their behaviors are optimized to reach these goals. The addiction algorithms of slot machines are built into newsfeeds in order to make engagement more addictive and make us act against our own better judgment. Technology is optimizing us instead of us using the technologies to our advantage. What is happening is that figure and ground get reversed as with Rubin's vase. What should be the figure has become the ground.

IN YOUR BOOK, YOU CALL THE OUTCOME OF THIS OPTIMIZATION THE ATTENTION ECONOMY.

Yes, instead of helping us leverage time to our intellectual advantage, the Internet was converted to an "always-on" medium, configured to the advantage of those who wanted to market to us or track our activities. Going online is no longer an active choice but rather a constant state of being. And every time I swipe my smartphone, it gets smarter about me, and I get dumber about it.

WHAT ABOUT ARTIFICIAL INTELLIGENCE? DON'T YOU THINK ALGORITHMS AND AI CAN SOLVE MANY PROBLEMS BETTER THAN HUMANS CAN?

When we assume that our problems are fixable by technology, we end up emphasizing very particular strategies. We improve the metrics a given technology can improve but often ignore the problems the technology is unable to address. We move out of balance, because our money and effort go toward the things we can solve and to the people who can pay for those solutions. We've got a greater part of humanity working on making our social media feeds more persuasive than we have on making clean water more accessible. We build our world around what technologies can do.

DO YOU THINK WE SHOULD ABANDON SOCIAL MEDIA AND BACK OFF FROM AUGMENTED AND AUTOMATIZED DECISIONS ALTOGETHER TO REMAIN HUMAN?

No, technology may have created a lot of problems, but it is not our enemy. Neither are the markets, the scientists, the robots, the algorithms, or the human appetite for progress. But what we have to do is balance these elements with our more organic, emotional, and social needs. It's not a paradox. Both sides can be united, if we wish.

SO, YOU'RE POSITIVE THAT TECHNOLOGIES AND HUMANS CAN COEXIST WHILE HUMANS REMAIN THE SUBJECTS IN CONTROL AND NOT THE OBJECTS FOR OPTIMIZATION?

The future is open and up for invention. It is not something we arrive at but something we create through our actions in the present. Even the weather, at this point, is subject to the choices we make today about energy, consumption, and waste. I encourage people to stop hiding in plain sight. We must take a stand and insist that human values are folded into each and every new technology. We have to stand up and be seen. However imperfect and quirky and incomplete we may feel, it's time we declare ourselves members of Team Human. ■

Review of the
NIM MARKET DECISIONS DAY 2022
JULY 5, 2022, OFENWERK IN NUREMBERG

Together with 200 guests and top-class speakers from science and practice, exciting questions about our focus topic this year were discussed:
The future of the customer journey— do we still think and decide for ourselves?

THE SPEAKERS

Vince Ebert →
**Scientist and comedian,
TV presenter and cabaret artist**
Keynote: Who Decides
Where the Journey Is Going?

← Prof. Dr. Christian Hildebrand
**Full Professor of Marketing Analytics and
Director of the TechX Lab, University of St. Gallen**
Hacking the Customer Journey:
How Bots and Human Augmentation
Are Changing Consumer Decisions

Stefan Wenzel →
**Independent Advisor,
Ex-CEO of eBay Germany, Tom Tailor Digital**
To Hope Is Not a Strategy—The Future
of the Customer Journey Is Today

← Dr. Thomas Ramge
**Non-fiction author and technology
correspondent for brand eins and The Economist**
Machines of Power—How Free Are
Our (Purchasing) Decisions?

Jenny Fleischer →
**CEO of babymarkt.de GmbH and Lecturer
in Digital Sales at HWZ University of Applied Sciences
in Business Administration Zurich**
Are Companies Prepared for the Customer Journey
of the Future to Offer Their Customers
Real and Unique Experiences?

← Dirk Ploss
Senior Early Innovation Manager, Beiersdorf AG
I Think, Therefore I Buy.
How Machines Could Do the Shopping for Us
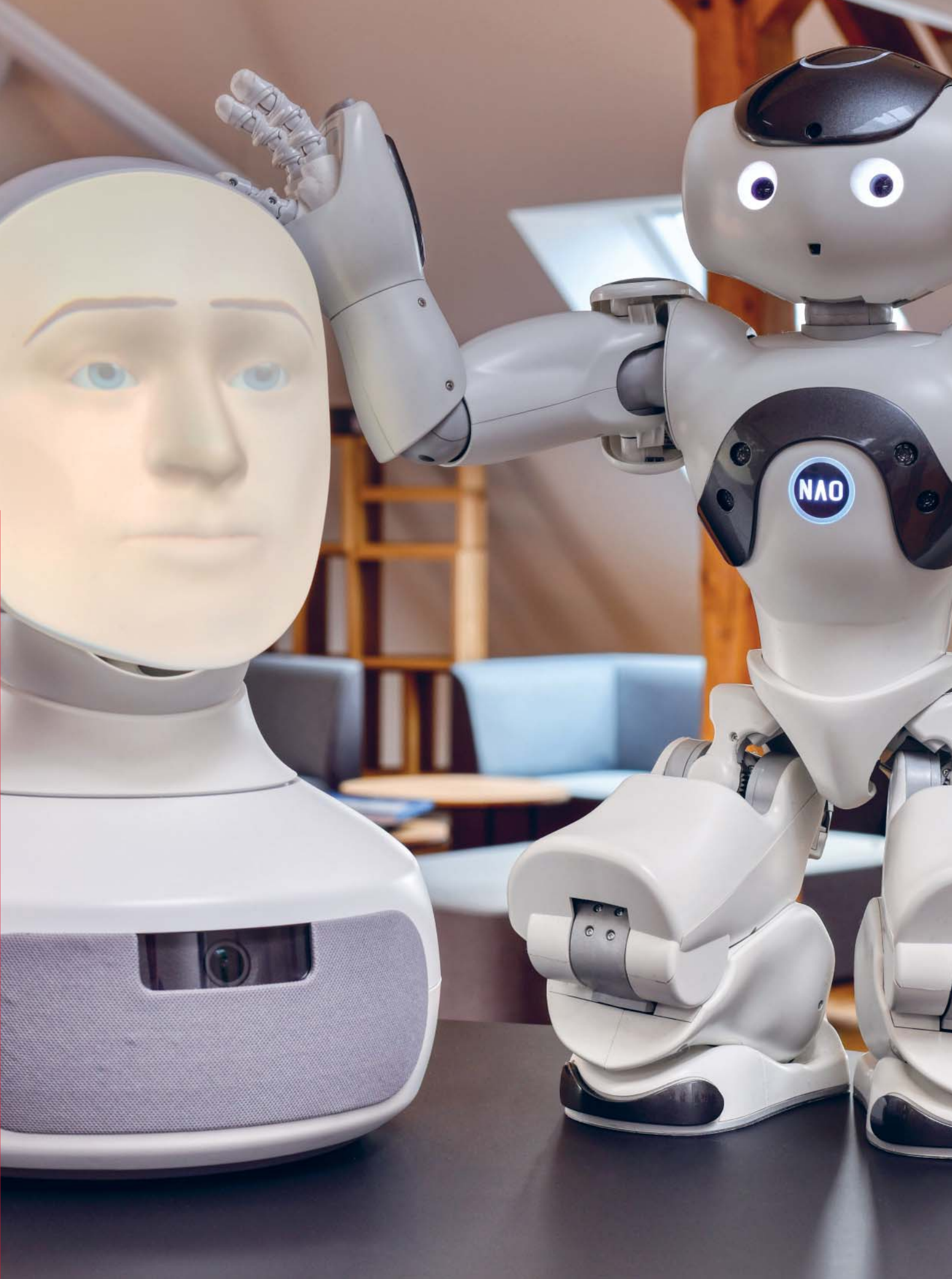and What That Means for Marketing.

Matthew Griffin →
**Futurist and tech evangelist,
founder of the 311 Institute**
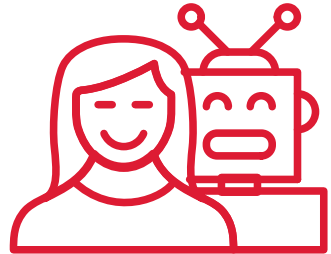The End of Choice

WHERE HUMANS AND MACHINES MEET

→ → →

How Artificial Attention Shapes Human Intentions

Insights from research:
Breakout Session 1 at the NIM Market Decisions Day 2022

The use of artificial intelligence (AI) will make everyday life considerably easier in the coming decades. Many jobs can be done by robots in the future.

Humanoid robots could revolutionize the entire service sector. Ten thousand service robots are already taking over tasks from waiters and waitresses in restaurants, but robots could also support service in hotels. Estimates suggest that robots are likely to replace 96% of receptionists in hotels by 2029.

The reason is simple: Service robots offer many advantages for operators and guests, such as flexibility, availability, and efficiency, and thus greater convenience for everyone. In the end, however, the users who have to interact with the robots are crucial for their success. The following questions arise: Do consumers trust them? And what does this trust depend on? Many studies show that the more humanoid the appearance and behavior of robots, the more trust people have in them. It is not yet entirely clear which characteristics influence trust and in what way.

FOCUS ON EYE CONTACT

We humans make and focus on eye contact as one of the most important nonverbal signals. Eye contact has an immense impact on our attention during an interaction, as well as on our trust in the other person, level of emotional arousal, and memory of the encounter.
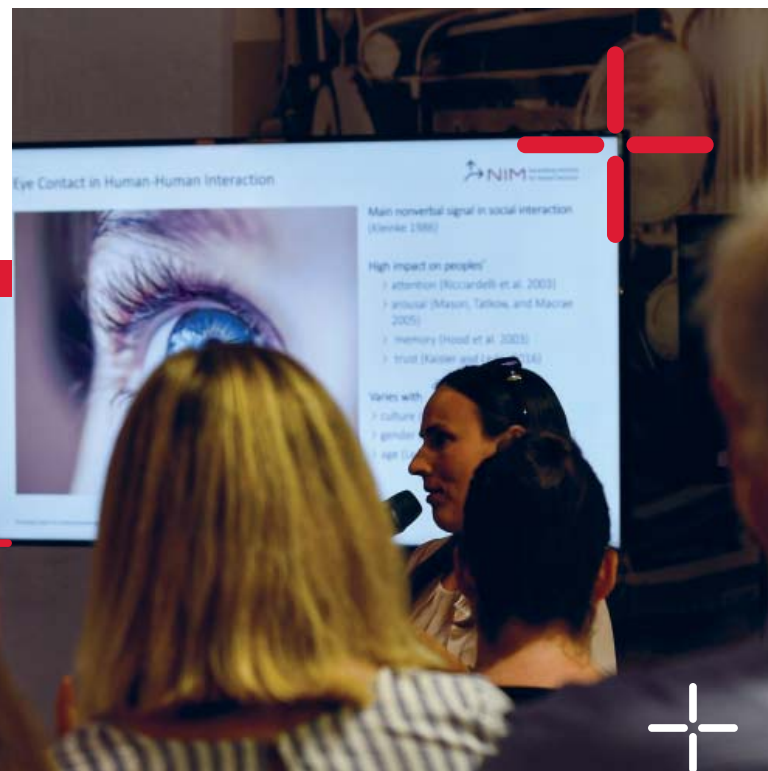
Current information about the project can be found on our website:
www.nim.org

Article on the use of service robots in the tourism sector:
www.elmundo.es

LEARN MORE

The effect of eye contact varies with culture, age, and gender. In marketing, eye contact has been shown to increase product recall, customer satisfaction, and purchase intention among customers.

In human–robot interaction, eye contact has many similar or comparable effects to human–human interaction, such as increased arousal or honesty when interacting with the machine. However, there are also some differences: For example, infantile learning and reflexive cueing of the direction of a conversation partner's gaze are not triggered by eye contact with robots.

Against this background, researchers at NIM are investigating the following questions in a study: Does eye contact with robots increase consumer trust? Does a more humanoid appearance have an effect? And what influence do eye contact and appearance have on purchasing decisions?

INFLUENCE ON TRUST IN THE FINANCIAL SECTOR

We are focusing on the financial sector, where trust plays a particularly prominent role—and because many financial institutions are already using so-called robo-advisors, i.e., digital investment advisory programs that provide consumers with automated investment recommendations. Automating financial services while maintaining customer trust is a major challenge for the entire industry.

To this end, NIM is conducting an elaborate experiment in which participants interact with a prototypical advice interface inspired by real-world robo-advisors but performed by the modern robot model Furhat. Furhat is a social robot that communicates with humans the way they do with each other—by talking, listening, and showing emotion with its expressive robotic face. During the interaction, study participants must make investment decisions. To ensure they behave realistically, they receive a performance-based payoff. At the NIM Market Decisions Day 2022, visitors were able to get an idea of the setting of the study and the different robot responses.

Initial results suggest that both the humanoid appearance of and eye contact by the financial advisor play a significant role. In human–robot interaction too, it appears that a humanoid appearance and eye contact increases consumer trust. And higher trust, along with higher risk tolerance and increased financial literacy, in turn leads to higher investment. Developers of robo-advisors should therefore consider integrating social robots into existing offerings, including eye contact with users. ∎

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René Schallner
Senior Researcher / Technology Lab Manager
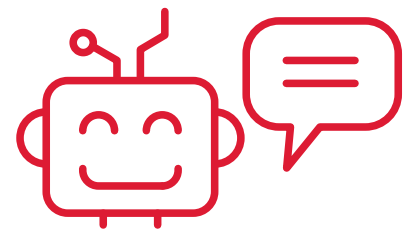*rene.schallner@nim.org*

LEARN MORE

Hadi, R. (2019): When Humanizing
Customer Service Chatbots Might Backfire.
In: NIM Marketing Intelligence Review, Vol. 11, No. 2

Hildebrand, C. & Bergner, A. (2019):
AI-Driven Sales Automation: Using Chatbots to Boost Sales.
In: NIM Marketing Intelligence Review, Vol. 11, No. 2

Chatbots: Customer Loyalty or Deterrence?

Everyone has experienced it:
When you surf the Internet, a chat window
opens and a friendly advisor offers
to help.

This is highly reminiscent of traditional shopping—for example, in a clothing store in the city center. The only difference is that the person offering help in this case is not a human being but a chatbot: a more or less intelligent machine. Numerous companies already have such chatbots in use or are planning to introduce them in the coming years.

The reasons for using chatbots are as varied as their possible areas of application. They range from providing customers with information and help with complaint management to genuine advice on the right product selection.

It is striking that virtual advisors have made great progress in terms of conversational skills. Developments in natural language processing, i.e., the ability of artificial intelligence (AI) to understand and generate natural language, have enabled chatbots to become better at understanding human input and to respond to it in a more targeted manner. The side effect is that it sometimes takes a while to determine whether you are communicating with a human or AI.

To give them an even greater human touch, technology designers have been trying for years to give chatbots and other AI-based applications additional human characteristics. Thus, the virtual advisors in the chat are given a name, use natural or even colloquial language and emojis, or, as in the case of Siri and Co, become so-called voicebots equipped with a voice.

WHY ARE CHATBOTS BECOMING MORE AND MORE HUMAN?

Numerous studies have shown that anthropomorphizing chatbots, i.e., making them more humanoid, actually leads to consumers perceiving the chatbot as more

human. This, in turn, can have a positive impact on consumer experience, preferences, and consumption decisions. In addition, consumers may even perceive robots as sentient beings with a social presence and therefore trust them more, be more empathetic toward them, or even feel observed by the robot. In this case, they would not want to be rude, for example, just as if they were interacting with a human being.

As a result, chatbots can help build more trusting brand relationships, increase customer enjoyment and satisfaction, and even influence consumer decisions.

Prof. Dr. Christian Hildebrand from the University of St. Gallen confirmed this at the NIM Market Decisions Day 2022. In his studies, he showed that a humanoid chatbot can establish a more intimate and trusting brand relationship, is perceived as more pleasant, and increases the upselling potential in sales. Specifically, chatbot studies in the car rental sector show that customers were almost twice as likely to book more expensive options and additional services when offered them by a humanoid chatbot compared to a traditional booking system.

"The more we personalize, the better upselling works in the sales context," Prof. Hildebrand said at the NIM Market Decisions Day.

and deception. Impressive examples are regularly the subject of news coverage, such as when artificial callers imitating real-life personalities are mistaken for the actual person.

But even aside from targeted deception or manipulation, the use or over-humanization of chatbots can have a negative impact on brand relationships or customer satisfaction.

Studies have shown that customers who communicate negatively with chatbots, for example in the course of a complaint, also tend to react negatively to humanoid chatbots. The fact that they have to deal with chatbots in such a situation can have a negative impact on customer satisfaction and brand loyalty. On the other hand, artificial intelligence also repeatedly reaches its limits. If an interaction with a chatbot does not run smoothly or even fails, the failure can be quickly attributed to the chatbot. After all, the assumption is that this would not have happened with a human counterpart.

Finally, an overly extensive humanoid design of artificial advisors can reduce the acceptance of chatbots in general. This is referred to as the Uncanny Valley effect. If the boundaries between human and machine become blurred or the machine pretends to be human, mistrust and unease can follow.

CHATBOTS:
BOTH A CURSE AND A BLESSING?

Chatbots can therefore be useful for consumers and providers alike. However, knowledge of the human perception of chatbots in conjunction with technological progress also opens up room for targeted manipulation

CHATBOTS:
WHAT IS IMPORTANT WHEN USING THEM?

When properly designed, chatbots can offer consumers and companies real added value. In the best case, they contribute to a positive consumer experience or can even help find the right product or service. For businesses, their use can lead to greater customer satisfaction and loyalty while reducing costs. However, chatbots can also create new problems, such as being active in the wrong situations or having a design that is too humanoid. Companies must therefore decide whether to use a human agent or a chatbot in specific contexts. If the decision is in favor of a chatbot, then it is important to match it precisely to the needs of the consumers or the customer segments. ∎

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FUTURE QUESTIONS: WHAT ELSE MAY CHANGE FOR MARKETERS

→ → →

Beyond Automation: Artificial Intelligence in Strategic Marketing Decisions

Insights from research:
Breakout Session 2 at the NIM Market Decisions Day 2022
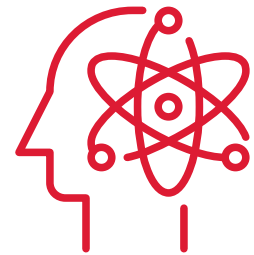
Chatbots in customer service, product recommendation systems, sentiment analyses in social media—the applications of artificial intelligence (AI) in marketing today are manifold. But is AI also about to move from the operational to the strategic decision-making level, as some researchers expect?

Increasing computing capacities and advances in machine learning are continuously improving the capabilities of intelligent machines. AI is thus becoming applicable to increasingly complex tasks. This could also change how strategic decisions are made—not just in marketing but also in other corporate areas. So, are algorithms about to decide which markets a company addresses or which communication and pricing strategy is pursued? Will there be intelligent machines on executive floors in the future and, if so, how would human managers collaborate with them?

NIM has explored these and other questions in a recent research project. To learn more about the use of AI in strategic marketing decisions, NIM surveyed 500 high-level executives from the B2C marketing and business strategy departments of companies included in the Forbes Global 2000 ranking of the world's largest public companies. In addition to the status quo, the survey focused on managers' expectations and preferences regarding future collaboration with intelligent machines.

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WISH FOR THE FUTURE:
HYBRID DECISION-MAKING PROCESSES

The study shows that the use of AI tools in operational marketing is already common practice. Of the companies surveyed, 83% already use such AI-based applications, for example in customer interactions or to automate simple processes. But are managers also willing to integrate AI into their strategic decision-making? Our results show: basically, yes. Nevertheless, in the ten-year time horizon examined, they still want to retain control and the upper hand. On average, the executives surveyed would like algorithms to have 43% weight in strategic marketing decisions in the future. Consequently, 57% should remain with human decision-makers.

So managers basically want to retain control. What does that mean for the form of collaboration between people and machines?

Question: What is your preference for the future: How much weight should AI applications like smart algorithms ideally have and how much weight should humans have in strategic decision-making 10 years from now?
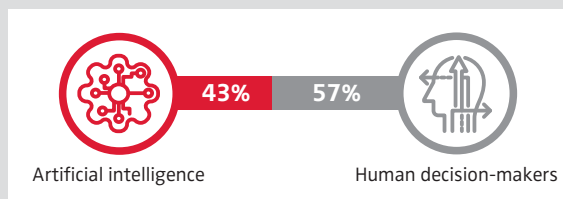
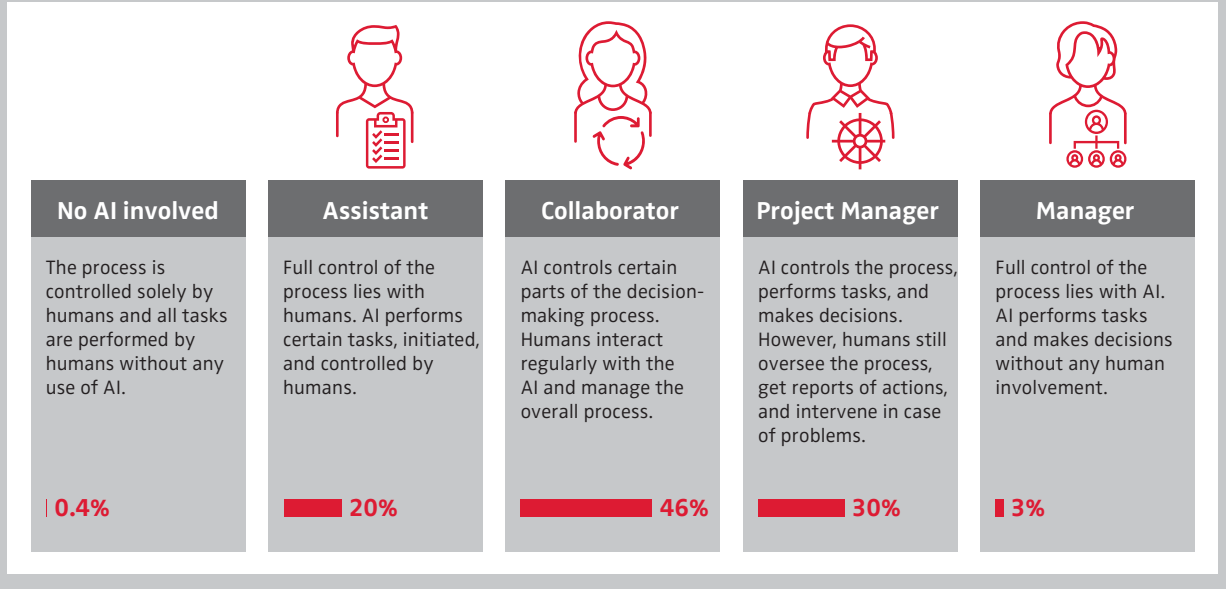| 43% | 57% |

Artificial intelligence   Human decision-makers

Study by the Nuremberg Institute for Market Decisions | Telephone interviews with n = 500 high-level executives from large public companies in the USA and Europe in 2022

THE ROLE OF AI:
FROM ASSISTANT TO MANAGER

The roles attributed to intelligent machines in strategic decision-making can vary widely. In the typology shown on page 39, a distinction is made between five roles—"no AI involved," "assistant," "collaborator," "project manager," and "manager"—depending on the AI's degree of autonomy.

Not even 1% of managers in our sample said they would not like to see AI used in strategic decision-making at all in the future. Twenty percent said they would like to use AI in the role of a supporting assistant. The largest group of respondents (46%) preferred working with AI in the role of a "collaborator," i.e., to make decisions in constant interaction with the machine while they, as humans, continue to control the overall process. Almost a third (30%) would like to delegate even more decision-making authority to AI as a "project manager." However, only 3% of respondents consider leaving strategic decisions completely to the machines as a desirable scenario.

Question: What is your preference for the future: What role should AI applications like smart algorithms ideally have in strategic decisions 10 years from now?

No AI involved	Assistant	Collaborator	Project Manager	Manager
The process is controlled solely by humans and all tasks are performed by humans without any use of AI.	Full control of the process lies with humans. AI performs certain tasks, initiated, and controlled by humans.	AI controls certain parts of the decision-making process. Humans interact regularly with the AI and manage the overall process.	AI controls the process, performs tasks, and makes decisions. However, humans still oversee the process, get reports of actions, and intervene in case of problems.	Full control of the process lies with AI. AI performs tasks and makes decisions without any human involvement.
0.4%	20%	46%	30%	3%

Study by the Nuremberg Institute for Market Decisions | Telephone interviews with n = 500 high-level executives from large public companies in the USA and Europe in 2022

AUGMENTED DECISION-MAKING: WHEN HUMANS AND MACHINES DECIDE TOGETHER

As it turns out, managers are open to the prospect of hybrid decision-making processes between humans and machines. However, they still want to remain involved and in control. And this seems to make sense because humans and machines have different strengths when it comes to dealing with complex and uncertain decision-making situations. Instead of replacing people with machines, they can complement each other in their abilities and thus achieve more together than they could individually. This is referred to as augmented decision-making instead of automation.

The use of AI offers a number of benefits on which companies are pinning their hopes. These include, for example, the prevention of human cognitive biases, the recognition of data patterns, and increased decision-making speed. The goal: greater decision efficiency by optimizing time, budget, and human resources.

However, there are also obstacles that prevent or at least complicate the rapid implementation of AI in strategic decisions. For example, algorithms can only generate suitable insights and recommendations for action if the IT ecosystem supplies the right data in sufficient quantities and in the appropriate structure. However, it is precisely here that resource constraints in companies often become apparent. An inadequate database due to missing, inconsistent, or outdated data can in turn lead to biases in the algorithms. Another challenge lies in the standardization of complex decisions. In addition, there are problems related to culture and mindset, such as employees' aversion to and concerns about working with AI.

In an interactive breakout session at the NIM Market Decisions Day 2022, these very hopes and obstacles were the focus of the exchange between visitors and NIM researchers. In addition, the exchange of ideas revolved around how participants' job decisions would change if they incorporated AI into their decision-making. ■

Complementarity of humans and AI in decision-making processes typically characterized by uncertainty, complexity, and equivocality.

	Artificial intelligence	Humans
UNCERTAINTY	Provide access to real-time information	Quick and intuitive decision-making in the face of the unknown
COMPLEXITY	Collect, curate, process, and analyze large amounts of data	Decide where and how to collect data; choose between options for action with equal data support
EQUIVOCALITY	Analyze sentiments and present different interpretations	Negotiate, build consensus, and solicit support

Own presentation based on Jarrahi, M. H. (2018): Artificial Intelligence and the Future of Work, Human-AI Symbiosis in Organizational Decision Making. In: Business Horizons, Vol. 61, No. 4.

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LEARN MORE

Talk "I Think, Therefore I Buy"
by Dirk Ploss
at the NIM Market Decisions Day 2022

Marketing to Machines: When AI Becomes the Customer

It is almost impossible to discuss the future of consumer behavior and shopping without discussing the role of artificial intelligence (AI) in purchasing decisions. So far, it is mainly the supplier side that deliberately uses modern technologies such as programmatic advertising, real-time targeting, or AI-supported targeting to influence the buying process in its favor. Looking ahead to the future, however, buyers could increasingly use modern technologies to secure their interests. Buyers could do this under the guise of automatic price and offer comparisons, which could lead to the complete outsourcing of purchasing processes to digital assistants.

Machines taking over parts or all of the shopping process would have significant consequences for the entire decision-making process. A common narrative for the future of shopping is that AI will take over (at least) everyday shopping for consumers by handling the somewhat annoying side of purchasing, including buying products such as detergents or toilet paper. In such a future scenario, AI systems would autonomously make decisions on behalf of consumers to ensure that they never run out of everyday products. How much shopping people will do themselves in the future and what decision-making autonomy they will delegate to machines will also greatly depend on the degree of enjoyment associated with the actual shopping experience and the desire of people to thereby take care of it themselves.

AI AS A PERSONAL SHOPPER

AI in the form of smart assistants such as Alexa, Siri, and others taking over purchasing decisions would offer advantages to consumers. For example, consumers would no longer need to worry about the purchase of everyday items because a machine would automatically buy what is required for the best possible price. A bit like the price comparison portal Idealo but buying automatically—this is how Dirk Ploss, Senior Innovation Manager at Beiersdorf AG, described it in his presentation at the NIM Market Decisions Day. This would make shopping far more efficient for customers. Ploss also sees further potential for automation. For example, customers could train their AI assistants to consider sustainability and have them look specifically for products that are not harmful to the environment.

Looking at the entire subject from a business perspective, it can safely be said that the information generated by assistants about their users would be of great value. Smart algorithms could use this information to address consumers in an increasingly personalized way and to ever better predict and serve their wishes and needs. However, it remains to be seen to what extent users would make their data available to companies in the future.

THE NEW CUSTOMER JOURNEY

If AI technologies were no longer only used on the supplier side but also increasingly used on the customer side, this would inevitably have an impact on the customer journey. As far as Dirk Ploss is concerned, the usual steps in the customer journey starting with awareness and moving on to consideration, purchase, loyalty, and advocacy could develop into a new purchasing sequence, which could come in the form of demand, delivery, consideration, confirmation, and feedback. The consumer would ultimately end up deciding on whether to keep a product or service that had been purchased automatically.

For example, a smart shopping assistant would learn which drugstore products consumers buy regularly and then recognize acute customer needs and order products directly and autonomously. Upon delivery, the consumer would only have to decide whether to keep the products or return them. This feedback would again enable the algorithm to learn which brands and products customers prefer and improve its predictions.

"Away from the emotional toward categorization. We've always ended up selling to a human—in the future, it could be an algorithm."

Dirk Ploss
in an interview with the NIM

MARKETING THAT APPEALS EQUALLY TO PEOPLE AND MACHINES

AI that works for customers would become a new player in the marketing space. This player would stand between consumers, who are trying to fulfil their needs, and manufacturers, who are trying to market their products. Looking at this potential development from the suppliers' perspective would mean that in the future, suppliers would increasingly be communicating and selling to machines instead of people. However, machines have a different way of doing things compared to humans. Machines fundamentally process information differently. Intelligent machines do not make decisions intuitively and emotionally but based on data and facts instead. Machines would therefore be a new, additional target group that would have to be addressed with appropriate machine-oriented marketing—in other words, marketing to machines would become necessary.

This new world of shopping would become even more challenging for brands than it is today. It is even conceivable that brands will move into the background as one of the key sales arguments in many product categories and that objective performance criteria and service will become increasingly important. For Dirk Ploss, this move would also mean that marketing would have to adapt. A sympathetic customer approach would become less relevant, and machine-readable product data and smart sales algorithms would take center stage. Creatively addressing current and potential customers would no longer be the core of marketing communication.

On the other hand, in cases where brands still play a role, it would probably be of immense importance to be the one brand that is in customers' minds. So, the algorithm would not be given the generic task of procuring a product from a specific category, but rather a product from this brand in particular. The question would be, for example, whether customers in the future would say, "Alexa, buy AA batteries" or "Alexa, buy Duracell AA batteries."

If this scenario ever transpires, marketing departments will have to rethink and develop an approach that takes into consideration a new intermediary that stands between them and the end consumer. This intermediary will require a wholly different type of communication. In this automated world, marketing may have to develop completely new approaches and invest heavily in new technologies, skills, and knowledge. Risks need to be assessed, marketing needs to be made machine-ready, and a strategy needs to be formulated that is right for your brand.

We live in times of exponential change. In just a few years, it could already be too late to think about brand positioning or advertising strategies for a future world of AI-mediated shopping sprees. The best time to think about the future was already yesterday, but the second best is today. ■

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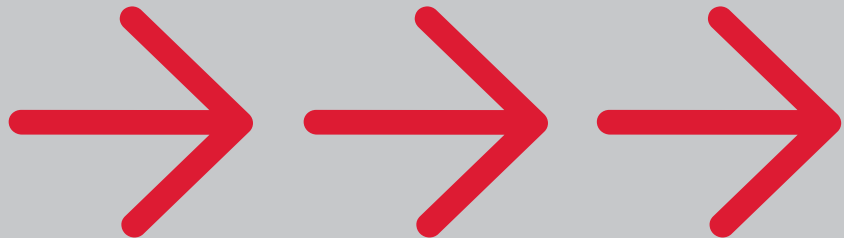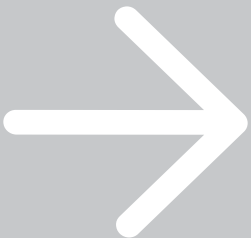
NIM MARKET DECISIONS DAY

The annual "NIM Market Decisions Day" is our expert conference concerning the topic "Understanding, Anticipating, Improving Market Decisions." On this day, top-class speakers from areas of science and practice build a bridge to discuss current research results, trends, and concrete practical experience. The aim is to promote dialogue between science and practice on exciting topics and findings related to market decisions.

NIM INSIGHTS LUNCH

Key insights at lunchtime in 30 minutes—at our NIM Insights Lunches, we give participants exciting insights into new research results. Of course, every Insights Lunch also offers the opportunity to exchange ideas directly with the researchers in interactive question-and-answer sessions.

WHERE ELSE YOU CAN MEET US

The experts of the NIM are sought-after speakers at conferences and symposiums. They present current research results and thus contribute to scientific dialogue and practical application. You can find dates for events at the Nuremberg Institute for Market Decisions on our homepage.

NIM MARKETING INTELLIGENCE REVIEW

The Journal of the Nuremberg Institute for Market Decisions

NIM MARKETING INTELLIGENCE REVIEW

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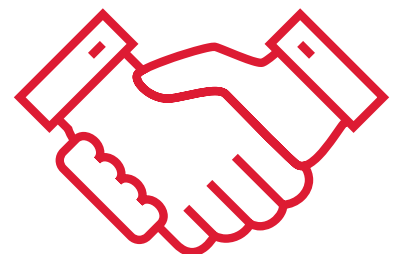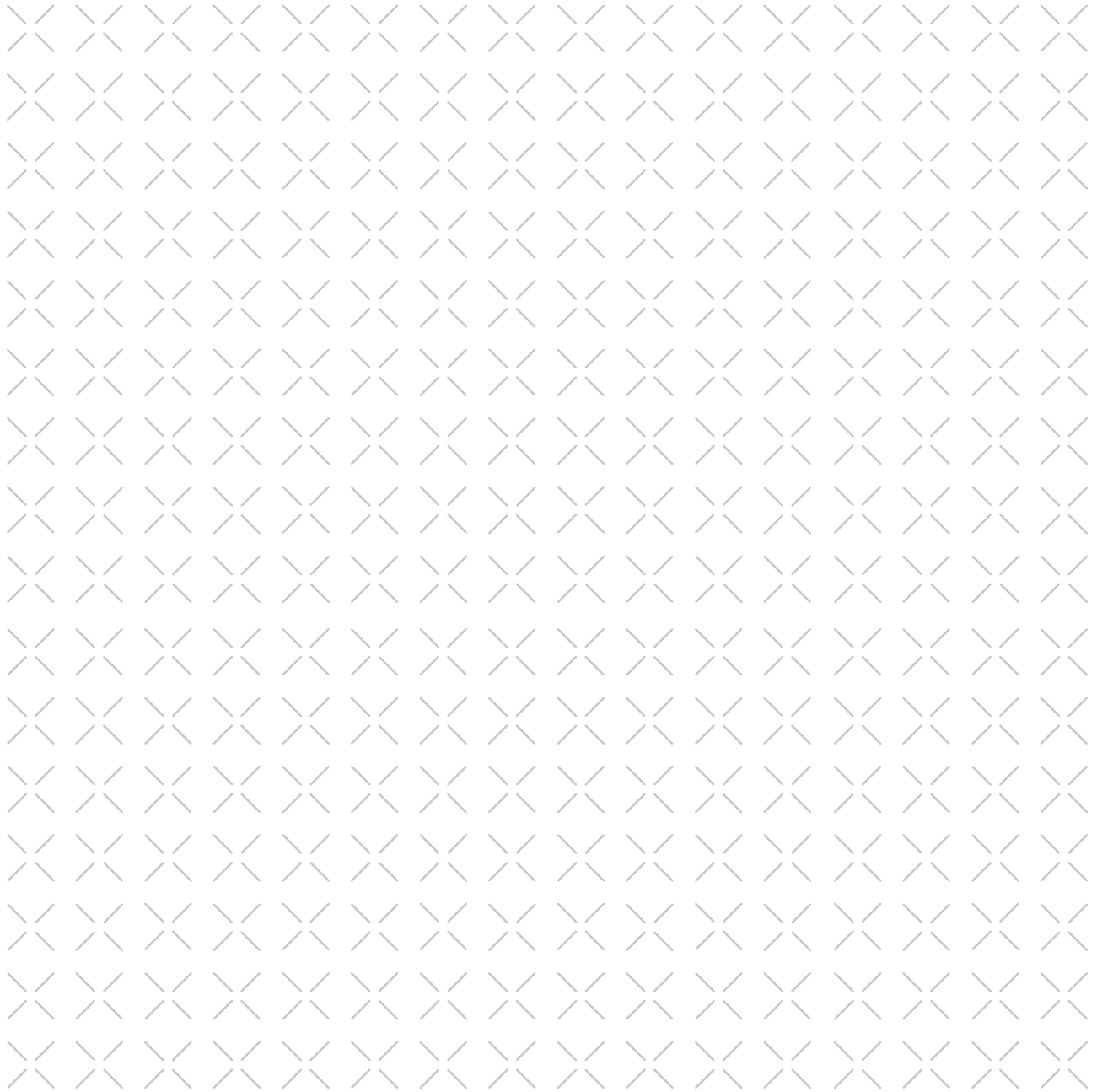
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