



2023

CROSSROADSEVOLUTION

TREND-ATLAS FOR
THE GERMAN
COMMUNICATIONS MARKET

STRÖER

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FOREWORD



Image: O. Tjaden

Back then, "Pre-Corona," we published Crossroads 2021, a trend-atlas that organized the world of trends from the perspective of a German media company. In our weekly newsletter "10 things you need to know this week," we repeatedly addressed micro and macro developments. Did things turn out differently than expected? No. Despite pandemics and war with subsequent inflation, trends have a nearly genetic evolution, when we look at them technically. This makes them relatively easy to observe.

Some trends have made the big breakthrough (generative AI), while other trends are still a long time coming (virtual reality). We asked ourselves the reason for this and once again examined the technical readiness of the trends in the German market: When does a plant become a strong mammoth tree that carries business models and changes the shape of our world?

"That's how quickly your life can turn around. How the future you will have tomorrow will not be the same future you had yesterday."

Chuck Palahniuk, US writer

Technological evolution is relatively easy to be curated these days. We have taken on this diligence task and hereby present the new edition of our trend-atlas. Some of the trends have new names and new facets, but they can still be described in terms of their relevance for observation, evaluation or action, and in terms of their supposed impact. The meta-view shows: The relevance for action has clearly moved closer, the age of observing and curating is coming to an end. The order of the day is in many cases: action.

We recommend using the trend-atlas as the basis for any discussion of the future and enriching it with your own insights.

Crossroads is a playbook, a script - but the actors who bring it to life will be yourself! We want to invite you to take the future into your own hands and to encourage others to do the same. You will only be able to move what you tackle!

Let us know how you are getting on with it. We would be pleased to support you in shaping the future of your brand.

Yours,

CHRISTIAN VON DEN BRINCKEN
STRÖER CORE GMBH & CO. KG

MANAGEMENT SUMMARY

When developments that took place in the past, whether of a technical or social nature, meet the achievements of the present, the new emerges: the future.

Technological developments take place in leaps and bounds, not in a linear fashion. We run the risk of being left behind because we either pay attention to these leaps too late, underestimate them or, in the worst case, even ignore them. At the same time, we want to shape the future, not just run after it or be overrun by it, which often turns out to be more difficult than expected due to the evolving complexity resulting from the simultaneity of our time. Although we know today that our brains are geared to linear thought patterns, we still find it difficult to imagine the future as it will truly unfold. Indeed, it is not a mere continuation of the old. It brings together what already exists and adds new aspects to it. The new requires the possession of one or more specific components in the past. Writing, for example, led to letterpress printing, computers in turn to digitized writing, and now there are language models with which we can interact in an almost human way. Without the respective developments that took place before, nothing new emerges. **Retrospective** is therefore important to understand what led to the status quo so that we can better prepare for the future, for more information visit blog.stroeer.de.

Another aspect that influences our current way of thinking about the future is the fact that we are currently in a time of crises. In addition to the current topics concerning climate change, we are currently experiencing political conflicts and natural disasters, not to mention the pandemic that was declared to be over this year. The major world events of our time make it difficult for us to look positively into the future, because there is a lack of **orientation**, a lack of positive anchors. This situation can have a negative effect on our entire perception.

We cannot solve the major problems of our time on our own. Nevertheless, we have set out to revise the trend-atlas for the German media and communications industry, published in 2021, and provide an up-to-date guide. In doing so, we have looked to past events to anticipate new ones: The 2023 trend-atlas shows that, more than ever before, we need to focus on **shaping tomorrow in today's world**.

Some trends or facets develop differently internationally, on other continents or in other cultures than in Germany. The German mentality is unique, especially when it comes to the strict requirements regarding data protection, the preservation attitude in general or the slowing down of innovation progress through the love of process. For this reason, the trends analyzed must always be viewed from the perspective of the **special nature of the German environment**.

We classified a total of 19 micro-trends from the media and communications sector to examine them in greater detail. They fall into five clusters, the so-called macro-trends, and their size gives them a greater or lesser degree of relevance within the trend-atlas.

The major trend of our time revolves around artificial intelligence. Currently, the focus is on generative AI: language models that communicate with us, take over tasks previously reserved for humans, produce creative results and whose development is causing far-reaching discussions. This also includes image and video systems. The great challenges with regard to this trend are on the one hand the overall responsible handling of this technology until regulations can take effect, and on the other hand the change and adaptation of our mindset. This trend cannot be stopped by fear or denial. Making it possible, taking into account the known dangers, is advisable. Implement the first applications, actively engage with the possibilities of AI - it will inexorably become a part of our everyday lives. Because the next leap is already around the corner: AI is currently still running on binary, slow and unintelligent systems. In a few years, the development of quantum computers may lead to a world that we can hardly imagine today. Performance will make such leaps that computers will "simply" determine all conceivable variants and the optimal solution will be selected.

*"The future is something that most people do not love until it has become the past."
William Somerset Maugham, English storyteller & playwright*

Other trends, however, we see sinking or disappearing in the German media and communications environment. Super apps, for example, as we know them from Asia, do not have a bright future ahead of them in our view, at least not in Germany. Virtual influencers, another trend from the Asian region, are similarly insignificant in our view, because artificial influencers are not considered modern or represent progress, but rather trigger discomfort. We also do not believe that genetic advertising, a trend from the U.S., is of great significance in the German environment - the attitude is too critical with regard to possible weak points in data protection.

The other trends considered in this analysis, by contrast, have a greater chance of becoming established, even if they will not have the same impact as Generative AI.

In times like these, characterized by uncertainty and negative events, we tend to imagine a dystopian future instead of creating a positive vision of the times to come. However, right now it is important to develop a **positive mindset** in order to create the future we hope for and not conjure up the one we fear. Positivize your mental attitude, use dystopian thinking to best prepare and be aware of, recognize and counteract the dangers. Let's create a future worth living and working!

The authors of this work look forward to future meetings and discussions with you.

INTRODUCTION & METHODOLOGY

Two years ago, with Crossroads 2021, we ventured an analysis of technology trends in the media and communications industry in light of the Corona crisis. We wanted to better understand what the issues we keep encountering in the media industry really mean, what slows them down and accelerates them, where switches are being made and how fast they are moving, how they are interconnected, and where there are opportunities to switch. Where trends and innovations keep coming to completely new crossroads and forks - the crossroads. The result was a trend-atlas with seven innovation fields that have a certain attraction to and among each other, as in a planetary system. Each innovation field is surrounded by a different number of technology trends that orbit it like moons.

We have now overcome the Corona shock. Nevertheless, we find ourselves in the midst of a turning point in time that is characterized by a multitude of crises. These are influencing society, the markets, the media, etc., and are leading to paradigm shifts in the way people, business and politics think and act. And changing paradigms create new worlds. This can create new barriers, but also many opportunities.

The perspective on the Crossroads trend-atlas must therefore be different today - free from the realities of a pandemic, but shaped by the events of our time.

This Crossroads Evolution trend analysis essentially draws on the macro- and micro-trends we identified in Crossroads 2021, but at the same time takes into account that the development of technological trends is a constantly changing process that is influenced by numerous factors and is often characterized by iterative development.

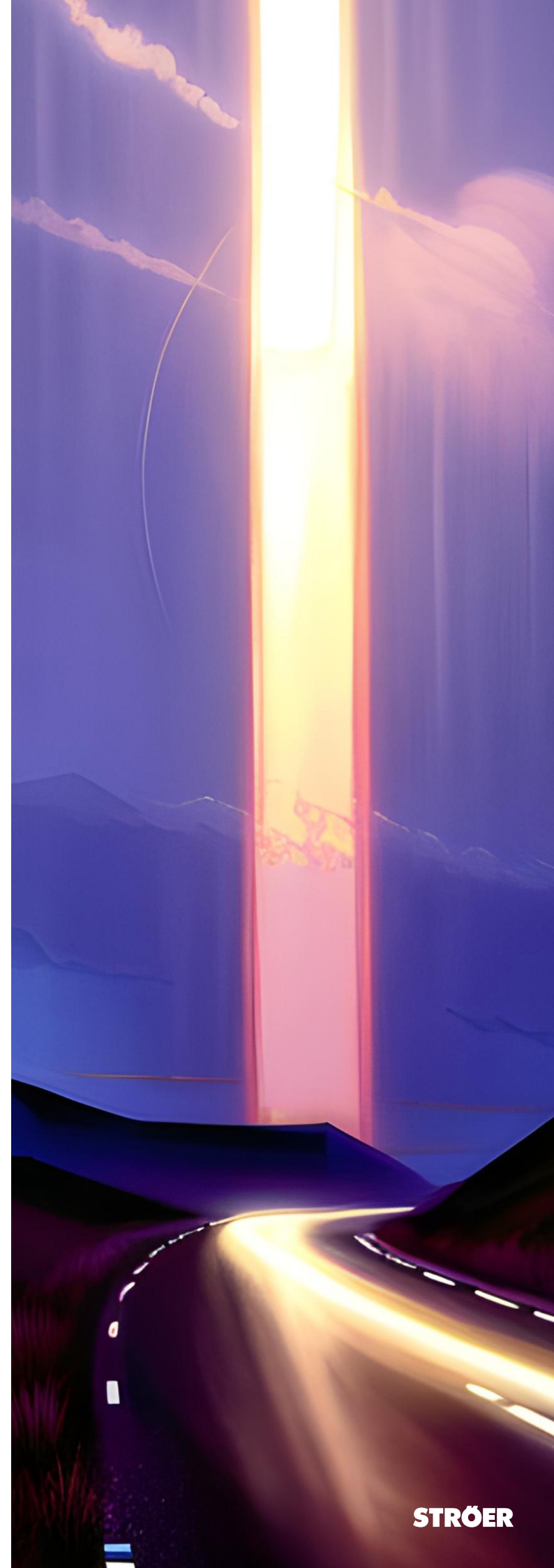
In the last two years, some of the trends considered in 2021 and against the backdrop of a pandemic have proven to be less relevant or have become established and thus left their trend status. At the same time, new technologies are emerging on the horizon, which we have included in the 2023 trend-atlas. The newly included trends are based on the Gartner Hype Cycle for Digital Marketing 2022 and the Gartner Hype Cycle for Emerging Technologies. Thus, our analysis results in a new picture of the trend-atlas with 19 micro-trends that can be assigned to five macro-trends.


This updated analysis aims to answer the following questions:

- How has the significance and influence of micro and macro-trends changed for the German media market in the last two years?
- How has the positioning of existing micro-trends changed in the trend-atlas and where do new micro-trends rank?
- Which trends are of particular importance for the illuminated market?

MEGATRENDS IN MEDIA

During the analysis, the megatrends considered in 2021 were also questioned and re-examined. Sustainability, new resilience, and ethics & trust are the three trends that are currently most relevant in the media and communications market. We have deliberately listed only these three megatrends, but are aware that some, such as cybersecurity (protecting computer systems and networks from attacks) or value-added marketing (expected added value from consumers), are also very important. Many of the megatrends or currents not specifically mentioned are picked up by many micro-trends, such as the critical view of data use & security.





**“ I have learned that
the path of progress is
neither short nor easy.**

*Marie Curie,
Polish physicist and chemist*

THE SIGNIFICANT IMPORTANCE OF **SUSTAINABILITY**

What gained new attention in 2018 with a single girl and a cardboard sign in Stockholm quickly became a global social movement. Today, sustainability movements are reaching a new level. The civil resistance of the "Last Generation" is drawing attention to the urgency of climate protection in a radical way. The sensational protest actions of mainly young people - like-minded out of fear of the future - are making big waves, which comes close to the movement's actual goal: emotionalization and media presence.


The Corona pandemic taught us that together, even in a short period of time, we can make a big difference for our environment. The lockdowns brought proof: there is a direct link between our behavior and environmental impact. However, we must make the necessary choices and act decisively. There are options that will make a positive difference if we are united. On a societal level, this requires structural changes that enable each person to behave in the right way. To do this, we need to be open to new developments, such as digitalization and artificial intelligence. These technologies are indispensable on the way to a climate-neutral society; without their possibilities, structural change cannot be realized quickly.

Business and politics have the greatest influence on climate change. Sustainable development requires a rethinking of previous economic principles, in which corporate success is not measured solely in terms of sales and profit maximization, but also in terms of need satisfaction, environmental compatibility and friendliness, and quality of life. Companies that credibly align their economic activities with the meaning and purpose of their business activities will benefit in the long term and secure their future.

Our current economic system, which is worth reconsidering, must be seen as an opportunity to reinvent industries and make a fresh start. Economic growth must not be restricted by renunciation and prohibitions, but must be shaped by more mindful (consumption) decisions. The associated need to reduce emissions also poses new challenges for the advertising industry. The sustainability of communication measures will become increasingly important as consumers pay more and more attention to environmentally friendly products and brands - the selection of the appropriate advertising formats and communication channels must inevitably be included in an overall strategy. In the future, media companies will therefore not only have to deal with the sustainability of their own operations, but also with the question of how they can offer low-emission forms of advertising to meet the growing needs of their customers.

It is to be hoped that the importance of sustainability will not be diminished by ever more rapidly recurring crises and the reduction of purchasing power as a result of inflation, or that a countermovement will possibly emerge. In the interplay between government, business and society, it is essential for each individual to protect our natural resources and our climate in order to guarantee a sustainable future.

We have a responsibility to shape growth intelligently in order to protect our planet through alternative solutions. We can realign social added value and social progress and create a fairer economy and society with the courage to question the established and the familiar.



“The important thing is not to predict the future, but to be prepared for the future.

*Pericles,
leading statesman of Athens*

THE INCREASING
IMPORTANCE OF

NEW RESILIENCE

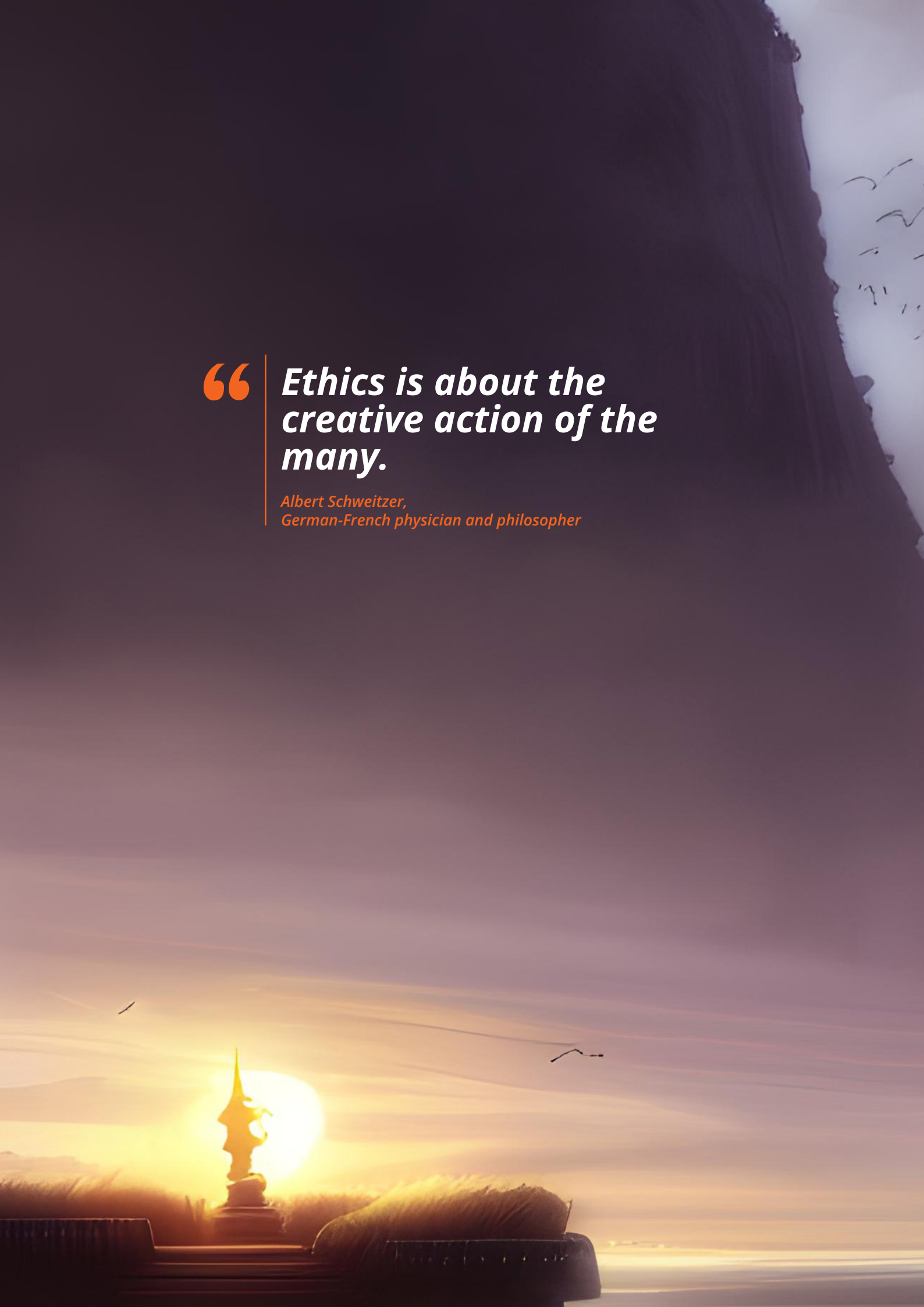
Crises and challenges have always been part of human life. Today, however, they reach us at a different speed and to a different extent than in the past. We find ourselves - actually or perceived - in a kind of permanent crisis mode: pandemic, war, inflation, environmental and energy crises, and the challenges of globalization. A host of complex and dynamic political, economic and societal shocks are occurring ever more rapidly and at shorter intervals, bringing with them profound disruptions and uncertainties; certainties we have built up are obsolete.

Resilience describes the ability or robustness to recover quickly from challenges and crises and emerge from them stronger. However, individual resilience alone is no longer sufficient in the face of the abundance of interconnected uncertainties and risks. We need more resilient communities, structures and systems that are networked to be better prepared for future acute challenges - even if, in retrospect, we are already more resilient than we had assumed.

Resilience encompasses the behavior of each and every individual in the face of influences and changes. High resilience includes qualities such as unstoppableness, belief in one's own strength, and the ability to respond to disruptive factors with flexibility and suppleness. Our own resilience, which can be learned or healed if it is not mature or has been damaged, is not only dependent on our individual characteristics, but also strongly influenced by social, environmental and political conditions that surround us. Because when we talk about corporate resilience, we must not forget one thing: Companies are made of people. The resilience of each individual person affects the resilience of a company.

Resilience-focused corporate transformation replaces structures and profiles with talent, competence and self-determination. Resilient entrepreneurship is characterized by the fact that economic activity is oriented toward people in a meaningful way and takes account of a social mission. It is important to take responsibility for employees, partners and customers and to ensure reliable (digital) systems - despite or precisely because of threatening actors, increasingly frequent failures or more demanding customer expectations. This is where innovative capability and (global) networking pay off. At the same time, robustness, which is also associated with durability, must never be used as an excuse for facing up to changes and challenges. Accepting these challenges is the right way to practice resilience - driven by the vision.

A crisis always forces us to rethink our actions. This is how our systems become more efficient and durable in order to continuously adapt to changing and increasing environmental conditions and risks, among other things. Overcoming the status quo requires flexibility, agility and the ability to learn - from everyone involved. After all, hazards cannot be assessed and prevented by one player alone, but only in cooperation - with the right attitude not to give up and to continue to develop despite difficult framework conditions.



“ Ethics is about the creative action of the many.

*Albert Schweitzer,
German-French physician and philosopher*

THE GROWING
IMPORTANCE OF

ETHICS & TRUST

We are making great strides into a future in which artificial intelligence (AI) seems to be becoming ubiquitous. Self-learning systems are shaping parts of our everyday, public and private lives and changing them from the ground up. So fast that standards and laws that are supposed to regulate such technologies are lagging behind. The topic of truthfulness and trust has taken on new relevance through the controversial discussions surrounding language models.

In order to realize the responsible application and evolution of AI, human rights must not be violated, people must not be discriminated against, and diversity of opinion must not be unsuppressed - while respecting privacy. Whether evaluation criteria, seals of approval, scaling or certification of AI products: The responsible use of AI - involving as many stakeholders as possible - is one of the biggest challenges ahead. Will there be a global consensus and standardization of moral and ethical guidelines? Will leading companies shape the rules within which future developments will operate before regulations can take effect? Many questions need to be discussed and answered in the coming period. AI must be further developed and adapted, and people must be guaranteed access to truthful information and education, so that the balance can be struck between technological possibilities and the responsible use of the same.

As mature and sensitized digital users, we are also becoming more critical and developing a more effective awareness of the reflective handling and control of our personal data. Many users are skeptical about the use of their data without any value in return. They demand sovereignty over their own data and want to decide for themselves what information is made available to whom and under what conditions. Data sovereignty adds the concept of informational self-determination to the overriding concept of data protection. Data is a commodity, but at the same time it is also a right that must be protected, especially in the context of AI, through anonymization or regulation approaches.

More than ever, companies that use data have a responsibility to be mindful of how we treat our data. Ethical use of data in a hyper-connected world goes beyond mere compliance. Sustainable use of data is about doing the right thing for people and society. Because first and foremost, people should benefit from (digital) ethics. In the media and communications environment, transparency plays an overriding role: manipulation, untruths, deception or even discrimination quickly lead to image damage and the loss of trust.

In order for us to remain competitive in Europe, and especially in Germany, a clear, common understanding of data privacy, ethics and security must be created in the future. We should be aware of the responsibility for our actions - but also for our inaction. Ethics should not be a brake on technology, but a strong basis for responsible and sustainable progress. We must not demonize technologies, but we must allow critical analysis.

MACRO-TRENDS & MICRO-TRENDS
TECHNOLOGY IMPACT

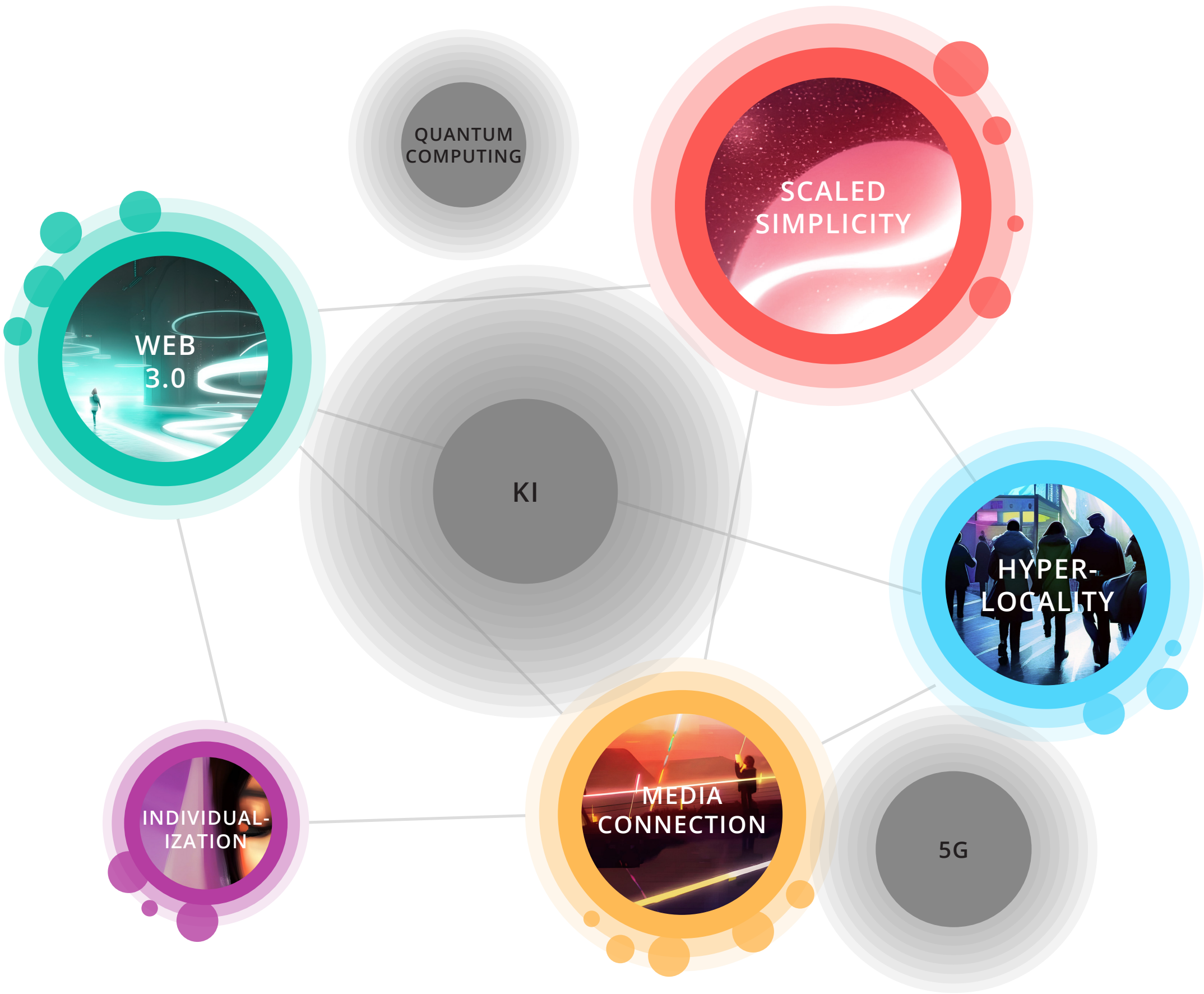
The defined macro-trends behave similarly to a planetary system: They have a certain gravitational pull on each other and a gravitational pull on the micro-trends, which are arranged around them like moons. Scaled Simplicity and Web 3.0. have the greatest gravitational pull and radiance in the overall picture.

Within the cosmos, three additional technologies can be identified that will significantly influence the macro- and micro-trends under consideration in the future:

The currently controversial phenomenon of **artificial intelligence** can hardly be avoided. A single application (ChatGPT) has given the topic of AI an unprecedented boost, catapulting us into long overdue discussions about regulations and dangers, but also enabling education and awareness of this sector. We believe that within the next one to three years, AI will enter all areas of life and, in particular, will permanently change the way we work.

5G is not only a necessary basis for the major future concepts of a smart city or for autonomous driving. 5G also plays a role in micro-trends such as augmented reality or the way we use our smartphones. A new transmission technology and increased radio frequency ranges lead to superiority over the predecessor technologies; more information can be transmitted in a shorter time. However, these advantages have a disadvantage in terms of range. A considerable expansion of the network of mobile communications masts is therefore required. 5G is already available to a small extent, but 4G is still the dominant technology with 80 % (measured in Sep. 2022).

Quantum computing is still being intensively researched far on the horizon. Experts expect an evolutionary leap as soon as these computers have made their operational and commercial entry into our world. Speed is the great promise of this development. Whereas today's computers are based on classical bits, binary computing, and perform one task at a time, quantum computers are based on the interaction of quantum mechanical states and can perform multiple tasks simultaneously. Based on the current findings and the current research successes, a cautious optimism is emerging in the industry, because for a long time the quantum computer was only a theoretical concept. Experts estimate that we will have to wait another five to ten years before this technology finds broader application.



MACRO-TRENDS

The changed view has also led to changes in the naming, sorting, and number of the original seven macro-trends:

- Scaled Flexibility has morphed into **Scaled Simplicity**, and the micro-trends listed below pay off in terms of simplifying and making everyday life easier.
- Two of the three trends in the Fluid Tribes macro-trend have moved beyond their trend status and merged with real conditions. Due to this thinning out, in-game advertising was assigned to the Media Connection macro-trend, and Fluid Tribes is no longer shown as a macro-trend.
- The macro-trend Ethics & Trust has developed into a megatrend as a social issue and is examined under Ethics & Responsibility in the Megatrends chapter.
- We have dissolved Big Data Analytics as a macro-trend, as almost all details regarding the handling of data are dealt with in many micro-trends.
- **Web 3.0** has emerged as a new macro-trend over the past two years. The technological developments and fields of application in this area could have a major impact on society and people. We have therefore added this macro-trend to our analysis.

Scaled Simplicity, Media Connection, Hyperlocality and Individualization are four familiar macro-trends in our trend-atlas. Web 3.0 is the fifth new macro-trend.

MICRO-TRENDS

Seven micro-trends from 2021 have retained their trend status, while twelve have been added on the basis of the Gartner Hype Cycles for Digital Marketing 2022 and Emerging Technologies 2022. The total of 19 identified micro-trends were assigned to the five overarching macro-trends. Based on desktop research and exchanges with experts, all micro-trends were reassessed in terms of their significance for the media market in Germany (size) and their proximity in time to the present (placement) and mapped in the trend-atlas 2023.

MACRO-TRENDS

1. Scaled Simplicity

Simplification and time savings through digital services and AI solutions.

2. Media Connection

Content, advertising and commerce are merging.

3. Hyperlocality

Merging the physical and virtual worlds in time and space.

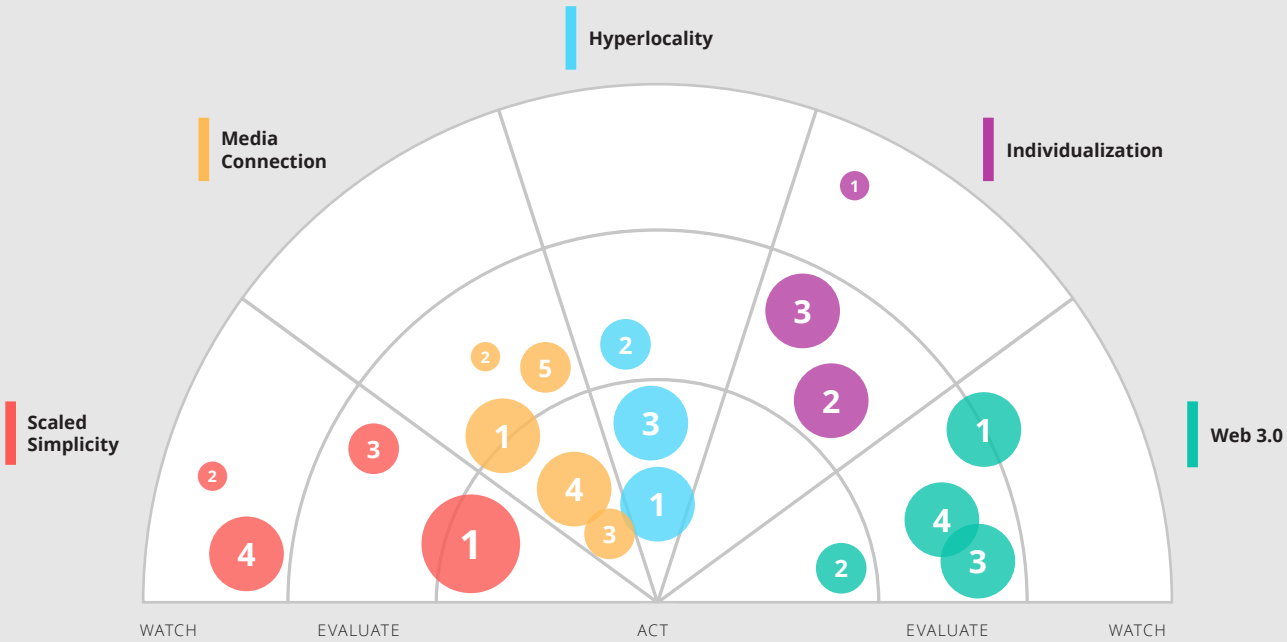
4. Individualization

Maximizing individual benefit.

5. Web 3.0

A decentralized and blockchain technology based version of the internet.

TREND-ATLAS



MICRO-TRENDS

- Scaled Simplicity**

1 Generative AI
2 Super-Apps
3 Digital Twin of a Customer
4 Digital Humans
- Media Connection**

1 Visual Intelligence
2 Virtual Influencer
3 Shoppable Media
4 Retail Media Networks
5 In-Game Advertising
- Hyperlocality**

1 Location Intelligence for Marketing
2 Event-Triggered Marketing
3 Augmented Reality
- Individualization**

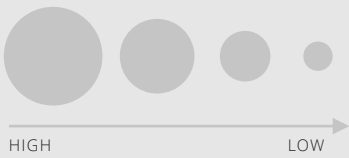
1 Genetic Advertising
2 Emotion AI
3 Decentralized Identity
- Web 3.0**

1 Virtual Reality
2 Avatar Worlds
3 Blockchain for Advertising
4 Non-Fungible Token (NFT)

TREND-ATLAS 2023

This trend-atlas is intended to help companies and organizations in the media and communications industry to make strategic decisions by identifying trends and evaluating them in terms of their relevance and significance. The following sections begin with a description of the macro-trends, which form the framework for the analysis of the micro-trends. This is followed by a comprehensive analysis and evaluation of the developments and changes specific to each micro-trend from the perspective of the German media market.

RELEVANCE FOR THE MEDIA- AND COMMUNICATION MARKET



SCALED SIMPLICITY

Simplification and time savings through digital services and AI solutions.

Digitization and the associated networking have greatly accelerated our society. We are always on. Increasingly, we long for opportunities and ways to escape today's hectic and complex life and create time for something new. We are looking for relief, deceleration and opportunities to live and consume more mindfully and consciously. Because today we value time more and more as a precious commodity and central resource in our lives. We want to live in the here and now.

Every day we are challenged in various roles in our hypermobile community, whether as employee, parent, family member or friend - we live a life with a high degree of flexibility. At the same time, we are constantly pressed for time in our professional, leisure and family lives; we need time to breathe. Rarely do we have the opportunity to concentrate completely on one thing for a longer period of time. Every day, we are exposed to an ever-increasing flood of stimuli. After a certain point, many people feel that being constantly on the move - especially after the Corona pandemic - is an acute strain, as is being permanently available. We harbor a desire to withdraw in order to pay more attention to personal needs. It's not necessarily a matter of doing less, but of doing the things we do better - not always faster - and achieving a heightened awareness of how valuable time is used wisely.

It's a daily dilemma: We appreciate the everyday simplifications of digitization and its services, but at the same time we feel a certain dependency. This does not stop us from raising our expectations of companies and wanting to have access to time-saving and intuitive services and offers at all times. A (haptic) product is no longer enough. As consumers, we want solutions or services at all times that relieve us of simple tasks or bundle them - after all, this is how we enjoy (and preserve) our convenience. Automated processes and offers, as well as artificial intelligence (AI) services, simplify or improve our everyday lives or make suitable recommendations based on our needs or mental state (well-being).

We demand convenient access to a wide range of services. We demand less stress and effort for routine, sometimes boring tasks. We want our daily lives to be more flexible, creating more freedom and a more livable future. How good it is that numerous technologies are penetrating society ever faster and bringing with them a new form of simplicity.

Chatbots have made the beginning of a human-machine relationship. Today, thanks to ChatGPT, **Generative AI** (GenAI) shows the broader society how far the development of Artificial Intelligence truly is. AI programs write texts and give answers that are almost indistinguishable from humans. This form of "creative technology" has been received with great fascination. It has the chance to inspire and (positively) change entire industries - provided that guidelines for responsible use of generative AI emerge that capture and limit reputational and fraud risks. In the future, GenAI can do even more: it can invent or develop novel designs or materials, or produce synthetic data that ensures the confidentiality of the original data sources. **As early as 2025, Gartner predicts that 30 % of marketing messages will be synthetically generated.** This compares to less than 2 % in 2022.

Many providers of digital services want (and need) to make it as convenient as possible for users to use them. **Super apps** centralize many different offers, functions and services from many apps in a single place: a closed ecosystem primarily on our end device. In China, super apps are already firmly established as an everyday platform, but they have not yet been able to gain a foothold in Western countries - yet? At present, most single-purpose apps satisfy only isolated needs of users, such as buying or paying. However, some apps that we already use today have the potential to grow into super apps by integrating additional services or extensions. Manufacturers, retailers, or brands can become part of this platform (e.g., through marketplace concepts) or become a super app themselves in order to remain relevant to customers. The user community gets a seamless and efficient experience where everyday activities can be managed conveniently. Furthermore, there is a lot of data for operators to build out the individual user experience.

Today, many applications are developed, tested and optimized in the virtual world before they are produced or used in the real world. In the future, digital replicas of people, objects, systems or processes in the form of digital twins will be increasingly used. With the help of AI, the exact, detailed image can make predictions based on past or real-time data and make recommendations for action. For example, more efficient research and product design can be carried out on the basis of "what-if" scenarios. If customers are emulated (**digital twin of a customer**), the digital twin may even know what they really need and can thus improve the overall personalized experience.

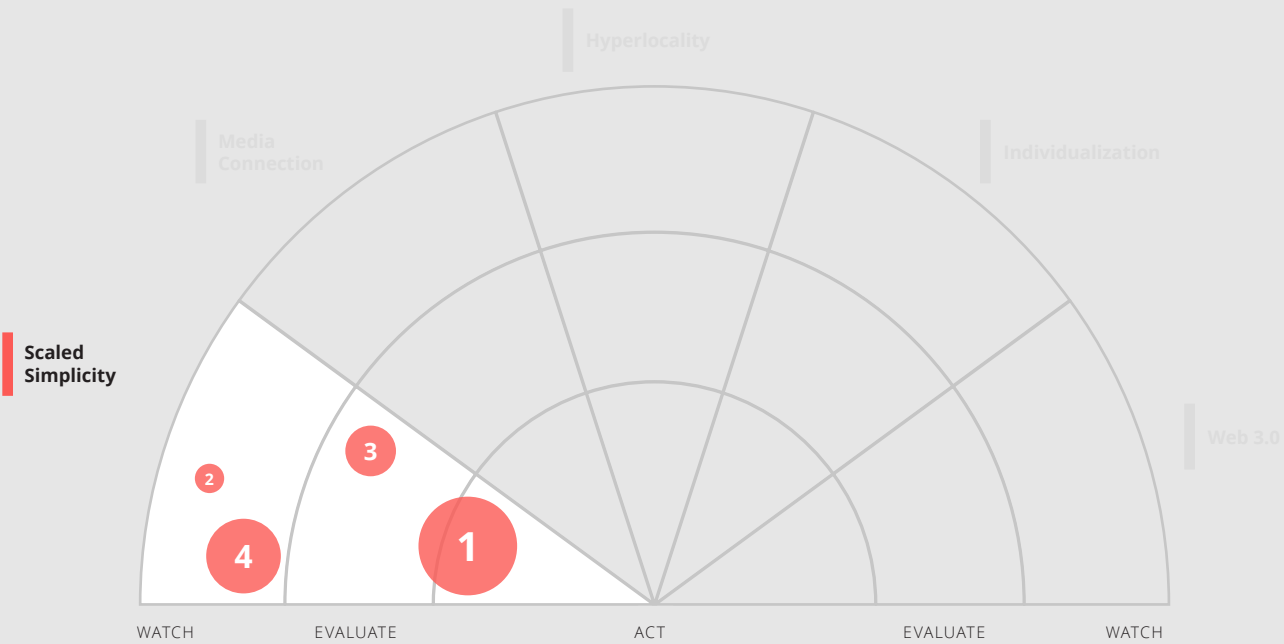
When AI-powered bots are given a face and they cover the entire range of human body language, we will be able to interact with **digital humans**. In the future, we will encounter humanoid avatars more and more regularly in customer service - especially in emotionally charged contexts - and, due to their remarkable resemblance to ourselves, will hardly be able to distinguish whether they are real or artificially created humans. Already today, they can be brought to life in a very short time, and they are continuously learning with every interaction. They embody emotionally intelligent and expressive AI that can be integrated into various systems and respond to multiple requests.

Technological differences between providers will become increasingly marginal in the future due to the developments described above. Forward-looking consumer engagement

will become decisive and must be available decentrally from everywhere. Optimal positioning and differentiation as well as long-term survival will only be possible if services proactively anticipate the needs of their customers before they actually arise. Customers no longer want cumbersome and reactive communication or cumbersome processes and applications. In the future, artificially intelligent interaction systems will take over tasks in customer management. Multifunctional applications and humanized AI applications will make our everyday lives easier and contribute more and more to our well-being. Thanks to their user-friendly added value, we will (have to) give them a chance and quickly get used to them. After all, technical changes also change us humans - we will no longer want to do without them.



CLASSIFICATION ON THE TREND-ATLAS



MIKROTRENDS

- 1 Generative AI
- 2 Super-Apps
- 3 Digital Twin of a Customer
- 4 Digital Humans

MEDIA CONNECTION

Content, advertising and commerce are merging.

Media convergence is old hat - the dividing line between media genres is becoming increasingly transparent in many areas. Advancing digitization is not only merging media with one another. It is also breaking down boundaries between content, advertising and commerce and creating a link between the real and digital worlds. This leads to a seamless customer experience across all touchpoints.

The micro-trends listed under this macro-trend show how the way we consume, produce and share content has changed. In the past, consumers were passive recipients of content, whereas today, through social media and other platforms, users are actively involved in content creation and distribution.

In recent years, it has also become clear that video content is becoming increasingly important for brands to get their message across. Platforms such as YouTube, Instagram and TikTok offer advertisers a wide range of opportunities to present their products and services in visual form. In general, **visual intelligence** has become increasingly relevant. With the increasing use of mobile devices and the rapid development of technologies such as artificial intelligence and machine learning, visual search, for example, is becoming more advanced and accurate.

Influencer marketing has developed into an important channel, especially for young target groups, and not just in recent years. This marketing tool is primarily suitable for strengthening trust in a brand and promoting products. In addition to micro- and nano-influencers, another type of influencer has emerged in the form of **virtual influencers**, mainly in Asia and (still) rather outside the mainstream in Germany.

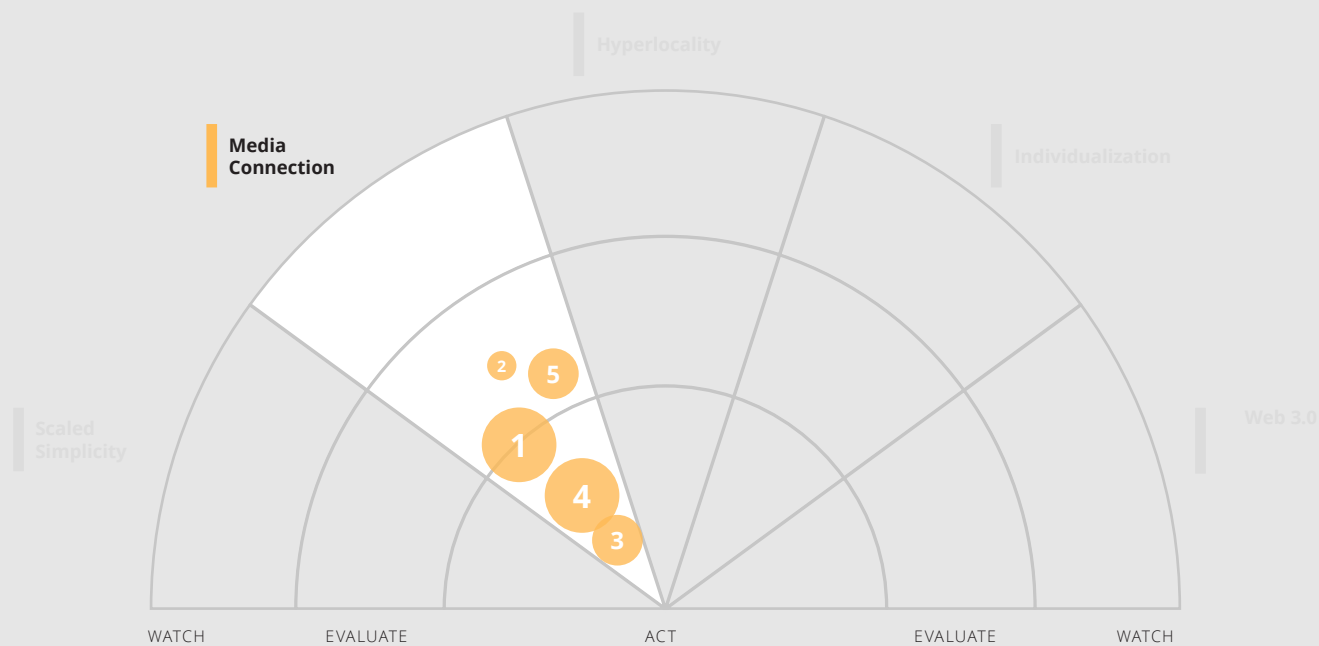
In addition, more and more brands have increased their presence on social media such as Facebook, Instagram, TikTok, and LinkedIn to engage directly with their customers and provide them with better customer service via **shoppable media**: Customers can purchase products directly from the social platforms.

At the same time, companies are increasingly using data and analytics to create personalized content, offers, and messages based on customers' individual interests and needs. **Retail media networks** offer the opportunity to deliver advertising messages via retailer websites. Companies that have significant access to customer data include major platforms such as Amazon and Otto. Due to a very detailed understanding of the respective customer journeys, they can address relevant marketing target groups very precisely through targeting and thus continuously gain relevance for advertisers.

To the same extent that influencer marketing appeals preferably to young target groups, this also applies to **in-game advertising**. One thing is clear: the gaming market is booming, and although there are still some technological challenges, the advertising channel is seen as having the potential to be at least a noteworthy addition to established channels in the future.

The greater use of artificial intelligence and automated systems will enable companies to communicate with customers in an even more personalized and effective way. Media companies and brands need to be aware of these changes and develop a media strategy that aims for an integrated and seamless user experience. In any case, there is a large repertoire of possibilities for this.

CLASSIFICATION ON THE TREND-ATLAS

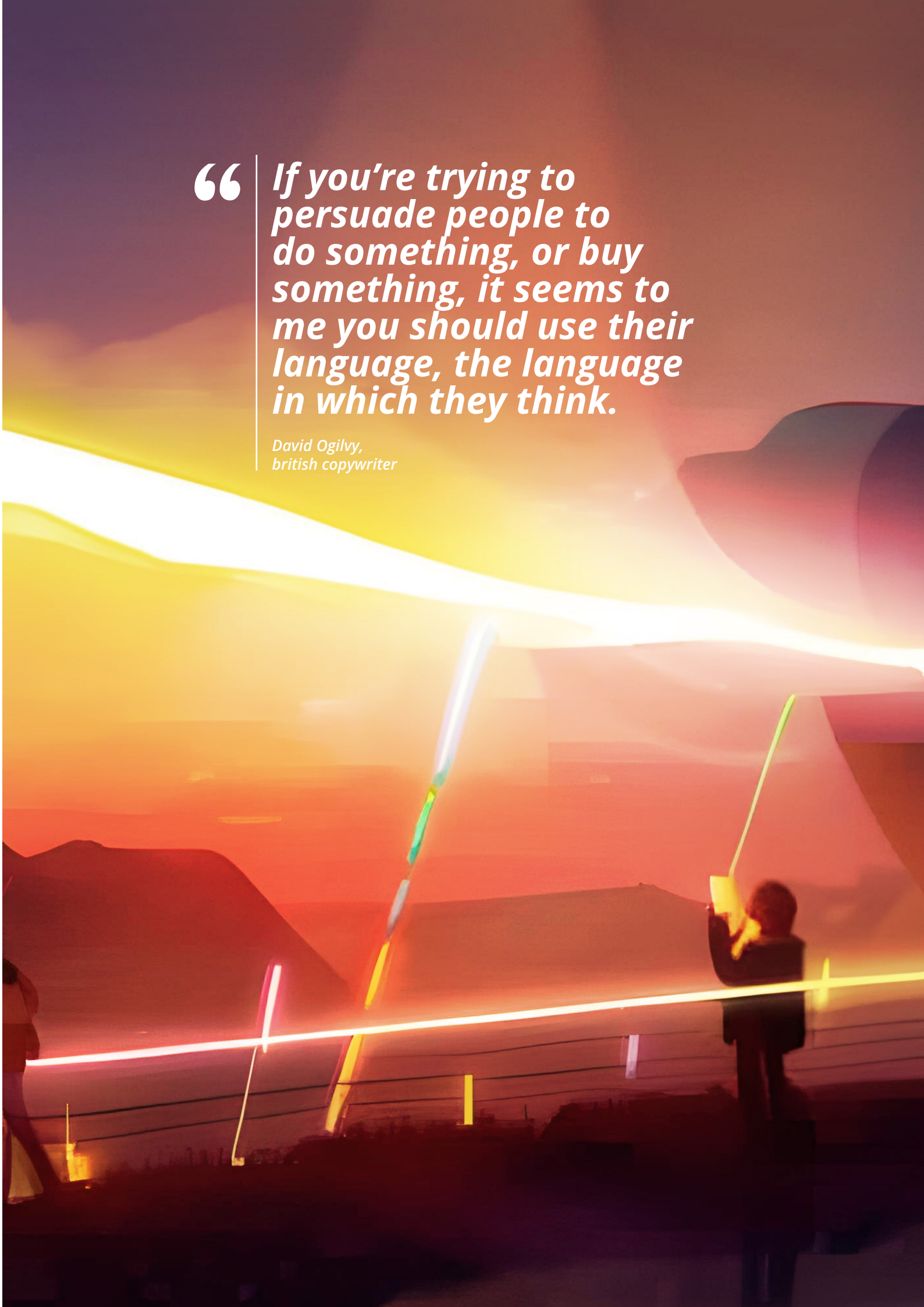


MICRO-TRENDS

- 1 Visual Intelligence
- 2 Virtual Influencer
- 3 Shoppable Media
- 4 Retail Media Networks
- 5 In-Game Advertising

“ If you’re trying to persuade people to do something, or buy something, it seems to me you should use their language, the language in which they think.

David Ogilvy,
british copywriter





HYPER-LOCALITY

Merging the physical and virtual worlds
in time and space.

New technologies are leading to a dovetailing of the physical and virtual worlds. The interactive possibilities we are familiar with from the Internet are thus increasingly being transferred to our physical environment. At the end of this development is hyperlocality - the state of location- and time-independent, seamless, ever closer digital networking of devices and objects.

Hyperlocality has become increasingly important in a world that is increasingly focused on place. With the increasing availability of GPS and location data, as well as increasingly complex geographic information systems, companies can analyze and use more accurate and specific information about the location of their customers. This information can be used to deliver personalized offers and messages targeted to the specific needs of a particular person or region: Retailers can use geospatial data to deliver offers and advertisements to customers who are near their stores, social networks can use geospatial data to deliver personalized recommendations and messages to users who are near friends or places of interest.

In the context of online searches, the use of geodata ([location intelligence for marketing](#)) is also highly relevant: Companies can use it to improve their presence in local search engine results and thus better reach their audience.

Another reason why geodata are becoming increasingly important in marketing concepts is that they allow marketers to play out marketing measures in response to the occurrence of certain triggers. In addition to the spatial component, there is also a temporal component. The space in which people move acts as a trigger for local communication with people in their situational

environment ([event-triggered marketing](#)). An ice cream brand only activates an advertising campaign when a certain temperature (e.g. 25 degrees) is exceeded at a precise location. The advertising can be played on digital screens in specific environments (e.g. train stations or shopping malls) or on smartphones when entering a specific geocage.

Geospatial data is also of great importance for [augmented reality \(AR\)](#). They provide indispensable basic information about the geographic position and physical environment of users, which is used in AR applications to enable seamless integration of digital content into the physical world. It is through these that AR experiences become realistic and immersive, providing users with a better understanding of their surroundings. An AR navigation app can use users' geospatial data to create a route through the real world and combine it with visual directions and markers in the AR application. This allows users to reach their destination without having to use a separate map or navigation system. Similarly, geospatial data can be used in AR apps to deliver personalized content based on location and interests. AR marketing apps can provide special offers and discounts for users near certain stores or highlight local events and activities.

Overall, geospatial data provides important information about the location and environment of users, which can be used in AR applications to improve the user experience and provide personalized and relevant content. Ultimately, the real world can be viewed like a website in the future. Smart devices can be used to detect objects in the physical world to obtain information about them or interact with them. Hyperlocality is becoming reality.

INDIVIDUAL- IZATION

Maximizing individual benefit.

Every person has his or her own preferences that shape the design of life and the concepts of freedom and (self-)responsibility. This gives rise to new value concepts and diverse lifestyles that strive for greater autonomy and create personal added value. There are no universal rules or strictly linear biographical phases of life. The different definitions of self-determination and demands of self-realization that one's own life should bring unfold diverse and unique lifestyles, completely indivi-dually according to personal wishes and ideas.

Individualization is a process to expand the possibilities of freedom for each individual. Imposed limits are broken, which not only changes us - we have to be more decisive - but also shapes our society more and more. In order to promote the individual interests of individuals, society, politics and the economy need to be reoriented towards more diversity, sustainability, flexibility and cooperation. The autonomous ego must also find its place in an individualized society of the future, as part of a collaborative we-culture. Individuality also strengthens the sense of community: The more individualized one goes through life, the more support is required from people who do not belong to the immediate environment. This requires openness and community-oriented togetherness.

High levels of prosperity and material possibilities give us numerous options to freely choose our lifestyle, our consumption or our media use. Self-assembled and individualized products and services have a higher value than prefabricated products. Hardly adaptable variants or single versions have no chance of survival on the market, even in the short term. This results in differentiated markets that demand hyper-personalized products, geared to specific needs, for each individual of a target group size. As a result, marketing strategies must be adapted at the same time, guided by big data and technology. Technological change has given an enormous boost to the trend of individualization. The Internet alone has greatly expanded the scope of possibilities. We experience more technical and social connectivity, more co-determination, and new ways of self-expressing our identity. We can choose from a multitude of options, create our individual products via digital configurator or 3D printing that no other person has. Designing our own consumer worlds has become socially established as the standard. But we want more me: in the way we are addressed, in the products and services. In return, we are usually willing to give more: More attention, larger amounts of data, our digital identity or our money.

To this end, technologies are used to identify patterns from our individual behaviors and the data we leave behind every day, both analog and digital, which allow individual product recommendations and specific offers to be made. But it is

essential that data collection in a digitalized world is carried out in compliance with legal regulations. There are various ways to do this, such as setting data protection policies, using encryption techniques, restricting access to certain websites, and setting up firewalls. It is also important that users are informed about how their data is collected and processed and that they have the opportunity to prevent or adapt the data collection.

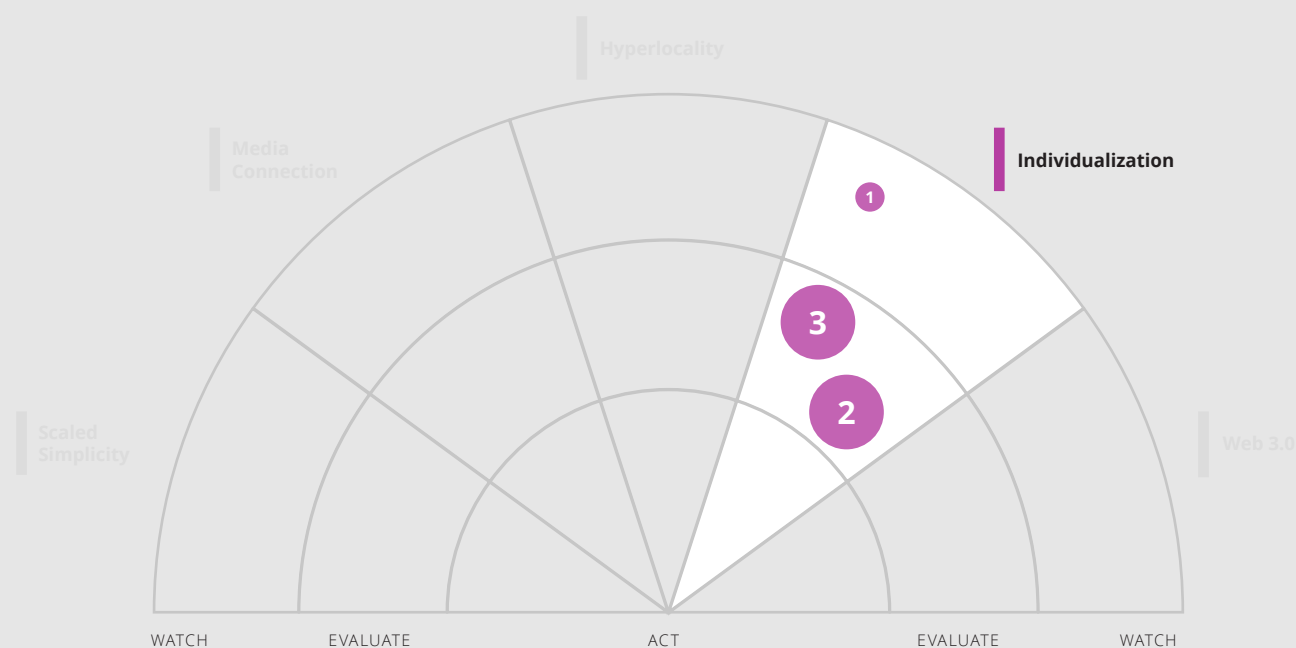
Genetic advertising is a particular example of individualization as a marketing trend. Genetic testing services that enable consumers to learn more about their ancestry, health risks and other genetic characteristics can also be instrumentalized for marketing and advertising purposes. Advertisers can use this new type of data to conduct highly targeted marketing tailored to the specific genetic makeup of consumers. Due to the unchangeable and thus exceptional permanence of this data, the trend is gaining in importance - even if the development is (still) heavily regulated, especially in Germany, due to strict rules on the protection of genetic data.

Emotion AI is a technology that focuses on developing algorithms that can recognize and respond to human emotions. In marketing, this technology can be used to create personalized experiences for customers. For example, a chatbot that uses emotion AI can respond differently to customers who are frustrated than to those who are happy. This can help improve customer satisfaction and build strong, long-term relationships between customers and brands.

In the context of individualization, the **Decentralized Identity** micro-trend is also gaining significant relevance. Decentralized identity refers to the use of blockchain technology to decentralize control over users' identity data. With decentralized identity, users gain full ownership of their own identity data, can control it and share it securely with companies and organizations when necessary. In this way, companies can leave manual review processes behind and quickly review information in a privacy-compliant manner that also creates personalized and relevant customer experiences while maintaining control over their own data, while respecting the principles of data sovereignty and privacy.

Individualization offers companies and advertisers a wealth of new market access. The wealth of variants and hyper-personalized options tailored to customers result in numerous new business models or an expansion of existing models. However, it is important that companies ensure that they use their customers' data ethically and responsibly to protect their privacy. Data protection policies and laws must be complied with to ensure that the use of data in the context of personalization in marketing is legal and ethical.

CLASSIFICATION ON THE TREND-ATLAS



MIKROTRENDS

- 1 Genetic Advertising
- 2 Emotion AI
- 3 Decentralized Identity

“To be irreplaceable,
you always have to be
different.”

Coco Chanel,
french fashion designer





WEB 3.0

A decentralized and blockchain technology based version of the internet.

The term Web 3.0 is used to describe various trends and developments that, taken together, represent a new level of the Internet. On the one hand, Web 3.0 is characterized by a new type of infrastructure. It is a decentralized version of the Internet based on blockchain technology that allows users to control their data and identity and to conduct transactions without intermediaries. It aims to solve the current problems of the Internet, such as data abuse, censorship, and monopolization, and to create an open, secure, and free online world based on collaboration and fairness. On the other hand, Web 3.0 is characterized by a high degree of ever-present elements, where the experience is central and where commerce, content, 3D, entertainment, social, and gaming merge with each other.

If you want to better understand the complex ideas behind Web 3.0, it is worth taking a brief look at the individual development stages of the World Wide Web.

Web 1.0, also referred to as the "static Web," was the first generation of the World Wide Web and was primarily focused on the consumption of static information. It was a simple and unidirectional method of information delivery, where users were only able to access information on web pages, but not interact with them or create content.

Web 2.0, also known as the "dynamic web," is the second generation of the World Wide Web and has evolved since the late 1990s. Unlike Web 1.0, Web 2.0 allows users to actively create, share, and interact with content. Web 2.0 is based on social networks, online communities, blogs, and wikis that allow users to share, discuss, and disseminate their thoughts and ideas. Web 2.0 has also changed the way companies and organizations work online, leading to an increased focus on user experience and collaborative working.

Web 3.0, also known as the "decentralized web," is the next stage in the development of the Internet and is based on blockchain technology. Each user has transparent and immutable records of all transactions, which can help to strengthen trust in (business) processes. Blockchain technology also offers a high level of

security, as it uses immutable and encrypted records. Companies can thus store their data and transactions securely and protect themselves against attacks. Smart contracts, used in Web 3.0, are self-executing contracts that are executed on the blockchain. This allows companies, for example, to automate business processes and reduce costs for manual processes.

Virtual Reality (VR) takes a key component in the creation of so-called Avatar Worlds, which in turn are particularly noteworthy in the context of Web 3.0. By **avatar worlds**, we mean a concept that describes a virtual world that enables people to live, work, and play in an interactive and immersive environment. Only via VR can users fully immerse themselves in Avatar Worlds and interact with them through sensory experiences such as sight, hearing and touch. Avatar Worlds can be seen as a kind of digital ecosystem in which users can interact in a shared virtual world. In some cases, Avatar Worlds are also referred to as the Metaverse. This is exactly the reason why we refrain from using the term metaverse here.

Some of the challenges in implementing Web 3.0 include the scalability of blockchain networks, the user-friendliness of decentralized applications, and the need for broader adoption of cryptocurrencies and decentralized identity solutions. If these challenges are solved, Web 3.0 and blockchain technology have the potential to fundamentally change the advertising industry as well by promoting transparency, trust and effectiveness (**Blockchain for Advertising**). For example, blockchain technology could form the basis for the creation of decentralized marketplaces for advertising, where advertisers work directly with marketers, publishers or influencers. Agents or agencies would then lose a great deal of their power. Furthermore, users could store their data on the blockchain and control who can access it. Advertisers would then be able to serve more targeted ads to users who are willing to share their data and possibly even reward them for their attention in the form of tokens or cryptocurrencies.

Overall, Web 3.0 technologies offer numerous new opportunities for companies and startups to develop innovative business models built on decentralized applications (DApps) and token-

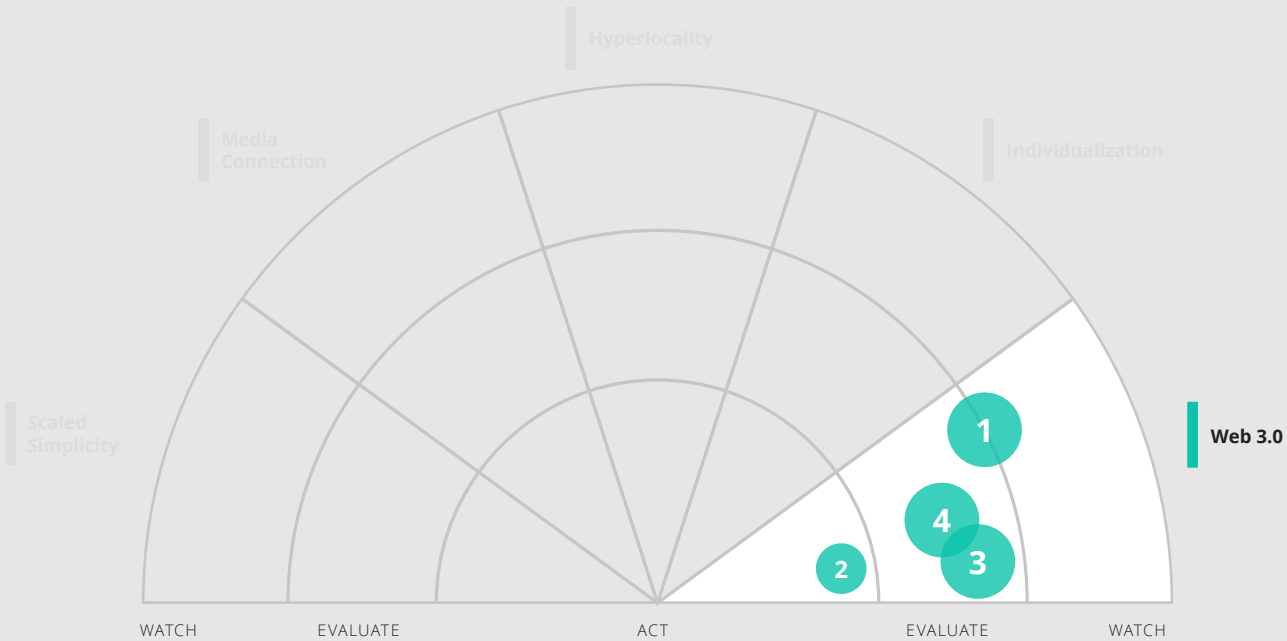
“Everything great that happened in the world first took place in a human's imagination.”

Astrid Lindgren, swedish author

based ecosystems. For example, DApps enable companies to sell products and services directly to end users without the involvement of a third party, such as an intermediary or platform. **Non-Fungible Tokens (NFTs)** are seen as another important use case for Web 3.0. NFT translates to "non-exchangeable tokens." They represent unique digital certificates validated via blockchain technology and can be clearly assigned to users via so-called wallets. Unlike fungible tokens, which are interchangeable, NFTs are unique and have a unique value. They can be used to represent and sell digital goods (e.g., artwork, music, collectibles). The emphasis here is on "represent." This means that NFTs are not the respective content or asset itself, but represent a digital ownership claim of the respective object. NFTs cannot be counterfeited and their ownership rights are immutable. In addition, tokens in token-based ecosystems can be used as a means of payment for products and services, but also as voting rights or as a share in the company's value creation.

All in all, Web 3.0 holds great potential for the advertising industry to make business processes more effective and transparent and to **promote user control over their data and privacy**. In addition, the generation of immersive user experiences will create new forms of interaction between brands and consumers. It will definitely be interesting to see how this technology develops in the coming years and what impact it will have on the way we interact and communicate.

CLASSIFICATION ON THE TREND-ATLAS



MICRO-TRENDS

- 1 Virtual Reality
- 2 Avatar Worlds
- 3 Blockchain for Advertising
- 4 Non-Fungible Token (NFT)

A person is walking away from the viewer down a forest path. The path is covered in fallen leaves and is flanked by tall, thin trees. In the distance, a large, bright, circular light source, resembling a sun or moon, is visible through the trees, creating a strong backlight effect. The overall atmosphere is serene and contemplative.

OUTLOOK: **HUMAN BEINGS IN PROGRESS**

Dear reader,

We hope that you have enjoyed reading this report, that it has inspired you to reflect and that it gives you a positive outlook for the future.

The view of many companies, as well as the technological view on and of trends, however, misses an important factor in many places: the human factor.

What makes people finally use a trend, accept it and embrace it? What causes a trend not to be adapted or even rejected? Together with the experts of the rheingold Institute for Depth Psychological Market and Media Research, we examined these questions in a further study. In the process, we learned interesting, conclusive and surprising things about people and their needs with regard to the acceptance or rejection of technological trends.

Basically, all applications have to serve certain soul needs in order to appear relevant at all. There are also hurdles to overcome in order for them to become established - some quite easy to take, others quite difficult to master.

Want to know more?

Contact us at strategie@stroeer.de - we look forward to hearing from you.



**“The best way to predict
the future is to create it.”**

*Willy Brandt,
former chancellor of Germany*

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Our updated trend analysis Crossroads Evolution deals with the developments of trends in the media and communication environment. Generative AI, Visual Intelligence, Decentralized Identity, NFTs and many more - we screen all movements, ascents and descents of a total of 19 micro trends and place them in the relevant context for the market.

Two years ago we highlighted the impact of Corona, this year we are at the end of the pandemic and in the middle of a turning point - a technological-digital epochal shift.

The impressions gained from conversations with experts, their know-how and our subjective observations have been incorporated into our findings and serve as a basis for ongoing discussions about strategic trends and recommendations for action for companies and advertisers. We hope you enjoy reading, discussing, questioning and look forward to hearing from you.



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