dot.Source®

HANDELSKRAFT 2019

DIGITAL DNA

HANDELSKRAFT 2019

DIGITAL DNA

CONTENTS

DIGITAL DNA

Dear Reader!

Retailers, manufacturers, and publishers are facing enormous challenges. A few years ago, digital transformation was primarily about introducing digital marketing and distribution channels, in parallel with an existing business model. Today, it means align-ing the entire corporate strategy and organi-sation internally and externally with the requirements of a digital world. Radical changes in environmen-tal factors require brands to be highly adaptable.

In the revolutionary digital age, companies need an evolutionary advantage: digital DNA.

Because digital means more than just something »on the Internet«. It's more than the code of digital tools and smart devices. Digital has long been a mind-set. It's a way of thinking, of tackling challenges, and working together.

New work is becoming a top issue for brands in the digital age. The connection of humankind, space, and technology involves customers, users, and artificial intelligence alike in the development of solutions. Agile methods, design and data thinking are established tools for transformation and innovation.

Our mindset makes us the ideal partner for our clients now and in the future. We're growing steadily and strategically. Our 240 digital experts offer comprehensive services and the knowledge to design digital customer relations. We continue to follow our claim: »Digital Success right from the Start«.

We are pleased that Handelskraft is now in the top 30 of corporate blogs,[01] that the Handelskraft Conference welcomes more and more visitors, and the certification courses from Digital Business School are increasingly in demand.

We particularly want to thank our employees, clients, and partners. With them, our Handelskraft Trend Book became reality again this year.

Here's to a successful and inspiring 2019.
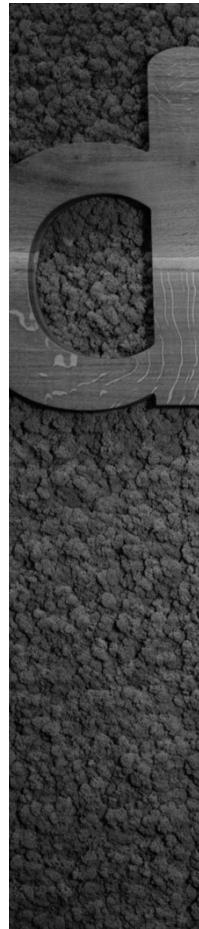
Christian Malik
Managing Director, dotSource

Christian Otto Grötsch
Managing Director, dotSource

Frank Ertel
Managing Director, dotSource

INTRO

PROGRESS IS ONLY RARELY DISRUPTIVE

Bricks-and-mortar retail isn't dead. Artificial intelligence hasn't destroyed all jobs. Corresponding prophecies were and remain only in our heads. Or not?

Now, what if the dogged focus on change limits your view too much? It's always the calmest when you're in the eye of a hurricane. If you look too long at ratios that can no longer be measured against reality, you'll be blind to necessary adjustments. The world in which companies operate is dominated by digital trends.

This world is being shaped more and more often by digital natives. They can't even pretend to care for debates about the »Internet being new territory«. They have high expectations for convenient and sustainable consumption and make new demands on their work environment. The increasing influence on the economy and the labour market by generations Y and Z, those who grew up in the midst of digital progress, who literally inhaled it, is unstoppable.

The reaction to these developments must not be a new line of conflict. Old or young. Analogue or digital. It's time to put an end to outdated categories. Generational changes are inevitable. Now is the time to bring together the best of seemingly different worlds to shape the digitised future together.

Handelskraft 2019 will show you what the near future will look like.

ALL QUIET ON THE DIGITAL FRONT?

THE UNDERRATED PERSISTENCE OF THINGS

People are not machines and machines aren't better than people. It sounds cryptic, but it explains why nearly 80 per cent of payphones in Germany have been disabled within the last ten years,[02] but at the same time, industrial companies with structures from the 1990s continue to record increasing sales and profits.

Why there are only about 23,000 payphones left in Germany is clear. Ever-increasing mobile network coverage and the rise of the smartphone have rendered them unnecessary. Users have chosen a more comfortable alternative.

But why is a company with out-dated structures now continuing on a path of success? According to the apologists for digitalisation this can't be possible. Processes are too slow, nobody is reachable at lunchtime and they have no website.

The recipe for success is trust and reliability. It doesn't sound business sexy, but it justifies why a customer doesn't give up on a long-term relationship lightly. Sharing a coffee with someone from sales goes a longer way than ordering via a chatbot. But it doesn't protect against the future customer expectations and the accompanying digital homework.

Of course, this is a simplification and deliberately polarising. However, it helps to differentiate the broad field of digitisation. Because this is necessary in order to develop unbiasedness with respect to digital trends, which it needs so that retailers and manufacturers can evaluate a trend's potential and extract the greatest possible individual company value from it.

Display Properties

Background | Screen Saver | Appearance | Settings

Color palette
True Color (32 bit)

Desktop area
Less ———|——— More
640 by 480 pixels

Font size
Small Fonts | Custom...

Change Display Type...

OK | Cancel | Apply

Color|S

Programs ▶
Favorites ▶
Documents ▶
Settings ▶
Find ▶
Help
Run...
Log Off WIN95...
Suspend
Shut Down...

Windows95

Start | Welcome
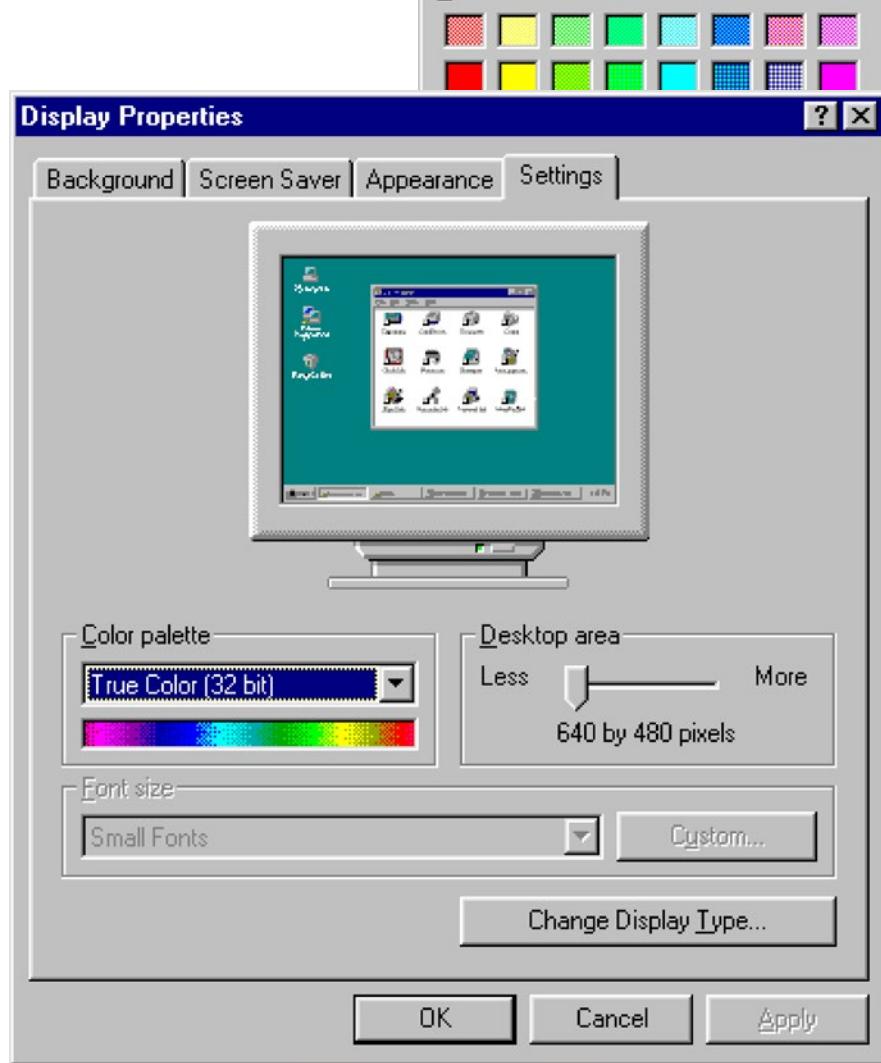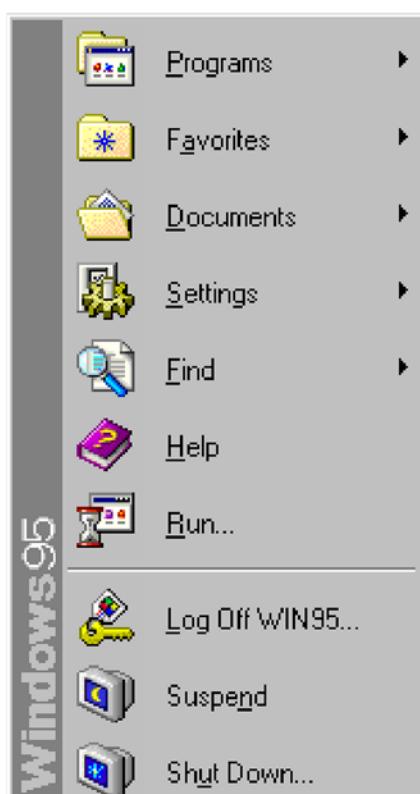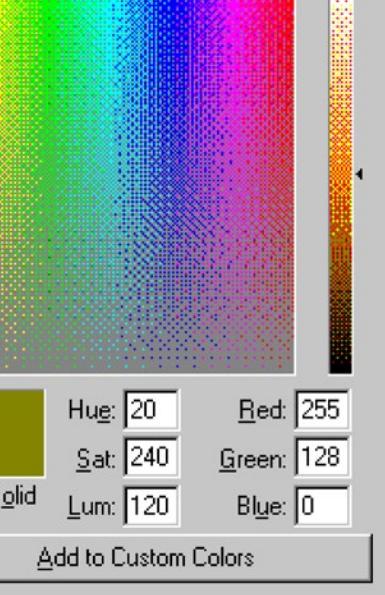
TOP 5 COMMERCE TRENDS REVISITED.

In 1998 a German magazine for teenagers called Bravo asked: »Is it worth going online?« The answers from eight teens between the ages of 15 and 17 – or as Bravo calls them: »Online Freaks« – ranged from the praise of chats and communities to complaints about long loading times and empty internet cafés. Surfing the internet wasn't in just yet.[03] But by 1998 you could already be shopping online. Since 1998 we've had Google. Since 1998 Germany has had Amazon.

As bizarre as Bravo's survey sounds today, it shows: For two decades »digitisation« has been developing at different speeds. After all, those who have been dealing with trends and developments in digital transformation for many years now find that a lot of trends last a long time. For all these trends there are excellent best practice examples.

In fact, five trends have been booming for decades.

The internet was once just a giant catalogue. It seemed obvious to digitally reproduce the catalogue concept from Williams-Sonoma or Harry and David. Online shops were born.

Since then online retail has grown. Just in the B2C sector in Germany alone it's grown by 5,000 per cent from 1 billion euros in 1998 to almost 54 billion euros in 2018.[04] Almost 20 per cent of retail sales are generated online today.[05] That number is rising with no end in sight. Online is now so powerful that Otto (a German mail-order company) stopped their print catalogue, the symbol of economic success, after 68 years.[06]

During the same period, the internet changed its face. Exciting features such as high-quality product images and product information became just as relevant as free shipping or delivery time. Today they're expected. Amazon and Zalando have shaped user habits so much that confidence in the shop, usability, as well as services and consultations have a higher impact on sales success than the best price.[07]

Digital business apparently knows no boundaries. E-food and sharing economies prove that you can sell anything online even if it once seemed impossible – thanks to digitally added value. In B2B too, digitally added value for customers is becoming more and more often the norm.

More than ever before, the buzzword »omnichannel« applies to retailers and manufacturers.

But that doesn't mean having to offer »everything« on »every channel«! User requirements and channels are individual. Omnichannel means offering those functionalities that users expect at the individual point of interest – not necessarily at the point of sale – in an integrated way. To do this, ERP, CRM, CMS, PIM and e-commerce system have to work together.

The basic question of e-commerce-driven digital business must, therefore, be: What does my customer, my employee, my partner (in short: the user) need to be even more successful in order to reach their destination even more conveniently?

German companies Karstadt, Otto, Quelle – they all made it easier for those involved in the customer relationship. They offered customers access to goods and manufacturers access to the customer. The business model of analogue access was devalued by online retail.

The products can today be found and purchased online. Inside and outside the digital world, the shop window has virtually lost its raison d'être. But how can companies adapt their business model if the unique selling proposition of sales area is no longer needed? One option is transforming into a platform.

On the platforms, companies don't just offer products, but also an inspiration. This requires them to act in a more data-driven way. Data is inextricably linked to digital transformation.

That's what the Otto Group has achieved. The group achieved 7.8 billion in online sales in 2017. That is 10.9 per cent growth compared to the previous year. Growth drivers are OTTO, now a marketplace instead of retailer, as well as About You,[08] a fashion platform subsidiary, founded in 2014. Even in the B2B sector, brands are relying on platforms more and more, and even trade fairs are increasingly shifting their added value to matchmaking. They know what the exhibitors offer, they know the interests of the visitors. Instead of providing space, their business model is changing. Based on their data, they network supply and demand.

For example, printing press manufacturer manroland also relies on the power of the platform and networks its customers with suppliers of accessories and consumables.

In addition, manroland offers digital services to its network, such as high-quality product photography.[09] The »Otis One«[10] platform monitors around 300,000 elevators worldwide to collect and evaluate data and intelligently improve service quality, also using IoT. BayWa is working to develop an integrated online platform to meet the needs of its loyal agricultural customers, even in the digital age. The prerequisite is a networked system landscape, such as that developed by Coca-Cola Germany based on Salesforce.[11]

Platforms answer the question of access for retailers and manufacturers, just as in the traditional business model. In the age of information, companies should not act as gatekeepers but as valuable networkers.

1

DIGITAL BUSINESS IS
MORE THAN E-COMMERCE

2

BRANDS ARE BECOMING
(SERVICE) PLATFORMS

3

PERSONALISATION
IS A MUST

4

CONTENT IS KING

5

EXPERIENCE ECONOMY
IN B2B AND B2C

The basis of every valuable customer relationship and inspiring user experience – online and offline – is knowledge. It shows that the other person is interested in me, and it creates trust.

In digital business, personalisation as a trend has been around for a particularly long time, because its implementation is complex. The dimensions of an individualised user approach are endless. Perfect personalisation would require a utopian state of full information. But if companies become data-based and test-driven, this utopia can always come closer to reality.

A fitting example of a perfectly personalised product is Spotify. Currently, the Swedish company has over 200 petabytes (200,000,000 gigabytes) of user and metadata.[12]

»Discover Weekly« or the personalised »Release Radar« are the tip of this iceberg. Movement, location, and weather data are also recorded and evaluated. If you're going to run again after a long time, you'll soon be offered jogging and running playlists.

However, personalisation also carries the risk of getting closer to the user than they would like. Advertisements, mailings, or pop-ups that annoy them ruin the relationship in just a few moments.

Nevertheless, customisation means far more than just customised product assortments, email delivery times, and social media advertising. That means enormous challenges for technology and personnel.

Personalisation also includes demand-oriented information presentation. At an appointment, customised user interfaces of the CRM system supply the sales representative on their tablet only with the most necessary information. On a laptop, whether in the office or at home, they have full access to all information about their customer bases. With product orders, customers get access to customised pages that help them, for example during assembly.

Personalisation will remain a trend until retailers and manufacturers translate it into excellent user experiences. It also means expanding the focus from conversion to the entire customer lifecycle.

1

DIGITAL BUSINESS IS
MORE THAN E-COMMERCE

2

BRANDS ARE BECOMING
(SERVICE) PLATFORMS

3

PERSONALISATION
IS A MUST

4

CONTENT IS KING

5

EXPERIENCE ECONOMY
IN B2B AND B2C

On average, each person gets 200 minutes of screen time on just their smartphone per day.[13] Only a fraction of this time is spent shopping. Users swipe through social media feeds, messengers, videos, podcasts, audiobooks, games, and more. They are looking for entertainment, inspiration, knowledge, and distraction.

Although brands have enormous potential to attract the attention of users, they are confronted with a gigantic challenge at the same time: They have to face the content alternatives in terms of emotions and relevance. Not to mention the mammoth tasks of content creation and content distribution. As text, as image, as video, or audio, content should be adapted to the current needs of the individual user and optimised for different channels and devices.

One development in the context of the content trend is the change from online shops to content-rich websites with a purchasing function. Experiments with buy buttons on social media and in messengers, or even physically, like Amazon′s Dash Button, are a consequence.

But not only the interaction of the purchase is relevant. The supreme discipline is to interweave call-to-actions into the channel-specific and demand-specific content. For example, digital video tutorials require functions such as start, stop, pause, forward, rewind, faster or slower. Possibly supplemented by »Schedule an installation now!«.

Another hurdle for retailers and manufacturers is attribution, i.e. the measurement of the effect of an activity. As part of an omnichannel customer journey, this seems almost an impossible undertaking.

Can it be measured at all without enormous expenditure if a web series of influencers also leads to higher sales in the store? How can correlation and causality be captured?

For digital content applies what has long been known from the analogue customer relationship: Trust develops through relevant conversations and not through hot air. High-quality content is an important distinguishing feature for brands in the digital age.

1

DIGITAL BUSINESS IS
MORE THAN E-COMMERCE

2

BRANDS ARE BECOMING
(SERVICE) PLATFORMS

3

PERSONALISATION
IS A MUST

4

CONTENT IS KING

5

EXPERIENCE ECONOMY
IN B2B AND B2C

As mentioned, customers do not give up a long-term relationship with brands lightly. At the same time, every positive experience is an investment in the expectation of the user, changing the quality of their relationship.

A voucher sent by email is also valid offline. Customer service via Twitter regularly worked with a higher satisfaction rate than via contact forms. The cancellation of the trip ran smoothly in the app and was free. The smart mirror in the locker room was able to say which things in the closet fit with the new favourite piece.

Working together on an office document was more convenient than email communication.

The examples of convenient user experiences that make our job easier or shorten the time between wanting and having are endless, and more are being added daily. They all gnaw at our now inefficient habits and routines. Until the moment when the email is missing the attachment for the fifth time and you ask yourself: Why isn't my file just in the cloud?

Brands have to deal intensively with the behaviour of their customers.

As a result they can develop innovations for their own products. Although Deutsche Bahn (German National Railway) has rarely been known for digital success stories, the field test of its comfort check-in has a real start-up spirit.[14] As a customer with a seat reservation and mobile ticket you can now check yourself in. Sleeping passengers are no longer awakened for what felt like an unnecessary passenger check. That increases customer satisfaction.

In short: Those who want to retain customers and employees in the long term must invest in their user experience.

DIGITAL TRANSFORMATION: LEVEL 2

It's very reassuring. In 20 years of digital history, those predicting the deaths of many retailers and manufacturers have been wrong. Users seem to be as patient in terms of change as digital trends. Even those who start late apparently have enough time to shape their own transformation. Is it time to take it easy?

As time progresses, the likelihood of an event occurring increases. In addition to the mathematical argument, there are also more solid indications as to why brands should engage with digital trends. Because, in fact, the pressure on companies is growing, making the digital end-time scenario more likely.

94 per cent of Germans between the ages of 14 and 65 own a smartphone. Over 65, and it's every other German.[15] 93 per cent of households have internet access.[16] Even if Facebook loses young users under the age of 25, the network is in high demand among »the elderly«.[17]

In B2B, WhatsApp is becoming more popular as a messenger and an important channel for sales and services.[18] Although delayed, behavioural patterns are currently changing throughout society.

Added to this is demographic change and a shortage of skilled workers. There is a generational change in companies. The survival of analogous inadequacy was, therefore, more due to the preponderance of baby boomers than the lack of willingness to adapt within the total workforce. New employees are now demanding the conditions of work that their potential employers have long neglected.

Do retailers and manufacturers have still enough time to do their digital homework? New international competitors are already available, who have taken up enough speed with the help of modern working methods and artificial intelligence to endanger existing customer relationships.

After all, it is competitors to which customer focus has not been an empty phrase, but their path to success so far. Many a company has tried to just sit out the digital transformation. Now they face a double challenge: dealing with old and new trends.

FROM TREND TO INNOVATION IN 3 STEPS

Why do people tattoo Harley Davidson's logo, but not AT&T's on themselves?
It's simple. AT&T says »We're the best!«, Harley Davidson says »Our fans are the best!«.

If you want to be successful as a brand, you must – and it can't be emphasised often enough – place your customers at the centre of everything. Hardly any company would not describe itself as customer centred.

A true user focus means regularly examining your business model, your (product) selection, and the practice of marketing, sales and service as well as your internal processes and resources with regard to their strengths, weaknesses, opportunities and risks. What does a perfect customer relationship mean for those involved?

How close is this vision? How can the gap between reality and target be closed?

This is the basis for getting from trend towards innovation in three steps. It's no shame to fail and take a step back – on the contrary. If you believe Amazon founder Jeff Bezos, it is a sign of the highest intelligence and a healthy mind.
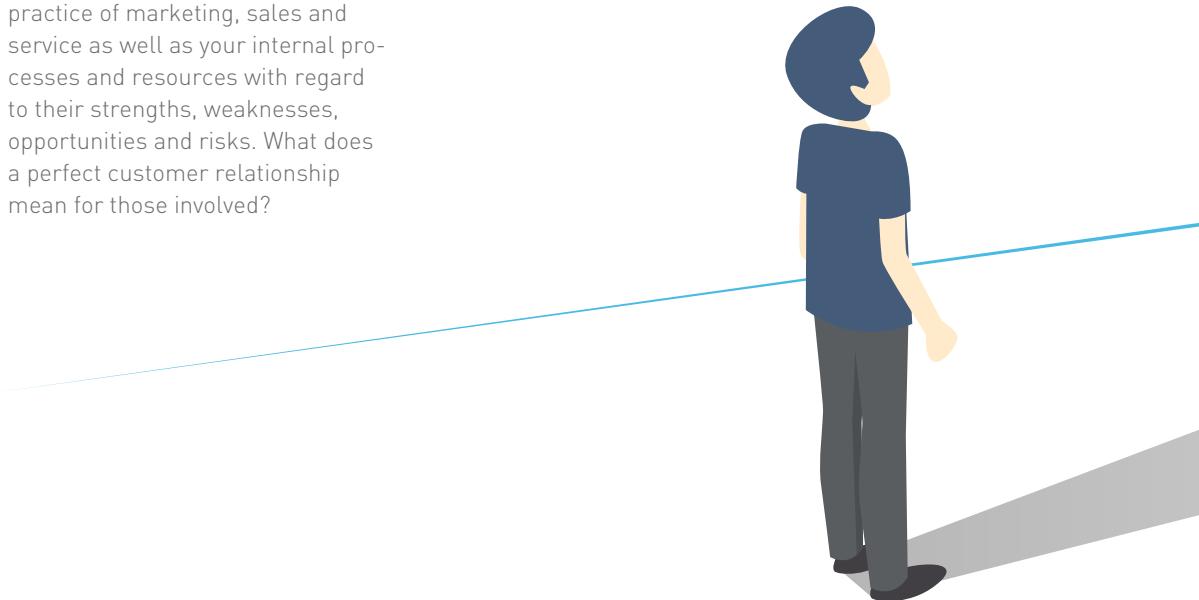
»Smart people are actually wrong a lot. The smartest people are constantly revising their understanding, reconsidering a problem they thought they'd already solved. They're open to new points of view, new information, new ideas, contradictions, and challenges to their own way of thinking. Consistency of thought is not a particularly positive trait. It's perfectly healthy — encouraged, even — to have an idea tomorrow that contradicts your idea today.«[19]

Jeff Bezos – Founder, President, Chairman & CEO of Amazon

CHALLENGE

DISCOVER
Pain Point

DEVE
Proto

Start Point

Focus
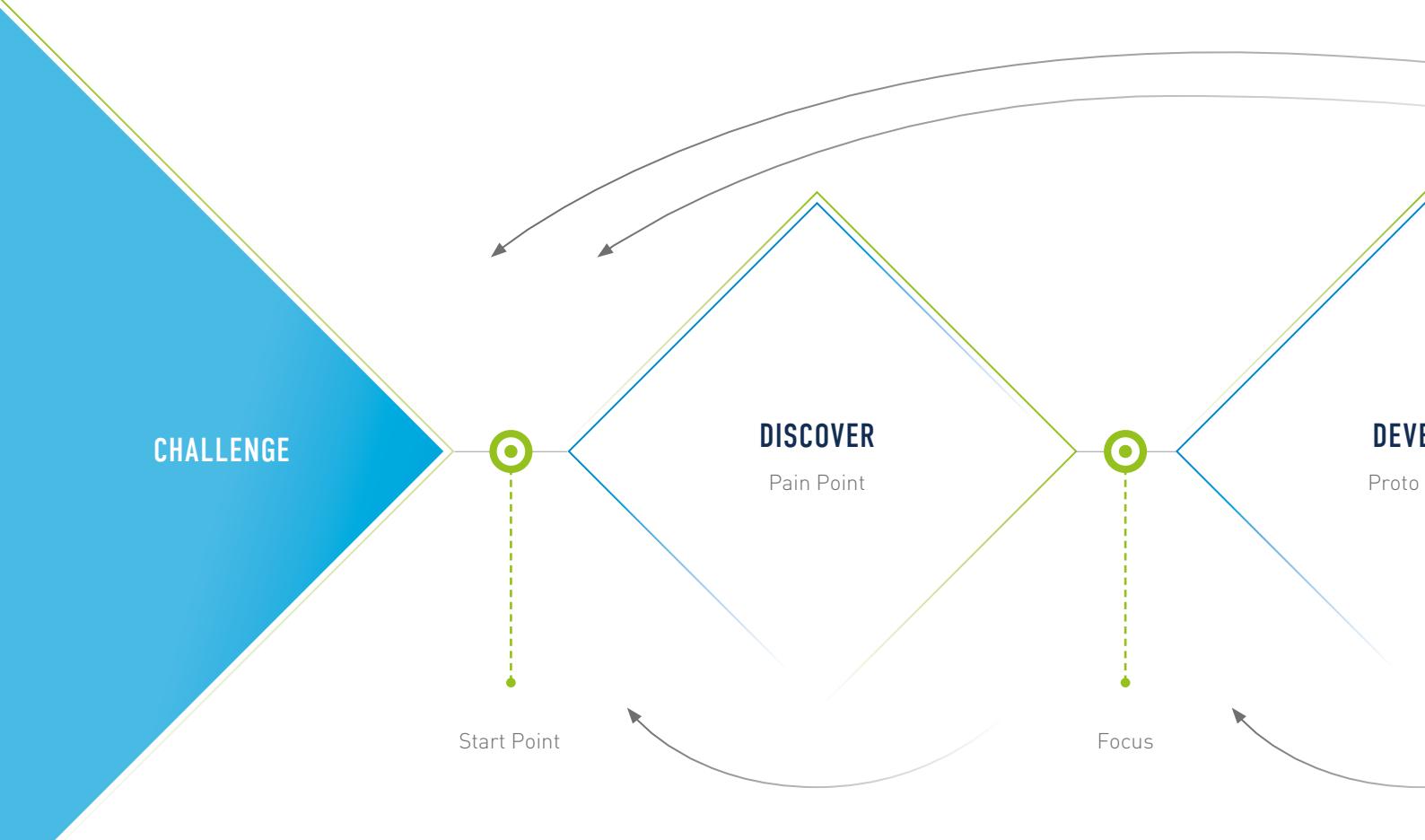
1. Getting Ready

In order to derive innovations for their own company from trends, brands first have to deal with trends analytically, without value and without prejudice.

- ⊙ What's the trend?
- ⊙ What basic needs of the user are satisfied?

- ⊙ Which companies are addressing this trend and how?
- ⊙ What changes have caused the trend?
- ⊙ What expectations are arising from the trend?

Especially in the discovery phase, it's worthwhile to set up the collection of information broadly.

Personas, interviews, internet research, and studies are popular sources. In addition, stakeholders should be involved as early as possible in order to arrive at a shared vision.

Or trivially expressed: If marketing thinks up something IT needs to implement, IT should be involved soon enough.

ELOP

type

TEST

MVP

SCALING

Evaluation

Verification
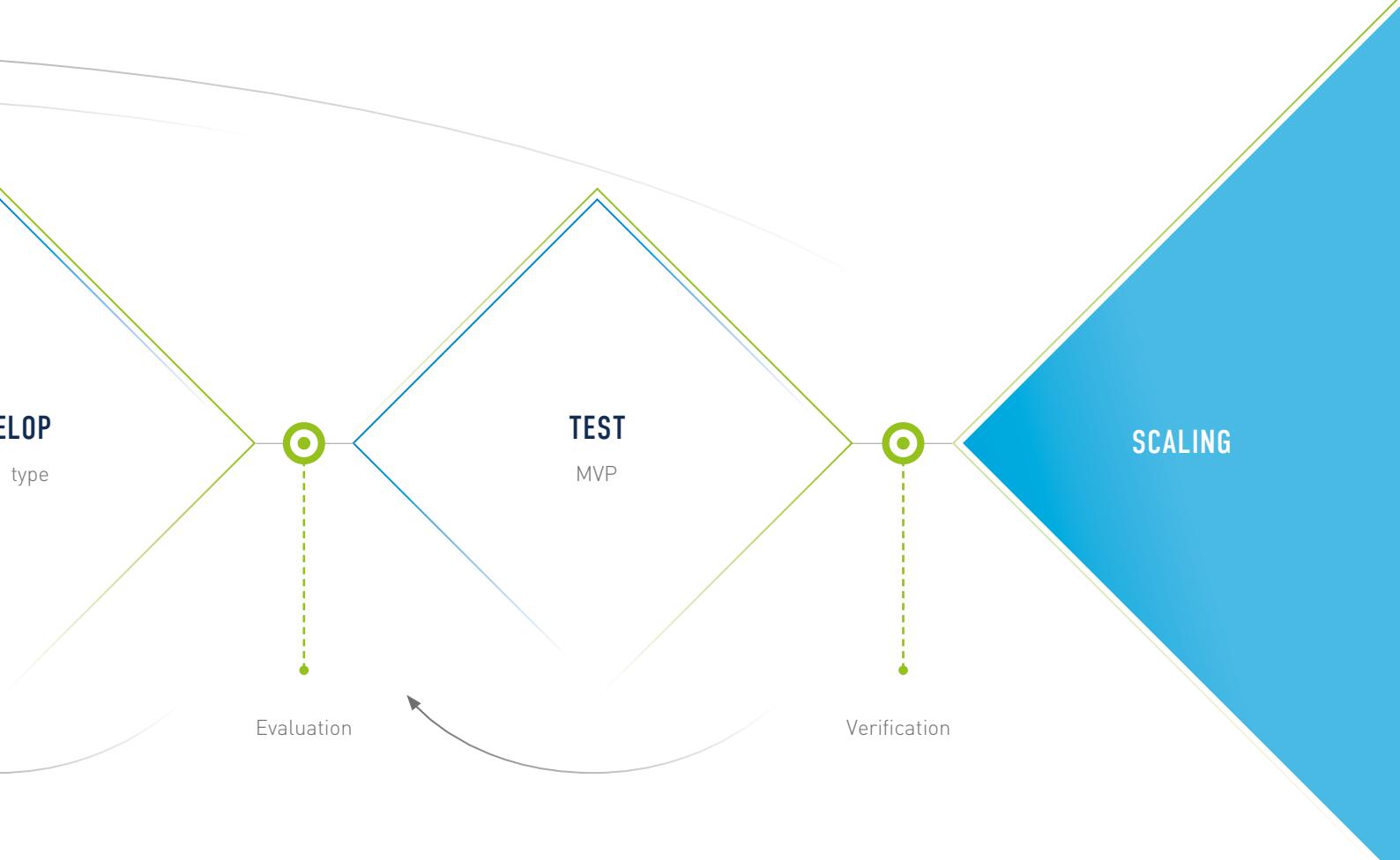
2. Getting Started

Once the discovery phase is completed, the invention phase begins.

- How and where can a trend be applied?
- Which (new) user groups does this trend suit?

At this point, the innovative ideas are »invented«. Whether it's a new product, a new business model, or a vision. The next step is the development of prototypes. Here, less is more. Start minimally, set success metrics, and quickly fail or learn and improve.

3. Getting Big

The prototype went completely wrong? Wonderful, back to step 1 or 2. What new insights have been gained? What needs to be adjusted?

Has the prototype been successfully tested? Great, now it's time for scaling and the iterative, user-centred evolution of the innovation.

ARTIFICIAL INTELLIGENCE

I FINALLY DON'T HAVE TO THINK ANY MORE

When you hear terms like artificial intelligence, deep or machine learning, you quickly see the image of a high-tech robot and scenes of dystopic movies in which machines seize power over humanity. But luckily all of that is happening in the future, right?

Actually, the AI revolution has long since begun. Tech giants from Asia and the US are already investing billions of dollars in its development. But artificial intelligence works in a subtler way than many would imagine.

It's already taken form in predictive analytics, natural language processing, and visual recognition. Smartphone users are already under its control. They ask Siri for directions, communicate in different languages thanks to Google,[20] and trust recommendations from their preferred streaming service.[21] Behind all this is an artificial intelligence that analyses human behaviour based on existing data in order to derive possible actions from it.

In contrast to the Terminator or HAL 9000, the applied AIs do not have the ability to abstract, to act strategically or creatively.

The development of business plans and strategies in a digital world is left up to humans. However, when it comes to identifying patterns and regularities, especially in huge amounts of data, artificial intelligence is clearly superior to humans. The use of machine learning gives them the opportunity to expand their cognitive and relational abilities as well as their decision-making principles. In an economy that is increasingly driven by data, this represents a tremendous opportunity. The question is no longer whether, but how AI can be profitably integrated.

FROM MOBILE FIRST
TO AI FIRST

Intelligent voice assistants, predictive shopping carts, smart mobility – new technologies are setting standards wherever they make the user experience more convenient. Be it a more flexible interaction, faster purchase, or shorter waiting times. The fulfilment of these needs simultaneously establishes new expectations, which users transfer to different areas of their everyday lives: Why can't I make a bank transfer with my voice? Why isn't it possible to call a cab in this city with an app? And why do I have to go through such a long process just to reorder one of my favourite products?

AI-based technologies are now having a major impact on procurement, interaction, and mobility, and are increasingly bringing customers convenience. They are already used to the internet knowing what they want. The Austrian wholesaler Kastner has recognised this

and therefore relies on predictive analytics[22] in its online shop. The algorithm creates individual shopping lists for registered regular customers based on their typical buying behaviour. If an item has been forgotten, the customers are automatically reminded. This not only ensures happier customers thanks to faster purchasing but also reduces the staff time for processing reorders and shipping costs in the company.

Amazon is also aware that its customers are no longer eager to scroll through endless product lists. In search of new trends and products, they prefer to scroll through image-based social media feeds and decide within milliseconds what they like and what they don't. This is a user experience Amazon also wants to enable on its platform. In the tile view of »Amazon Scout«,[23] customers have the opportunity to find the right product

> **i** Like the human brain, an AI forms neural networks. In contrast to previous programs, which only follow complex if-then rules, they seek solutions independently, collect experiences based on feedback, and adjust their behaviour accordingly.

i Is the user clicking on the given product recommendations? Do they like the results for their search term? Depending on the feedback, the connections between the neurons in the network become stronger or weaker. This process, also known as machine learning or deep learning, allows the network to self-optimise over time, increasing the confidence of the AI. The AI not only learns based on its own experience, but also based on data from other machines with which it is networked. For example, a fleet of autonomous vehicles generates huge amounts of driving experience within a very short time.

in a pinterestesque style. Furniture and other home accessories can be rated with a thumbs up or thumbs down. The AI-based tool then designs the product display according to the user's preferences.

Starbucks offers next-generation coffee to-go with the help of AI-based services.[24] Thanks to integrated Alexa skills, American customers can place their orders on the way to work in the Starbucks app without having to take

their hands off the steering wheel – or their bicycle handlebars. The integrated chatbot then tells them when they can pick up the order in their favourite location – without the hassle of waiting.

Are you ready for the AI revolution?

AI AS A COMPETITIVE ADVANTAGE

Not just in terms of customer expectations, but also for the optimisation of internal business processes, artificial intelligence is playing an increasingly important role. From automated product tagging[25] to semi-automated creation of descriptive text,[26] to AI-based online marketing budgets[27] – the capabilities of artificial intelligence are as diverse as the pain points of brands, retailers, and manufacturers. If you know how to use the opportunities of artificial intelligence, you'll gain clear competitive advantages.

For example, the use of AI offers great potential in optimising stock levels. Sales and customer losses are inevitable if the suddenly hotly desired goods are no longer available and can only be delivered again days later while other products mutate into a warehouse keeper.

The Otto Group relies on an algorithm that analyses customers' daily buying behaviour, considering various influencing factors such as weather, season, price, and discount campaigns, and creates forecasts based on these.[28] Sufficient inventories can be guaranteed even before the order is received and large quantities left over at the end of the season can be avoided.

With truck transport, the optimisation of supply and demand flows not only leads to cost savings, but also to significantly lower environmental impact. With the help of AI, the Hamburg start-up »Cargonexx« transforms a tangle of highly complex logistical data into networked intelligent mobility.[29] The self-learning algorithm predicts spot market prices for truck tours at the press of a button and automatically distributes them to available carrier capacities. Forwarding costs and empty trips are thus significantly reduced.

Even products with particularly short life cycles can be more effectively marketed using artificial intelligence, as an example from »11teamsports« shows.[30] Many of the items sold there, such as national team jerseys, have often reached their end of life cycle faster than fans, brands, manufacturers, and retailers would prefer. In order to prevent losses in sales and margins as well as high residual inventories at an early stage, the company uses an intelligent pricing agent. Based on various data, including inventories, historical sales figures, and click-through numbers on the website, the agent determines the optimal sales price in real time. This promises maximum sales and profits during the remaining product life cycle.

What is your artificial IQ?

Data Sources

Game Relevance	Player Performance	Historic Player Performance	Team Performance	Team Social Media Sentiment	Global Team Ranking
Social Media Team Ranking	Historic Order Data Segmentation	Demographic Visitor Data	Shop Sessions via Stadium WiFi	Stadium Beer Consumption	Weather

Natural Language Processing		Predictive Modelling
Noise Sentiment Analysis		Inventory Mgmt
Machine Learning		Pricing Engine

| OWN GOAL	TIE	2:1	3:1	4:1
18 min	28 min	38 min	59 min	65 min
Purchase Probability:	Purchase Probability:	Purchase Probability:	Purchase Probability:	Purchase Probability:
40 %	28 %	43 %	61 %	87 %
Best Price:	Best Price:	Best Price:	Best Price:	Best Price:
49.99	49.99	59.99	69.99	69.99
Prediction Confidence:	Prediction Confidence:	Prediction Confidence:	Prediction Confidence:	Prediction Confidence:
68 %	62 %	72 %	74 %	92 %
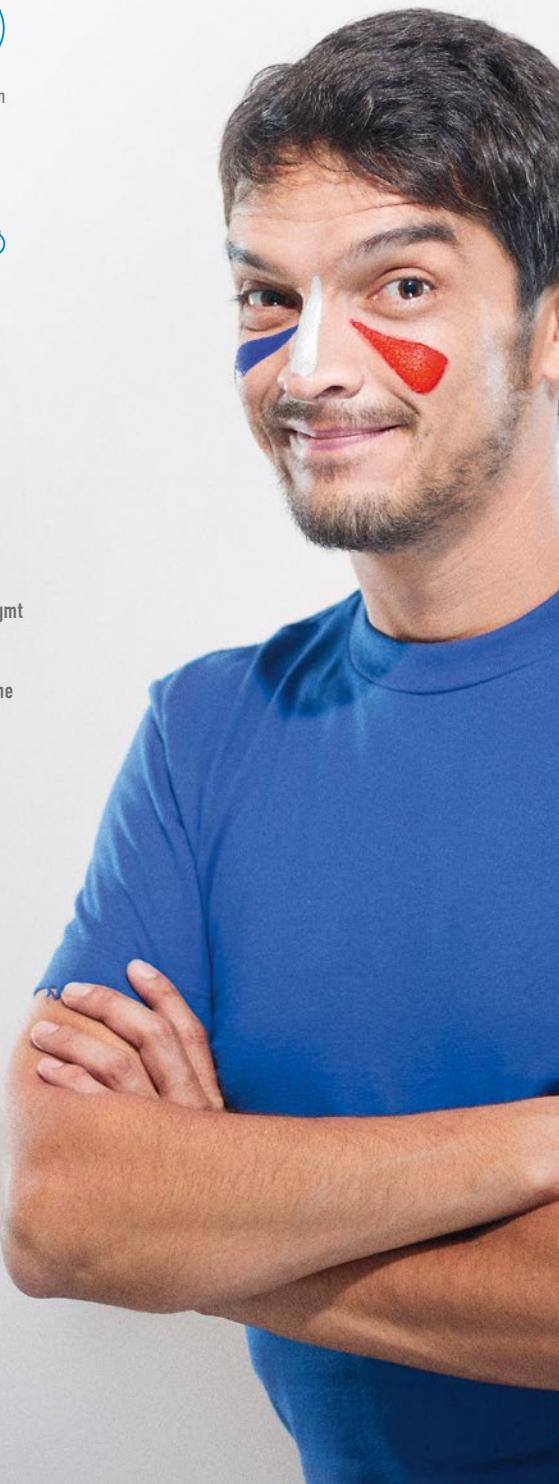
DATA THINKING AS
A TOOL FOR AI INNOVATION

Data generates knowledge, and knowledge is power. The topic of big data has meanwhile arrived at most companies. Collecting data has long been standard. Regardless of whether order histories, demographic data, returns rates, or market prices – you have what you have! What is missing, however, is a concrete goal for the further use of the collected data.

In the praiseworthy intention of implementing the latest technologies, AI use cases are then literally constructed based on the collected data without any real benefit. Complaints about a lack of good data are quickly heard. Consequently, the formerly prized AI project is a cost for the company above anything else. But can you learn to use data to reduce internal costs or even increase sales?

Yes, you can! That's what »data thinking« is. It describes a method that combines data science with the design thinking approach. In contrast to conventional big data concepts, technological aspects take a back seat. The basis of this data strategy corresponds to the basic idea of design thinking: the creative development of user-centred use cases in cross-functional teams. At the same time, the project participants should not be restricted in their ideas by the data currently available but should first think about which use cases entail the greatest business potential.

Only then can the team determine what data is needed in which quality for the use of artificial intelligence. This approach has clear advantages: On the one hand, data scientists and AI specialists

who intervene in case of unrealistic system requirements or underde-veloped projects can be called in at an early stage. On the other hand, innovation budgets are invested in solutions that actually drive the company forward, from the get-go. Many data and AI tools are open-source and require little to no pro-gramming skills. With the help of tools, like those from Google, work can be quickly started.[31] In order to playfully get closer to the subject of machine learning, it is worth giving »Wekinator« a go.[32]

Which use case holds the greatest strategic potential for your company?
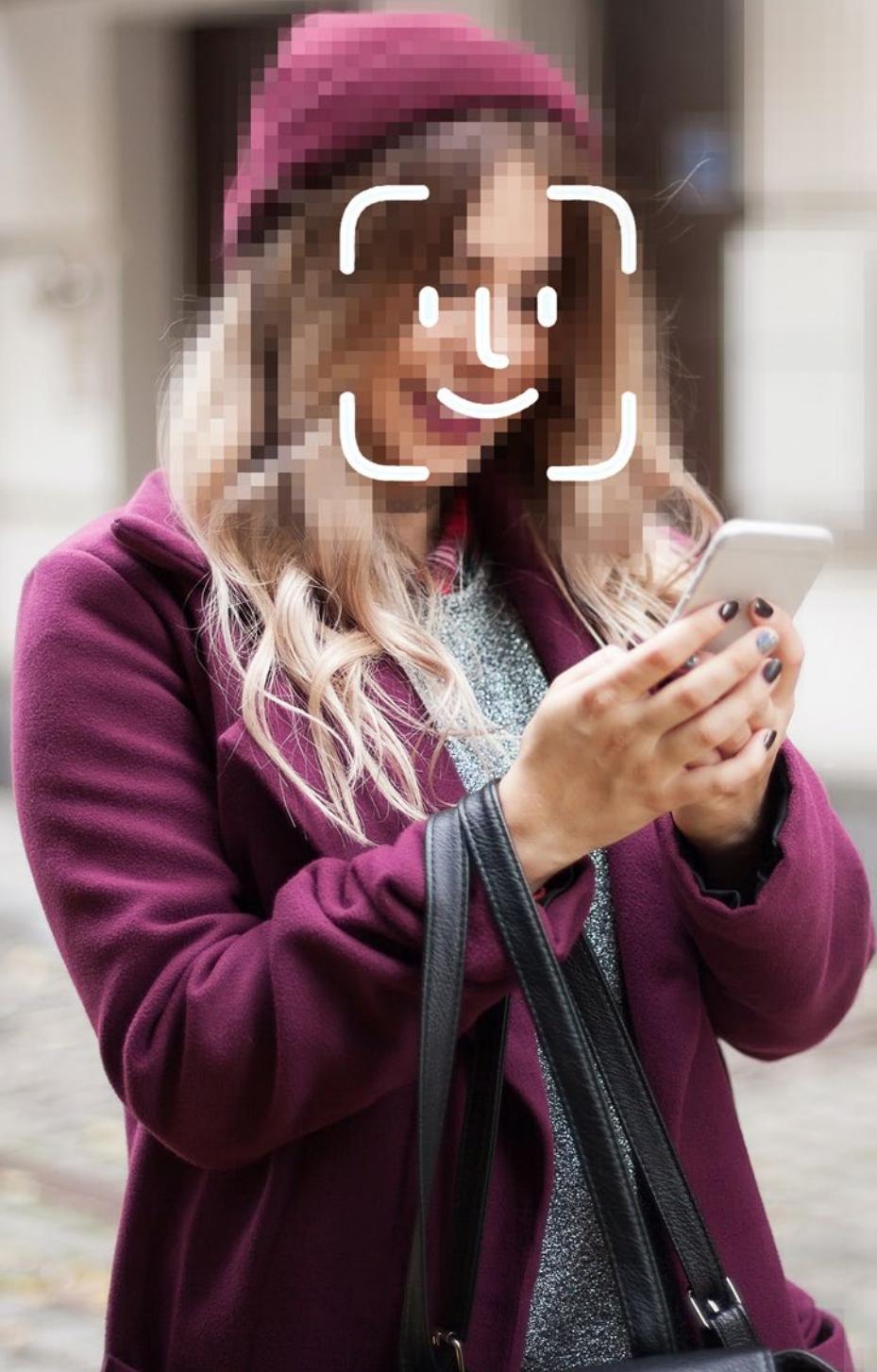
MY DATA. MY EXPERIENCE.

In the virtual eyes of intelligent systems, human beings are first and foremost the sum of their data. Moreover, in times when they increasingly satisfy their everyday needs digitally, humans increasingly become the sum of their actions: What do they consume, evaluate, and share when, from where, and with whom? A smartphone can tell you a lot more about a person than even their relatives and acquaintances can and in some cases even better than the person themselves. Thanks to the constant development of AI-based image and speech recognition, even a wink is enough to identify a person and their interests.

The travel company TUI also relies on AI-based recognition of facial expressions in their »Destination U« service.[33] As the user views a clip about various travel destinations and recreational activities, the system captures the emotional expressions on their face and then creates a recommendation for the perfect vacation.

IBM Watson's »Tone Analyzer« focuses rather on the language.[34] Watson can detect emotions in social media posts and, for example, allows customer service to react quickly to negative comments.

The abilities of AI even go so far that they can trick themselves. Researchers at the University of Toronto have developed an algorithm that protects photos from facial recognition technologies. Special pixels in a photo, which are barely visible to the human eye, are changed so that the facial recognition algorithm has no chance of identification.[35]

The thought of the technological power of such systems can be strange, perhaps even frightening. As a human, do you still have control over your data, over your actions? Or do you only interact with AI at your side?

Concerns like these are understandable. It is, therefore, more important for digital companies to come to the task of reversing these concerns. After all, with all the advancements of machines, it remains the human being who programs and controls them, who feeds and trains the neural networks with data.
Information and transparency on the nature and purpose of data use with the help of AI are the first steps to take responsibility as a digital player. In order to leave dystopias on machines that seize power over humanity to the movies and instead to provide for a future with and not despite or against AI.

How responsibly do you handle your customers' data?

NEW WORK ORDER

FUN. PASSION. HARD WORK.

At a time when machines are doing various jobs better and faster than people, employees inevitably ask themselves the question of the meaning and value of their own work. The concept of »working to live« has become obsolete in the face of the progressive development of automation and artificial intelligence. Instead, people are increasingly looking for fulfilment and self-realisation in their work. New work precisely describes this displacement of a rational performance society by the creative economy.

Independence, participation in the community, meaningfulness of one's own actions, and the development of everyone's potential are the values of work 4.0. Above all, these are generations X, Y, and Z's demand for a work environment. Companies of the future are and will be increasingly dependent on the knowledge of these digital natives.

So what do you do to meet the demands of this new work culture? First and foremost, companies need to create free space for their employees – both spatially and mentally. Only then can they develop their own ideas and live their own responsibility. Fixed working hours, steep hierarchies, and a strict division of departments hamper the promotion of innovation and knowledge work.

The dissolution of previous hierarchies also means letting go of one's own socio-cultural character, according to which, with age, more knowledge and the correspondingly greater power of decision-making automatically come along. Competence is no longer a question of age. The trend is more and more in the direction of managers around the age of 30 with a team of people at least in their 40s.

Unapproachable supervisors with sole authority to instruct belong to the past. Leaders are more of a moderator and supporter in a creative environment. Instead of dictating tasks, project managers should let their team work out tasks and deadlines on their own. The question »What can I do for you so that you can work as best as possible?« has a more beneficial effect on motivation and productivity than just demanding input.

Entrepreneurs who question the productivity of their teams in view of this development can be reassured: Once convinced of their own role in the project, new workers are characterised by great enthusiasm, motivation, and commitment – provided they work in a network with people, space, and technology.

NOT FASTER OR EVEN CHEAPER – ONLY BETTER!

Brands, retailers, and manufacturers need innovative solutions to meet the fast pace of the digitised economy. It requires short communication channels, fast feedback loops, and rapid decision-making, in short: a flexible work organisation. Away from pyramidal hierarchy structures towards network structures across teams.

Agility is a buzzword that has already been severely strained and hotly debated in this context.

Above all: Does agile project management really get you there faster? The honest answer is no. But in a modern work world, is that still a decisive factor for the definition of a project's success? The answer here is also no. Why does the agile project approach still have so many advocates?

In the face of constant change, it does not make sense to rely on a project plan that, while giving the appearance of an exact cost estimate, allows for no deviation, not to mention spontaneous reactions to new trends and changing user behaviour.

For this reason alone, an optimal solution cannot be worked out using a rigid waterfall model. If you dissociate yourself from the idea of an end goal defined at the beginning of the project, you open the way for a genuine innovation process. Although this does not lead to a finished product on the

Minimum viable product

Iterative expansion and feature development

shortest route, it does allow continuous optimisation and a quick reaction to changing market conditions and customer expectations.

In essence, this process consists of three stages: the discovery of the actual pain points, the invention of a prototype and the testing of a first solution that is reduced to the essential basic functions according to the principle of MVP (minimum viable product). Should the result not lead to the desired goal, the

team has the opportunity at any time to go back one step, that is, to revise the prototype or redefine the pain points.

The most important thing is: Working on a satisfactory solution does not stagnate. Rather than sticking to a well-crafted platform for years to come that will no longer be state-of-the-art at the time of release, companies should better launch innovative services at short intervals. These may not be perfect,

but they can be refined quickly based on real user feedback in an iterative process. True to the motto »fail fast to succeed sooner«, such an agile project approach does not necessarily promise the least effort, but certainly a more sustainable success.

Are you already failing or are you still planning?
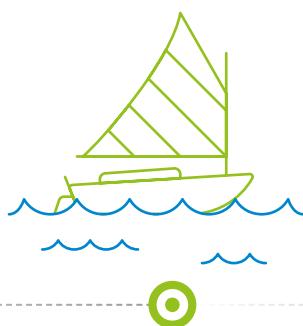
**Iterative expansion and
feature development**
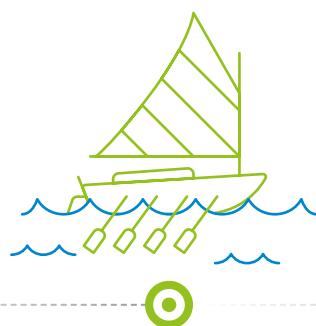
**Expanded
product**

DO WELL INSTEAD OF MEANING WELL

Of all the agile methods, scrum is the most commonly used in projects (85 per cent). Approaches like kanban, design thinking, and lean start-up are also becoming increasingly popular.[36] But despite growing enthusiasm, companies should be aware that the use of scrum and other methods is not per se a universal remedy or even a guarantee for the success of the project.

Most agile methods not only describe a procedure but above all, a basic attitude. It is therefore essential that the principles and values that come with it, such as commitment, focus, respect, and flexibility, as well as the willingness to learn constantly, can not only be understood but also practised and internalised. Especially in the initial phase of an agile project, there is often an increased need for coordination in the light of the new methods, which understandably causes scepticism and displeasure at the management level.

Kick-offs, sprint reviews, and stand-ups should not be interpreted as a new, prettier version of classic meetings in which, according to tradition, one person gives a lecture while the rest fight the urge to fall asleep. Here it is up to the project managers to convey the right understanding of the brief meetings and their purpose from the beginning – the rapid exchange of necessary information, creative sessions based on the design thinking or design sprint model, where employees of different teams are supposed to contribute their own responsibility, can overwhelm some colleagues at first.[37] For this, it's essential to create a corresponding feedback culture. Anyone who stifles first ideas of employees and colleagues by mocking criticism will most likely never be able to witness their genius. Mutual appreciation and encouragement for joint thinking are the prerequisites for success in innovative projects.

It might take some time for all participants to have the same level of knowledge and a common mindset. To use agile methods that have not yet been tested for the first time in a project whose success may decide on the existence of the company is very risky.

Instead, it is best to first carefully use each method as a test balloon in smaller projects to ensure that it fits in with the team and their intended goal. Because an agile project procedure doesn't always make sense. Particularly in departments such as financial accounting, immutable deadlines, and the achievement of previously defined goals are indispensable.

In which of your projects can you test agile methods with low risk?

MAKING THE OFFICE CHILL

The place for creative innovation, self-development, and joint development in network structures cannot be a homogeneous office routine in which all employees are physically present at uniform workplaces from 9 am to 5 pm. A new work culture inevitably requires a new spatial concept. Large digital companies like Google and Facebook, but also successful start-ups from Silicon Valley set an example – the office as a place to hang out.

Not just bright, glossy offices and spacious meeting rooms, but also cosy seating areas and kitchens reflect the mindset of modern work. They support the network effect as well as working according to changing individual preferences. If concentration suffers from the conversations in the open-plan office, then people can retreat to designated quiet rooms. These are not isolated thinker cells, but a space for the common quiet

retreat – a library-like atmosphere. Everyone is concentrated, nobody distracts by talking, making calls, or other sounds. Employees who only need to be visually isolated to focus on something benefit from room-in-room concepts such as special seating. Whiteboard walls in the offices and common rooms encourage spontaneous concept sketches and brainstorming. The British Library of Political and Economic Science offers, in addition to

rooms for silent working, modern workspaces for joint learning and teamwork.[38] Up-and-coming specialists then already become familiar with and appreciate the manifold possibilities of a new working world.

Each person has different phases of productivity according to their biorhythm, so knowledge work should not be tied to fixed office hours. Tasks can also be done in the home office or after longer breaks between the working time entries. The prerequisite for this is the confidence of the project managers and team leaders in the fact that their team members do not take advantage of this new flexibility.

In the new work age, freedom and self-responsibility are not only valid for the spaces in our heads, our attitudes and behaviour, but also for the spaces that surround us as we work. If the office is a place where work is fun, and every employee feels taken into account in their needs, this is also reflected in the results.

How comfortable are your offices?

THE NEW TOOLKIT

Flexible working methods and open room concepts do not work without the corresponding technical infrastructure. Cross-team collaboration can only take place in changing work environments with the right hardware and software.

Replacing desktops with note-books is the first step, but it also requires systems that allow employees external access to corporate data and communication paths. Cloud-based solutions such as Office 365 ensure mobile, device-independent work, and the integration of communication and sharing tools. In order to promote team-internal cooperation, they should not only be accessible to all employees but also be controlled by them. Introductory workshops in the boot camp style provide a uniform know-how for the use of work tools.

Smartboards like the Microsoft Surface Hub or the Samsung Smart Hub can make remote meetings more interactive. New ideas and concepts can be visualised more easily with them and shared across teams and spaces.

Collaboration tools, such as ticket systems or inhouse information portals, also enable spatially sepa-rated teams to efficiently organise their projects and interact trans-parently. This not only benefits the cooperation of the employees but also the cooperation with partners and customers. Each agile team works only as well as the task distribution in project management. In order to maintain an overview even in the event of staff shortages and be able to respond flexibly, joint access to sprint and product backlog is essential.

How well the communication and collaboration tools mesh has a significant impact on the efficiency of workflows. The services used should help teams simplify com-munication processes. Automatic ticket notifications take the place of status meetings. Quick polls in team chats or WhatsApp groups are already replacing cumbersome e-mail communications. However, employees should become aware of the danger of a communication overkill with increasing communi-cation channels. Here, clear rules must be drawn up when and for what purpose each channel is used. The challenge is to use the smart systems smartly, without forgetting the interpersonal interaction.

Do your employees use tools that they love?

STOP & THINK: NO TECHNOLOGY IS NOT A SOLUTION EITHER

AGILE SOLUTIONS
BETWEEN ZERO AND ONE

Technology and digital transformation are inextricably interwoven. Today's smartphones have more than two thousand times more computing power and have sixteen million times more memory than the Apollo Guidance Computer, which was used by humans to land on the moon in 1969.[39] The digital age is also the age of IT.

IT managers often experience digital trends first hand and have to provide the infrastructure to meet the changing requirements of their internal and external clients. Not an enviable job, considering that solutions should be as flexible as their users. It is important to avoid data silos and island solutions as much as possible – and if adjustments, upgrades, or migrations are necessary, the system landscape must prove its future viability.

It's a field of tension that repeatedly demands a lot of its players, a balancing act between expectation and innovation. If, for example, a digital platform breaks down under load of hours of one million parallel users who want to buy tickets for the 2019 Rammstein Stadium Tour,[40] some head of IT out there will certainly want to just shoot people to the moon.

Nevertheless, there is good news, because the gap between IT and digital business is closing. Trends like artificial intelligence and new work are helping both perspectives to achieve greater visibility and understanding through cross-functional cooperation. Clearly, all stakeholders of the digital transformation in retail and industry benefit from the current tech trends.

SOCIAL

IOT

VOICE

B2B

APPS
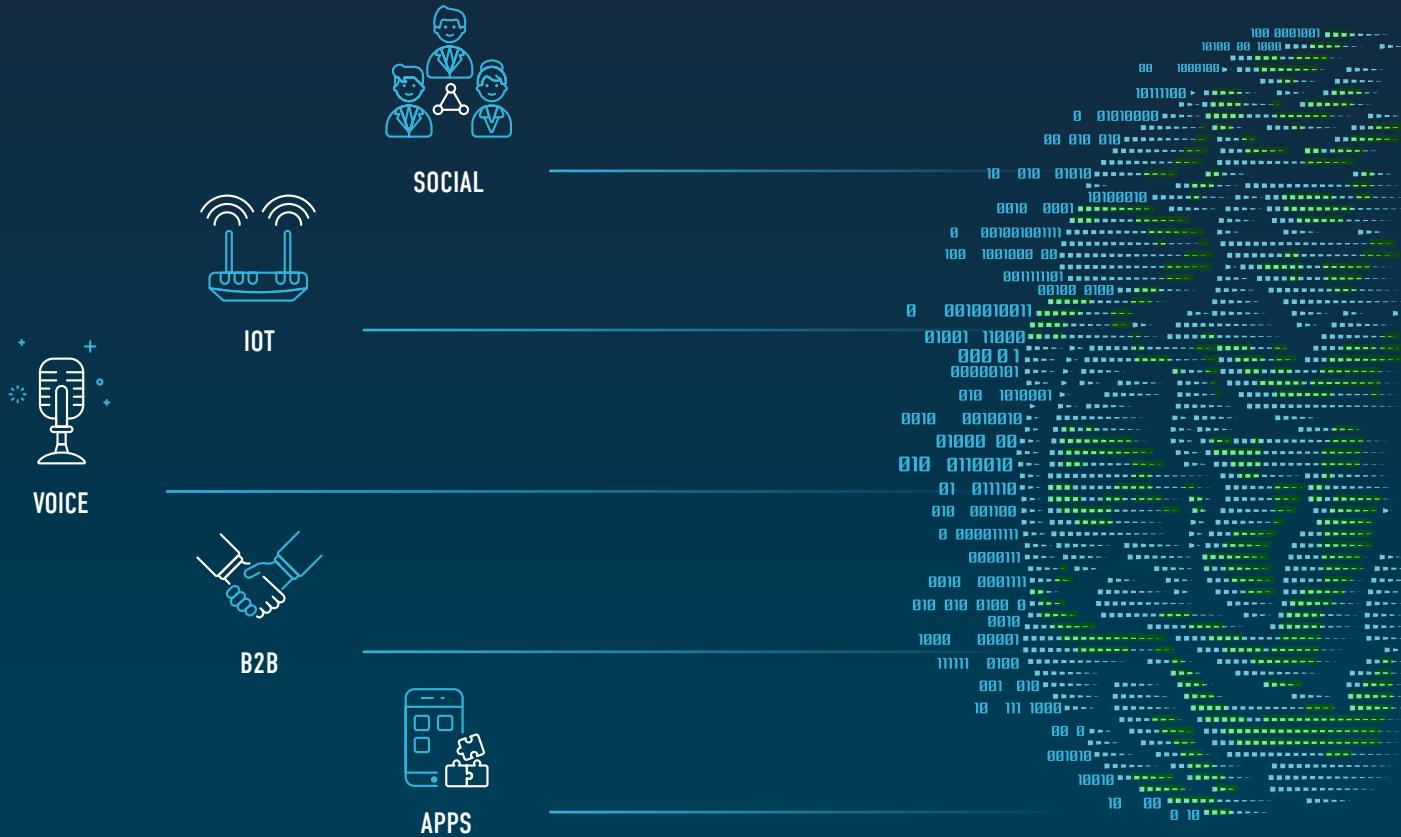
HEADLESS, BUT NOT BRAINLESS: ACHIEVE NEW SH

Retail has many faces, especially digital retail. New features are added and available almost every day. Not only do customers want to communicate with their favourite brands around the clock, they also like to experiment with something new: customer service via WhatsApp, shopping lists

via Amazon Alexa, flight bookings via chatbots, and a connected car that independently books the next car park – this is mobile commerce in the truest sense of the phrase. As curious customers experiment with the beautiful new shopping worlds, there comes a new of challenges for companies:

to be present at all these touchpoints without getting bogged down in a zoo of software or losing their train of thoughts and goals.

The charming solution is called »headless commerce«. By decoupling front-end logic – the »head« which can have the shape of a

CAR

WEARABLE

VR

SHOP

MORE
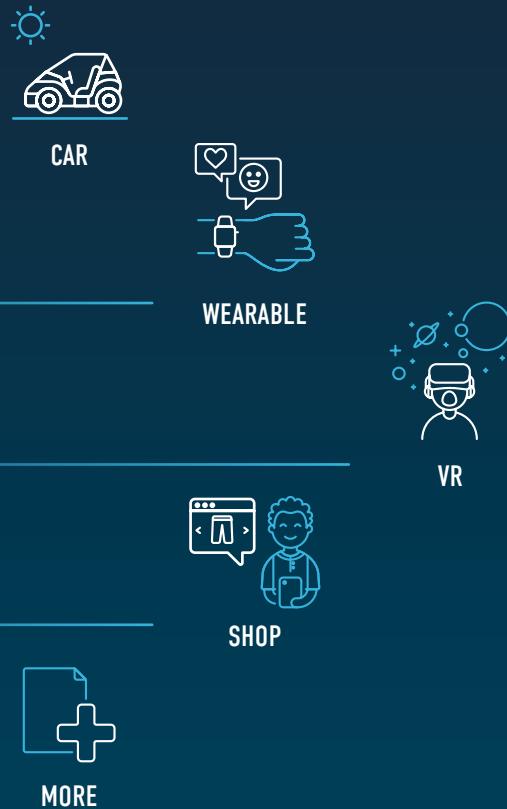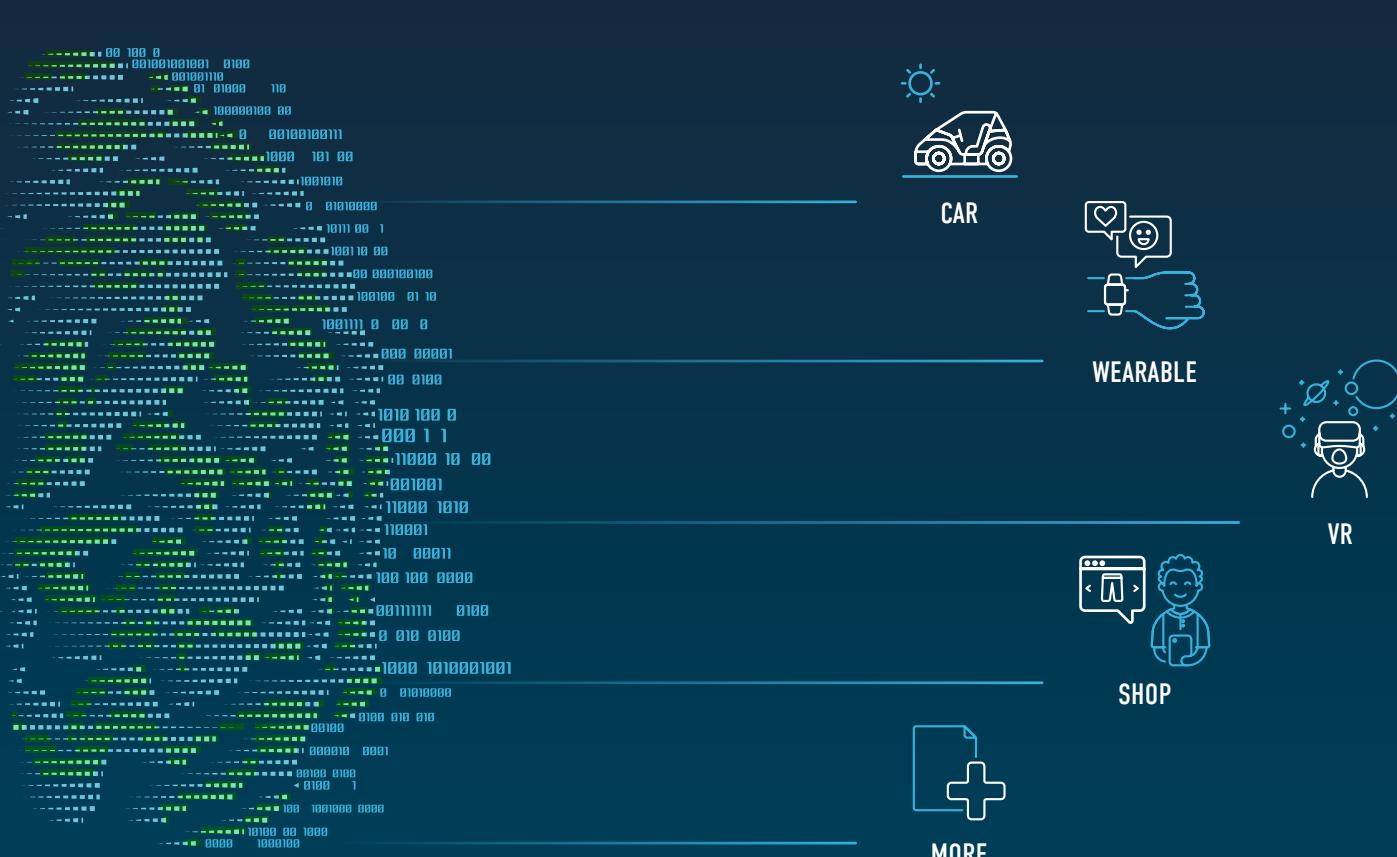
OPPING EXPERIENCES WITH HEADLESS COMMERCE

normal web shop, an app, a virtual assistant – from the back-end processes, companies can experiment with new user interfaces without risking the stability of the overall system. This way you create individual shopping experiences for your customers, with full control over layout and user guidance.

This is made possible by an API that connects the head and body in terms of data.

It guarantees that the program parts understand each other and ensures that brands and retailers can continue to quickly and flexibly connect new devices and

touchpoints – without the headaches that traditional and rigid e-commerce solutions so easily cause.

Dr. Roman Zenner
Industry Analyst
commercetools GmbH

commercetools
Next generation commerce

GET ON CUSTOMERS' HOMESCREENS
WITH PROGRESSIVE WEB APPS

Digital transformation is forcing companies to be highly adaptable and agile. Speed is not just a constant value, but rather a basic requirement. Retailers and manufacturers are striving to bring new products to market as quickly as possible, while consumers expect shorter loading times, trouble-free checkouts, and fast deliveries.

To meet these challenges, more and more companies are following Google in working on a new technology that could change the way we access the internet forever: progressive web app (PWA). This is a website that combines the advantages of a native mobile app and a responsive website. PWAs are reliable, appealing and very fast. Their look and feel is similar to that of a native app with lightweight animations, intuitive navigation and seamless scrolling. A homescreen icon en-sures visibility.

In addition, PWAs can trigger event-based push notifications, opening up new opportunities for discount promotions in e-commerce. Nevertheless, unlike apps, the content of a PWA can also be found via search engines and is

easy to update because a PWA is also a mobile website. And there's another plus: You can also use these types of websites offline. The reason for this is a JavaScript, the »service worker«, that can provide content through intelligent caching, even with poor connection.

A PWA developed by Starbucks offers customers around the world an accessible and easy-to-use online ordering system that works much easier and faster than its predecessors.[41] Meanwhile, BMW is focusing on short loading times and appealing content.[42]

To create excellent customer experiences and respond quickly to changes, companies build their web apps based on micro-frontends.[43] Similar to the microservices infrastructure, the web app consists of individual features distributed among independent teams.

Each team has a specific mission, such as »providing a good checkout experience«, on which it's focused and specialised. A team acts cross-functionally and develops its features from the database to the user interface.

This enables faster software development, better customer orientation and sustainable growth. New touchpoints such as wearables or smart TVs can also be integrated more easily and smoothly.
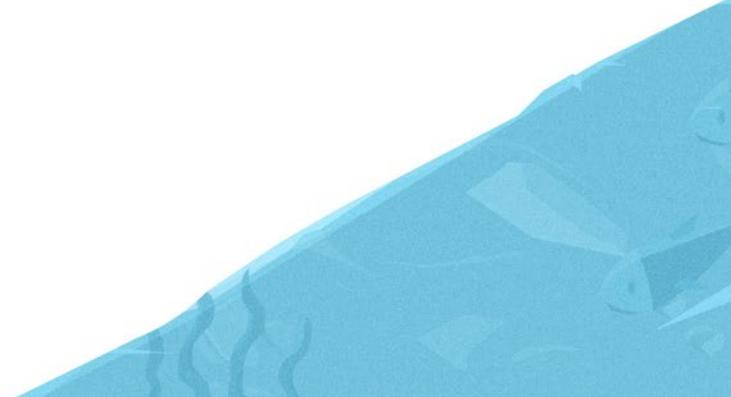
The front-end world is developing rapidly, putting the customer at the centre more often than ever.[44] It's about providing intuitive and smooth digital experiences to master an omnichannel reality.

How progressive is your app?

SUCCESS FOR IT WITH LESS HARDWARE

The online and offline touch-points are constantly multiplying and with them the data volumes being generated. Speed and agility are more than ever needed to meet the demand for more networking – both from person to machine and between machines.

Promising technologies such as artificial intelligence and the internet of things need smooth processes and smart data analysis to work. The use of clouds and new agile software architectures such as microservices or headless commerce has ensured that these technical requirements are met in recent years.

Like a user who releases memory space on their mobile phone by putting images and documents in the cloud, companies rent virtual hardware, such as a Windows Virtual Desktop, in the cloud territory to operate and maintain their data centres online.[45] Remember: IaaS.

In addition to hardware, software is also accessible via the cloud, which is automatically updated and managed on a pay-as-you-go basis by the respective provider. Key term: SaaS.

To develop even faster and more efficient solutions, programmers tend to be in control of their IT landscapes. This allows them to better handle the growing complexity and focus on developing and driving innovation in a customer-centric way. Remember: PaaS.

With this approach, the so-called serverless technology is popular, not as a substitute, but as a supplement to existing IT landscapes. The world's largest cloud providers offer these new functionalities in their respective public cloud environments.

Serverless applications are particularly focused on mobile back-end development and real-time computing. A prime example of this is the app »Weather Gods« which provides reports about specific weather events.[46]
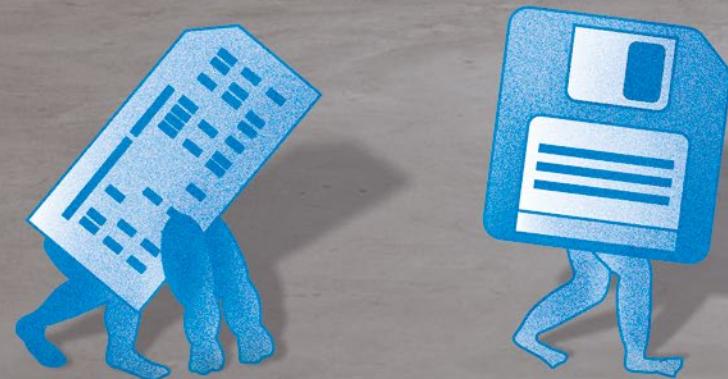
IoT ecosystems and shipping platforms are also benefiting from this idea, since they can finally tap the full potential of this technology. The Israeli company »abilisense«,[47] for example, manages an IoT messaging platform for people with hearing problems who are alerted by sounds audible to them whenever a situation becomes dangerous or life-threatening. Other applications include streaming analytics and cognitive processing.

The advantage in these areas is that, despite many networked devices and a plethora of data, companies can scale better and keep costs down and resources used low.

The success of web-scale platforms such as Netflix[48] and Expedia[49] speaks for itself. The courage to take innovations seriously in order to build forward-looking and adaptable business models pays off. According to a PwC study, serverless computing can even help banks compete with modern high-tech competitors.[50] Nevertheless, these new technological approaches are not a universal solution. Companies should individually assess which IT strategy makes sense for them.

How innovative is your IT?
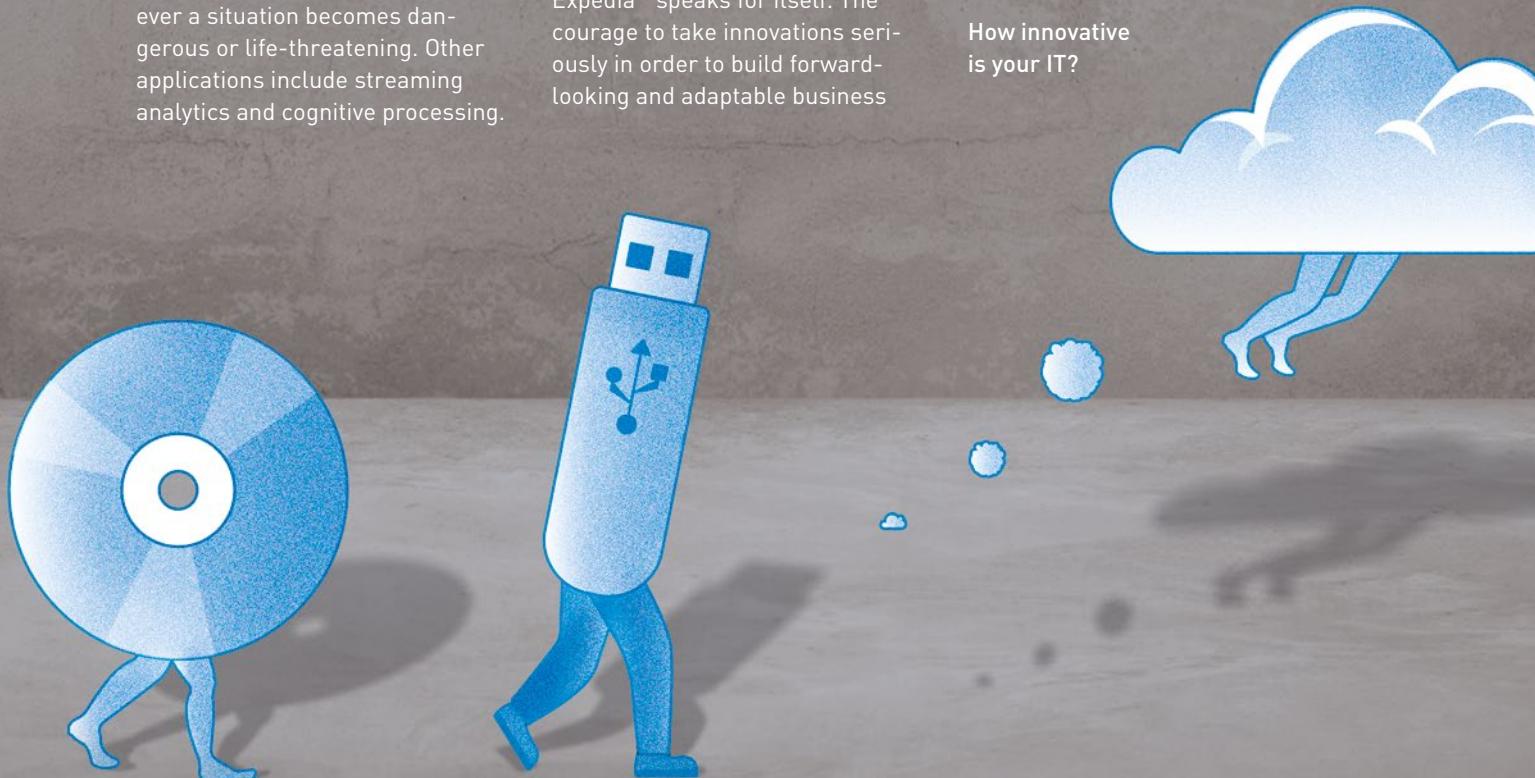
FACTS
&
FIGURES

HOW DO YOU
MEASURE SUCCESS IN THE DIGITAL ERA?

In the beginning was the online shop. It stood for the future viability of retailers and manufacturers who, with the electronic twins of their print catalogues, could now bring their business into the digital world. Meanwhile, the line between online and offline has disappeared – digital structures are deeply rooted in our everyday lives and permeate all levels of an organisation.

And just as digitisation goes far beyond e-commerce, corporate success in the digital age can no longer be measured solely based on classic commerce metrics.

In addition to figures on consumer behaviour and macro data of national and international markets, the following chapter therefore includes two additional areas that already affect our everyday lives – both private and work. The new values in this equation are artificial intelligence and new work; both can't be ignored any more when it comes to evaluating the future of businesses.

The increasing importance of marketplaces and digital platforms as well as current tech trends shouldn't be missed, for a comprehensive view of the status quo of the digital world.

On the following pages, we'll show you what level the digital evolution has reached and which factors companies will have to consider going forward.

INTERNET USAGE [51]
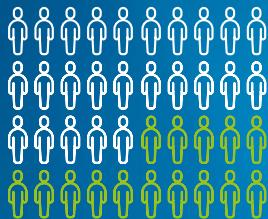
63.3 mil.

Germans used the internet in 2018.

2017: 62.4 mil.
2016: 58 mil.
2015: 56.1 mil.

353 min.

is the amount of time spent on the internet by 14 to 29 year-olds daily.

2017: 274 min.
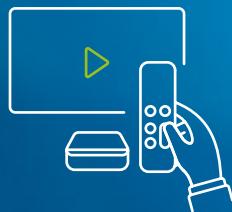
31%

of Germans use video streaming services at least once a week.

Only **4** mil.

5G mobile phone connections will be available worldwide in 2019.

One billion, of which 118 million in western Europe, are forecast for the year 2023. [52]

49%

of Germans used music streaming services at least once a week in 2018.

28%

of Germans order groceries over the Internet.[54]

61.9 mil.

consumers have purchased products or services online in Germany in the past 12 months.[53]

Only 7%

of all users shop across different channels. They generate About 27% of all sales.[55]

6 out of 10

German citizens wish that child benefit (62%) and childcare places (61%) could be applied for online.[56]

Nearly every other

user has a hard time differentiating between advertisements and content.[57]

CONSUMER BEHAVIOUR

PAYMENT METHODS [58]

More than half

of consumers can imagine paying via biometric authentication.

38%

of retailers have introduced at least one new payment method at the point of sale in the last two years.

62.9%

of German retailers don't offer country-specific payment.

7

payment methods are offered by online retailers on average.

Billing

is still the most popular payment method in German-speaking countries.

PayPal

is the preferred payment method among digital consumers.

Credit cards

are used much more often in Austria and Switzerland than in Germany.

PayPal

32%

PayPal

2016: 29.2%

41.3%

Billing

2016: 40.2%

8.7%

Direct debit

2016: 8.2%

POPULAR PAYMENT METHODS IN GERMANY

Sofort.

3.2%

Instant transfer

2016: 3.7%

8.5%

Credit cards

2016: 10.9%

amazon Payments

3.4%

Amazon Payments

2016: 2.3%
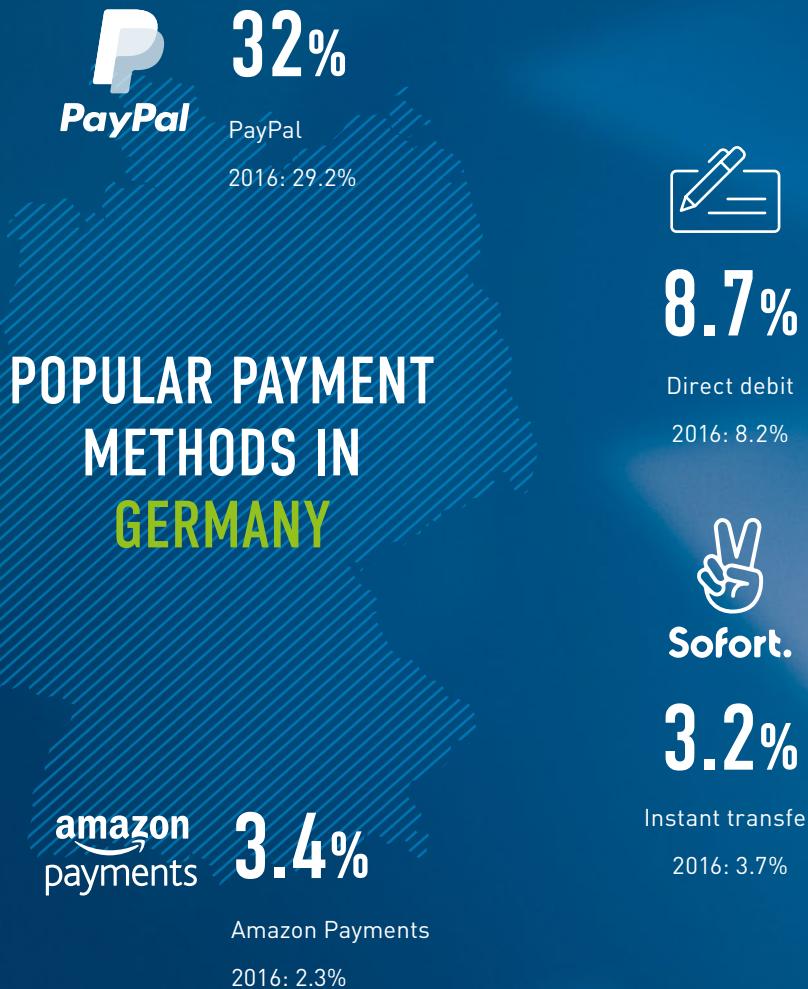
SALES IN E-COMMERCE[59]

58.4 bil.

euros of sales were generated in 2017 in Germany solely through e-commerce.

2016: 52.7 bil. euros
2015: 46.9 bil. euros
2014: 41.9 bil. euros

73 bil.

euros in total e-commerce sales of goods and services were generated in 2017.

42.8 bil.

euros in sales were generated in 2017 in the 1,000 largest online shops in Germany (8.1% more than in the previous year).

29.08
bil. euros
2016: 25.6 bil. euros

29.38
bil. euros
2016: 27 bil. euros

11.76 bil.

euros of sales in clothing

2016: 11.16 bil. euros

9.87 bil.

euros of sales in electronics

2016: 8.74 bil. euros

4.44 bil.

euros of sales in computers / accessories / games / software

2016: 3.67 bil. euros

3.84 bil.

euros of sales in household goods & devices

2016: 3.01 bil. euros

1.13 bil.

euros of sales in groceries

2016: 0.93 bil. euros

THE POWER OF MARKETPLACES [60]

43%

of German industrial companies already use an IoT platform. [61]

Only 12%

of executives indicate that they currently operate a digital platform. [62]

56%

of cross-border e-commerce worldwide takes place on marketplaces. [63]

OMP
Online Marketplaces
(eBay & Amazon)

MCV
(multichannel consignors) total
MCV + APV (pharmacy mailers)
+ STV - (shippers who are based in stationary retail)
+ TVS (teleshopping senders)

IPP
Internet Pure Players

STV
Shippers who are based in stationary retail

HEV
Manufacturer Shippers

SHC
(shopping clubs)
APV (pharmacy mailers),
TVS (teleshopping senders)
and other channels

SALES GROWTH BY SENDER TYPE

Total revenue in 2017 compared to 2016 (in euros)

4.4% **21.0%** **12.6%** **26.2%** **11.8%** **4.1%**

	OMP	MCV	IPP	STV	HEV	SHC
2017	27.9 bil.	20.1 bil.	8.6 bil.	8.7 bil.	1.3 bil.	1.7 bil.
2016	26.7 bil.	16.6 bil.	7.6 bil.	6.9 bil.	1.2 bil.	1.6 bil.
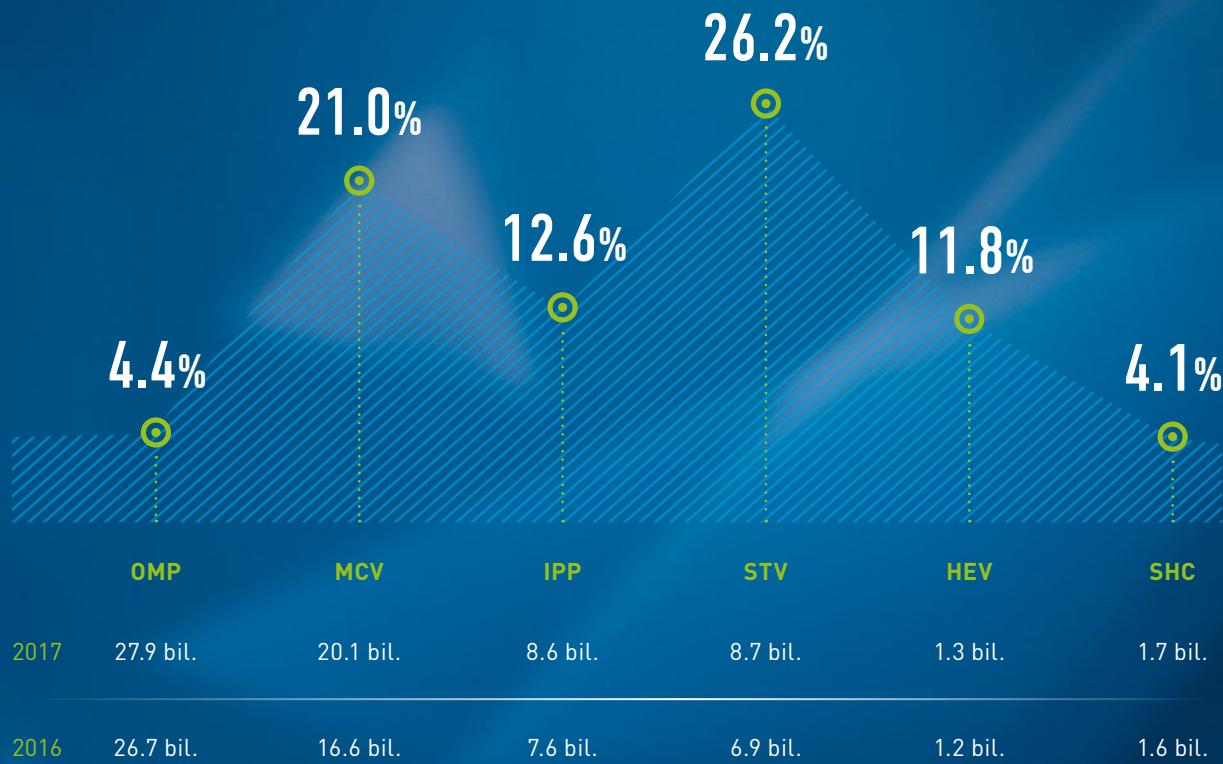
INTERNATIONAL E-COMMERCE [64]

10.2 bil.

of sales for Alibaba were generated in Q2 2018.[65]

45.2 bil.

euros of sales on Amazon occurred in Q2 2018.[66]

673.7 mil.

people in Europe are online daily.

634 mil.

customers shop on Alibaba with their smartphone.[67]

64%

was the proportion of cross-border purchases in Switzerland in 2017.

Austria: 53%
Germany: 25%

The UK

is the clear leader in B2C e-commerce sales in Europe. In 2016, the British spent a total of 178 billion euros online.

Germany and France follow with 93 billion euros each.

THE AI FACTOR
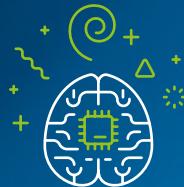
Every other

German wants to understand how artificial intelligence works.[68]

8.7 mil.

people in Germany are already using a smart speaker.[69]

2 out of 3

consumers want to know if they're interacting with AI or a real person.[70]

55%

of users would interact with a combination of AI and human.[71]

Only 7%

of companies rely on AI-based interactions to solve consumer issues.[72]

25%

of customer service communications will be through chatbots by 2020.[73]

2.3 mil.

jobs will be created by AI, and 1.8 million will be eliminated by 2020.[74]

52.2 bil.

dollars will be spent on AI systems in 2021.[75]

4 out of 10

German start-ups are already relying on artificial intelligence.[76]

52%

of digital experts say that their companies are unable to fully exploit AI's potential.[77]

NEW WORK

45%

of companies in Germany want to spend more money on the digitisation of office and administrative processes.[78]

4 out of **10**

employers (39%) already offer their employees the opportunity to work from home.[79]

Every other

large company in Germany is already using agile project management methods.[80]

93%

of professionals from different business sectors advocate the introduction of agile methods to increase efficiency.[81]

Only 1 in 10

companies employs someone in a senior position for digitisation.[82]

Half of

all traditional apps will be replaced by PWAs by 2020.[83]

66%

of businesses use cloud computing.[84]
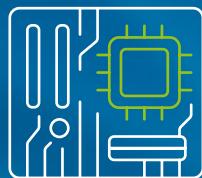
163 zettabytes

(1 ZB = 1 billion terabytes) of data will be generated globally in 2025.[85]

2016: 16.1 ZB

60%

of CEOs say that it's hard to find qualified data experts.[86]

16%

is the growth rate of customer relationship management, making it the fastest growing sector in software.[87]

TECHNOLOGY

FUTURE

RETAIL

NEW WAYS TO MEET MARGINS

Buy low, sell high — this is how, albeit shortened, the business model of every retailer works. But what happens when the classic selling of goods has just one place left? Is the middleman unnecessary when it comes to the mere purchase of replaceable goods? As the days of Amazon as an omnipresent gateway to the product world have arrived, is there still a reason for retailers to exist as a guarantor for fast, simple, and personalised searching, buying, and receiving of goods? Is digitalisation finding a new victim? Is retail dying?

Well, classic retail is in crisis. Nevertheless: Just because traditional ways to margins are breaking doesn't mean retailers have no future. They just have to go about it in other ways. And these should, as before, all lead to one goal: Focus on the customer. This age-old retail mantra has to be actively implemented in the face of the retail end-time scenario rather than sticking to just lip service. Because only if you think beyond pure product sales and act accordingly, you can survive the middleman dying.

A good example of this is »MiSUMi«[88] – a former Japanese mail-order company, which has developed into a one-stop mechanical engineering shop with holistic concepts. MiSUMi offer their customers a rich portfolio with 100,000 freely configurable components and an impressive 17 million products. First and foremost, however, thanks to their know-how in terms of MTO (make-to-order), they provide optimal and holistic solutions.

Not only the change of experienced players such as MiSUMi illustrates the rethinking that it takes to succeed in retail. Even the »young wild ones« are exemplary. Start-ups such as »Roobeo«[89] turn the traditional retail model of the building materials industry upside down. Roobeo users, be they major customers or hobbyists, are directly supplied by the manufacturer. This guarantees significantly shorter delivery times and, of course, good quality. And that's what it's all about: true added value away from the mere purchase of products, which companies offer their customers over personalisation, high-quality and personal advice or — in a classical way — over an easier access to the product. Who would have imagined ten years ago to choose and order a new individual mattress online and have it delivered almost directly to the bedroom, including 100 nights trial sleep and a money back guarantee?[90]

Even established brands can disappear from the market if they underestimate new players. Newcomers not only announce customer focus, they also live and grow from it. Almost 100 million euros in revenue have so far been recorded.

Although they are 266 times smaller than the established ones, they are growing at a 19x speed compared to them.[91] Established retailers should not build their future on the phrase »they will not last (long)«, but take action instead.

NICHE AS A MODEL FOR SUCCESS

The stories of modern apps or platforms are essentially based on a similar plot: The niche as a model for success. »Rebelle.com«[92] is revolutionising the second-hand industry with its range of luxury goods. With its community app,

»Asana Rebel«[93] moves yoga from stereotype to health and fitness hype. Courageous female entrepreneurs make intimate themes acceptable – like Lea-Sophie Cramer with »amorelie«.[94]

Niches lurk everywhere and could not be more different given these examples. What they all have in common is that the starting point and centre of their digital presence is always the consumer and their individual needs.
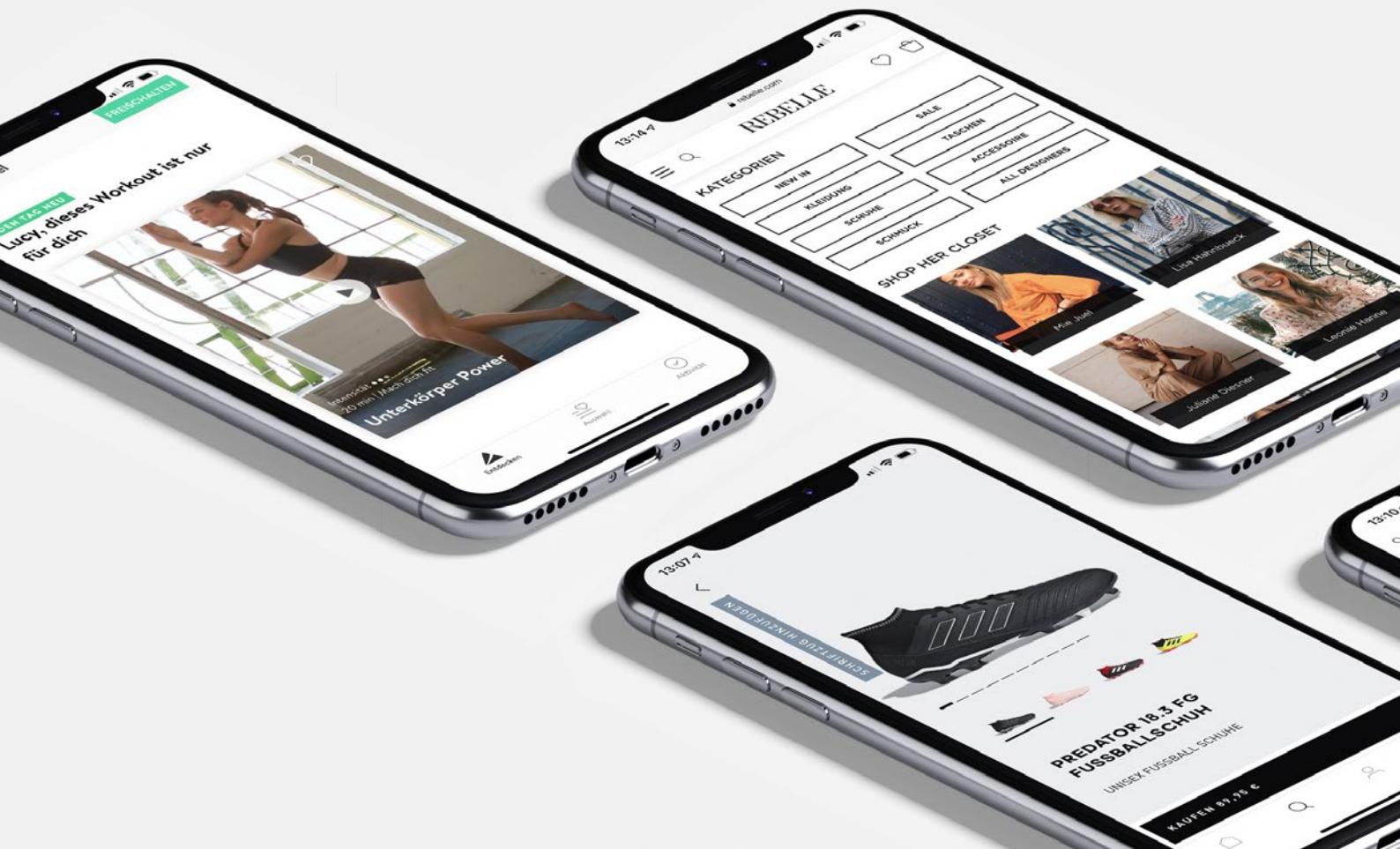
Successful niche players develop and optimise their offer together with the users. Instead of offering a supposedly perfect digital product that is thought to cover everything that is part of a perfect customer journey, growth is based on customer desires and feedback.[95]

This is also particularly evident in the »adidas Sports & Style« app, with which the company takes personalisation to a new level and literally puts its products in the hands of its users.[96] Registration and personal details are the entry to highly personalised content, such as videos of athletes and favourite sports, event invitations, but above all, individually tailored product recommendations.

A win-win situation for adidas and its customers, because the more actively the app is used, the more precise content and offers become.[97]

Zalando and Conrad Electronic have also understood that new technologies and innovations are creating new customer demands that go beyond just buying a product. However, they also recognise that they can serve niches within their own business model and technology stacks. A good example of this combination variant is the »Wardrobe« project by Zalando.[98]

With the second-hand app, the user can sell finished garments within the community or directly to Zalando, rummage around in the wardrobes of others, be inspired and share their own looks.[99]

Once its customers have spent some time sorting out and lingering on Wardrobe, Zalando knows what's missing in their real closets, and can target content more easily.

For established market participants, the challenge to develop the business model into the niche or to expand niches is conceivably large. Learning by doing projects can have a huge impact on business model and trade relations. As the Zalando Wardrobe example shows, emerging business,[100] the integration of alternative and new business models, can be a golden middle ground.

Are you ready for alternative business models?
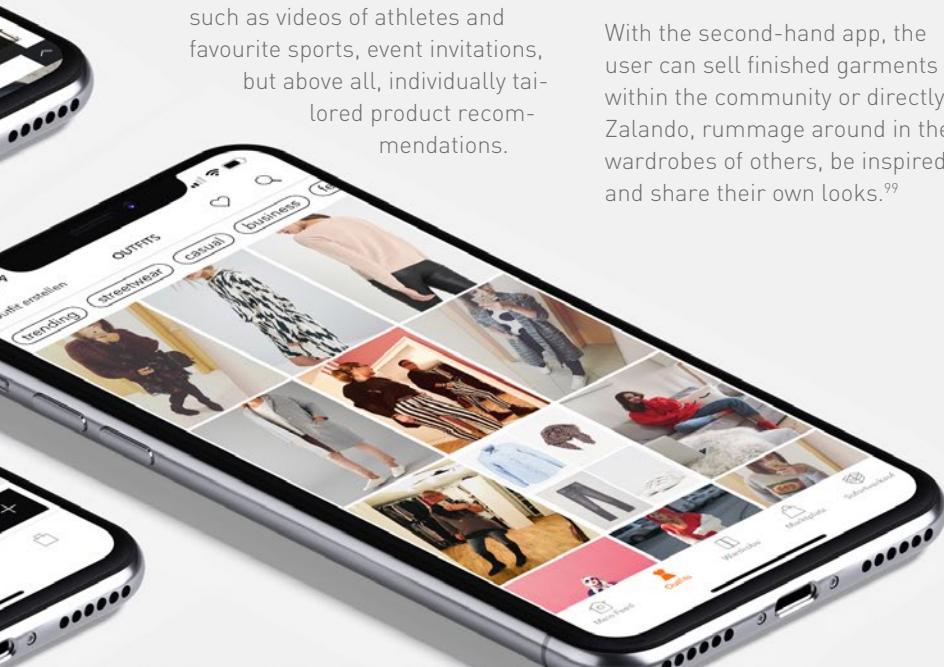
M2P – EXPERTISE AS A GOOD

Humans are curious by nature. Entrepreneurs can exploit this desire to know more and more by going beyond the mere supply of products and services, and adding the supply of knowledge.

Take, for instance, influencer marketing. Nothing new, controversial, but properly used and implemented, this form of communication can be exactly what customers expect also – or especially – in 2019: A plus to the offer that inspires; a surplus of knowledge that bridges the gap to reality. However, brands should choose their advertisers wisely. Authentic brand icons outweigh mere reach. These days users respond to indiscriminately placed products through a vote of no confidence.

Writing instruments manufacturer STABILO,[101] for example, thanks to the contributions of a competent calligraphy artist, is able to go beyond the original horizons of its pull marketing and offer its customers the opportunity to learn, to know, and to share more, even after purchasing a product. The M2P (mentor-to-protégé) strategy fulfils the expectation of customers for companies to provide them with an experienced expert.[102]

Airbnb is also already implementing the M2P trend, going beyond its actual intermediary role of temporary accommodation with »Explore experiences« and the provision of experts (knowledge) about the best wine in the region or the must-sees of art and culture.[103]

A mentor can therefore also mean a group of peers who have the knowledge that other peers, aka protégés, are looking for.

It's not your customers' desire to learn and to know more that will cease, but their readiness to buy, if you don't offer them what they need beyond the product – access to a mentor and their knowledge.

Are you a mentor for your customers?

IS WHOLESALE BECOMING RETAIL?

Whether catwalk or product fair – winter must-haves are presented in spring. Does that make sense? Today's customers prefer to buy what they see as soon as possible and certainly not in six months. And brands know that too.

So it is hardly surprising that more and more manufacturers are expanding their established wholesale business model with their own retail initiatives in marketing, sales, and services.

Classic wholesale relationships are broken up. Brands such as Erima or Tamaris, who for years have relied on secure revenues through intermediaries, are even active on marketplaces or are setting up their own brand shops. With #instamaris,[104] Tamaris is already focusing on user-generated content and influencer marketing in order to address and advise its customers in a targeted and personal way. Not only can Tamaris customers be inspired by the feature on their own shop page, but they are also encouraged to share their own looks, for example on Instagram.

Content commerce prevails. And with it the awareness to always offer customers more, to surprise them. This is precisely what the concept of pop-up stores, which more and more brands and retailers use as new distribution channels, builds on. The principle of artificial scarcity plays a decisive role here, as pop-up stores are limited, both in terms of time and in terms of the goods offered.

Whether traditional brands such as adidas, who turn a hotel area into a temporary shop, or wellington boot retailer »Hunter« from the UK, who uses temporary stores to promote their brand beyond the island – the first come, first served idea triggers the customers' hunting fever.[105]

Again, this new strategy benefits from the unstable status of traditional retail and offers brands the ability to reach customers beyond the established trading models.

Nevertheless, many former wholesalers are still in their infancy with their new B2C strategy and thus as an example of the »new form of retail«. Sports brands like Erima have yet to build their knowledge of end consumers. Despite this gap in know-how, the »new retailers« start with their strategies where classical commerce needs to rethink and catch up: with the end users' expectations for personalisation, consulting, and customised content – directly, any time, anywhere.

Almost incidentally, manufacturers thus collect first-party data that they were previously denied. Amazon supports the trend of developing manufacturers into retailers with Amazon Storefronts.[106]

How well does your commerce strategy fit with your customers?

BRANDS

IN

THE DIGITAL

AGE

MAKE, BUY, OR COOPERATE?

The fact of the matter is: Digital brands are competition. Places in the superlative category are limited. Who reaches the customer the fastest, most personally, most sustainably? In order to secure a place, digital brands have been equipping themselves for years with suitable technologies and are rebuilding their internal structures. They're frequently confronted with the usual questions: Produce or buy? Alone or with a partner?

The increasing prevalence of networked devices and their untapped potential as IoT drivers are motivating many companies to invest in smart devices. The world's largest sporting goods manufacturers have recognised this potential in fitness trackers and have, consequently, launched their own hardware.

However, the production of new products is very demanding. A lack of expertise also increases costs and risks.

This explains why new adventures don't always end well – even for sports giants like adidas. They stopped production of their fitness tracker miCoach after just a few years.[107] But adidas is sticking to its cooperation with Fitbit and is not leaving the wearable market completely. With digital transformation, the priorities have changed. The focus is now on their own app and Runtastic.

Is it better to buy instead of manufacture? This strategy also carries risks, not to mention big competition. There's also no guarantee that acquisitions will succeed. Fortunately, companies don't have to put themselves in such a dilemma. A third way to drive innovation is proving increasingly successful.

And that's: cooperation. Thanks to the close exchange of knowledge, cooperating brands can achieve common goals quickly, easily and effectively, including flexibility and win-win moments. A good example of this is a collaboration between IKEA and Sonos.[108] The furniture store wants to use the home sound expert to build Wi-Fi speakers in IKEA design, thus establishing highquality sound as part of the IKEA lifestyle. Carl Zeiss and Deutsche Telekom (T-Mobile) are also combining forces and mutual know-how in their joint venture, Tooz,[109] to develop AR glasses.

Even seemingly impossible alliances become possible. As part of the KoMoDo model, DHL, DPD, GLS, Hermes, and UPS share joint microdepots in Berlin.[110] From there cargo bikes take over the last mile. Customer satisfaction increases, and, at the same time, space and the environment are spared.

DIGITAL LIFESTYLE: (NO) QUESTION OF AGE

Baby boomers, generation X, Y, or Z – brands, retailers, and manufacturers are striving for a more precise definition of their target groups with such classifications.

Millennials (born between 1982 and 1996) are often the focus of attention because of their special shopping habits and increasing purchasing power. They are the first age group that grew up entirely with digital technologies.

Whether cliché or reality, millennials are vastly different from their predecessors, generation X and baby boomers. Through approaches such as m-commerce, same-day delivery, express checkout, live chat, and content marketing, brands are adapting their digital strategies to the preferences and requirements along the customer journey of this consumer segment.

However, with all focus on this exciting target group, companies shouldn't underestimate the importance of other generations. Silver surfers are often disregarded even though they are the largest, most numerous, and most affluent segment.

Seniors have long been dealing with the internet and are open to new technologies.

Customers »in their prime« attach great importance to being well informed and receiving worry-free services. When shopping online, they tend to rely on PCs or laptops instead of mobile devices and appreciate traditional interactions such as a telephone conversation.

Generation Z was basically born with a smartphone in their hands. They know the analogue world only from books, communicate with pictures, emojis or audio messages, and consume almost exclusively video content. This generation spends its free time between YouTube and Instagram and admires influencers – a lifestyle that »YEAY« has recognised and thus exclusively used short videos to sell products, becoming the first marketplace app in the world to do so.[111]

While there are considerable differences between generations, their core behaviour is closer to one another than their age difference suggests.

Everyone is facing the same disruptive changes brought about by globalisation, innovation, technology, and social media, which in turn leads to a fusion of attitudes and behaviours.

With the target group of »Young Value Shoppers«, the eBay platform Catch specifically addresses millennials who want to discover the latest products at reasonable prices and shop spontaneously, but contrary to this official claim[112], the selection on the platform, and thus the targeted audience is much larger.

Different attitudes about technology, expectations, and behaviour don't strengthen the cliché, but instead ensure a broader, more effective segmentation.[113] Moreover, it is about recognising that the focus is on the expectation of an excellent and individualised customer experience.

Are you fulfilling your customers' expectations?

CONSUMPTION WITHOUT A GUILTY CONSCIENCE

Consciously living and consciously consuming are trends that are no longer confined to a clichéd edge group. This new attitude to dealing with resources, oneself, and togetherness affects the individual as a private person, but also as a client, colleague, partner and entrepreneur.

In the German-speaking world, within the last few years, a packaging-free shop has joined others. Even supermarkets »without packaging« are a trend in the purchasing behaviour of more and more customers of all generations.[114] Self-service, buying small amounts instead of preset weights – the possibilities are endless.

The willingness to change without giving up consumption is a customer need that more and more brands recognise, implement, and thus put their competitors under pressure.[115]

Who, if not a drugstore, is affected by plastic overkill? dm (a European drugstore chain) is going on the offensive, launching a twelve-month test project in Austria for the packaging-reduced purchase of organic cleaning agents. Not completely packaging-free, because the refill bottles are made of plastic.

Nevertheless, refilling the vegan and 100 per cent organic[116] products at the store not only protects the environment, but also calms the conscience, and, by the way, increases customer loyalty. Because »zero waste«[117] doesn't mean zero consumption. It's about »conscious consumption«.[118] A trend that has long since taken hold in the fashion sector.

Despite the introduction of a sales commission, more ads and competitor »Zadaa«, »Kleiderkreisel« successfully entered their tenth year of business.[119]

H&M supports the WWF with ten per cent of proceeds from their specially created »Wildlife Collection«, continuing their long-standing, successful cooperation for greater sustainability despite consumption.[120] Even used luxury brands can find their customers through pioneers such as »The RealReal«[121] or »Vite EnVogue«.[122] An inscreasing trend.

Conscious consumption is also an issue in more and more companies. The online comparison portal Trivago, for example, bought 1,700 drinking bottles made of glass for their staff – produced by the start-up and sustainability advocate »Doli Bottles« – and is setting an example.[123]
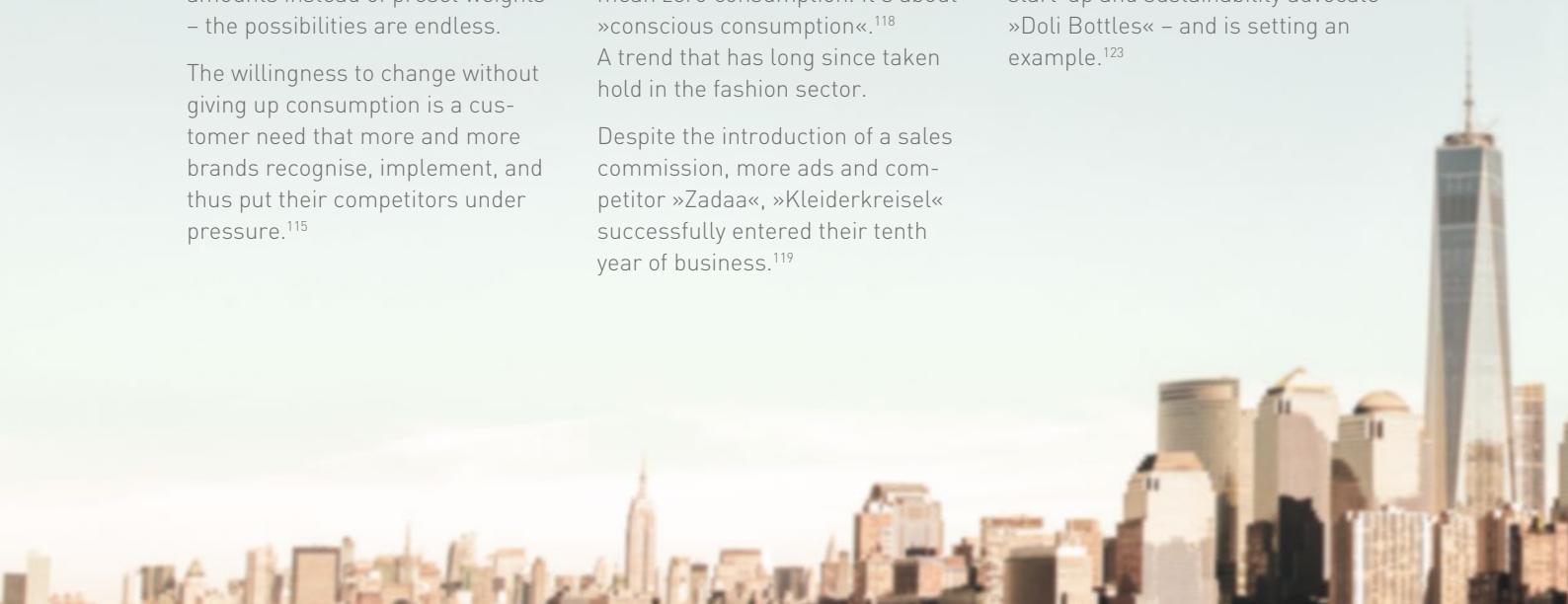
And a pretty stylish one, too – thanks to the ingenious design of the Dolis, which have long since made the rounds on Instagram.

Not just start-ups, but also some of the big names of the world wide web are taking sustainability seriously. Both Facebook and Google have set themselves the goal for the 2020s to rely only on renewable energies. A claim that will not go unnoticed, considering their huge data centres.[124]

Everyone can contribute. Anyone who acts cleverly on the entrepreneurial side, thanks to conscious consumption, not only helps the environment, but also their image.

Do your customers shop without a guilty conscience?

THE STATE AS A DIGITAL BRAND

Start thinking about bureaucracy and you'll probably get annoyed. Not to mention the slowness and complexity that are commonly associated with it. But that need not be. Digitalisation can make a significant contribution to reducing bureaucracy. By eliminating paperwork from administrative processes, people in Germany, for example, could gain a total of 84 million hours of free time per year.[125]

Apart from that, customers in this increasingly connected world always expect a product or service to be available. They want to see fast results. Not just as a consumer, but also as a citizen. However, the digital divide between the public sector and the private sector is immense.

The big challenge is to make the interaction with authorities as straightforward as the daily digital routines. Estonia leads by example here. Only weddings, divorces and

real estate transactions require a personal appointment with an official: All other issues can be handled digitally.[126]

But intelligent public services involve much more than just digitising office space. Often it fails because of the necessary infrastructure. The construction of the real-time mobile network 5G is therefore at the top of the agenda of many countries. In Germany, too, as the timetable is already fixed.[127]

In addition to a functioning infrastructure, digitisation calls for organisational and legal changes as well as close collaboration between all actors.

The state must, therefore, take the initiative and act as a platform itself. It should provide a network that connects citizens and officials, businesses and government agencies to fundamentally promote and regulate the digital economy.

Another use case is Singapore.

The city state is to create an alliance of education, business and government that not only benefits start-ups and established players in digital competition, but also citizens.

With »MyInfo«,[128] Singapore has a national digital identity platform with more than 100 digital services. Account creation processes run there without lengthy document-based verifications – an absolute benefit for companies and customers, who can use services almost immediately. However, it remains to be seen how the digitisation of the state apparatus will affect criminal law and the constant criticism of a lack of freedom of speech in Singapore.

The digital transformation of the public sector is a complex task, because it is not only technical, but also political. Forerunners such as Estonia and Singapore show that it's feasible and worthwhile.

Is your administration digital?

IN
CONCLUSION

IT'S ~~NOT~~ THINKING FOR YOU

The biggest misconception of digitisation is an often-limited focus on technology. Web shops, smartphones, IoT, and virtual assistants are not an end in themselves.

Digital tools should be used to achieve business goals rather than determine them. Retailers and manufacturers heading haphazardly in the wrong direction are saved neither by a software project nor by enormous digital marketing budgets.

Instead of struggling with major projects year after year – or even for years - successful brands rely on continuous improvement. Fast and in small steps. Evolution instead of revolution.

Artificial intelligence and agile working conditions can only develop their potential where companies are eager to experiment.

It also means entrusting the right people with the right positions. »Data Scientist« or »Chief Digital Officer« are no posts, but roles that help companies develop their own digital DNA. Quality and success of digital customer relationships are determined by people.

Digital business is people business.

ABOUT US

ABOUT US

dotSource, that's over 200 digital natives with one mission: designing digital customer relations. Our work rises from the connection of humankind, space, and technology.

We've been supporting businesses in their digital transformations since 2006. Whether e-commerce and content platforms, customer relationship and product data management, or digital marketing and artificial intelligence: our solutions are user-oriented, emotional, targeted, and intelligent.

We see ourselves as a partner of our clients, whose special requirements and needs flow into the project straight from the first idea.

From strategy consultation and system selection, to concept creation and UX design, to operation in the cloud – together we develop and implement scalable digital products.

Our approach relies on new work and agile methodologies such as scrum and design thinking.

Companies like EMP, BayWa, Axel Springer, hagebau, C.H. Beck, Würth and Stabilo trust in our competence.

With our blog Handelskraft.com, annual Trend Book, and Handelskraft Conference, we network industry knowledge and provide insight into current opportunities and developments of digital brand management.

In order to comprehensively prepare professionals and executives for the entrepreneurial challenges of the digital world, we launched Digital Business School together with Steinbeis Technology Group in 2015.

With our groundbreaking solutions, we have been able to establish ourselves as one of the leading digital agencies in German-speaking Europe and are now among the top 10 largest companies in the industry.

KNOW-HOW: UNDERSTAND AND IMPLEMENT DIGITISATION

You want to have a good idea when it comes to topics such as cross-channel retail, B2B e-commerce, SEO, UX design, or mobile commerce? You want to choose your new e-commerce, CRM, product data management, or marketing automation software wisely and need an overview of existing solutions?

In addition to this trend book, we use our channels to network industry know-how and inform you about the latest developments.

White Papers

We make digital topics easy to understand, pointed, and practically explained. Our publications, such as white papers, trend books, and case studies, can be downloaded free of charge from our website.

Handelskraft Blog

Handelskraft is one of the leading e-commerce and digital marketing focused blogs in Germany. Since 2007, we've been reporting on current trends perspectives in digital business on a daily basis. We already share our ideas with over 6,000 readers.

Youtube Channel

On the dotSource YouTube channel, we bring our publications to life. With »dotSource Research«, you'll regularly be provided with knowledge directly from our digital experts about designing digital customer relations.

Podcast

Digital expertise – whether in the car, on the train, or on the couch – is now always in your ears. In »Digital Business Talk« Handelskraft Editor Oliver Kling invites you to join in the conversation. The focus is always on current developments in online commerce, whether online marketing, online sales, or online services.

.

Webinars

The customer journey is getting more complex. Modern software solutions offer an ever-better link between the different touch-points and systems. In order to keep track of the market, we regularly present current solutions from providers such as SAP, Salesforce, and commercetools in our webinars.

SUCCESSFUL E-BUSINESS REQUIRES MORE THAN JUST AN E-COMMERCE SYSTEM

Commerce: Generate More Revenue

- Management and display of catalogues and products
- Control of product recommendations and bundles
- Order management, and central transaction platforms

Sales: Build Positive Customer Relationships

- Central management of accounts, leads, and opportunities
- Identify potential cross- and upselling opportunities
- Automation of sales processes
- Controlling and forecasting

Services: Provide Digital Value

- Self-service portals for customers
- Integration in CRM, commerce and ERP solution
- Central control of service channels (direct, telephone, e-mail, shop, social media)

Marketing: Design Digital Omnichannel Campaigns

- Segmentation and personalisation
- Grading und scoring of leads
- Campaign management: SEA, email and social media
- Nurturing automation and success measurement

Content: Address Customers Individually

- ◉ Creation, administration, and editing of content on a website
- ◉ Mapping of the publishing process including role model
- ◉ Separation of content, structure, and presentation
- ◉ Dynamic content based on customer data

AI and Analytics: Use Data Intelligently

- ◉ Speech and image recognition for mood analysis or automatic tagging
- ◉ NLP for real-time translations and dynamic chatbots
- ◉ Business intelligence solutions for forecasting and controlling

Product Data Management: Meet Individual Channel Requirements

- ◉ Central administration of product information and relations
- ◉ Data optimisation for search engines and marketplaces
- ◉ Connection to third-party systems such as digital asset management
- ◉ Data governance as well as process and role management

System selection white papers including dotSource Vendor Matrices are available for:

- ◉ Customer Relationship Management
- ◉ Product Data Management
- ◉ E-Commerce Software
- ◉ Content Management Software

TRANSFORMATION BEGINS WITH AN IDEA

In order to design business strategies in the digital world and to bring about change in the company, it requires specialists and executives who not only propagate the change but also live it themselves — and this starts with their own further development.

PRACTICAL FURTHER EDUCATION FOR DIGITAL

» The Würth Group invests in all divisions of digitisation. The subject of e-business is an important extension of our multi-channel distribution. In this context, we want to give our employees the opportunity to be trained as e-commerce managers with the certificate course.

– Bernd Herrmann, Adolf Würth GmbH & Co. KG

CERTIFICATION
»E-COMMERCE MANAGER«

PIONEERS AT DIGITAL BUSINESS SCHOOL

» Digital Transformation Architect training helped me to further open my horizons, to develop the attitude to be taken for the transformation, and to strengthen myself even more for my role as a coach and consultant on digitisation in our business.

– Michael Meier, Mainzer Vehrkehrsgesellschaft mbH

CERTIFICATION
»DIGITAL TRANSFORMATION ARCHITECT«

Digital Business School

CURIOUS?
Make the smart move now at
www.digital-business-school.com

FRANKFURT**2019**
HANDELSKRAFT
KONFERENZ FÜR DIGITALEN ERFOLG

THE DIGITAL EXPERIENCE BASE

Take part. Connect. Level up. | 28 March 2019 | Klassikstadt Frankfurt

Laid the foundation for your digital project yet? Then get ready for the next steps — development, conversion, and expansion! At Handelskraft 2019, we won't just show the trends that will arrive next year, but also how to integrate them into your own business model.

DEEP DIVES & WORKSHOPS

WARM-UP &
AFTERSHOW

KEYNOTES & SESSIONS
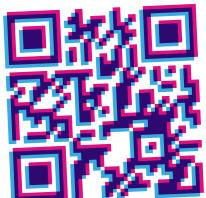
GET
TICKETS
NOW!

CONFERENCE.HANDELSKRAFT.COM

A SELECTION OF OUR REFERENCES

BayWa — BayWa Baustoffe | Immer ein gutes Baugefühl

STABILO®

Messe Düsseldorf

LENSBEST — EINFACH. BESSER. SEHEN.

Bild

BADER — MODE. WOHNEN. LEBEN.

SWAROVSKI

C·H·BECK

heine

MÖVENPICK WEIN

geschenkidee.ch

MUSIC STORE professional

WÜRTH

Cornelsen

3M

EMP

HUBER PACKAGING

hagebau

Customer Care with Salesforce Service Cloud
Who helps me when my clients need help?

Nico Saborowski
Digital Consultant
dotSource GmbH

Oliver Kling
Digital Analyst
dotSource GmbH
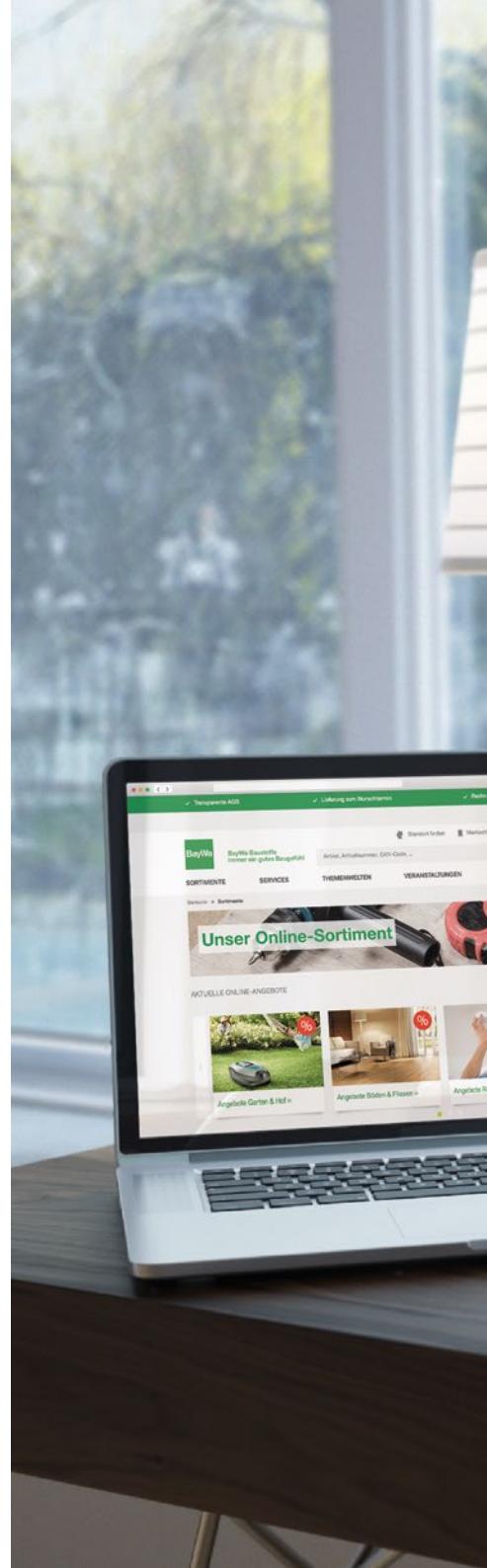
We have a strong network. In our webinars and podcasts we connect industry know-how, and together with our partners, regularly provide insights into current software solutions.

A SELECTION OF OUR PARTNERS

SAP Silver Partner

HYBRIS PLATINUM PARTNER

salesforce gold consulting partner

commercetools Certified Partner

Gold Partner intershop

PROFESSIONAL MAGENTO SOLUTIONS PARTNER

shopware Solution Partner

IBM Business Partner

TYPO3

magnolia

Adobe BUSINESS Solution Partner

e-Spirit

StiboSystems

contentserv FUTURIZE EXPERIENCES

CELUM ALWAYS AHEAD.

akeneo

Tradebyte Cycle of e-commerce

emarsys

econda CERTIFIED WEB ANALYTICS PARTNER

FACT-Finder Certified Partner

BVDW TRUSTED AGENCY Q2/2019

bevh PREFERRED BUSINESS PARTNER

K5 LIGA

ECC KÖLN ONLINE EXPERTS

Ernst-Abbe-Hochschule Jena University of Applied Sciences

DHGE Duale Hochschule Gera-Eisenach

SCMT Steinbeis Center of Management and Technology

FRIEDRICH-SCHILLER-UNIVERSITÄT JENA

WE'D LIKE TO SAY THANKS

COMMERCETOOLS

commercetools GmbH is an international software company that offers inspiring shopping experiences across all channels with its cloud-based e-commerce platform: from mobile apps to voice assistants, chatbots, AR/VR and IoT applications to car commerce. International brands such as Car-hartt WIP, Cimpress (e.g., Vistaprint and Tradeprint), Express and Wizards of the Coast (Hasbro) rely on the cloud-based commercetools platform for digital commerce.

The software company was founded in 2006 and has been part of REWE Digital GmbH since 2014.

At locations Munich, Berlin, Jena, Amsterdam (Netherlands) and Durham (North Carolina / USA) you'll find more than 150 employees.

A SELECTION OF
OUR WHITE PAPERS

dotSource

Selecting E-Commerce Software
Comparing Providers and Technologies

»SELECTING E-COMMERCE
SOFTWARE«

dotSource

**Selecting Customer Relationship
Management Software**
CRM Providers and Systems Compared

»CUSTOMER RELATIONSHIP
MANAGEMENT«

dotSource

**Selecting Product Data
Management Software**
Comparing PIM and MDM Systems

»PRODUCT DATA
MANAGEMENT SOFTWARE«

dotSource

**Selecting Content Management
Systems**
CMS Providers and Systems Compared

»CONTENT MANAGEMENT
SYSTEMS«

dotSource
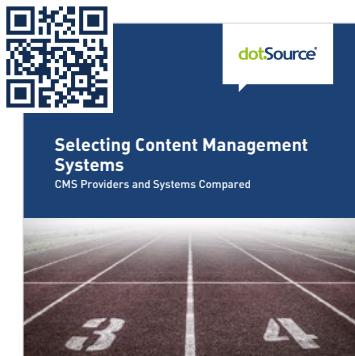
E-Commerce Potential in B2B
What can e-commerce and m-commerce
do for your business?

»SUCCESS WITH
B2B COMMERCE«

dotSource

KPIs in E-Commerce
How Successful Is My Online Shop?

»KPIS IN
E-COMMERCE«

SEO in the Mobile Era
7 Tips for Google's Mobile First Index

Newsletter Registration Optimisation

Search Engine Advertising Optimisation
More success with adwords, Bing Ads & Co.

»SEO IN THE MOBILE ERA«

»NEWSLETTER REGISTRA-
TION OPTIMISATION«

»SEARCH ENGINE
ADVERTISING OPTIMISATION«

Success in mobile commerce
Entry, Optimisation and Best Practices

»SUCCESS IN MOBILE
COMMERCE«

... WANT TO LEARN MORE?

You can find
all our white
papers here

dotSource.com/downloads

SOURCES

»EDITORIAL«

01 – **https://bit.ly/2FPWeWQ**
  – news aktuell – accessed on 01.10.2018

»ALL QUIET ON THE DIGITAL FRONT?«

02 – **https://bit.ly/2A379Jb**
  – Statista – Gesamtbestand an öffentlichen Münz- und Kartentelefonstellen in Deutschland von 2006 bis 2017
  – accessed on 13.11.2018

03 – **https://bit.ly/2QIcyL5**
  – Marc – Bravo fragt 1998 ˝Online gehen – lohnt sich das?˝ – Testspiel – accessed on 11.10.2018

04 – **https://bit.ly/2cZRrTz**
  – Statista – Umsatz durch e-Commerce (B2C) in Deutschland in den Jahren 1999 bis 2017 sowie eine Prognose für 2018
  (in Milliarden Euro) – accessed on 11.10.2018

05 – **https://bit.ly/2RF0Iml**
  – Statista – Brutto-Umsatz im interaktiven Handel in Deutschland vom 1. Quartal 2015 bis zum 3. Quartal 2018 (in
  Milliarden Euro) – accessed on 11.10.2018

06 – **https://bit.ly/2IMYFZm**
  – Christoph Kapalschinski – Aus nach 68 Jahren – der Otto-Katalog verschwindet – handelsblatt.com
  – accessed on 10.10.2018

07 – **https://bit.ly/2pTBWSL**
  – »Customers´ Choice – Beste Online Shops 2018«, ECC Köln in Zusammenarbeit mit dotSource
  – accessed on 14.11.2018

08 – **https://bit.ly/2OeN3EB**
  – Otto Group Newsroom – Pressemeldung vom 04.04.2018 – accessed on 10.10.2018

09 – **https://bit.ly/2OJCo09**
  – Alexander Wachter – Advanced Product Photo Services by MARKET-X – LinkedIn Pulse – accessed on 13.11.2018

10 – **https://zd.net/2IyrdIj**
  – Larry Dignan – Otis launches smart elevator, people mover platform Otis One – zdnet.com – accessed on 08.05.2018

11 – **https://sforce.co/2OJEH7m**
– Salesforce Case Story – The formula for global success – accessed on 9.10.2018

12 – **https://bit.ly/2z2Nkkn**
– Stefan Hajek – So funktioniert die Erfolgsformel von Spotify – wiwo.de – accessed on 13.11.2018

13 – **https://bit.ly/2RMo9Jy**
– Androidmag – Wie viel Zeit verbringen wir auf unseren Smartphones? – accessed on 13.11.2018

14 – **https://bit.ly/2JaXfrF**
– Nikolaus Doll – Ticketkontrolle in der Bahn? Dösen Sie weiter! – welt.de – accessed on 13.11.2018

15 – **https://bit.ly/2flA0vi**
– Statista – Anteil der Smartphone-Nutzer in Deutschland nach Altersgruppe im Jahr 2017 – accessed on 13.11.2018

16 – **https://bit.ly/2lNCd7B**
– Statista – Anteil der Haushalte in Deutschland mit Internetzugang von 2002 bis 2017 – accessed on 13.11.2018

17 – **https://bit.ly/2GsYhwE**
– Jochen Siegle – Facebook verliert junge Nutzer – nzz.ch – accessed on 14.11.2018

18 – **https://bit.ly/2G1SChL**
– B2B Marketing – WhatsApp officially launches business app across select markets ahead of worldwide release
– accessed on 14.11.2018

19 – **https://bit.ly/2xDkCpi**
– Jessica Stillman – This Is the number 1 sign of High Intelligence, According to Jeff Bezos – inc.com
– accessed on 10.10.2018

»ARTIFICIAL INTELLIGENCE«

20 – **https://bit.ly/2JG2oaW**
– Shannon Liao – Google Translate is rolling out offline AI-based translations that you can download – The Verge
– accessed on 12.06.2018

21 – **https://bit.ly/2pOYbcD**
– Mario Gavira – How Netflix uses AI and Data to conquer the world – LinkedIn Pulse – accessed on 02.07.2018

22 – **https://bit.ly/2QKKZke**
– Sonja Shinde – Kastners schlauer Einkaufskorb – Lebensmittel Zeitung vom 03.08.2018

23 – **https://bit.ly/2qN566K**
– Katja Kupka – Scout: Amazon präsentiert eine neue KI-Shoppinghilfe – t3n – accessed on 14.11.2018

24 – **https://bit.ly/2DHcpVU**
– Bernard Marr – Starbucks: Using Big Data, Analytics And Artificial Intelligence To Boost Performance – Forbes
– accessed on 14.11.2018

25 – **https://goo.gl/hwQdKn**
– Google Cloud Vision – accessed on 14.11.2018

26 – **https://bit.ly/2PqbJdL**
– Jörg Dennis Krüger – Schreibt KI conversionstarke Texte? – ConversionBoosting – accessed on 14.11.2018

27 – **https://bit.ly/2PsjRKZ**
– Anja Heinrich – KI macht die Suchmaschinenwerbung besser – Adzine – accessed on 14.11.2018

28 – **https://bit.ly/2pNUBPU**
– Otto Group – Kurz vor Zukunft – accessed on 12.10.2018

29 – **https://bit.ly/2sQALWh**
– Claudia Burkhardt, Nico Litzel – So verändert Künstliche Intelligenz die Logistik – BigData-Insider
– accessed on 16.05.2017

30 – **https://bit.ly/2OYTGu4**
– personalization & pricing summit 2018: Von „Mobile First" zu „AI First" – prudsys – accessed on 12.10.2018

31 – **https://ai.google**
– Google AI – accessed on 14.11.2018

32 – **https://bit.ly/1S89shm**
– Wekinator – accessed on 14.11.2018

33 – **https://bit.ly/2QErj1W**
– TUI Group – Die Zukunft des Reisebüros – accessed on 14.11.2018

34 – **https://ibm.co/2hnYkCv**
– IBM – Tone Analyzer – accessed on 14.11.2018

35 – **https://bit.ly/2pRpmDw**
– Vera Bauer – Datenschutz: Algorithmus schützt vor Gesichtserkennung – Mobilegeeks – accessed on 10.06.2018

»NEW WORK ORDER«

36 – **https://bit.ly/2OlLsg1**
  – Hochschule Koblenz – Status Quo Agile - Dritte Studie zu Verbreitung und nutzen agiler Methoden
  – accessed on 12.10.2018

37 – **https://bit.ly/2yywGYJ**
  – Susanne Grätsch, Kassandra Knebel – Agile Methoden: Design Thinking, Design Sprint, Lean Startup, Scrum
  – Berliner Team – accessed on 29.03.2018

38 – **https://bit.ly/2D3AYw0**
  – London School of Economics and Political Science – Using the space and facilities – accessed on 14.11.2018

»STOP & THINK: NO TECHNOLOGY IS NOT A SOLUTION EITHER«

39 – **https://bit.ly/2S5Kjqq**
  – Luca Diggelmann – Apollo 11 - Mit 1 MHz zum Mond – pctipp.ch – accessed on 24.11.2018

40 – **https://bit.ly/2Ky8lYQ**
  – Benjamin Köhler – Rammstein-Konzerte ausverkauft – eventim erzielt Rekorde – morgenpost.de
  – accessed on 24.11.2018

41 – **https://bit.ly/2RDpdjH**
  – Universally Accessible Ordering for established and emerging Markets – Formidable – accessed on 27.09.2018

42 – **https://bit.ly/2IMsfOy**
  – Carmaker quickly, smoothly shares stories via AMP on BMW.com – The AMP Project – accessed on 12.03.2018

43 – **https://bit.ly/2QxzbSk**
  – Michael Geers – Micro Frontends – accessed on 27.09.2018

44 – **https://bit.ly/2ONQzoT**
  – Goldy Benedict – What is Micro Frontend and How it Provides benefits to the startups? – Techuz
  – accessed on 28.02.2018

45 – **https://bit.ly/2EdsgwD**
  – Oliver Nickel – Microsoft vermietet virtualisiertes Windows 10 oder 7 – Golem.de – accessed on 26.09.2018

46 – **https://apple.co/2ff7ApA**
  – Weather Gods – App Store – accessed on 12.10.2018

47 – **https://bit.ly/2QKP6Nu**
  – Abilisense.com – accessed on 11.10.2018

48 – **https://amzn.to/2swrceG**
– Netflix-Fallstudie – Amazon Web Services – accessed on 10.10.2018

49 – **https://amzn.to/2CACUM4**
– AWs-Fallbeispiel: Expedia – Amazon Web Services – accessed on 11.10.2018

50 – **https://bit.ly/2EkDFLc**
– Banks can regain tech advantage through serverless computing – PwC – accessed on 14.11.2018

»FACTS AND FIGURES«

51 – **https://bit.ly/2OPWWYU**
– ARD/ZDF-Onlinestudie 2018 – ARD/ZDF – accessed on 10.10.2018

52 – **https://bit.ly/2qiXiKl**
– The Ericsson Mobility Report – Ericsson – accessed on 14.11.2018

53 – **https://bit.ly/2OmqIEg**
– E-commerce statistics for individuals – Eurostat – accessed on 14.11.2018

54 – **https://bit.ly/2pZPtbq**
– Statista – Anteil der Online-Käufer, die in den letzten zwölf Monaten Lebensmittel/Güter des täglichen Bedarfs für
private Zwecke über das Internet gekauft bzw. bestellt haben, nach Altersgruppen in Deutschland im Jahr 2017
– accessed on 14.11.2018

55 – **https://bit.ly/2qLLDDt**
– Global Commerce Review Q4 2017 – Criteo – accessed on 20.03.2018

56 – **https://bit.ly/2OSoMR1**
– Staat 4.0 – Verwaltung hinkt Bürgerwünschen hinterher – bitkom – accessed on 19.09.2018

57 – **https://bit.ly/2JxmhQl**
– Jeder zweite Social-Media-Nutzer kann Werbung von Inhalt nur schwer unterscheiden – bitkom
– accessed on 16.07.2018

58 – **https://bit.ly/2q758WL**
– ECC-Payment-Studie Vol. 22 – ECC Köln – accessed on 12.03.2018

59 – **https://bit.ly/1GRnePd**
– Interaktiver Handel in Deutschland 2017 – bevh – accessed on 19.10.2018

60 – **https://bit.ly/1GRnePd**
– Interaktiver Handel in Deutschland 2017 – bevh – accessed on 19.10.2018

61 – **https://bit.ly/2pYeO5N**

– Business-Relevanz Künstlicher Intelligenz – BVDW – accessed on 12.09.2018

62 – **https://bit.ly/2EGdoHj**

– Musik-Streaming: eine digitale Plattform verändert den Alltag – bitkom – accessed on 26.09.2018

63 – **https://bit.ly/2hsiaaZ**

– European Ecommerce Report 2018 – Ecommerce Europe – accessed on 02.07.2018

64 – **https://bit.ly/2hsiaaZ**

– European Ecommerce Report 2018, Ecommerce Europe – accessed on 02.07.2018

65 – **https://bit.ly/2CTkpmk**

– Statista – Annual revenue of Alibaba Group from 2010 to 2018 – accessed on 14.11.2018

66 – **https://bit.ly/2JznwA6**

– Statista – Umsatz von Amazon weltweit vom 1. Quartal 2007 bis zum 3. Quartal 2018 – accessed on 05.07.2018

67 – **https://bit.ly/2MMcAmU**

– Alibaba Group Announces June Quarter 2018 results – Alibaba Group – accessed on 23.08.2018

68 – **https://bit.ly/2rKXdi3**

– Jeder Zweite möchte Künstliche Intelligenz verstehen – bitkom – accessed on 08.05.2018

69 – **https://bit.ly/2PR3RyH**

– Digitale Sprachassistenten erreichen den Massenmarkt – bitkom – accessed on 29.08.2018

70 – **https://bit.ly/2P7JQ9r**

– The Secret to Winning Customer's Hearts With AI – Capgemini – accessed on 09.07.2018

71 – **https://bit.ly/2P7JQ9r**

– The Secret to Winning Customer's Hearts With AI – Capgemini – accessed on 09.07.2018

72 – **https://bit.ly/2P7JQ9r**

– The Secret to Winning Customer's Hearts With AI – Capgemini – accessed on 09.07.2018

73 – **https://gtnr.it/2MHVDG3**

– Gartner says 25 percent of customer service operations will use virtual customer assistants by 2020 – Gartner – accessed on 14.11.2018

74 – **https://gtnr.it/2jW5Lj2**

– Gartner says by 2020, AI will create more jobs than it eliminates – Gartner – accessed on 14.11.2018

75 – **https://bit.ly/2G9NOa1**

– Worldwide Spending on Cognitive and Artificial Intelligence Systems Will Grow to $19.1 Billion in 2018 – IDC – accessed on 14.11.2018

76 – **https://bit.ly/2q5AywD**
– Startups: Ohne KI und Datenanalyse kein wirtschaftlicher Erfolg – bitkom – accessed on 01.08.2018

77 – **https://bit.ly/2pYeO5N**
– Business-Relevanz Künstlicher Intelligenz – BVDW – accessed on 12.09.2018

78 – **https://bit.ly/2wvaUUD**
– Fast jedes zweite Unternehmen will mehr ins digitale Büro investieren – bitkom – accessed on 28.08.2018

79 – **https://bit.ly/2GK29JW**
– Vier von zehn Unternehmen erlauben Arbeit im Homeoffice – bitkom – accessed on 26.02.2018

80 – **https://bit.ly/2J6s5So**
– Scrum - König unter den agilen Methoden - bitkom research – accessed on 21.09.2018

81 – **https://bit.ly/2OlLsg1**
– Status Quo Agile 2016/17 - Hochschule Koblenz – accessed on 01.03.2017

82 – **https://bit.ly/2N4lRrH**
– Unternehmen setzen verstärkt auf Digitalisierungs-Teams – bitkom – accessed on 09.09.2018

83 – **https://gtnr.it/2PevznB**
– 100 Data and Analytics Predictions Through 2022 – Gartner – accessed on 21.05.2018

84 – **https://bit.ly/2JOPers**
– Zwei von drei Unternehmen nutzen Cloud Computing – bitkom – accessed on 12.06.2018

85 – **https://bit.ly/2guEdRE**
– Statista – Prognose zum weltweit generierten Datenvolumen 2025 – accessed on 14.11.2018

86 – **https://mck.co/2sVjRFJ**
– Analytics comes of age – McKinsey Analytics – accessed on 14.11.2018

87 – **https://gtnr.it/2IrhDa5**
– Gartner Says CRM Became the Largest Software Market in 2017 and Will Be the Fastest Growing Software Market in 2018 – Gartner – accessed on 10.04.2018

»FUTURE RETAIL«

88 – **https://bit.ly/2yCp9bB**
– Von Maschinenteilen zu ganzheitlichen Konzepten – Konstruktionspraxis – accessed on 09.10.2018

89 – **https://bit.ly/2PxOsCw**
  – Lennart Paul – Roobeo – der neue Stern am Baustoff-E-Commerce-Himmel? – warenausgang.com
  – accessed on 08.10.2018

90 – **https://bit.ly/2p8UH5G**
  – bett1.de – accessed on 08.10.2018

91 – **https://bit.ly/2QEHtbe**
  – Bianca Sellnow – Microbrands erobern den Markt für Konsumgüter, Digitaler Mittelstand.de – accessed on 08.10.2018

92 – **https://bit.ly/1JzmgGi**
  – Rebelle – accessed on 14.11.2018

93 – **https://bit.ly/2slR1i7**
  – Asana Rebel – accessed on 14.11.2018

94 – **https://bit.ly/2i0Fj8C**
  – Amorelie – accessed on 14.11.2018

95 – **Adidas consumer-centricity and personalization**
  – Joseph Godsey, Head of Digital Brand Commerce, adidas at K5 Future Retail Conference 2018

96 – **https://bit.ly/2OdN1wF**
  – Adidas – accessed on 08.10.2018

97 – **https://bit.ly/2QEGk3g**
  – Joachim Hofer – Diese App ist für Adidas wichtiger als jeder Turnschuh – handelsblatt.com – accessed on 09.10.2018

98 – **https://bit.ly/2IN0NAd**
  – Zalando Wardrobe – accessed on 14.09.2018

99 – **https://bit.ly/2yqA73H**
  – Laura Melchior – Zalando launcht Wardrobe-App und geht mit Beauty-Sortiment live – internetworld.de
  – accessed on 12.07.2018

100 – **Zalando im Gespräch: 10 Jahre Zalando**
  – und was jetzt? – Robert Gentz, Co-Founder & Vorstand – Zalando at K5 Future retail Conference 2018

101 – **https://bit.ly/2RFdl0A**
  – STABILO Inspiration – stabilo.com – accessed on 25.09.2018

102 – **https://bit.ly/2REGdpR**
  – Berlinda Nadarajan – Four People-Centered Trends to Watch for in E-Commerce – socPub.com
  – accessed on 25.09.2018

103 – **https://bit.ly/2OkGG2r**
– Airbnb explore experiences – airbnb.co.uk – accessed on 26.09.2018

104 – **https://bit.ly/2OOjMzP**
– Tamaris Instamaris – tamaris.com – accessed on 08.10.2018

105 – **https://bit.ly/2A0GSJy**
– Katharina Hutter – Pop-up-Stores als temporäre Kundeninspiration – absatzwirtschaft.de
– accessed on 10.10.2018.

106 – **https://bit.ly/2RSoudI**
– Ingrid Lommer – Die fabelhafte Welt der Amazon Storefronts – internetworld.de – accessed on 14.11.2018

»BRANDS IN THE DIGITAL AGE«

107 – **https://bit.ly/2K3N3Sy**
– Hans-Christian Dirscherl – Aus für MiCoach: Adidas stellt Fitnesstracker ein – PC-Welt – accessed on 14.11.2018

108 – **https://bit.ly/2ypiBwK**
– Vera Bauer – IKEA und Sonos Kooperation: Erster Lautsprecher-Protoyp präsentiert – mobilegeeks.de
– accessed on 09.06.2018

109 – **https://bit.ly/2PmnOMV**
– Verena Fulde – Zeiss und Telekom bündeln Engagement für Datenbrillen in Joint Venture – Telekom PM
– accessed on 07.02.2018

110 – **https://bit.ly/2Pv0fpu**
– cargobike.jetzt – accessed on 14.11.2018

111 – **https://bit.ly/2QGcSdl**
– YEAY – accessed on 10.10.2018.

112 – **https://bit.ly/2C94Rts**
– Neue shopping-Plattform für Young Value shopper: ebay startet Catch– ebay – accessed on 27.09.2018

113 – **https://bit.ly/2OcPHuD**
– Millennials and beyond – Deloitte – accessed on 27.07.2018

114 – **https://bit.ly/2cPmDCx**
– Annika Flatley – Verpackungsfreier Supermarkt: einkaufen ohne Verpackung – utopia.de – accessed on 11.10.2018

115 – **https://bit.ly/2EgPhyG**
–Guilt-Free Consumption – trendwatching_com – accessed on 12.10.2018

116 – **https://bit.ly/2Epk5gu**
– Nadja Ayoub – Dm testet Abfüllstation für Bio-Reinigungsmittel – utopia.de – accessed on 11.10.2018

117 – **https://bit.ly/2L3tI2M**
– Stefanie Jakob – Zero Waste: besser leben ohne Müll – utopia.de – accessed on 11.10.2018.

118 – **https://bit.ly/2yxSW4Y**
– Mark Parish – Community-Conscious Consumption And The evolution Of Market Value Forbes
– accessed on 12.10.2018

119 – **https://bit.ly/2OSGTcJ**
– Sandra May – Zadaa: Kleiderkreisel bekommt Konkurrenz – onlinehaendler-news.de – accessed on 12.10.2018.

120 – **https://bit.ly/2n9Ld8J**
– WWF und H&M richtungsweisend für nachhaltigere Mode – about.hm.com – accessed on 12.10.2018

121 – **https://cnb.cx/2O1NaPk**
– Lauren Thomas – Online start-up The RealReal to open its second luxury consignment store, as e-commerce brands
keep growing – cnbc.com – accessed on 12.10.2018

122 – **https://bit.ly/2CbtXrv**
– Vite EnVogue verrät die regionalen Vorlieben der Deutschen bei Preloved Designerfashion – fashionnetwork.com
– accessed on 12.10.2018

123 – **https://bit.ly/2yxRTSM**
– Trivago kooperiert mit Doli für eine nachhaltige Unternehmenskultur – eco-world.de – accessed on 12.10.2018

124 – **https://bit.ly/2NhNLiU**
– Kim Rixecker – Bis 2020 will Facebook vollständig auf erneuerbare Energien umsteigen – t3n
– accessed on 12.09.2018

125 – **https://bit.ly/2Obe6AF**
– Government 4.0 – the public sector in the digital age – McKinsey & Company – accessed on 1.03.2018

126 – **https://bit.ly/2RO0xo6**
– Matthias Kolb – Die Zukunft ist schon da, aber sie ist vor allem in Estland – SZ.de – accessed on 14.11.2018

127 – **https://bit.ly/2z9eo1w**
– Daniel Delhaes – Das ist der geheime Masterplan für das wirklich schnelle Internet – handelsblatt.com
– accessed on 14.11.2018

128 – **https://bit.ly/2qKVZU5**
– Irene Tham – All SingPass users to be auto enrolled in digital data vault MyInfo by year end – The Straitstimes
– accessed on 14.11.2018

PHOTO SOURCES

– Seite 84 – iStock #813402090, © Ismailciydem

– Seite 85 – iStock #530007782, © Rawpixel

– Seite 87 – iStock #621835164, © Comomolas

– Seite 97 – Adobe Stock #162633004, © Ingo Bartussek

– Seite 99 – Photos © Matthias Eimer

– Seite 101 – www.business-images.de/portfolio – Edited by dotSource GmbH

– Seite 103 – © www.szarka.me – Edited by dotSource GmbH

dotSource®

It's 2019: 25 years after the first e-commerce software was introduced at the CeBIT conference. The forecasted big bang for commercial and industrial fossils has so far failed to show. Nevertheless, transformation is noticeable everywhere – digital code is changing the DNA of our world. Revolution has become evolution. »Handelskraft 2019« shows which factors will be decisive for the future strategies of companies and how they can use them to successfully digitise their customer relations.

trendbook.dotSource.com

Head Office Jena
Goethestraße 1
07743 Jena

Office Leipzig
Hainstraße 1–3
04109 Leipzig

Office Berlin
Hardenbergstraße 9
10623 Berlin

FON **+49 (0) 3641 797 9000**
FAX **+49 (0) 3641 797 9099**
E-MAIL **info@dotSource.de**

www.dotSource.com | www.handelskraft.com | www.digital-business-school.com