

Customer Service and Engagement

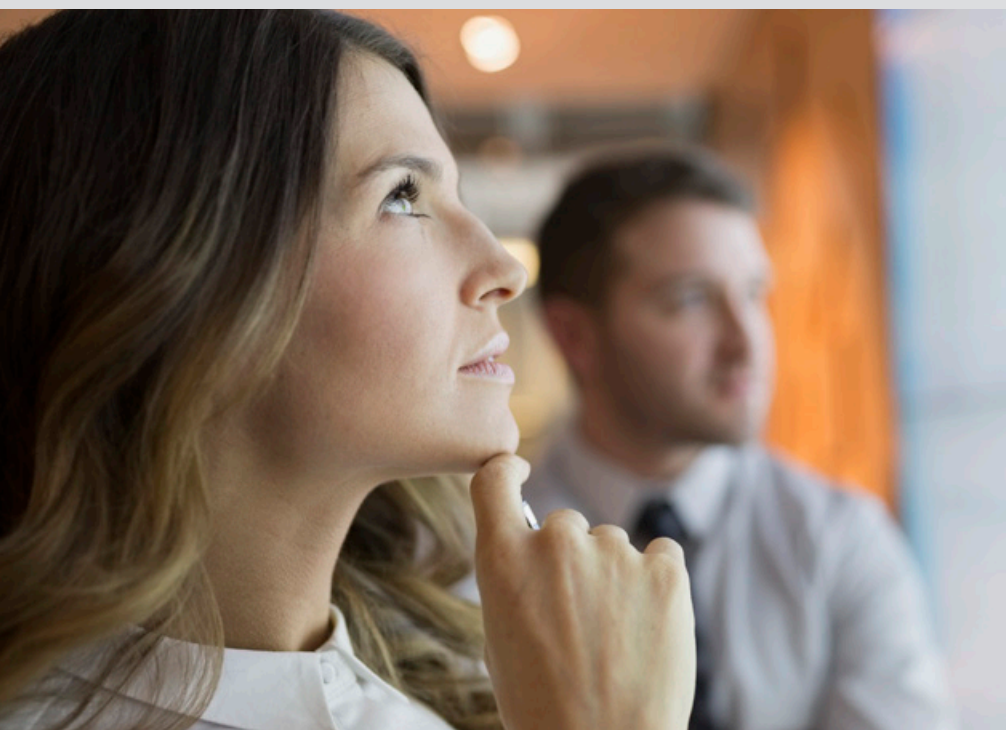
How digital transformation will influence
the future of customer service



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Introduction

Dear reader,

I am delighted to present our latest study focussing on trends and new technological possibilities in customer service. We detail how Germany's largest industries are successfully implementing digital service initiatives using concrete, state of the art examples. I am convinced that these insights will provide you with many new ideas to inspire your digital activity in the future.

Our research for this study has shown how strongly the coronavirus pandemic influenced companies' digital transformation. It has already partly changed customers' interaction habits. Many developments will remain after the pandemic because they benefit all stakeholders – working from home is just one of several examples of this. That said, Covid-19 is not the only factor that is shaping the service market.

Germany's minimum hourly wage set to rise to 12 euros, will lead to adjustments in the sourcing strategy of many service providers and in-house centres and drive demand for new locations.

Consequently, the ongoing headwinds the industry is facing will significantly increase the need for service digitisation and cost reduction in 2022 and 2023.



Matthias Riveiro,
Partner
Customer Practice, PwC Germany

I wholeheartedly believe that customer service is actively transitioning from a pure 'problem solver' to an experience which offers the potential for cross- and upselling. Our interdisciplinary team of authors has taken this evolution into account, resulting in a study that very much reflects our motto 'from Strategy through Execution'. We hope that it will help you to implement your service transformations holistically – from strategy to organisational and process optimisation to technical implementation.

I want to thank all those who contributed to this study. In particular, I would like to thank our clients, my Customer Practice team, and the experts from the Customer Centric Transformation (CCT) team. My gratitude also extends to the entire PwC network.

I now hope that we will soon be able to enjoy more human contact again. We are all human beings and personal interactions will always remain important, especially in our business. This importance is clear, as demonstrated by a desire for empathetic agents.

Yours sincerely,

Matthias Riveiro

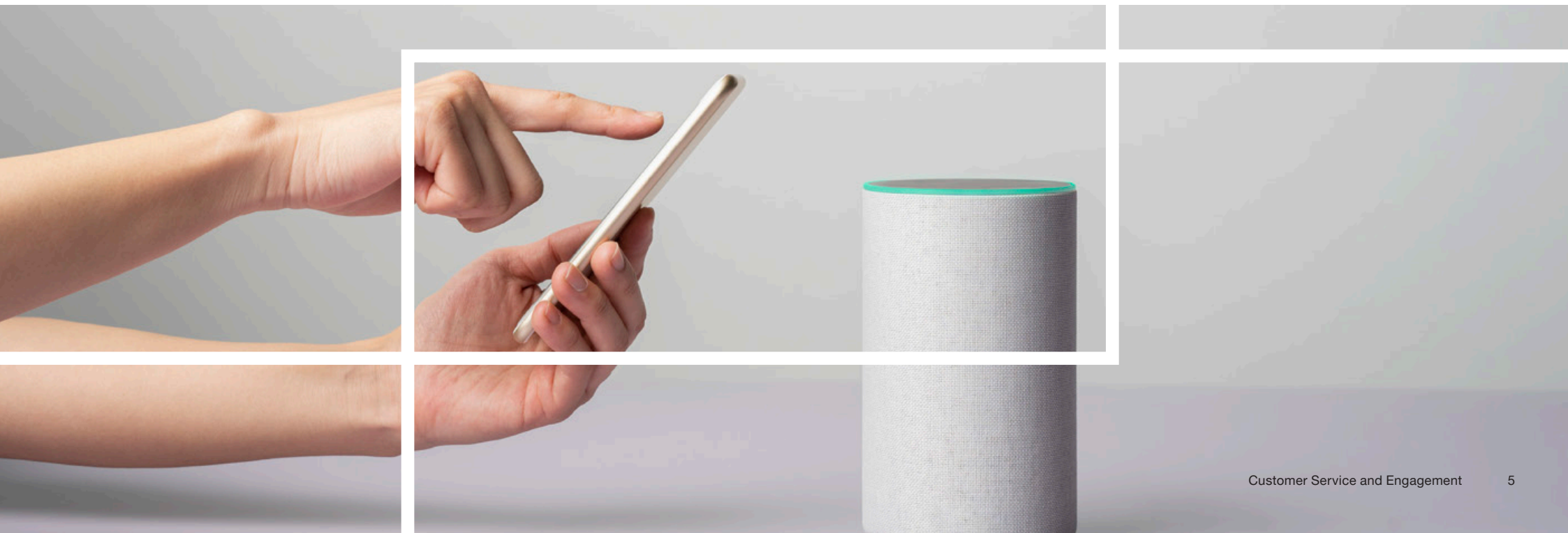
Customer service is one of a company's most critical core activities. Most people have had contact with a company's customer service. Some of these experiences stay in the memory because they were particularly negative or positive. After positive experiences, customers are often enthusiastic about the service and become real 'fans'. In the best case scenario, they tell friends, relatives, and acquaintances about it. A major challenge is that customers usually remember negative service experiences longer than satisfying ones. This fact makes it even more important to avoid bad experiences at all costs.

Customer service has strategic importance

Many companies have recognised this, and today, their customer service is much more professional than it was a few years ago. And it is of strategic importance: Direct contact with customers can make or break customer loyalty. If customers' needs change or they express new ones, service staff should quickly notice this. With changing customer demands, customer service is also constantly changing – or must do so, especially due to digitisation.

Objective of the study

Which trends are most strongly shaping the customer service of today and tomorrow? This study provides answers to these central questions. Besides, it offers a detailed examination of the developments in specific sectors, with a particular focus on the question of maturity in customer service. Combined with selected best practices, readers receive practical guidance on how they need to react to current and future developments – and specific measures required to improve their overall customer service experience.



Our 2022 analysis builds upon previous studies which looked at trends within customer service. In our analysis from 2018, we examined the evolution of the call centre outsourcing and CRM market in Germany, looking at how these trends play out by sector.¹ In our 2020 follow-up study, we showed how digital services 2.0 are changing the German contact centre and CRM market.²

For the current study, we examined the changes resulting from Covid-19, which acted as a catalyst for digitisation. As contact centre agents worked from home, sometimes forced to do so, end customers used digital services during lockdowns in spring 2020 and winter 2020/21 more actively than ever before.

Structure of the study

Two types of trends are currently influencing customer service – fundamental, overarching trends and technological developments. The first group includes constantly increasing customer expectations, increased scope for self-service, the extreme personalisation of the customer service experience and better working conditions for agents. The second group includes advanced technologies such as Artificial Intelligence (AI), which have been used in the service sector for several years. In the future, they will become a standard within customer interactions. In addition, there are cloud-based omnichannel systems as well as the use of voice and biometrics as security features.

Similar to AI, Robotic Process Automation (RPA) is also increasingly becoming part of the standard repertoire of contemporary customer service. Based on this assessment, we use our maturity model to determine the digital development status of individual sectors. We then use our established quantitative market model once again to provide a deeper insight into the future growth of individual sectors. We have revised it fundamentally so that it soundly reflects the most important ongoing trends as well as the latest developments and experiences resulting from the coronavirus pandemic. We show which technologies individual industries are currently using and how trends are evolving, and to what extent, as well as the specific opportunities and challenges for customer service. These results are complemented by eight instructive, concrete application examples.

We hope that our readers will gain interesting impulses and exciting insights from our study – and possibly concrete, practicable suggestions for improving customer service in their companies.

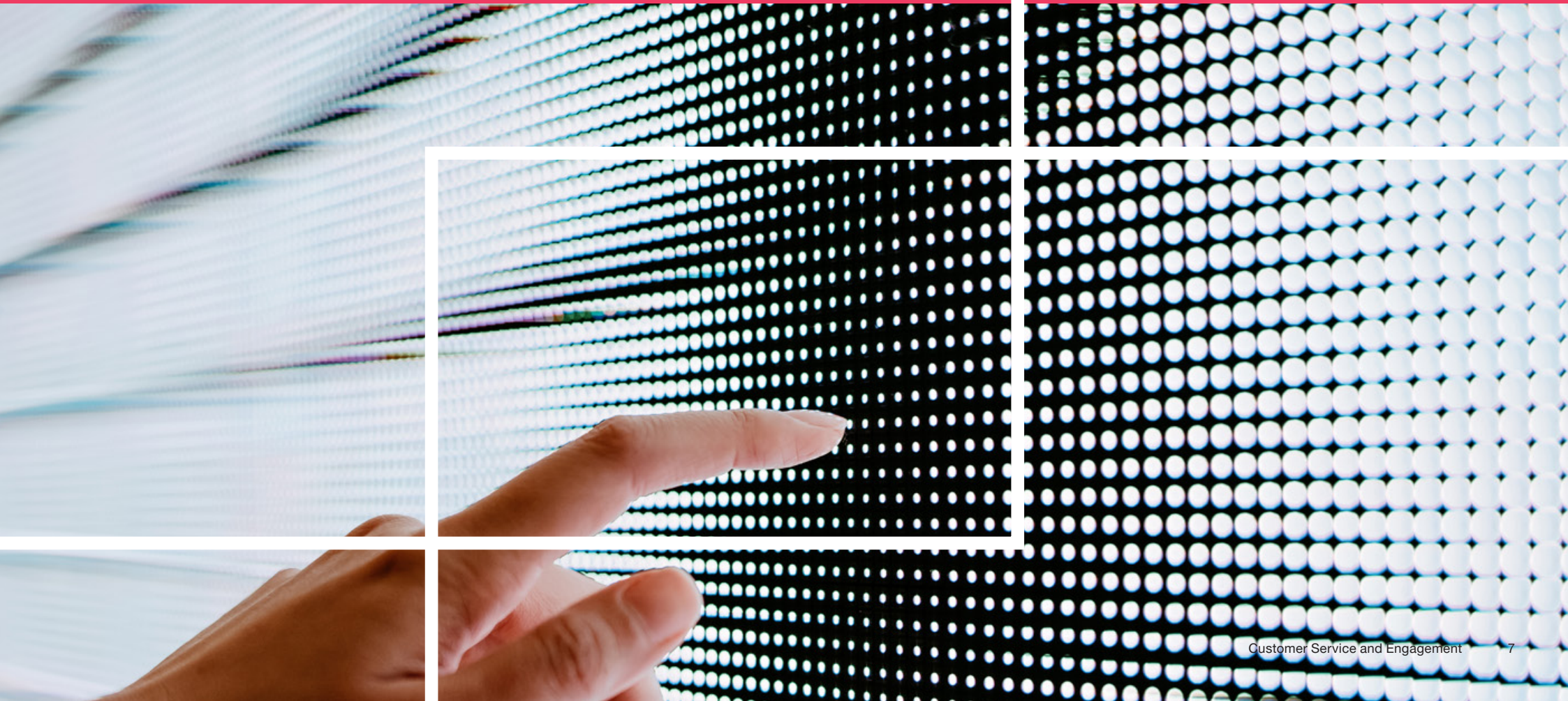
¹ PwC (2018) The German contact centre and CRM service market

² PwC (2020) The future of the German contact centre and CRM market



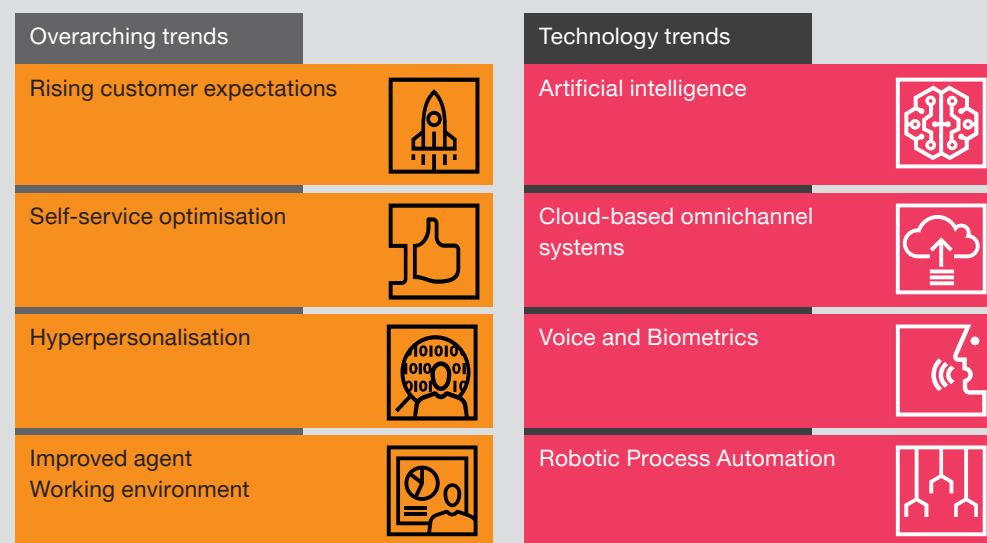
Part A

Current trends and tendencies in the service sector



To what extent have customer needs changed in recent years? What (technological) trends can be observed in the market? And how can companies use them to continuously optimise their customer service?

Fig. 1 Trends in customer service 2022, own illustration



Overarching trends

Currently, four overarching trends can be observed. They are demonstrably shaping customer service and will significantly influence the evolution of customer service as a whole. These include: Constantly increasing customer expectations, the optimisation of self-service offerings, hyperpersonalisation and the improvement of the working environment for service agents, all of which we will now explore in greater depth.

Trend 1: Increasing customer expectations

Fast, competent, reliable – that’s what customers have essentially always expected from customer service. However, their demands and expectations have increased further with the development of new, digital technologies – and will continue to do so. Customers want 24/7 access to answers to their questions. Not least because digital leaders like Apple, Alphabet (Google), Microsoft and Amazon have set new standards through a combination of technology, design, and service. Customers evaluate interactions with other companies against these standards.

The uptake of digital contact channels in Germany has been somewhat slower compared to countries such as the USA. However, the pandemic has seen customers increasingly embrace digital tools. In the first lockdown in spring 2020, many Germans made greater use of digital services, online shopping and video advice, in some cases even for the first time. For example, in PwC’s “Global Consumer Insights Pulse Survey” from June 2021, 44% of the Germans surveyed said they had become more “digital” as a result of the pandemic. It is noteworthy that more respondents now regularly shop online compared to the beginning of the pandemic.³

³ PwC (2021) Global Consumer Insights Puls Survey

Good service increases willingness to pay

Meeting customer expectations on digital channels is now increasingly critical for success. A wide range of contact channels, consistently high service quality, efficiency, ease of use and accessibility as well as friendliness are still the most important attributes of a service. If they are fulfilled, customers even tend to have a higher willingness to pay.⁴

However, meeting growing customer expectations is a major challenge for many companies, and the gap between trendsetters and laggards is growing. In addition, many industries are becoming more competitive, also due to new entrants in the market. Customers now find it easier than ever to turn their back on a company if they perceive the service experience to be negative.

But how can companies best accommodate changing customer service demands? One potential solution would be to restructure established operating models, to redesign processes, and to initiate a real rethinking within the company in order to place customer experience at the heart of all activity.

The good news is that new digital technologies offer companies a wide range of solutions to meet increasing customer expectations and differentiate themselves from the competition. The digitisation of processes and structures often helps them to achieve greater efficiency and cost reductions, which are also important considerations for companies.



⁴ PwC (2019) Experience is everything: Here's how to get it right

Let us now look at some of the trends and approaches companies are taking to adapt to increasing customer expectations:

- **Customer experience as a new success factor** – Customer expectations and the customer experience are increasingly important when it comes to achieving differentiation from competitors.
- **The rise of self-service** – From self-checkouts to personalised FAQ pages and to IVR in call centres – customers are more willing to solve their problems themselves today than in the past. While they still (also) want to talk to human agents, in many cases, contact centres can save time and money with cleverly implemented self-service tactics – and improve the customer experience at the same time.
- **“Always on” culture and 24/7 service** – We have become accustomed to being able to find the information we need and contact others at any time. Customers want to maintain these habits when dealing with companies. While 24/7 call centres are not always possible, customers do expect to receive assistance at off-peak hours, such as extended opening hours and weekend support.
- **Customers expect omni-channel service** – Many customers change their contact channel during a request. They expect consistent service and that the exchange with a company feels like one single conversation.
- **Customers expect personalised service** – The entire online experience is personalised today. Customers have the same expectation of service. For example, customers want to be remembered and treated as an individual – rather than one of many random customers. To accomplish this in practice, agents need access to the customer’s entire communication history, buying habits, and preferences.
- **Mobile connects people, businesses and information** – All aspects of the customer experience need to be mobile-friendly – from the website to the customer service. Companies should therefore consider mobile service not as an extra, but as a necessity. “Mobile first” is an eminently important principle in this context.

Trend 2: Optimisation of self-services

Self-services can relieve the burden on traditional contact channels, especially telephone and e-mail. Customers appreciate round-the-clock availability and are increasingly willing to solve more complex issues “themselves” using technology – because they are often able to do so quicker than with self-service offers. Companies appreciate the cost reductions enabled by self-services, hence, their use will continue to increase in the future.

What causes self-services to fail

While many companies already offer one form of self-service or another, telephone and e-mail remain the most frequently used service channels – although various studies and surveys show that customers are very open to self-services in principle. But why do customers still tend to use telephone and e-mail as more expensive interaction channels for companies?

Because self-services are too often not yet optimised. According to studies, self-services fail mostly at the following three points:

1. External search,
2. Navigation on the company page,
3. at the self-service itself.⁵

Service does not begin with the service itself; the availability of clear channels of communication plays a decisive role in its eventual success (or failure). For example, if potential service enquirers find a telephone number or an e-mail address during an internet research, they will probably use it first – without using the self-service tools available on the company website.

Self-service tools must be easy to find

In this regard, self-service is also a question of search engine optimisation (SEO), for which the marketing departments are responsible in most companies. However, the application of SEO strategies to appropriately position self-services and traditional customer service are rather rare. It therefore makes sense for marketing and customer service to work together more closely on this point than they have in the past.

⁵ Gartner (2021) Enable Customer Self-Service to Deliver Better Support

Self-services should be easy to find and navigate on the corporate website itself. However, sometimes search functions provide hundreds of answers, which users have to sift through to find an answer that might fit. This is where modern, natural language search functions can improve the service. For example, modern search functions track entries and click paths in real time and offer the results in a ranking to the following customers.

Ease of use and continuous optimisation

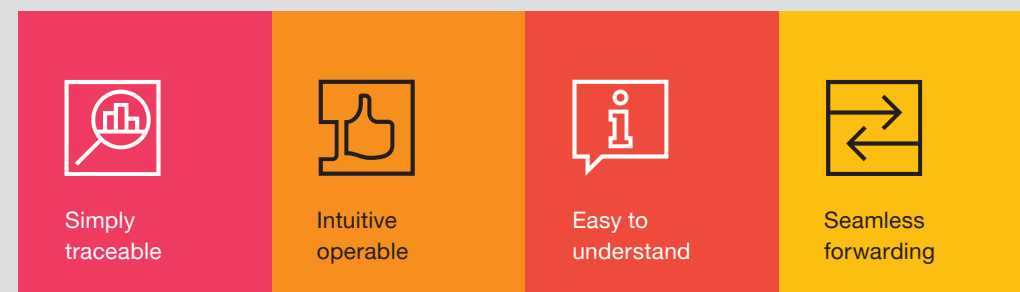
Modern systems must also cope with constantly changing customer concerns. Thus, the search function should include special events. For example, after a natural disaster such as the tsunami in the Ahr Valley in summer 2021, customers required information to help them cope with the aftermath – not search results optimised for a marketing campaign. For service optimisation, the customer journey should therefore always be considered as a whole.

It is essential that value adding self-service tools are simple to use. For example, what is the point of complex voice response systems (IVR, Interactive Voice Response) being able to handle customer concerns if customers cannot describe their concerns to the system in such a way that they can solve them using the self-service functionality? When setting up or optimising self-services, companies should therefore always keep in mind how customers without special expertise usually express their concerns so that self-services actually solve their problems. In addition, such services should allow for seamless referral to human service agents. Otherwise, customers will have to become active again if they cannot solve their problem via self-service. This means additional effort – which is usually remembered as a negative experience.

In the wake of the coronavirus pandemic, many companies have set up or had to set up self-services within a short time. Now they need to be optimised and constantly updated. Inconsistent and outdated information easily irritates customers – and usually causes additional contact volume. In the worst case, customers may even turn away from the contacted company and switch to the competitors who are offering a better self-service experience.



Fig. 2 Key success criteria for self-service, own illustration



Trend 3: Hyperpersonalisation

Today, customers expect increasingly personalised services. They will tend to choose companies that offer them a service tailored to their specific needs, such as the right product offer at the right time. While personalised service is already standard today, so-called hyper-personalisation takes service quality to the next level. Hyperpersonalised service is proactive, intelligently smooth and consistent. However, only 13% of customers currently say they have experienced this in their dealings with companies.⁶

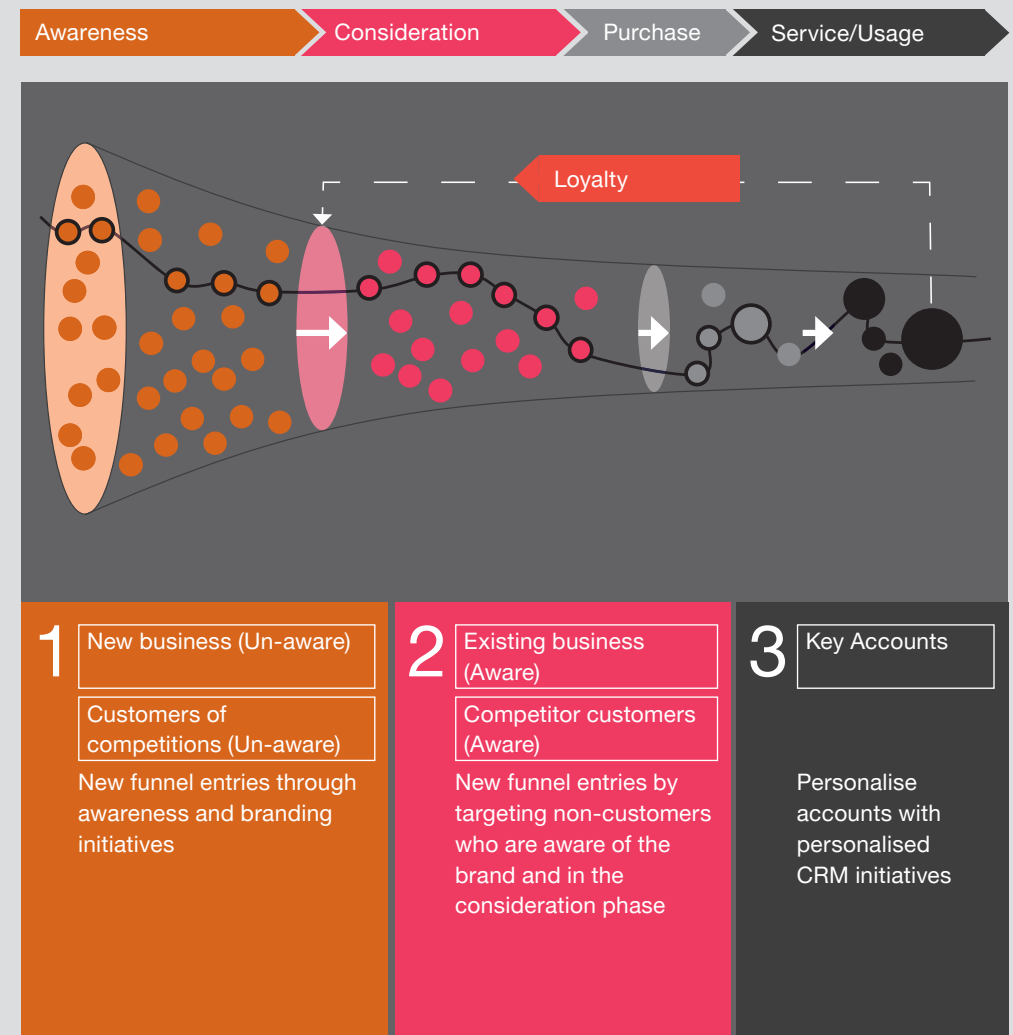
Hyperpersonalisation (also known as “one-to-one marketing”) involves displaying specially selected content, products, and services to customers, supported by real-time data and Artificial Intelligence (AI). The aim is to provide customers with highly individualised, contextual content. For hyper-personalised service, providers need to precisely know a company’s products and customers and have the right data, technologies, and resources for implementation.

Implementing a hyperpersonalised service is challenging, even for technologically advanced companies. It is not enough to capture real-time customer data to support omni-channel journeys; it requires an entirely new approach that empowers service agents to use data in new ways. This approach includes the following aspects in particular:

1. Customer service as a central customer management channel for customer-centric marketing

Traditional marketing focuses on the attention and accessibility of (potential) customers at the beginning of the sales funnel; customer-centric marketing focuses on the relationship with customers and their management throughout the entire life cycle. Existing customers are already familiar with the company’s offer and can be addressed differently.

Fig. 3 Sales funnel, own illustration

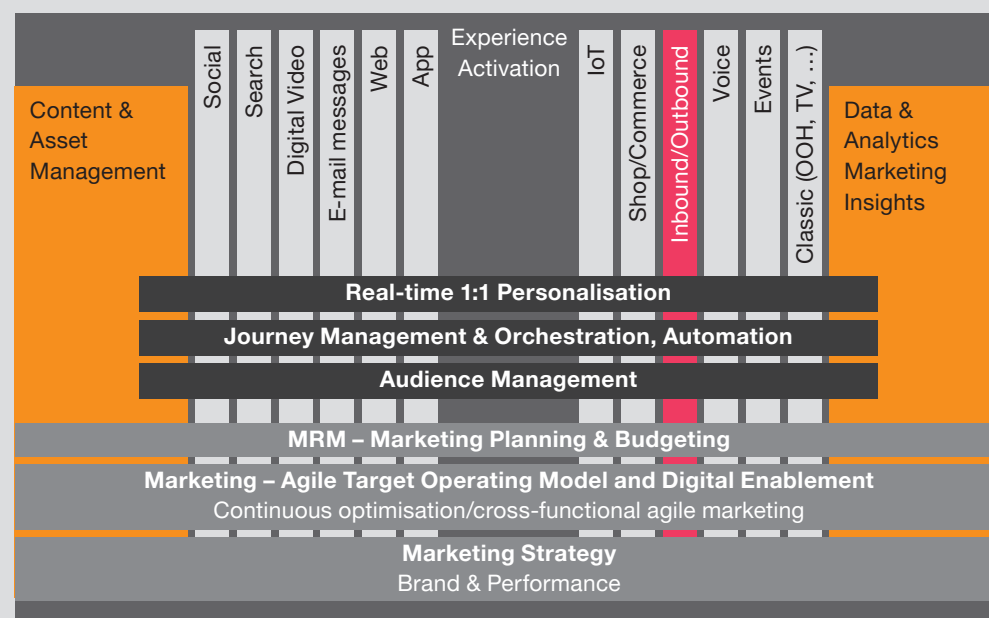


⁶ Gartner (2021) Drive Dynamic Customer Engagement Through Service

2. Service contacts are essential building blocks for modern, customer-centric marketing

The so-called audience management provides information about service and usage behaviour – and provides the basis for scoring models. These in turn enable more targeted customer segmentation and addressing. Based on these insights, key moments for customer interaction can be identified, in which companies can, for example, address their (potential) customers directly and precisely. Furthermore, this data can also be used for incoming customer communication. Thanks to the relevant information, intelligent systems can provide suitable information and thus help to adequately address customer needs.

Fig. 4 Inbound and outbound customer service in a marketing context, own illustration



3. Hyperpersonalisation creates positive customer experiences

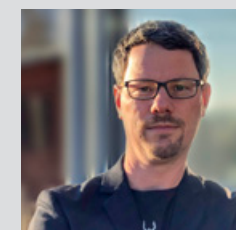
Thanks to data, it is also possible to address customers personally with customised (information) offers. Addressing customers by name with the identified need increases customer satisfaction and the likelihood of purchase.

Customer segmentation can be more granular than with classic A/B testing and provides continuous improvement of proposals based on transaction results.

The overall benefits of hyperpersonalised services are enormous. The most important are:

- For companies, there are high efficiency gains through cross- and upselling at the point of service, since customers can be drawn back into the sales funnel via loyalty mechanisms.
- Customers are pleasantly surprised by the right offers in the service context. Previously undesired service interactions become value-adding conversations thanks to the right offers.
- The targeting of critical groups can be specifically excluded by processing negatives of segmentation: Companies avoid unnecessary and untargeted communication.

The prerequisites for successful implementation are customer database platforms (CDPs) and a complete integration into the entire marketing, sales, and service infrastructure.



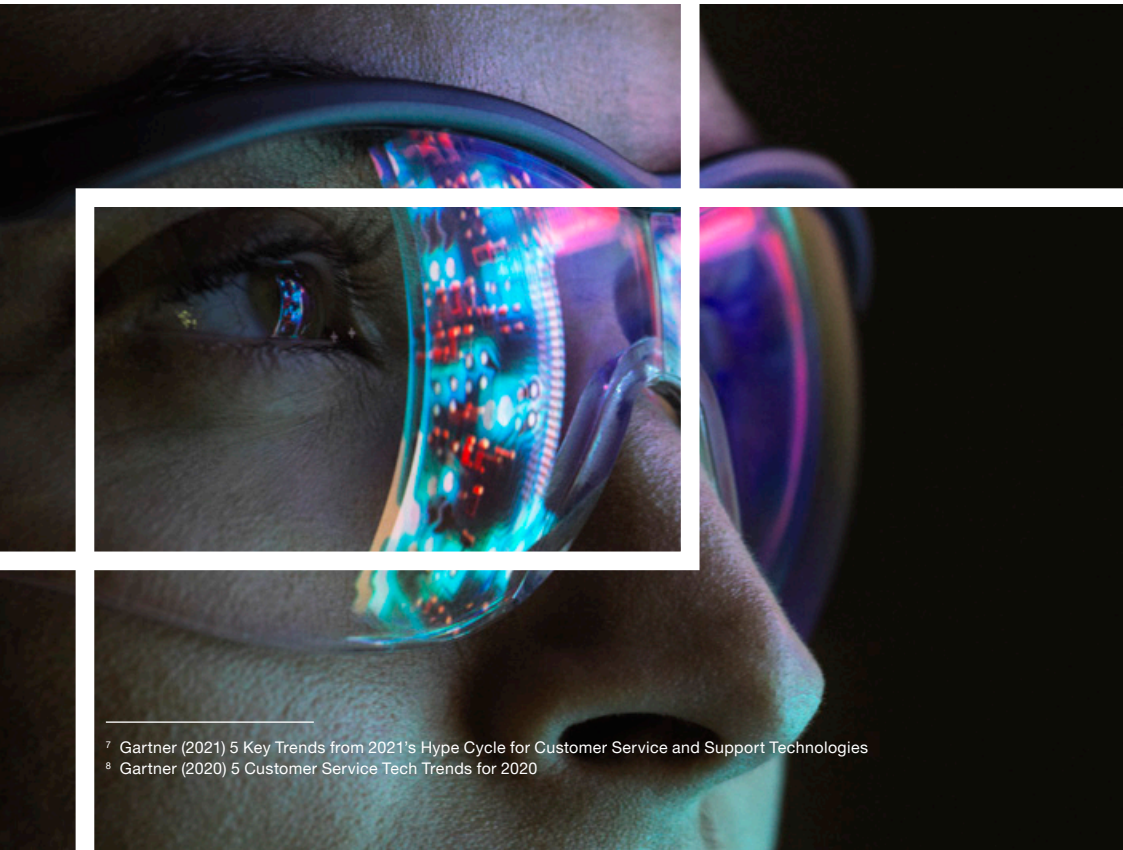
Mathias Elsässer
Partner PwC Germany

How businesses benefit from hyperpersonalised service

Hyperpersonalisation offers companies many advantages. For example, it minimises the risk of customers being overwhelmed by an oversized offer because recommendation algorithms only show them content that is really interesting and relevant to them. Hyperpersonalisation is also able to identify customers' "pain points", i.e. problems that need to be solved, and show them directly suitable solutions.

Modern hyperpersonalisation now reaches a considerable level of detail. The prerequisites are comprehensive automation and high data availability on customer interests.

Technologies and methods such as AI, machine learning, and Internet of Things (IoT) applications analyse customer intentions in detail, recognise them in the right context and offer companies in-depth creative approaches to address them. Leading companies such as Amazon, Spotify, and Starbucks are already using hyperpersonalisation to investigate which factors most influence their recommendation engines.



Trend 4: Improved agent experience

Customer service focuses on the customer experience. This is understandable because it has been proven that a good customer experience is built on basic data – through journey-driven approaches – and increases customer loyalty. However, in our view, customer experience is only one of several building blocks for optimal customer service.

Equally important is the "agent experience" – related terms are "employee experience" (EX) or workforce engagement management. They describe the holistic experience of employees at their workplace. While agent experience has so far received little attention in studies and in practice, our view is that it is one of the most important trends in customer service.

Satisfied service agents achieve better results

In essence, the aim is not only to optimise customer service staff operationally, but also to optimise their working environment. This includes, for example, assistance tools that simplify their work and make customer data and key information easy to find. It is equally important that companies use feedback from their service staff to identify opportunities for improvement and implement them in practice.⁷

Studies show that employees who use value adding systems and applications every day are up to 20% more productive than those who do not. Moreover, they achieve 11% higher customer satisfaction in the delivery of their services compared to employees who do not.⁸

⁷ Gartner (2021) 5 Key Trends from 2021's Hype Cycle for Customer Service and Support Technologies

⁸ Gartner (2020) 5 Customer Service Tech Trends for 2020

Technical and human capability

Since simpler customer enquiries are increasingly automated, human service staff tend to handle more complex enquiries. Positive service experiences for end customers therefore need both: technical and human skills, i.e. suitable tools and employees who can handle them. It is important to promote both in a targeted manner.

Omnichannel management, combined with data management, offers great potential here. For example, internal processes can be optimised by agents organising workflows on their own; verbal and/or written service communication as well as customer data can be used by means of data analytics tools, AI, and machine learning for the agents clearly, transparently, and comparably. As a result, service staff can quickly address customer enquiries and, if necessary, access prepared solutions because they can view past transactions and touchpoints.

Contact centres often neglect agent training

An improved agent experience also means that automation relieves them of repetitive tasks and that they can focus on more value-adding tasks and advisory services with digital support. This requires investments in their professional development, resulting in improvements to the customer experience.

However, more than 70% of contact centres invest less than four hours per month in training their agents. Furthermore, they use only 2% of the onboarding time to train problem-solving oriented thinking. Instead, they mainly teach how workers should operate the respective technologies.⁹

Self-service tools are now also available for the flexible training of agents. And with special feedback tools, agents can independently understand how they can improve their service performance in the future. AI-supported evaluations of customer conversations reveal possible weaknesses and strengths. Moreover, regular personal feedback sessions remain important to further motivate and evolve agents.

Employee-centred approach strengthens loyalty to the company

The importance of a good agent experience became even more apparent during the pandemic, when many service employees were working from home. In addition to technical aspects (functioning equipment, VPN access, etc.), contact centres should keep the physical and mental well-being of their employees in mind. Such an employee-centred approach shows appreciation and helps to retain valuable, efficient employees in the long term. Successful onboarding increases motivation, engagement, and productivity. Exit interviews are also an opportunity for companies to identify and address reasons for dissatisfaction in order to prevent other employees from leaving for the same reasons.



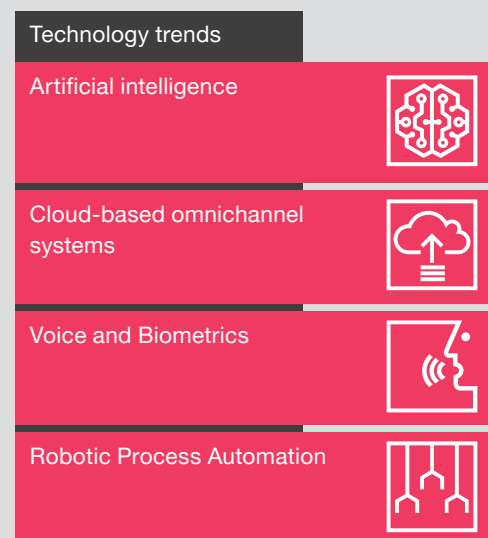
⁹ Nice (2021) What is agent experience?

Technology trends

In addition to the above-mentioned overarching trends, technological developments are shaping today's service sector. The four main technology trends – Artificial Intelligence, omni-channel systems, voice and biometrics, and robotic process automation – are presented below.

At the beginning of 2020, i.e. even before the start of the pandemic, AI-supported virtual assistants, voice bots, and proactive process automation or robotic process automation were the top three technologies that around 800 surveyed companies of a study wanted to implement quickly.¹⁰ The conversations and workshops we conducted for this study essentially confirm this, supplemented by cloud-based omnichannel systems. How and for what are companies already using these four future-oriented technologies today?

Fig. 5 Technology trends, own illustration



Technology trend 1: Artificial Intelligence

Artificial Intelligence is a collective term for various applications in which machines simulate human intelligence. They have made remarkable progress in recent years. The main reason for this is that the necessary computing power is now comparatively cheap and easily available. The technical bases for AI are usually neural networks; although they have existed since the 1980s, it is only today that they can be calculated with high performance and are available to many users. AI applications often focus on cognitive abilities such as vision and language comprehension. In the following, we go into more detail and present concrete AI applications.

1.1 Artificial vision (computer vision)

Today, Artificial Intelligence can recognise what is in a picture – a dog, a cat or both? And it recognises where the contours of the depicted objects run. Before that, an AI system had to be trained with vast numbers of images. In simplified terms: If an AI system has only seen dogs and cats during training, it cannot reliably recognise a horse later on. Some manufacturers of AI systems offer pre-trained models that can be used directly. They can be further trained and refined with own data sets. Insurance companies, for example, use such models to evaluate photos that are attached to a damage report. The AI system then determines whether the picture shows the car model for which the insurance policy applies and whether the damage can be seen as described.

¹⁰ NTT (2020) Global Customer Experience Benchmark Report

1.2 Language

Text classification

The most widespread AI application is text classification. Here, an algorithm assigns a text to one or more predefined categories, for example a newspaper article to the sports, foreign policy or business sections. The AI only succeeds in correctly assigning unknown texts only if it has previously seen many examples of the respective categories.

This form of AI is also frequently used in service centres, when incoming customer enquiries are categorised by topic. For example, is it a question about opening hours, a change in master data or a request for a new tariff?

Information extraction

Information extraction means that AI can recognise certain points of information in a continuous text: Proper names, addresses, contract numbers, tariff designations or monetary amounts. Information extraction is used to transform unstructured information from documents into structured information.

Speech-to-text, text-to-speech

AI can also transcribe spoken language (speech-to-text) and read out written language (text-to-speech or speech synthesis). Examples of this include dictation functions, simultaneous translation and interactive search assistants such as Siri/Cortana or so-called voice bots, i.e. chatbots for the telephone.

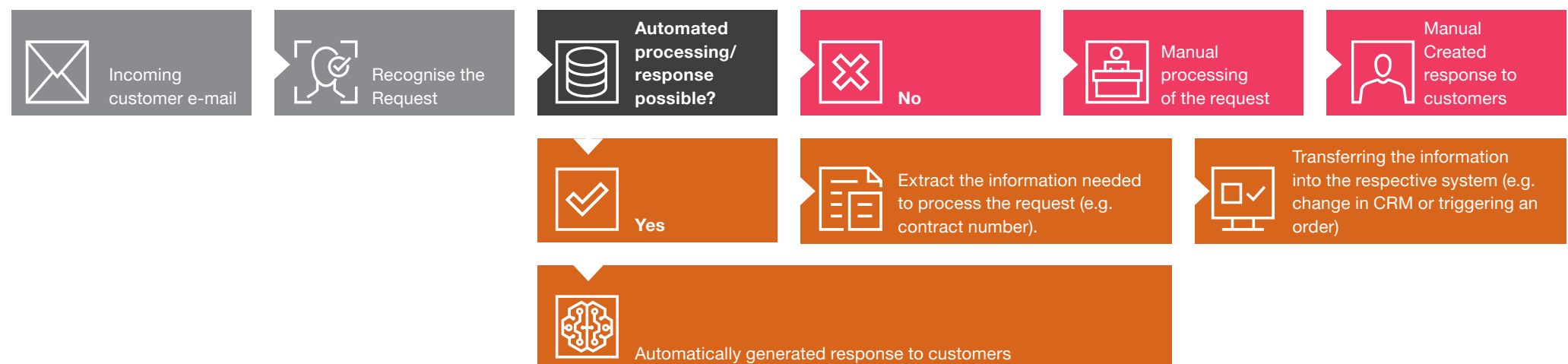
Process automation using the example of e-mail processing

For service centres, processing e-mails is one of the most expensive tasks. This is because e-mail conversations often generate queries, so that customer advisors and customers have to work through the conversation each time. Paradoxically, e-mail enquiries often contain trivial concerns. How can AI help to process emails more efficiently in the service centre and thus relieve human employees?

Identify customer concerns

When e-mails are received by customer service, the concerns they contain must first be identified in order to assign them to the most competent agents and to prioritise them. Some concerns can then be processed automatically. Among others, these include questions about opening hours, the transmission of meter readings to an electricity supplier and the kilometre reading for a car insurance company. E-mail requests can be classified and routed by means of text classification – the first important step for automation.

Fig. 6 Recognising a customer concern, own illustration



Reading attached documents

E-mail text can be classified, as can any supporting documentation or correspondence. Image files, PDFs and similar formats require OCR (Optical Character Recognition) beforehand. This technology converts the text into a digitally readable format. After that, the text classification can take place. In practice, this often involves invoices or orders that are received as attachments or faxes.

Automated e-mail processing

There are basically two types of tasks here. The first is responding to basic customer requests for information e.g. opening hours. Such requests are handled by simply sending the enquirer the correct information in response. Other requests, meanwhile, require changes in downstream systems, for example a master data change or the triggering of an order.

E-mail reply

The first task, replying to emails, can be technically automated in various ways. For instance, “self-learning” AI systems in customer service learn from every new reply that service employees write and the corresponding incoming e-mail. However, this variant involves heightened potential for error because users have very little influence over what the AI learns. For example, once the AI has learned the opening hours, customers may receive an outdated answer as soon as they change.

“Unlearning” is the technical term for this problem: How can we recognise which information is no longer up-to-date and should be “forgotten”? The approach carries further difficulties. If concerns are very diverse and not particularly clear-cut, or if the answers are formulated very differently, an AI will struggle to automatically generate suitable answers. In contrast, it is safer to create a set of possible questions and prepare suitable answers. FAQs, which most companies have already formulated, are well suited to this. If they are centrally maintained and updated, it is highly likely the automated answer will be correct.

In this case, AI for text classification recognises whether it is one request of the FAQs, and if so, which one. The system then automatically sends the predefined answer. Additional information, such as the contact person responsible for the specific customer, can be dynamically embedded in it as part of a query stored within the database.

E-mail processing with connection to backend systems

It is somewhat more complex to automatically process e-mails that require changes in downstream systems. As described above, examples of this are master data changes, orders and tariff changes. For each of these requests, the data required for processing is defined. For a tariff change, for instance, the customer number and the name of the desired tariff are needed; for an order, the desired product and the quantity.

These information points are taken from the text of the e-mail or the attachment by means of information extraction. AI is only able to process the request independently when all the necessary information can be extracted. Otherwise, it must be handed over to a human employee or the AI automatically sends a targeted request to the customer. It also makes sense to carry out plausibility checks in the background. For this purpose, interfaces to the required backend systems are necessary, e.g. to the order system or the customer database. This can usually be implemented with common software development methods. For systems that are difficult to access, Robotic Process Automation (RPA) is often used to simulate human clicking, for example.

Dealing with uncertainties

Despite such advanced applications, often enough concerns cannot be precisely identified in an e-mail, or the information required for processing cannot be clearly extracted. How can users deal with such uncertainties?

Most AI methods provide a confidence value which indicates how sure they are about their decision. To give an example, AI can pinpoint the likelihood that a particular piece of information is the customer number a telephone or an order number. If the AI is unsure, a customer advisor can be allocated a task about a certain threshold to check the result of the AI. Even with low thresholds, there is an advantage compared to conventional manual processing, because employees only need to correct a number or mark the information you are looking for in an e-mail, but no longer have to type anything.

An interesting variant in the interaction between AI and humans is “ghost work”. Here, the AI provider itself operates a service centre that specialises in correcting AI results by humans. Users of this service receive correct results that were created by AI and by humans. However, it is also clear that no automated processing is error-free. It is therefore important to always inform customers about what has been done, for example a change of tariff.

Process optimisation before process digitisation

Process optimisation should precede process digitisation. It is better for customers to order directly via a web form or app than to automate an email ordering process, for instance.

AI is not a panacea, but it is becoming more and more powerful



Thorsten Schmidt
Senior Manager
PwC Germany

AI applications have been used more and more in recent years because the computing power required for them is available and because users are now more accepting of new technologies. For example, AI systems help to validate complex delivery models, make recommendations or answer customer queries independently. Thereby, Artificial Intelligence is a bridging technology. Combined with other systems, such as a chat system, it interprets statements and provides answers.

Especially in customer service, expectations of AI are high – often too high. AI is not a panacea. For instance, it takes time to set up an AI-based chatbot. It also does not automatically solve all customer concerns. Requirements and the necessary effort are often significantly underestimated today.

Nevertheless, AI is becoming more and more powerful: Automated Machine Learning is an example of the evolutionary step. Thanks to automation, the applied AI can further develop independently – and no longer has to be trained manually, like in machine learning. In customer service, for example, extensive e-mail conversations can be automated with little effort in the future.

Omni-channel systems are quickly configurable “command centres”



Piotr Gardyński
Solution Architect, PwC
Poland, Customer Technology

Customers no longer choose shops and service providers based on whether they are available online, but on how quickly and efficiently they handle the purchase process and what the experience is like during each interaction. For customers, convenience and efficiency are the most important considerations. For example, if they have a problem with one of their subscriptions, they are less likely to look for the official support portal or e-mail address. Instead, they contact the subscription provider via a messenger of their choice and expect the provider to offer them immediate personal support.

For companies to succeed in this, service staff must be able to use the right tools. This is where omni-channel systems come into play. They connect multiple systems into a “command centre” and provide service workers with information and actionable insights so they can act when needed.

If customers contact a company via a messenger, for instance, a chatbot responds first. In many cases, it can already solve simple problems and forwards more complex enquiries to its human “colleagues”. They can then automatically continue the conversation via chat, telephone or video call with screen sharing, depending on the customer’s wishes. If the omnichannel system is also connected to a customer data platform (CDP), a knowledge base (KB), and a sales automation system, the relevant customer data is visible at first glance and customer concerns can usually be resolved quickly and successfully.

For cloud-based omnichannel platforms to remain powerful, they must be flexible enough to adapt to changing conditions within days and weeks rather than months. This is possible with the combination of a cloud-based approach and no-code/low-code solutions. Besides, data consistency and agility are also required to react quickly to changing customer behaviour.

In our technology team, which focuses on CRM SaaS solutions and low-code platforms, we are seeing growing customer interest in tools that allow them to develop their own applications. When advising customers, we always make sure to maximise the result with additional functions or a quick configuration. Customised systems are important to overcome complex technical challenges. However, future changes often cannot be implemented that quickly. That is why large technology providers are expanding their SaaS omnichannel solutions and low-code platforms so that users can create new digital customer experiences very quickly.

New functions every 4 months

Thanks to user-based subscription licensing, customers receive the same powerful technology as the largest companies in the world with only a few licences. This means that even small businesses can use their – usually limited – IT budget efficiently.

The Salesforce platform can be used with third party apps or the underlying low-code features to create proprietary apps. Meanwhile, the Salesforce AppExchange is the largest cloud marketplace for companies with more than 4,000 apps and more than nine million installations. Every four months the company provides new functions to existing customers, free of charge.

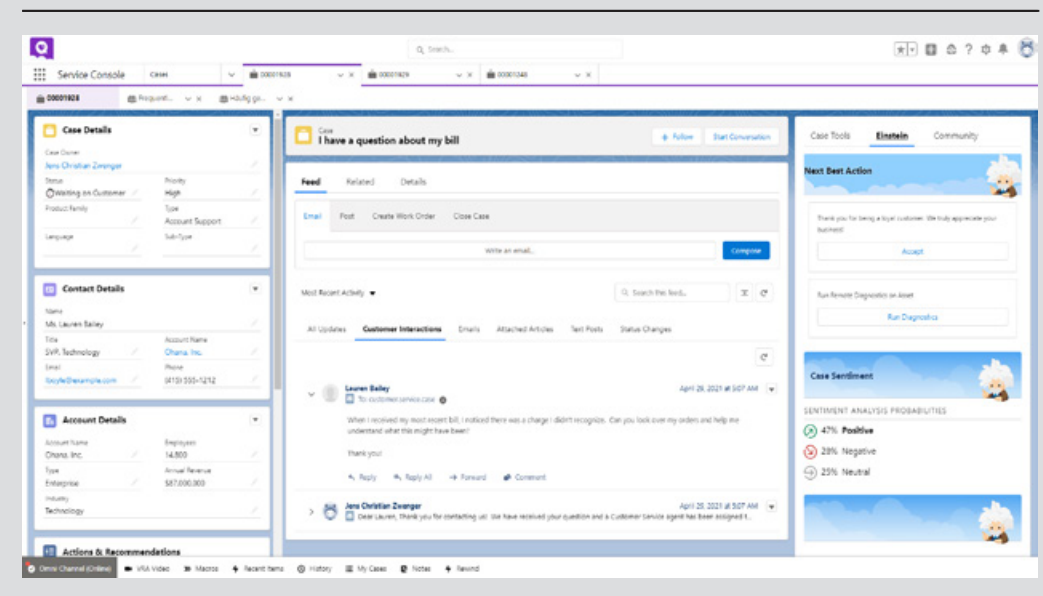
In addition to the Service Cloud, Salesforce is developing solutions to better integrate mobile field service employees. For example, internal service staff can receive information from field technicians in real time, such as their expected arrival time or their current location. Salesforce's stated goal is to provide enquirers with the right information in real time, across all relevant channels.

Salesforce meets the most important requirements of contact centres today and in the future:

- **Customer centricity**
With one single platform, service agents receive customer data from different business functions, such as marketing, retail, and sales. This gives them a holistic view of customers and enables them to provide a personalised service.
- **Seamless data integration**
The “Customer 360” function allows external data to be fed into the service cloud, for instance information on reward programmes or product inventory data.
- **Telephony and intelligence**
With Service Cloud Voice, Computer Telephony Integration (CTI) is natively integrated into Salesforce; this allows, for example, Amazon Connect to be used for automated voice AI or real-time transcription of calls.
- **Social media integration**
The integration of messages via Facebook Messenger, WhatsApp, and other channels, allows personalised conversation channels to be set up.
- **Process automation**
For example, Salesforce Einstein AI enables article recommendations, case routing and classification, Next Best Actions and much more.

Pre-built digital assets typically accelerate time-to-market and reduce project costs. At PwC, for example, we have combined our business, industry and technology expertise to develop Salesforce-powered solutions. This includes the PwC Service Excellence Accelerator; it complements Salesforce Service Cloud standard features with sentiment scoring, call reason prediction, product recommendations, intelligent issue tagging and even call volume forecasts.

Fig. 7 Example image Salesforce Service Console



Proven in practice: PwC's Service Excellence Accelerator

PwC helped one of the world's largest insurance companies develop a world-class service centre. Initially, systems were focused on products and policies that did not put the customer at the centre, data entry standards varied from one system to another, and IT systems were not fully integrated and far from intuitive.

In contrast, our holistic solution, built on the Salesforce Service Cloud, focuses on an intuitive console and thoughtful process design. This means the right information is always available at the right time. This has improved the service experience internally and externally and, for example, significantly increased employee engagement.

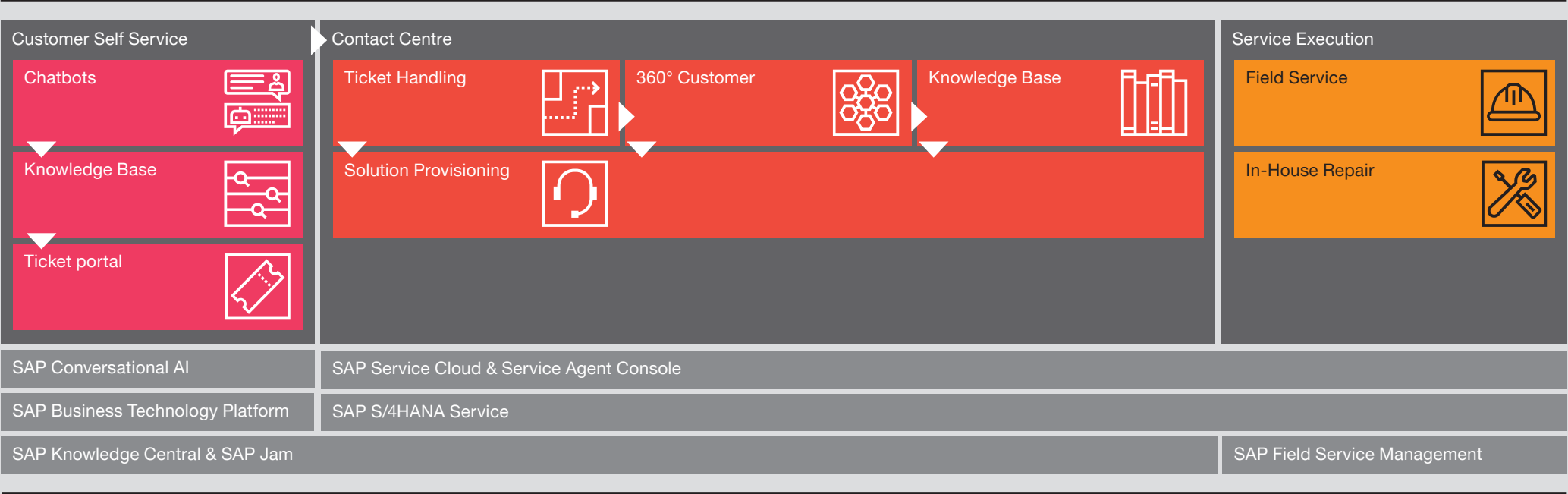
Remarkably, our client has managed to reduce average call handling time by 43% and post-call effort by 64%. Measures of customer satisfaction or likelihood to recommend (CSAT, Customer Satisfaction, and NPS, Net Promoter Score) both exceeded the baseline. The improved usability also reduced the time spent on training and onboarding. The result is a significantly improved customer experience – and the projected savings to the company between \$22 and \$29 million.



The SAP service solution

With the service solutions of its customer experience suite, SAP addresses the overarching trends in customer service (cf. Part A, Chapter 1 of this study). The SAP portfolio includes various solutions: from self-service and contact centres to field service and backend processes with integration into ERP processes such as billing and logistics. How these solutions help meet the overarching customer requirements is illustrated below using the example of a typical customer journey in a B2C context.

Fig. 8 Example B2C customer journey with the contact centre at the centre, own illustration



Customers are used to searching for information themselves for various concerns related to a company's products or services, expecting quick, simple answers and solutions to problems (cf. Trend 1, increasing customer expectations). The customer journey therefore usually begins with an internet research via a search engine. However, on the company's service pages or service portal, self-service solutions can offer quick support and thus relieve the burden on personal customer support services.

Intelligent chatbots make it easier for customers to find their way around

With Conversational AI, SAP offers a platform to develop intelligent chatbots which help customers find the information they need or guide them through simple customer service processes, such as creating a ticket. With Knowledge Central, companies can also provide their customers with FAQs, product information, and articles. Simple self-service functionalities such as forms complete the range of functions. Extended self-service portals can then be implemented, for example, with the functions of the SAP Business Technology Platform (formerly SAP Cloud Platform). Customers can contact a company around the clock via chatbots and quickly receive a solution.

Automated prioritisation according to the mood

Service tickets are managed in the SAP Service Cloud. As soon as a ticket is created, it must be assigned to the responsible agent in the contact centre. This works automatically on the basis of the existing service-level agreements between the customer and the company, the country or market of origin, the responsible team, and other factors. In addition, Facebook or Twitter posts can be analysed using sentiment analysis. The sentiment that the sender expresses a support request is automatically determined so that concerns can be prioritised, allowing urgent queries to be resolved as quickly as possible. Intelligent and automated allocation makes the ticketing process cost and time efficient. This also has a positive effect on the fourth overarching trend, the improved agent experience (cf. Part A, Trend 4).

If the customer's problem persists, a ticket can be opened via various communication channels, such as:

- E-mail
- Phone
- Chat
- Social media (for example Facebook, Twitter)
- Self-service portal



For example, if customers' wish to make a telephone call to a service employee, the SAP Service Cloud supports them with the optional Service Agent Console. If possible, the identification of the corresponding customer is automated, for instance by using their telephone number. This gives agents quick access to all relevant customer data. All communication is linked to the respective customers across all channels. This means that the entire customer history is also available to other agents at any time.

Data exchange between CRM and ERP systems

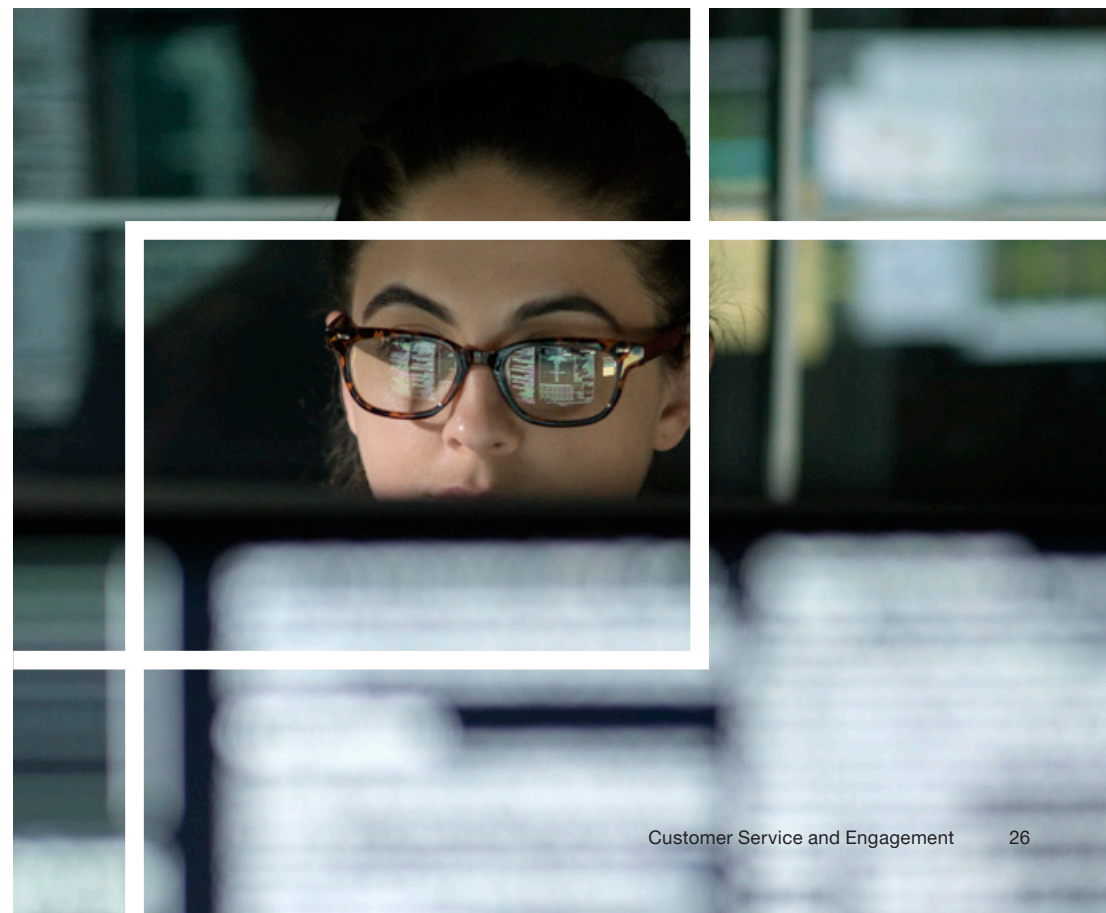
If the customer concern relates to deliveries, invoices, payments, etc., agents can access the necessary data from the ERP system with the Service Cloud using the Customer 360 function, which connects the CRM system with the ERP system. For example, the credit limit or a delivery block can be transferred from S/4HANA. In the new sales and service components of S/4HANA for customer management, this data is already included in the core components.

The integration of back-office data helps reduce data silos and gain a comprehensive overview of customers' without having to switch between different internal contacts. Agents can use this information to identify opportunities for up- and cross-selling. This links service activities with sales activities and allows customers' to be served more comprehensively.

Extensive knowledge of complex issues

In addition to customer information, product, service, and process knowledge should be available to support staff in a simple and context-related manner. An integrated knowledge base helps customer support agents deal with more complex issues effectively. Similar to SAP Knowledge Central, the collaboration application SAP Jam can easily be integrated into the SAP Service Cloud. If necessary, agents can forward relevant content such as instructions, price lists, or product information sheets directly to the customer. As a result, this intelligent support sustainably reduces the processing time per ticket.

In certain cases, service activities have to be carried out on-site or virtually at the customer's premises, for example on-site repairs, remote services, or assessments. In addition to other resources such as tools or materials, the right service employees must first be identified for the corresponding task and their assignments need to be planned. With the integration of SAP Field Service Management, the contact centre can transfer tickets or service orders to the scheduling department for field service or technicians. The scheduling department can then identify the most suitable and next available customer service employee.



Prudent implementation

To implement a system landscape like this successfully, companies need to plan implementation projects carefully. In order to meet their own needs and those of customers, companies should focus on the aspects of complexity, costs, and effort as well as the creation of added value.

In this context, complexity primarily arises from the fact that in each company, there are different systems – large number in some cases – in use. The focus here should be on synergy effects that can be achieved with best practices and industry standards. To this end, it is helpful to have access to a broad network of experts, especially if there are particularly high demands on customer service and more complex functions are required to fulfil them.

To keep project costs reasonable, it is often worthwhile to request nearshore, offshore and mixed offers from the chosen project partner. Using these in a balanced way can minimise costs in the long term while maintaining the same quality.

Finally, it is necessary to keep an eye on the added value for the company throughout all project phases. In the case of a more extensive SAP implementation, technical feasibility and processes should be reviewed. Experienced experts even look beyond the implementation and adopt a holistic project approach, from strategy to execution.

This can reap dividends. Studies show that customer service employees work up to 50% more efficiently with the SAP Service Cloud.¹² Ideally, customer service should be as easy for customers to use as a search engine and refer them to a human employee if needed. This can reduce customer churn by up to 10%.¹³



¹² Forrester Research Inc. (2021) The Total Economic Impact™ Of SAP Sales Cloud And SAP Service Cloud

¹³ ibid.

The service solution from Microsoft

Dynamics 365 Customer Service: The service solution from Microsoft

Microsoft Dynamics 365 comprises modularly combinable applications that support all processes in organisations: from project and financial management to marketing, sales, and service to merchandise management, production, and supply chain management. Artificial intelligence and innovative mixed reality functions bring significant improvements, and the security and compliance mechanisms of the Microsoft Cloud protect business and customer data reliably. With Dynamics 365, organisations can quickly respond to new demands from their business environment, market conditions and sales opportunities, while adapting processes with minimal effort.

Customer Service is an integral part of the Microsoft Dynamics 365 product family, which is a leader in the Gartner Magic Quadrant for the CRM Customer Engagement Center.¹⁴ According to one study, companies that use Dynamics 365 Customer Service have an average return on investment of 131%.¹⁵

Individual interactions

Dynamics 365 Customer Service supports seamless service experiences by providing users with a holistic customer view with complete information on each service case. This improves the First Time Resolution Rate – i.e. significantly more customer queries can be answered during the first customer contact. The features of the solution include:

- A wide range of coordinated service channels – with consistent service quality on the phone, by e-mail, chat, via SMS, or via social networks
- A central, networked service environment that maps the customer journey with a comprehensive conversation history
- Chatbots, online portals, knowledge bases, and other self-service tools to further personalise the service experience while identifying cross-selling and up-selling opportunities
- Consistent support for all customers – even when handing over to another service agent or switching between different service channels

¹⁴ Gartner (2021) Magic Quadrant for the CRM Customer Engagement Center

¹⁵ Forrester (2020) The Total Economic Impact™ of Microsoft Dynamics 365 Customer Service

Service agents work more productively and effectively

Dynamics 365 Customer Service also helps service agents and other employees in the service organisation process requests faster. This is done with comprehensive insights, enriched data signals, and mixed reality tools. The unified working environment of the service solution increases employee productivity because everyone can navigate between different service cases and directly understand their context. An integrated AI dynamically guides employees, helping to speed up problem resolution. The AI offers for example:

- Real-time sentiment analysis, automatic translations and call transcriptions
- Quick access to knowledge articles and databases of similar queries so staff can process new queries more quickly
- Interconnected databases and systems, irrespective of file origin or type,
- Solutions to critical customer queries via video chat, co-browsing and remote-assist functions
- Better interaction between colleagues, supervisors, and experts, as they are able to work together via Microsoft Teams, resulting in fast support handling and resolution.

Optimisation of all processes in customer service

The Microsoft service solution provides service agents with comprehensive insights, suggests actions, and identifies fields where routine activities and redundant tasks can be eliminated with automation. These include in particular:

- Service operations enriched with artificial intelligence and insights to improve employee performance and enhance customer experiences
- Virtual assistants automate the solution of simple problems, freeing up time for human support agents to deal with more complex cases and valuable interactions with customers'
- AI-powered insights uncover innovations that can transform customer interactions and lead teams to optimal business outcomes
- Queries can be automatically grouped by topic using natural language processing to quickly identify current trends and emerging issues which has a positive impact on brand perception and allows further improvements to the customer experience
- Unified routing, AI models and rules automatically assign incoming requests to the most appropriate service agents – relieving them of routine tasks such as monitoring queues



Technology trend 3: Voice and Biometrics

Modern biometric systems such as fingerprint scanners and facial recognition (“FaceID”) on our smartphones are increasingly replacing passphrases and passwords. Artificial intelligence is behind this innovation. Deep Learning, i.e. the training of special neural networks for analysing visual data in particular, is making biometric systems ever more reliable and precise – and constantly provides new application possibilities. This also includes voice-based applications. But how do they work exactly?

Speech biometrics systems reliably recognise our voices

The basis is our biology: the interaction of lungs, throat, vocal cords, and oral cavity make our voices as individual as our fingerprints. Computers can “understand” the tones and frequencies contained in the digital recording of a short sentence and extract their individual characteristics. To make this work for as many people as possible while recognising individual voices, deep-learning systems are trained with recordings of thousands of people, enabling them to learn to precisely recognise the differences.

When we register with a voice biometrics system, a deep-learning model creates a profile based on our spoken sentences, known as a voice print, which can be viewed as a kind of vocal fingerprint. Based on the profile, the technology can recognise the speaker. When customers’ repeatedly call a contact centre, the voice application analyses a short audio recording and compares it with the stored profiles. These voice biometrics systems are already very effective – in recent years, thanks to Deep Learning, error rates have dropped by 90%.¹⁶

Deep Fakes carry risks

Compared to fingerprints and facial recognition, speech biometrics poses some significant challenges. For example, the systems only work reliably when the spoken words exceed a certain length. There is also risk of data misuse and other forms of cybercrime, especially in connection with Deep Fakes, whereby AI is used to create false voice samples. For instance, in recent years, criminals have embezzled money from CEOs by having an AI system imitate their voices. Fraud victims believe the generated voices are real, and while they sound authentic to the human ear, speech biometric systems can reliably detect Deep Fakes and professional voice impersonators.^{17,18}

¹⁶ <https://link.springer.com/article/10.1007/s11042-020-10073-7>

¹⁷ <https://www.wsj.com/articles/fraudsters-use-ai-to-mimic-ceos-voice-in-unusual-cybercrime-case-11567157402>

¹⁸ <https://www.lrt.lt/en/news-in-english/19/1393935/imposter-used-deepfake-to-dupe-baltic-mps-impersonate-navalny-associate>

Modern voice biometrics systems offer protection against such risks in different ways as often users have to repeat a certain sentence instead of using the same short passphrases. The voice pattern is then stored as an acoustic fingerprint and checked against new calls. Some applications can even extract biometric features during a normal conversation and therefore avoid misuse.

Speech biometrics applications are also becoming increasingly important for contact centres. In 2018, Nuance and Deutsche Telekom expanded their partnership. Since then, customers can use the passphrase “At Deutsche Telekom, my voice is my password” – an example of a quite long and therefore secure passphrase. Many customers prefer to authenticate themselves this way rather than with PINs entered via keyboard or passwords that they set once and may have to change regularly, which can lead to being locked out if a password is forgotten. Contact centres are able to save time and increase security by correctly identifying callers through this form of automation.

The market for speech biometrics systems is developing rapidly, with annual growth rates of more than 20%¹⁹. In April 2021, Microsoft announced its intention to acquire the market leader Nuance for 19.7 billion US dollars.²⁰ In 2018, the US company LumenVox merged with its German competitor VoiceTrust. And the omnichannel system provider CCT Solutions signed an agreement with LumenVox in 2020 to integrate authentication via voice biometrics into its sales portfolio.²¹

Voice start-ups on the rise

AI start-ups are also trying to establish themselves in the speech biometrics market. In particular, the combination of AI-based chatbots and speech biometrics promises innovations and competitive advantages. As an example, Oldenburg-based company OmniBot integrates a wide variety of speech recognition and speech analysis technologies into a conversational AI. This combination even prompted former Amazon Alexa employees to switch to OmniBot, and companies such as Volkswagen are already using the technology. In short, voice biometrics are successfully using AI commercially, and the number of customers and applications are growing rapidly. As a result, AI is set to become a relevant factor in the years to come, particularly within customer service.

Speech biometrics offer many opportunities – but some risks remain



Serge Hanssens
Partner, PwC Société
coopérative (Luxembourg)

The biometric revolution has profoundly changed many industries as virtually all smartphones, tablets, and notebooks sold in 2021 contained one or more biometric sensors. In the travel industry, for example, millions of travelers use biometrics every month at airports around the world.

Voice biometrics holds similar potential. It can provide a more natural, faster, secure, and convenient way to interact with apps or customer centres. It is also more secure than entering PINs manually and can be checked automatically. This is why hundreds of companies and thousands of customers’ already use speech biometrics every day.

With this said, there are also risks involved: some governments and private organisations have misused biometric systems, prompting legislators in many parts of the world to make regulatory adjustments. Therefore, any use of voice biometrics applications requires expert knowledge and appropriate change management. However, used correctly and securely, the technology can significantly increase customer satisfaction as well as operational efficiency.

¹⁹ https://www.reportlinker.com/p05774401/Voice-Biometrics-Market-by-Application-Component-Type-Deployment-Organization-Size-Industry-Vertical-Region-Global-Forecast-to.html?utm_source=GNW

²⁰ <https://microsoft.gcs-web.com/node/29236/html>

²¹ <https://www.prnewswire.com/news-releases/contact-center-specialist-cct-expands-offerings-with-speech-and-authentication-suite-from-industry-expert-lumenvox-301003497.html>

Technology trend 4: Robotic Process Automation

Robotic Process Automation (RPA) is a software solution for automating mostly rule-based, recurring routine tasks. In recent years, RPA has become more and more accepted as a standard technology, and most DAX companies are already using it. RPA helps reduce process costs by up to 75% and increases process speeds while sustainably improving the overall quality of processes. In addition to increasing efficiency, companies see RPA as a means of mitigating the shortage of skilled workers to some extent, by making “software robots” perform certain tasks instead of human employees.

Three RPA top dogs dominate the market

Almost 200 software companies worldwide currently offer RPA solutions. In the future, all software companies that deal with the transformation of workflows will have an RPA solution in their portfolio. Three pure-play RPA vendors currently dominate the market: Automation Anywhere, Blue Prism and UiPath.

In Germany, Blue Prism and UiPath have a particularly strong presence; both companies offer a fully integrated automation suite that meets the highest requirements for compliance and enterprise scaling. With Microsoft, another player has recently entered the RPA market that has the power and capability to challenge existing vendors and quickly gain market share.

Fig. 9 What is Robotic Process Automation?, own illustration

Simple, configurable software solution

Complements the human workforce by automating routine, day-to-day, rule-based tasks, allowing professionals to focus on their other tasks.

Works with existing systems (e.g. SAP, Workday) in the same way as a user

No change to underlying systems and technology required

Ensures transparency and a seamless audit trail



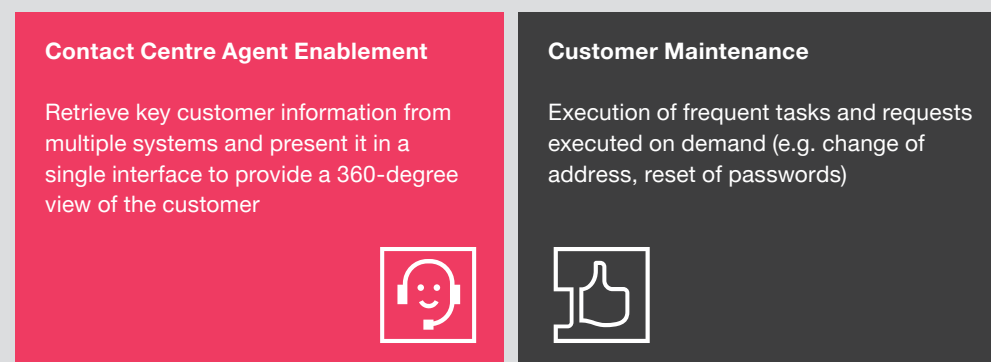
In contact centres, RPA solves three key challenges:

1. Binding customers more strongly to the company
2. Improving agent performance
3. Modernising and enhancing processes

In the past, many contact centres have invested in technology that promised to streamline their processes, consolidate their technology systems, improve customer service, and reduce operating costs. However, many of these promises failed to materialise. As a result, organisations have had to deploy more systems with custom integrations; these are expensive to build, maintain and service.

Based on our many years of contact centre experience – together with our RPA partner UiPath – we have investigated two areas of activity with high automation potential in assisted service: agent enablement and customer care.

Fig. 10 RPA application possibilities in assisted service, own illustration



Agent Enablement in Contact Centre

When service agents are given RPA-based tools and consoles, they can focus more on customer interaction instead of going through inefficient processes. In the latter, they sometimes have to open four or more systems to track the entire customer history. Software robots, in contrast, consolidate relevant information into one single console, therefore agents can understand the customer's problem in a 360-degree view.

Customer care

After a call to the contact centre, agents typically need to manually update multiple systems, such as Salesforce CRM, SAP ERP, and Atlassian Jira, to capture a record associated with the concern and document the customer's query, once it's been resolved. This requires a lot of time, during which the agents are ideally already dealing with the next enquiry. With RPA, the software robot handles all updates and changes in the background, freeing up capacity for customer service staff.

Biggest RPA benefit: increased productivity

Is the use of RPA now worthwhile for companies? According to a study published in November 2021 on the overall economic impact of the UiPath platform,²² the answer is clearly yes. The study has identified the productivity gain in the four companies as the most important benefit of the platform. Up to 225,000 customer support-hours can be saved per year, and the total value of the benefits within three years was around 12 million US dollars. Our experience from many RPA implementation projects confirms this enormous savings potential.

²² Forrester (2021) The Total Economic Impact™ of the UiPath Platform

Currently, three trends are influencing the use of RPA the most:

1. Hyperautomation

In the past, RPA mainly automated routine and rule-based tasks. Combined with other state-of-the-art technologies, RPA is now more intelligent and can also automate higher-value tasks. This allows additional efficiency gains to be achieved. Concrete advanced RPA applications for contact centres include fully integrated chatbots for unassisted services and AI-based models for churn prediction, as well as recommendation systems for assisted services.

2. Human in the Loop

Traditionally, RPA processes were only implemented if no further input from employees was required during the process. This has limited RPA deployment to some extent. For providers like UiPath, these restrictions no longer apply – RPA can simply pause until a human is finished with their input.

3. Citizen-Led Development

Previously, professional developers were needed to implement RPA. Some process automations could not be implemented because they lacked the necessary resources, or they were not economical. UiPath and Microsoft have solved this problem with low-code RPA solutions. With these solutions, even specialist users without IT knowledge can automate simple processes. Companies can therefore develop RPA workflows more agilely; they can also achieve more efficiency with smaller problems and become more digital overall.

RPA enables us to process mass operations efficiently



Stefan Gentzsch
Partner, PricewaterhouseCoopers
Legal AG Rechtsanwaltsgesellschaft

At PwC, RPA enables us, among other things, to offer our clients from various industries solutions for the intelligent and efficient handling of mass processes such as mass litigation. Under the umbrella of our Automated Processing Solution, we can automate what were previously repetitive steps and at the same time reliably derive insights using artificial intelligence (AI). This enables us to provide our customers with even more targeted support in cases where complex issues require human expertise as well as litigation support. This use of digital, self-learning solutions for non-critical cases not only allows for a much more resource-efficient processing of cases, but also, and above all, a strong reduction in processing times while maintaining a consistently high quality. In our eyes, a combination of human expertise and technological support – also known as “legal tech” – is one of the key trends for legal advice in the future.

Part B

Key sector overview



After presenting the most important (technology) trends, we now look at the developments and challenges of the following eight sectors.²³

Fig. 11 Overview of sectors, own illustration

1	Energy and utilities		5	Financial services	
2	Information technology		6	Public sector	
3	Retail/Consumer goods		7	Healthcare	
4	Telecommunications		8	Travel and hospitality	

For the sectors mentioned, we point out the current developments, challenges and opportunities in customer service. The insights into the sectors are underpinned with practical examples. They show how the aforementioned trends and technologies can be used profitably. For this purpose, we have conducted interviews with PwC industry experts, companies, and institutions to determine the service maturity level of the individual industries. From this, we derived estimates of market growth and outsourcing potential.

²³ The industries presented are based on the Global Industry Classification Standard (GICS)



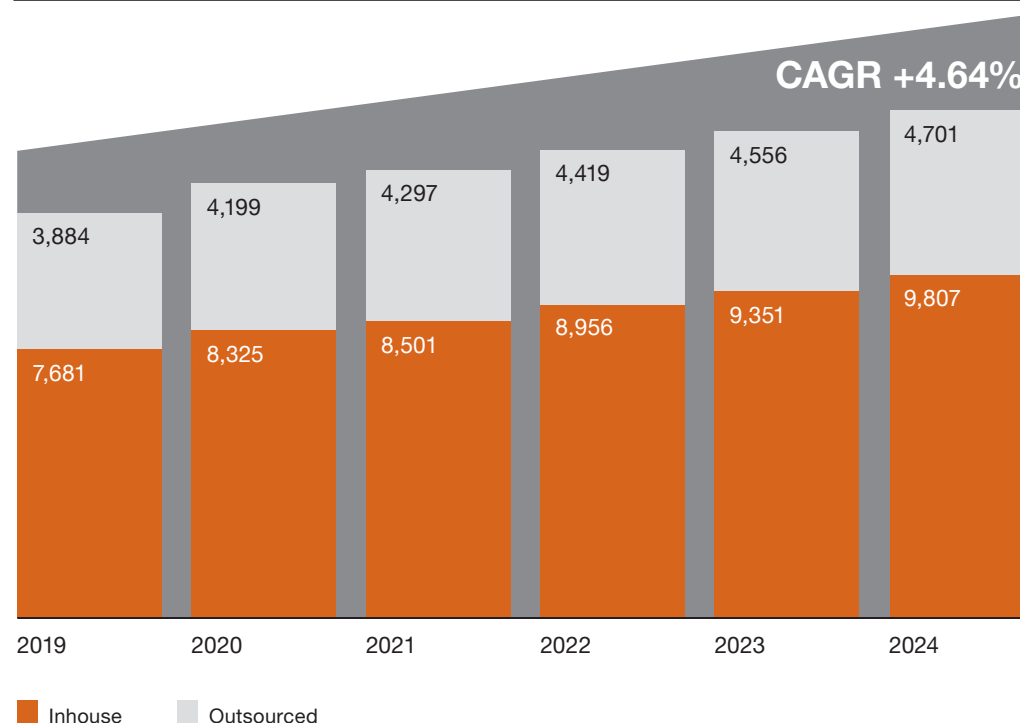
The PwC market model

For this study, we have updated our proven market model from the previous studies on the CC and CRM market.^{24,25} The market model describes the total market volume and growth, as well as the price development of contact centre and CRM services. The market volume is calculated from a dimensionless demand index and a price index. We asked call/contact centre service providers and companies from various industries using their services to estimate the development of demand, and prices. Based on these responses and macroeconomic forecasts²⁶, we have modelled the demand, market volume and price development in outsourcing up to the year 2024. Unless otherwise stated, the following information is based on the PwC market model.

General market development

The coronavirus pandemic has had a major impact (mostly negative) on customer service in all sectors. However, some industries have been able to recover faster than others. In the travel and hospitality industry, for example, the effects of the pandemic are still clearly felt; in the telecommunications industry, on the other hand, they are hardly noticeable. We have therefore revised the data model from the last study. In order to reliably determine how much Covid-19 has affected customer service across each of the industries, we assess growth (CAGR) for the period 2019 to 2024.

Fig. 12 Estimated market size for contact centre/CRM services in Germany in million euros



Sources: global industry analysts, PwC market model – own analysis

²⁴ PwC (2020) The future of the German contact centre and CRM market

²⁵ PwC (2018) The German Contact Centre and CRM Service Market

²⁶ Including Eurostat, Federal Statistical Office, Statista, PwC analyses

We expect the overall market to grow moderately at 4.64% CAGR until 2024 (see Fig. 11). In-house services are expected to grow slightly faster (5% CAGR) than outsourcing (3.9% CAGR).

The main driver of market growth is rising market prices. With the planned increase of the minimum wage to 10.45 euros by July 2022 and to 12 euros by October 2022, personnel costs are rising. In addition, investments in technologies such as CRM systems, chat- and voice-bots are contributing to the price increase. We expect a total CAGR of 4.15%; the in-house price level is expected to increase by 2.9% CAGR and the outsourcing price level by 4.9%. This is somewhat higher because it is more strongly linked to the rise in the minimum wage.

Among the sectors, the most significant growth until 2024 is expected in public services, with a CAGR of 8.7%. We expect the lowest growth (1.8%) for the energy and utilities industry as well as for the telecommunications industry (1.6% CAGR).

Fig. 13 Development of market volume (CAGR) by industry 2019–2024, own illustration

Energy and utilities 1.8%		Travel and hospitality 3.0%	
Information technology 7.2%		Financial services 5.9%	
Retail/ Consumer goods 1.8%		Public sector 8.7%	
Telecommunications 1.6%		Healthcare 7.2%	
Total 4.6%			



Rising contact volume, rising prices









Contact volume will also rise by 2024. However, we assume that this can be compensated for increased automation and more self-service offerings. Since complex enquiries tend to be handled more frequently by manual customer service, the price per human contact will probably likely rise as well. This is because complex enquiries require more processing time and expert knowledge. The expected price increase can therefore only be offset to a limited extent by relocating to nearshore/offshore locations.

On the demand side, the volume of customer service requests is expected to increase by 1.4% CAGR across all industries. However, the differences between individual sectors are significant: service enquiries will decrease in the telecommunications sector (−0.8% CAGR) and the energy sector (−0.7% CAGR), because their offers are becoming increasingly automated, and the products require less explanation. In contrast, the volume of enquiries in public services (+6.6% CAGR) and in the healthcare industry (+4.3% CAGR) will increase at an above-average rate, primarily because regulatory restrictions for these industries are no longer in place and customers are now more likely to embrace digital offerings.

Significant market shift since 2015

Since our first survey in 2015, there has been a clear shift in the market: at that time, the largest market shares were in telecommunications and energy and utilities. Due to the above-mentioned commoditisation and automation, these industries are losing market share, while it is growing for sectors such as healthcare, financial services, and public services.

Fig. 14 Development of market shares in-house & outsourcing per industry in percent, own illustration

Energy and utilities 	Travel and hospitality 
2015 16%	2024 12%
Information technology 	Financial services 
2015 5%	2024 7%
2015 16%	2024 12%
Retail/ Consumer goods 	Public sector 
2015 14%	2024 13%
2015 12%	2024 15%
Telecommunications 	Healthcare 
2015 16%	2024 12%
2015 14%	2024 17%

The development of market shares can be further differentiated by in-house and outsourcing volumes. The in-house market is expected to grow by 5% CAGR until 2024, outsourcing by 3.9%.

The telecommunications industry in particular is shifting services more and more towards in-house operations, which are expected to grow by 4% CAGR, while outsourcing is set to decline by 2.1% CAGR. This trend can also be observed, though less strongly, in the energy sector. The healthcare sector is moving in the opposite direction: outsourcing is expected to grow by 9.2% CAGR until 2024, compared to 6.6% CAGR for in-house volumes.

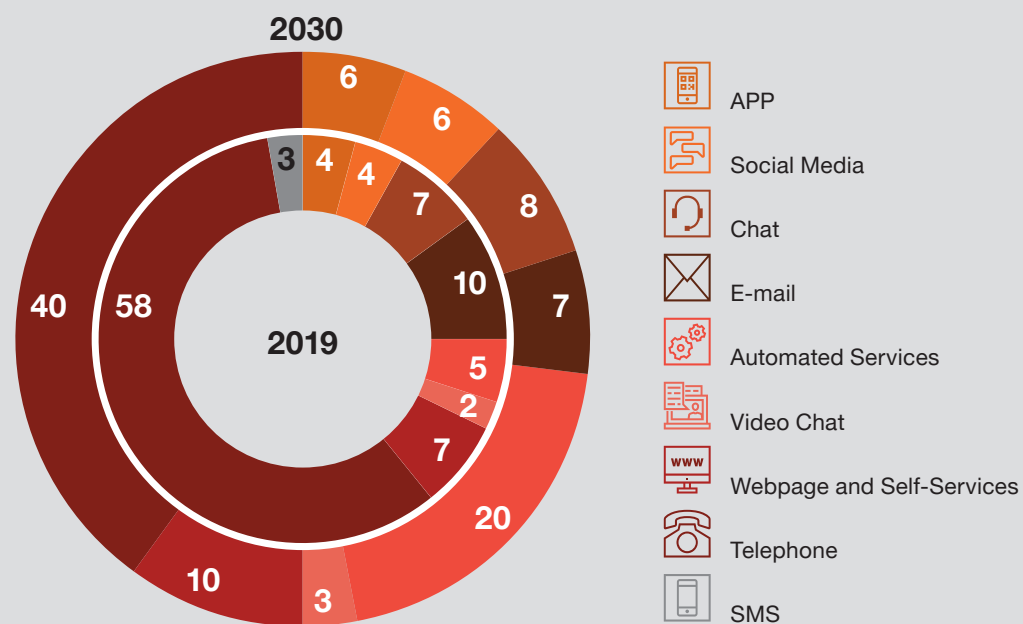
Fig. 15 Market volume growth (CAGR) per industry, in-house 2019–2024, own illustration

Energy and utilities 3.4%		Travel and hospitality 1.9%	
Information technology 7.2%		Financial services 6.0%	
Retail/ Consumer goods 1.1%		Public sector 9.2%	
Telecommunications 4.0%		Healthcare 6.6%	
Total 5.0%			

Fig. 16 Market volume growth (CAGR) per industry, outsourcing 2019–2024, own illustration

Energy and utilities -1.0%		Travel and hospitality 5.0%	
Information technology 7.3%		Financial services 5.8%	
Retail/ Consumer goods 3.3%		Public sector 7.0%	
Telecommunications -2.1%		Healthcare 9.1%	
Total 3.9%			

Fig. 17 Development of contact channel distribution in percent, own illustration



Telephone remains the most important contact channel in 2030

In 2030, we assume that the telephone support will remain the most important service contact point despite a slightly decreasing share. In terms of automation, however, we see a clear shift: automated services such as chatbots, intelligent IVR systems and virtual assistants will increase by 10%, while e-mail will be used less frequently by customer service staff thanks to (partial) automation. In addition, webpages and self-services will become increasingly important thanks to increasingly integrated intelligent searches as well as predictive and context-based suggestions. These will answer customer concerns efficiently, and immediately, cutting down wait-times while ensuring the quality of the conversation remains a priority.

The PwC maturity model

In order to determine the extent to which the requirements for modern customer service are fulfilled in each of the eight sectors examined, we developed a maturity model in expert interviews and workshops with companies. We evaluated the industries on the basis of seven dimensions that take into account internal (“inside-out”) and external aspects (“outside-in”) (cf. Fig. 18).

They are:

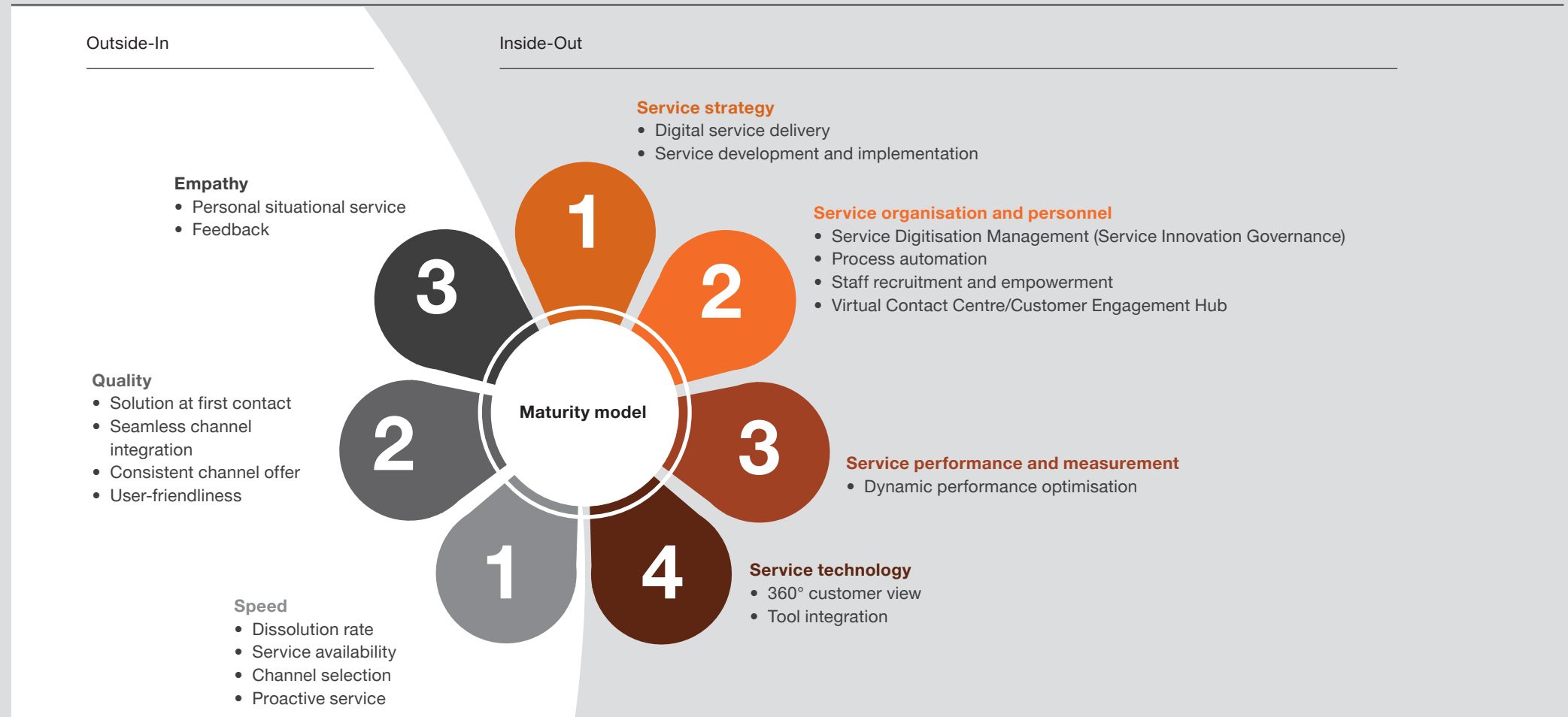
Inside-Out

1. Service strategy
2. Service organisation and personnel
3. Service performance and measurement
4. Service technology

Outside-In

1. Speed
2. Quality
3. Empathy

Fig. 18 PwC maturity model, own illustration



For each dimension examined, the result is a value between 1 and 5, with 5 being the top score. In the following, we present the assessed attributes and requirements for each dimension in more detail.

1. Service strategy

Every company should define a customer service strategy for itself in order to clearly understand service performance and priorities. For example, how personal and how digital should the service be? This leads to answers to the question of which services the company in question can – and wants to – provide itself, and which it would like to outsource to third parties. “Best-in-class” companies also define to what extent different corporate functions influence the customer experience and measure it with appropriate key performance indicators (KPIs). They continuously adapt the service offering based on a clearly defined target picture and make decisions for or against certain services and channels according to fixed rules.

2. Service organisation and personnel

Here, the topics of service governance, process automation, digital employee empowerment, and the provision of a virtual contact centre are the most important aspects. By service governance, we understand the extent to which customer service is an integral part of the business – for example, whether a separate organisational unit regularly presents new digital services to top management and tests best practices. Ideally, different company functions will design and develop the service offering. Campaigns and initiatives are coordinated between the functions involved; feedback from customer service, for example, is used in real time by leading companies to optimise the service. Management embeds an innovation-friendly corporate culture.

Successful customer service also achieves a high level of process automation. Tools for process analysis are in place, as is a regular review process. Leading companies strive for the highest possible level of automation and use RPA for highly standardised processes if full automation would require too many resources.

Personnel requirements planning is automated and data-based. The most advanced companies anticipate needs and automatically initiate follow-up recruitment processes. Flexible education and training models make required skills more available and thus improve employee planning. Online training, for example, complements traditional classroom training, and employees receive (financial) incentives to continuously improve. A well-maintained central database makes relevant knowledge available and ensures that key competences are retained even when highly qualified employees leave the company. High-performing service centres do not rely on employees being present on site; they can bring in additional capacity on an hourly basis and regardless of the location. “Skill-based routing” ensures that customer requests are handled by those service employees who have the necessary skills. Virtual management plans and controls service peaks automatically, among other things through financial allowances, takes into account legal framework conditions and reacts flexibly to employees’ working time requests.



3. Service performance and measurement

A centralised dashboard with all relevant KPIs allows access to performance data in real time. AI models and cutting-edge analytics provide optimisation suggestions that can be implemented in real time. The dashboard shows at a glance what influences the relevant KPIs and how much the KPIs are used for further optimisation suggestions. KPIs include more complex metrics such as customer satisfaction and cost per contact. It is important that the data processed is clearly defined and consistently collected. If this is the case, companies can rapidly assess the impact of certain measures and react quickly to changes.

4. Service technology

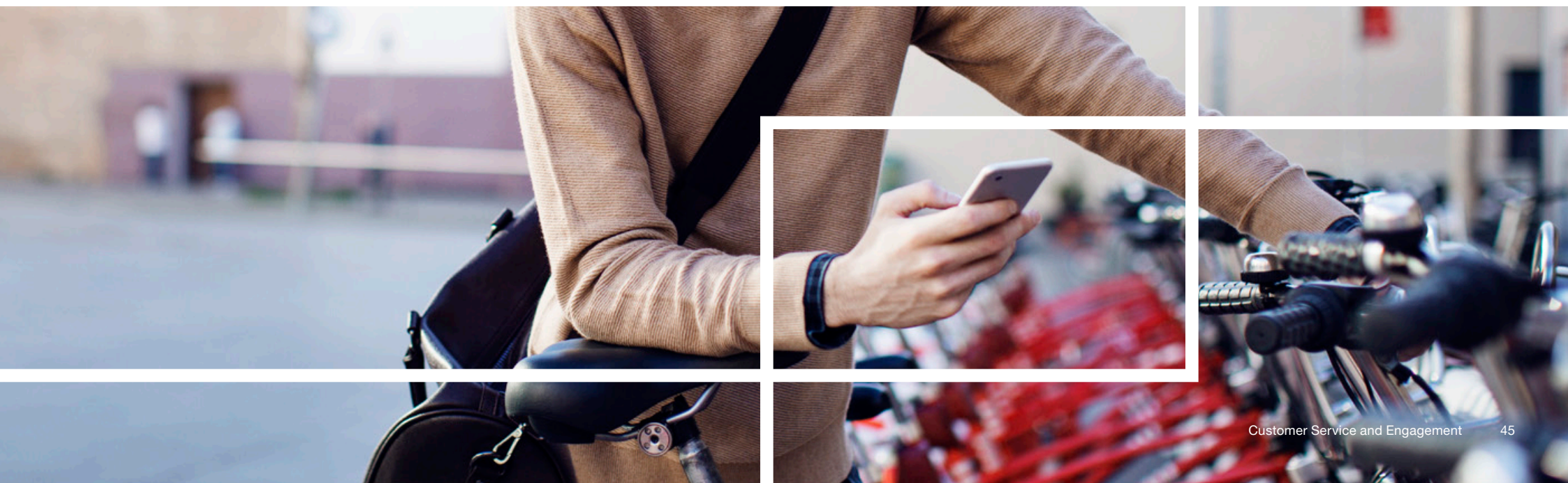
With supporting technologies, service agents receive a consolidated 360° customer profile including master data; they no longer have to search for information and know in real time or shortly before accepting a call whether the caller is a premium customer or not. This enables them to identify and exploit up- and cross-selling potential. AI systems suggest actions to agents in real time and thus optimise the customer dialogue. The IT systems are fully integrated, and exchange information exactly when it is needed. Agents can quickly access the information they need about customers' previous transactions as well as know-how from adjacent systems at any time. This allows them to give customers a seamless service experience.

5. Speed

With modern service options such as voice biometrics and intelligent databases, customer enquiries can be processed quickly and efficiently and provide customers with adequate solutions. Customers describe their concerns more quickly and are more likely to find the right solution. During core hours, personal service is available in sufficient numbers; during off-peak hours, self-service solutions help.

Self-service should offer a customer journey that is as simple as possible and solves problems quickly. User-friendliness is more important than completeness. The solutions work hand in hand with personal services and can hand over to human employees in case of uncertainty or arrange a call-back appointment in off-peak times.

Based on statistical models, companies approach customers proactively. Contacting customers benefits them because it anticipates their problems. Ideally, customers do not have to take action themselves. "Best-in-class" companies use the input from customer service to improve service offerings and reduce the frequency of incoming customer enquiries.



6. Quality

Contemporary customer service not only resolves customer concerns quickly but does so at first contact. For many companies, the first-time resolution rate is important for evaluating their customer service. A high first-time resolution rate requires well-trained service employees who have sufficient access to third-party systems to process customer concerns on a case-closing basis. With modern customer service solutions, employees can transfer cases to other colleagues as needed – seamlessly and across channels. Customer information and details such as order or transaction numbers do not have to be discussed separately.

Ease of use is central to all service channels. Self-service solutions with many response options should be easy to find and use. A voice response system should be able to interpret incoming customer concerns over the phone using natural language, rather than listing several response options one after the other. All solutions should allow customers to choose between personal and digital service. It is therefore important to regularly review and optimise service solutions with user experience in mind.

7. Empathy

Because more and more service options are available and companies are increasingly offering self-services instead of classic personal service, the latter – if it still exists at all – is more important than it was a few years ago. Customers want to be addressed personally and in an individualised manner. Modern IT systems make this possible in an optimal way; with data-driven models, customer needs can be anticipated and addressed in a forward-looking manner.

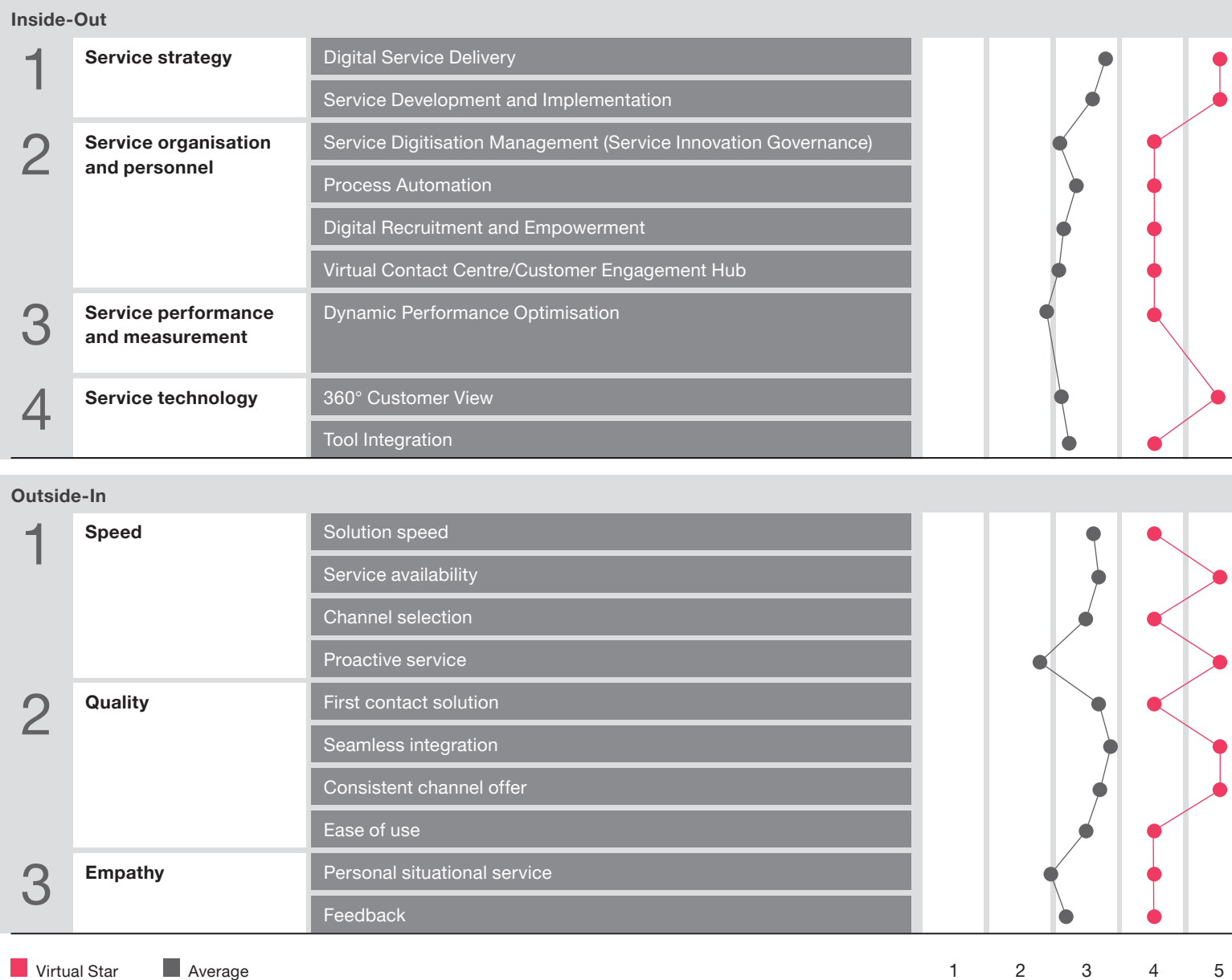
For example, personalised videos present certain situations. They provide answers to questions that customers may ask sooner or later – and thus help reduce causes for inquiries. Contemporary customer service uses customer concerns to collect valuable feedback on customer satisfaction and identifies contact triggers. These can be used to improve processes or eliminate errors – and continuously improve the customer journey.

Status quo of the maturity level in customer service

Before analysing the individual sectors, one overall finding: there is still potential for optimisation of customer service in all sectors. In the inside-out dimension they achieved an average score of 2.9 points; in the outside-in dimension the result was only slightly better with 3.0 points. The greatest potential for improvement is in proactive service as well as personal situational service. Nevertheless, there are “virtual stars” – pioneering industries that already offer high-quality proactive service, have a consistent and seamless channel offering, and are convincing in the 360° customer view. However, even these best-in-class industries can achieve more in some categories.



Fig. 19 Maturity level of customer service in Germany, own illustration





Industry overview

Now that we have explored the general evolution of the market and its overall maturity level, we will delve deeper into the individual sectors. We will also use concrete examples to show how digital customer service is already being successfully implemented today.



Energy and utilities

1. General market development

Change in outsourcing market volume by **-1.0% CAGR**,
caused by demand decline by **-2.9% CAGR**,
despite price increase of **2.5% CAGR**

Because customers understand the products and services of the energy and utilities industry better and better, there tend to be fewer customer interactions. This trend will continue, in particular, AI-supported and automated e-mail communication will reduce service interactions with human employees. Comparison platforms of energy providers such as Check24 and Verivox have once again increased customers' willingness to switch in the course of Covid-19.

This would suggest that the volume of enquiries tends to increase because customers ask more questions about switching tariffs, for example. In fact, the opposite is the case, because switching processes are now largely standardised and digitalised. In the medium term, however, demand in customer service will increase again, especially since electrically powered vehicles are becoming more and more widespread. This is expected to lead to more questions about the infrastructure required as well as about products that need explaining, such as wall-mounted charging boxes for the home.

More self-services, less demand for outsourcing

In the past, the energy and utilities industry regarded customers more as "meter readers"; now the focus is on high-quality customer service. With intelligent self-services, customers can conveniently solve many issues themselves. Demand for outsourcing services will therefore (further) decline; at the same time, higher costs per customer contact are to be expected, especially due to the upcoming increase in the minimum wage that many service agents will receive. Overall, we expect demand for outsourcing to fall sharply – in 2024 only 13% of the outsourcing market volume will be accounted for by the energy and utilities industry. Contact centre service providers with a strong focus on this industry must prepare for this.



2. Maturity

Inside-out view

The energy and utilities industry scored above average in the dimension of service organisation & personnel. The large basic suppliers and market participants such as EnBW and E.ON often already rely on process automation and use various analysis tools. This is often not the case for smaller providers, so that the industry as a whole scores rather averagely.

Staff planning is already partly automated and data-driven in larger companies. Online training was greatly expanded, especially during the coronavirus pandemic, and is now more standardised.

In contrast, the industry scored slightly below average in the dimension of service strategies. Although most market participants differentiate their service offerings according to customer segments, they are not yet very “digital”. At least most companies have a clear picture of which service channels they want to and should offer.

The lowest level of maturity is in the dimension of 360° customer view, although it is within the average for all sectors. Companies typically still collect information manually. Obtaining opt-ins from customer data, for example, is particularly difficult for the industry because many customers use the basic service and therefore contact their provider quite rarely. Market participants already engage in cross- and upselling activities, but these can be expanded and automated to a much greater extent.

Outside-in view

In the outside-in analysis, the energy and utilities industry scores slightly below average in all dimensions. In the speed dimension, the aspect of “channel selection” is particularly striking: The larger energy suppliers already offer several communication channels; however, this is not yet an industry standard. A lot of room for improvement provides, for instance, the smooth switching of channels. In many cases, service availability is still being developed, chat and voice bots are also only gradually coming into use, and 24/7 live customer service is not common. Many companies have service portals, but often with too few functions.

In the dimension of quality, there is also potential for improvement for the industry. One exception is the aspect “solution in the first contact”: Here the result is even above the average of all the sectors examined, because the service employees in the energy and utilities industry are usually particularly well qualified and the companies often maintain extensive knowledge databases. Another reason is targeted training and continuous professional development.

In the category of empathy, the industry results are mixed: There is still significant catch-up potential in personal situational service; on the other hand, most companies already collect customer feedback on a regular basis and use it to improve customer service.



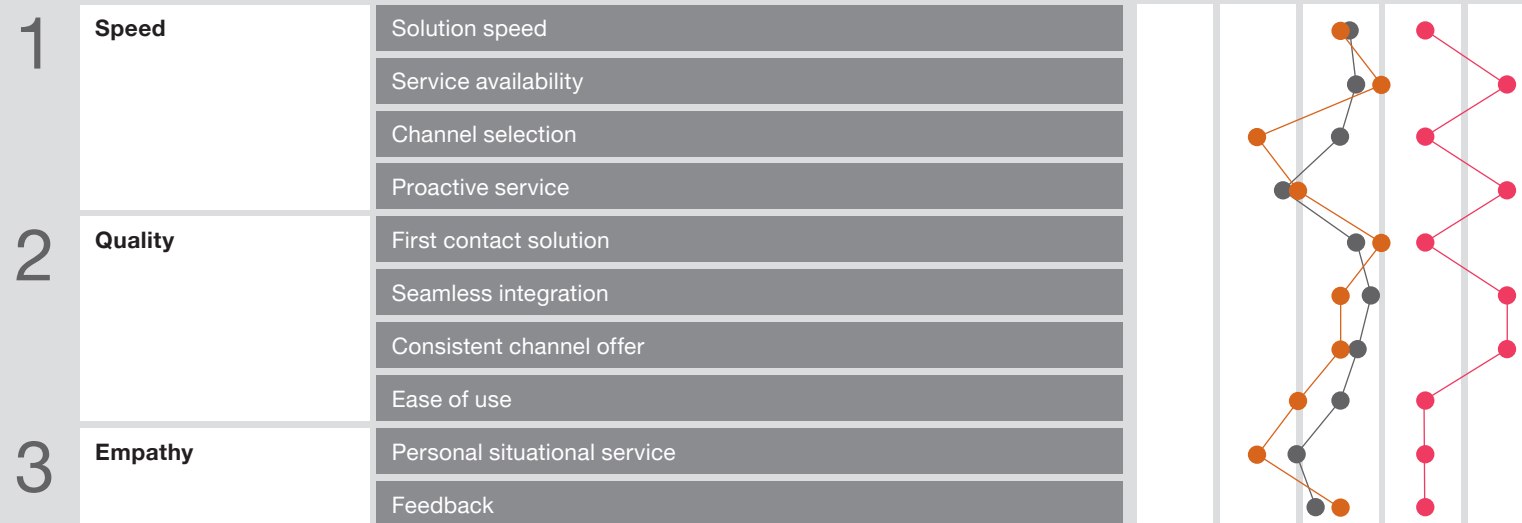


Fig. 20 Overview of digital maturity in the energy and utilities sector, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

During the coronavirus pandemic lockdowns, commercial customers consumed less energy than before. Less surprisingly, for private households who stayed at home, energy demand increased. Overall, energy consumption fell by 4% in 2020 and returned to a normal level in 2021.²⁷

There was a sharp increase in energy costs for end customers during 2021, with these set to remain high for the whole of Europe in 2022. The main reasons for this were the return to the old VAT rate, inflation, the increase in EEG apportionment and supply shortages.

During Covid-19, many end-users checked their tariffs and contacted customer services more frequently than in previous years. This was partly because many leisure activities were not possible during the lockdown periods, and people used the free time to review their household expenses, especially as end-users' energy consumption increased significantly due to the increase in home office work.

In addition, many customers used the lockdown time to carry out home improvements. The greater demand for smart thermostats and other smart home solutions, suggests an increased information requirement from private customers about their energy consumption. The main reason for this is a heightened awareness of price and the environment, both of which have increased since the arrival of the pandemic.

As a result, the volume of enquiries increased and the contact reasons changed. This presented new challenges, especially for the basic suppliers, who in the past looked after a relatively passive customer base, with little customer interaction. Large energy suppliers such as E.ON or EnBW, had already adjusted their service to regular customer contact beforehand. However, basic suppliers were often surprised by the increase in demand, so that they had to expand their service centre capacities at short notice, through a combination of in-house resource and outsourcing.

Another effect of Covid-19 on the industry is that many service workers are working from home to answer customer queries – and they will likely want to continue hybrid working, no longer attending the office every day once the pandemic is over.

4. Industry specifics

There are three types of suppliers in the energy sector: Basic suppliers (municipal utilities and others), large energy suppliers (E.ON, RWE, etc.), and online (discount) suppliers (e.g. eprimo). Each of these utility types sets a different focus with its business model: basic suppliers guarantee the basic supply of electricity, water, and gas regionally while large energy suppliers and online suppliers tend to concentrate on a broad, supra-regional customer segment.

The online suppliers have very lean, completely digital business models and tend to appeal to digitally savvy customers. It is therefore not surprising that the digitisation of customer service is particularly advanced among them. Basic suppliers, on the other hand, serve customers who tend to give little thought to their energy suppliers and therefore seek little contact with them. The basic suppliers, for their part, generally pursue not only economic, but also political, social and ecological goals. These also flow into their tariff structure.

²⁷ BDEW Bundesverband der Energie- und Wasserwirtschaft e.V. Economy and Energy Consumption Edition 11/2020 and 12/2021



5. Challenges

A number of challenges for the industry stem from high levels of regulation. For example, energy suppliers are only allowed to use customer data to a limited extent for cross- or up-selling or other personalised services. Purchased data is usually not detailed enough. The data situation is even weaker for basic suppliers, because customers of basic suppliers tend to infrequently update their master data. In addition, customers interact less with them, so data maintenance is also difficult for suppliers themselves. A study by JD Power shows that utilities have problems collecting more complex customer data (consumption data, individual consumption optimisation, etc.) and making this data available in an updated form on the website or in apps.²⁸

Competition within the industry has once again become much tougher overall. Customers often strive to secure the cheapest tariff or a switching bonus via portals, such as Check24 and Verivox. Most customer enquiries to suppliers include a change request, complaints, or enquiries about metering/billing.

AI-based services can often provide a better personalised offer while reducing the cost of reactive customer service. If such solutions are offered, companies must also activate them in the online portal. However, customers of utilities often have no need for regular interaction; they only use the portals selectively, for example, for a change of address, a password reset or a meter reading. Above all, service portals must take into account increasingly high customer standards where service quality and service accessibility are concerned, with a high bar set by other industries and companies.

Another challenge for the industry is to find the right balance between on- and offline – in particular, how to successfully bridge gap between the online and offline customer journey. The common challenge here, one that is quite pronounced within the industry, is siloed thinking across service, sales, and marketing. As a result, there is considerable untapped potential for cross-selling, gaps occur between different channels or customers sometimes have to re-explain their concerns in the follow-up contact. In short: consistent, cross-channel customer communication looks different.



²⁸ J.D. Power (2020), (2021) Utility Digital Experience Study



6. Opportunities and potentials

In the wake of the pandemic, customers are increasingly embracing digital solutions and self-services, and the energy and utility industry is no exception. Therefore, good service performance is becoming more and more important to differentiate from the competition – especially since the actual product, energy, offers little means for differentiation.

Recent research such as the one conducted by Gladly²⁹ has shown, that for 79% of 1,500 respondents, personalised service is more important than personalised marketing; 45% of users turn their backs on a brand after just two bad service experiences. However, good, easy-to-find information on company websites or in apps is not only a challenge, as mentioned above, but also an opportunity for utilities to improve.

Due to the legal requirements for smart meters, for example, energy companies will receive a lot of data in the future, e.g. data on consumption quantities. This will create new opportunities for individualised offers. Additional services for the smart home, for example, the individual control of electric vehicle charging with predictive consumption models, also make it possible to better utilise the electricity grid. They can also lead to lower costs for end customers and utilities. Mobile apps that provide customers with information on smart devices such as refrigerators, doorbells, or heating, for example, offer utilities new opportunities for interaction and to strengthen customer loyalty.



²⁹ Gladly Customer Expectations Report (2020 and 2021)

Utility companies need to embrace their role as “customer caretakers”



Anton Schenk
Business Development and Strategy
Director – Capita Energy Service GmbH

The pandemic has clearly shown us the importance of change for energy suppliers when it comes to improving all aspects of the customer service experience. In the past, this was often done very timidly: The aim was not to unsettle customers and to preserve the company’s own complex processes instead of adapting them to become more customer-centric. Today, the shortcomings of this approach are becoming clear. It is imperative that utilities companies fully understand customers and embrace their role as “customer care takers”. Customers want to receive the information they need at all points of contact – whether they are users of a charging infrastructure for e-vehicles, feeders with a PV system, or users of a smart meter. They do not differentiate between the market roles of network operator, metering point operator or supplier, expecting uncomplicated access to the full range of products and services.

It is therefore essential to interact with other industries as well as with service providers specialising in customer experience (CX) in a frictionless and, at best, customer-centric manner – a discipline that energy suppliers sometimes still have to master. Digitalisation thrives on platform economies with clear but easy hurdles and easy access to processes, data and systems. The utilities industry has been known for a more compartmentalised approach to date. This must be discarded in order to pursue new, customer-centric paths.



7. Practical example

The contact centre of the future

Digital-enabled customer service in the energy sector

Practical example from Capita Customer Services GmbH

Digitisation in the contact centre of the future means much more than process automation or providing digital customer contact channels. Instead, it is about understanding customer behaviour, needs, and concerns in detail on the basis of well-founded, reliable data analysis. However, only with the targeted use of digital technologies and appropriately empowered employees, can a holistic contact concept be designed for a consistently better customer experience that exceeds customer expectations and sets new quality standards.

“Counting points” become customers

The more traditional energy sector must meet growing customer demands. The increasing liberalisation of the energy sector, the market entry of new agile competitors and comparison platforms as well as the shift towards green, sustainable energy and the dual role of some customers as suppliers and consumers (“prosumers”) are challenges that must be met. Companies must therefore not only create new products, but also digital services: The digital transformation of business processes and the customer journey must also be adapted to the constantly changing and at the same time increasing requirements of customers in the energy sector.

From the consumer’s point of view, one can only say: that’s good! Providing loyal customers with the required contact channels and inspiring them with a high quality of service is the best way to exceed expectations. How this can be achieved is shown, for example, by the energy supplier SWK STADTWERKE KREFELD AG (SWK), with whom Capita has a long customer relationship based on partnership and a joint venture.

Digital competence leads to better customer experience

In cooperation with Capita, SWK already geared its service towards a seamless customer experience several years ago. The technical basis for existing and new customer contact channels is a fully integrated omni-channel platform. It enables a smooth transition from digital channels to service staff. Furthermore, it offers – both technically and procedurally – the existing channels where customers demand them. At the same time, the platform can provide all the necessary information so that service staff can gain a 360° view of the customer.

Regardless of the starting point and the digital maturity level of the company in a given case, important data is created with every customer contact and in the entire process network, which – linked with the already existing internal and external data in a central location – becomes valuable information. This makes it possible to analyse at any time what customers want and when, at which point of the “journey” they are, and who accepts which offers. which offers are accepted by whom. In this way, a holistic picture is created. It forms the basis for the future contact concept and enables the customer experience to become increasingly individualised and constantly improved – without an excessive degree of investment.

Bundled information thanks to a digital service and sales platform

SWK created its own digital platform in-house. This covers both services and sales across all divisions. The solution portfolio ranges from an employee service cockpit and a website-integrated customer portal to an app solution as well as AI elements. As part of the joint venture between SWK and Capita, these developments were extensively piloted, improved in terms of processes and ultimately, integrated into Capita’s daily business.



Delighting customers with emotional intelligence

Standardised enquiries are solved by chatbots, IVR and RPA. Only in the case of complex queries do customer advisors – always with the required degree of empathy – come into play, either via messaging or chat, e-mail or telephone. Several factors are decisive here: customers can only be delighted with qualified customer advisors who can clarify complex issues, demonstrate emotional intelligence and master various situations with digital tools!

Today, Capita is working together with SWK to forecast customer concerns even better and to establish appropriate processes. For example, they are jointly preparing the implementation of the following service: If customers receive a reminder, they are likely to contact customer service as a result. If the system recognises the caller, the call is routed to a customer advisor who has special skills in receivables management. The employees automatically receive all information about the respective customers as well as suggestions for solutions – such as instalment payment information or framework conditions for deferring payments – and are thus optimally prepared to solve the concerns according to the requirements.

Capita's overall concept of the Digitally Enhanced Workforce

However, individual solutions with customer-oriented communication channels are not only becoming increasingly important in the energy sector. Companies are facing the same challenges regardless of the sector: offering channel diversity, orchestrating channels correctly, bundling information and making it available at the right time via a central platform.

In the contact centre of the future, the focus is clearly on customers and their needs, even as digitisation continues. In order to optimally meet these needs, Capita relies on a triad of data, technologies and employees for a digitally enhanced workforce and thus creates consistently better customer experiences.



Information Technology

1. General market development

Outsourcing market volume growth of **7.3% CAGR**,
driven by demand growth of **3.6% CAGR**
and a price increase of **4.0% CAGR**

Individual companies and business areas in the IT sector will continue to grow strongly until 2024; we expect a solid growth for the industry as a whole. Regulatory requirements such as the EU General Data Protection Regulation (GDPR), for example, will bring contact centre service providers a solid increase in demand because they can often implement compliance guidelines faster than companies can do so internally.

However, the IT industry in particular has benefitted from the effects of the coronavirus pandemic: many companies had to upgrade hardware and software so that their employees could work from home. Hardware demand in Germany, for example, was higher in 2021 than it had been for eleven years. The demand for software and services increased significantly again in 2021 after a rather restrained year in 2020, when many companies held back on investments.³⁰

We expect demand to shift away from hardware and towards software and services in the coming years. Because the industry already largely relies on self-service solutions, the remaining customer service tasks will tend to be complex and become more expensive due to the shortage of skilled workers. Many tasks will therefore be outsourced – an opportunity for BPOs. We therefore expect price increases in outsourcing to be significant, namely 4.0% CAGR by the year 2024.



³⁰ Statista (2021) Revenue growth rates in the IT market in Germany from 2006 to 2021 by industry segment



2. Maturity

Inside-out view

Customer service in the IT industry varies in maturity. For example, it is above average in the dimension of service strategy, with many online-based business models and the strong trend towards service digitisation. The picture is mixed in the dimension of service organisation & human resources: In the categories process automation and virtual contact centre, the maturity level is above average; in the categories service digitisation management as well as digital recruitment and empowerment, the maturity level is below the average of all the industries studied. This is because the industry is clearly focused on the main online business and technical support, while customer service is only secondary. In terms of employee empowerment, the industry has tended to rely on self-service solutions from the beginning.

In the categories of service performance & measurement through dynamic performance optimisation as well as service technology, the maturity level is above average. Especially in the integration of tools or the 360° customer view, the industry is willing to experiment and already has quite a lot of experience, because IT companies, their employees, and customers are usually more technology-savvy than those in other industries.

Outside-in view

In the outside-in assessment, the maturity level is average in most dimensions. In the speed category, the industry was convincing in the aspects of channel selection, service availability, and high solution speed. In proactive service, on the other hand, the IT sector's maturity level is well below the average of the sectors studied. Apparently, many companies have not yet recognised the added value that proactive service can bring them.

In terms of service quality, the industry performs averagely in general. However, it achieved an above-average result in the category consistent channel offer. This is mainly due to the good visibility and interconnection between individual service areas and support levels. In addition, the service offers are usually very easy to find, also thanks to very good search engine optimisation.

Moreover, the industry scored well above average in the dimension of empathy; the maturity level in the categories of personal situational service and customer feedback is very high – in the latter, the IT industry even achieved the highest maturity level of all industries. For example, it regularly asks for the likelihood of recommendations with the Net Promoter Score, and it equally uses customer feedback intensively in self-service. Overall, the industry is keen to learn from customer feedback because usability and customer experience are particularly important to it.

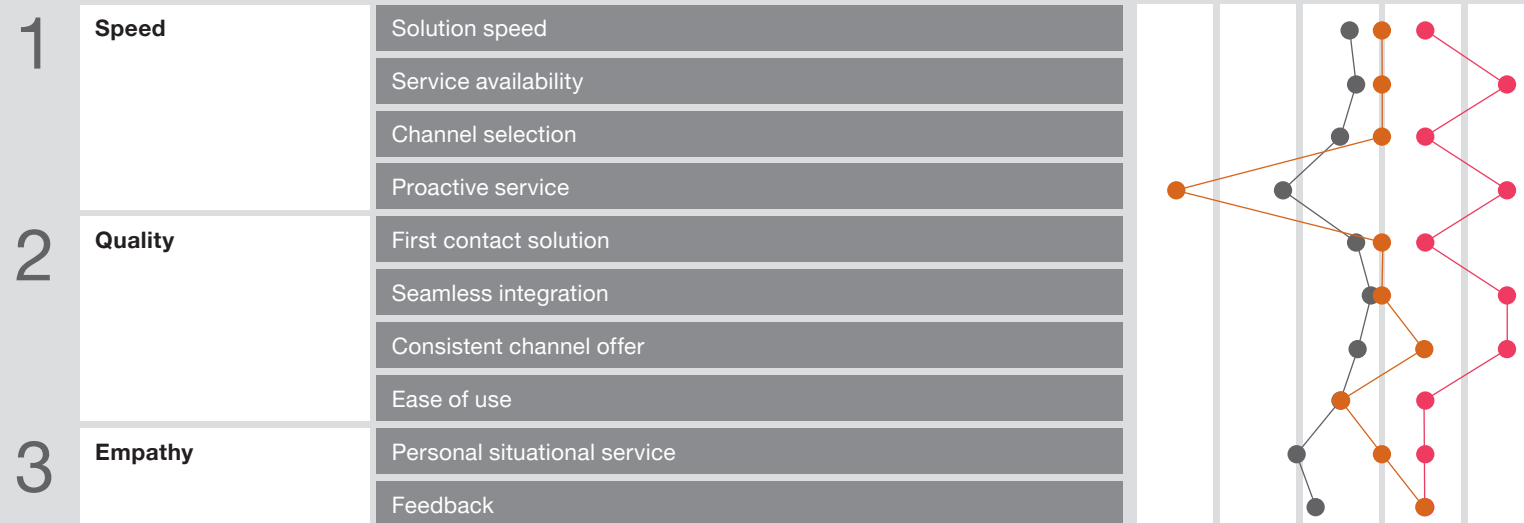


Fig. 21 Overview of digital maturity level of information technology, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

Overall, the information technology industry recovered from the Covid-19 crisis better than the other industries examined in this study. The demand for technical equipment for the home office has increased, and entertainment providers such as Netflix have recorded rising user numbers. Because the coronavirus pandemic has forced many industries to redouble efforts to digitalise their processes, demand from software providers has also increased, in customer service especially for software for chat, video telephony, co-browsing, and CRM systems.

The industry as a whole has been able to cope well with the increased contact volume in customer service thanks to digital tools and self-services (which are widespread anyway). Similar to other industries, companies have largely moved customer service staff to home offices. The IT industry has been able to provide the necessary infrastructure and processes faster than others. The work-from-home approach has largely fallen on fertile ground in this industry, which is why we assume that customer service employees will not completely return to the company office in the future, but that a certain home/office split will remain permanently.

4. Industry specifics

The information technology industry consists of four types of companies (software, hardware, semiconductor and entertainment companies): In the case of “software and services”, it is mainly large, global companies such as SAP and Microsoft whose customer service is already highly digitised compared to other industries; in some cases, they even offer customer service software themselves. Among the hardware providers are, for example, Hewlett Packard and Samsung. The third category is semiconductor companies such as Infineon, and the fourth category includes entertainment companies such as the RTL Group and Netflix. The requirements for customer service are suitably different. Especially in “software and services”, more complex use cases and consultations are more frequent than in the entertainment sector. There, simpler enquiries about address or password changes as well as about the payment or cancellation process are more common; self-services are well suited for this.





5. Challenges

As in many industries, there is still significant potential for savings in the costs per customer contact in the IT industry. In particular, this can be achieved with self-service portals. The most important factors here are user-friendliness, quality, and relevance of information. A major challenge is the interconnection between different customer service channels. There is often an information gap in the interaction between first and second level support: Service providers are primarily responsible for the initial consultation but must often pass them on to the second level because they lack the required knowledge or access rights. Enquirers then usually have to describe their concerns again. Requests are also increasingly complex, which requires more competences and better expertise on the part of service staff. This can be achieved, for example, with knowledge databases, work platforms and a well-maintained CRM. Complex requests are very difficult to answer with self-services. It can therefore be assumed that human employees will continue to be needed in the future, despite very well-developed self-services.

There is also potential for improvement in proactive support: the industry's activities are mainly focused on the central products and processes; very few companies proactively address their customers and their challenges. Yet this could be worthwhile: For example, if customers learn about changes and potential problems at an early stage, this will significantly reduce customer service enquiries and have a positive impact on customer satisfaction.

Finally, the shortage of skilled labour is also a challenge for the industry, as wage levels are rising and competition for skilled service employees is increasing. To meet the demand, the industry often relies on nearshore outsourcing.

6. Opportunities and potentials

The industry benefits from the digital affinity of its customers, who accept self-service options more than in other industries. Chatbots can help customers with standardised requests such as address or password changes and therefore further increase the self-service share in customer service. We assume that many companies will link their self-services even more closely to core systems and thus cover more use cases with self-services in the future.

Increasing interconnection will also lead to more proactive or predictive service options in the future. We believe that the information technology industry can even play a pioneering role here. Because remaining requests are becoming increasingly complex, service employees must be sufficiently qualified. This further increases the demands on training and recruiting, and well-prepared knowledge must always be available with appropriate tools.





7. Practical example

Automation in the IT sector: software robots relieve IT staff

Practical example from PwC Germany, Alexander Jannasch

The client is a large, German-based software company with a global network of branches and units who initiated a large-scale efficiency and transformation project with a focus on digitisation, streamlining of workflows and efficiency improvements.

Process analyses and ideation session presentation

At the beginning of the efficiency and transformation project, the focus in the first 3 months was on surveying the processes with the highest potential for optimisation. During this assessment phase, numerous ideation workshops were held with the business units to show what is technologically possible to increase the imagination of the employees. On the other hand, the existing processes were examined and analysed with best practices and peer benchmarks, among other things.

One result of the process analysis was the very complex user management in the company, whose tasks typically include “reset password” or “get access to an application”. Maintaining user management is usually one of the least popular tasks within IT and the service desk, and it ties up resources a lot.

The implementation – a quick win

After identifying the business cases, it was important to the client not only to launch longer-term optimisation initiatives, but also to achieve success in the short term if possible. Hence, the company decided to leverage the potential in the area of user management with Robotics Process Automation (RPA). The customer had already set up a centre of excellence for RPA with the necessary infrastructure, so it was possible to start immediately with the design of the automation solution. For the automation solution, the company decided on an “unattended” robot that independently processes all requests around the clock every day and only calls the IT staff in case of problems or exceptions to ask for input. Within just one month, this automation solution was developed, tested, and in use.

Given the highly transactional and repetitive nature of such requests, the password reset process could be 95% automated by providing software robots with standardised, pre-formatted templates (e.g., for service requests and confirmation messages) and the necessary access to the IT service management tool.

The same applies to access management: The RPA robots were able to automate the process by 70% with access to the necessary IT-related programmes. After the request is created, the software robot validates the requests and exceptions and provides standard access rules. Also, the users are very satisfied with this solution – they simply notice that their requests are processed faster and do not have to constantly ask for the current processing status.

For example, when processing 1000 or more applications per month (with a processing time of 15 minutes per application), automation by a robot leads to more than 200 hours of labour saved and the efforts of two employees. The fear for one’s job, often formulated at the beginning of a project, turned out to be unfounded. For quite some time, the IT department had been understaffed due to departing employees and the shortage of skilled workers – so they could not complete all tasks in a timely manner according to the needs of the business units. The colleagues can now concentrate on higher-value tasks again – a win-win for both the company and the employees.



Alexander Jannasch
Manager, PwC Germany



Retail/Consumer Goods

1. General market development

Outsourcing market volume growth of **3.3% CAGR**,
driven by demand growth of **1.5% CAGR**
and a price increase of **2.3% CAGR**

Demand in the retail and consumer goods industry is driven by high growth rates in the comparatively service-intensive online business. The self-service share is increasing even among smaller providers, but customer expectations of the industry are increasing just as steadily. Personalised advice and individual services are becoming increasingly important in many customer segments.

The consequences of numerous lockdowns throughout the pandemic for the industry were severe. While the grocery sector only suffered slight sales losses, the rest of the retail sector suffered from the restrictions and requirements in the stationary business. Click-&-collect initiatives counteracted this and increased the volume of enquiries in customer service. More and more local and regional suppliers offered their products online. Automotive sales were also very limited during lockdowns. This led to an expansion of digital advisory tools – which were very well accepted by customers and will therefore certainly continue to be used in the future.

In the long term, digital advisory tools, further automation, for example with self-services such as FAQ and chatbots, will offset the increasing contact volume in the industry. The customer service market will therefore only grow slowly for the retail and consumer goods industry.





2. Maturity

Inside-out view

Overall customer service maturity in the industry is above the average of all the surveyed industries. There is clear development potential, especially in the dimension of service organisation & personnel, specifically in digital recruitment and employee enablement; also, in many cases there is not yet a specialised business unit that deals with the digitisation of customer service. In most cases, various departments in this sector have customer contact, but there is no standardised approach to the digitisation of customer service.

Staff recruitment is often handled by BPO service providers. One industry pioneer is the online pure player Amazon: Compared to other companies, its customer service is much more automated and it pursues a specific service strategy – namely that of avoiding customer contact. This significantly increases Amazon's service level because the company reliably anticipates customer enquiries and customers usually receive the right answer quickly.

Many companies in the industry view customer service more from a cost perspective than from a benefit perspective and plan their service offerings with this in mind. The categories of performance optimisation and service technology are correspondingly strong in this industry, which makes it a role model for other industries. At Amazon, for example, service staff receive a comprehensive insight into customer history via specific systems and can therefore support customers quickly and in a targeted manner. In contrast, less service-focused companies usually use various systems without customer profiles – with significantly lower service quality and efficiency.

Outside-in view

In the outside-in analysis, too, large online pure players and smaller, less digitally-savvy companies performed very differently – albeit at an overall above-average industry level. Online pure players track customer data excellently and therefore score with service speed, availability, and quality. They usually resolve enquiries in the first contact. Smaller companies have less well-developed customer contact points, which is why finding a solution is more time-consuming for them.

There is room for improvement in service personalisation across the industry because companies do not adapt their service offer to the customer even after providing personal data, like a product preference. Proactive customer service also offers potential for improvement, especially among many smaller market players. Overall, the large discrepancy in customer service between leading and smaller market participants is striking in the industry.

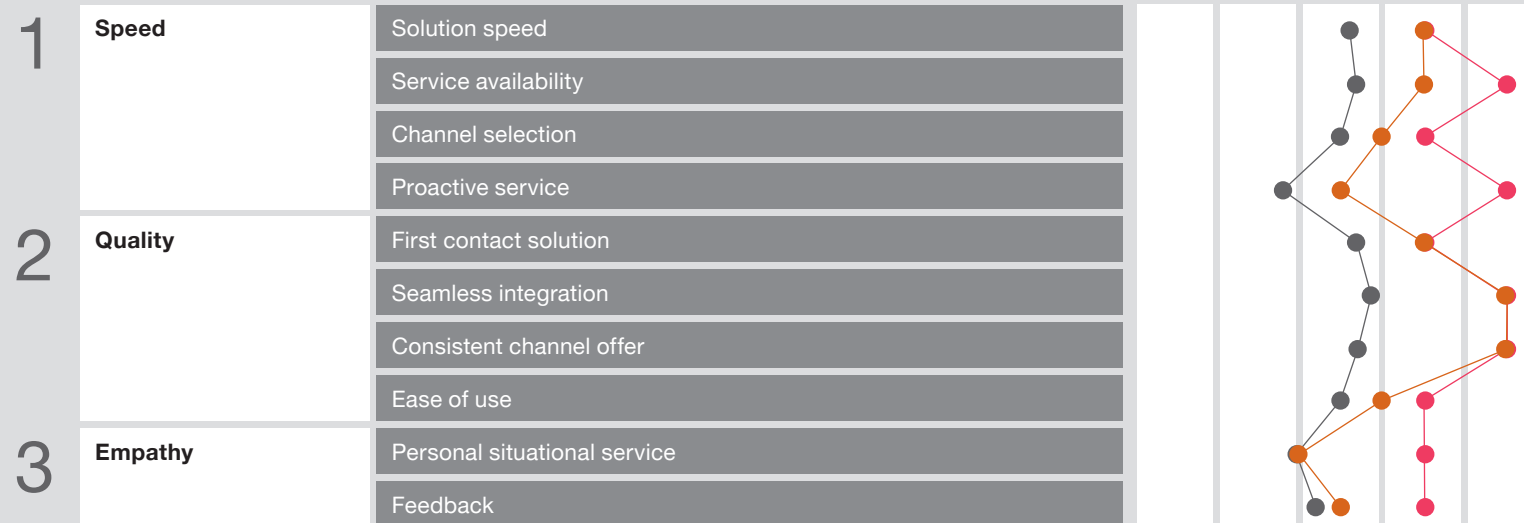


Fig. 22 Overview of digital maturity level retail/consumer goods, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

Due to the coronavirus pandemic, customer service has become more of a focus for business leaders in this industry as well. While large e-commerce companies already had an excellent online presence, other market participants have greatly expanded theirs during the pandemic. Clear beneficiaries have been mail-order food retailers like HelloFresh and online furniture retailers like Home24.

With the exception of groceries and drugstores, stationary retail was strongly affected by the lockdowns. They often had to build up and expand digital competencies within a very short time period in order to be able to continue serving their customers. New formats such as Click & Collect at least enabled some sales.

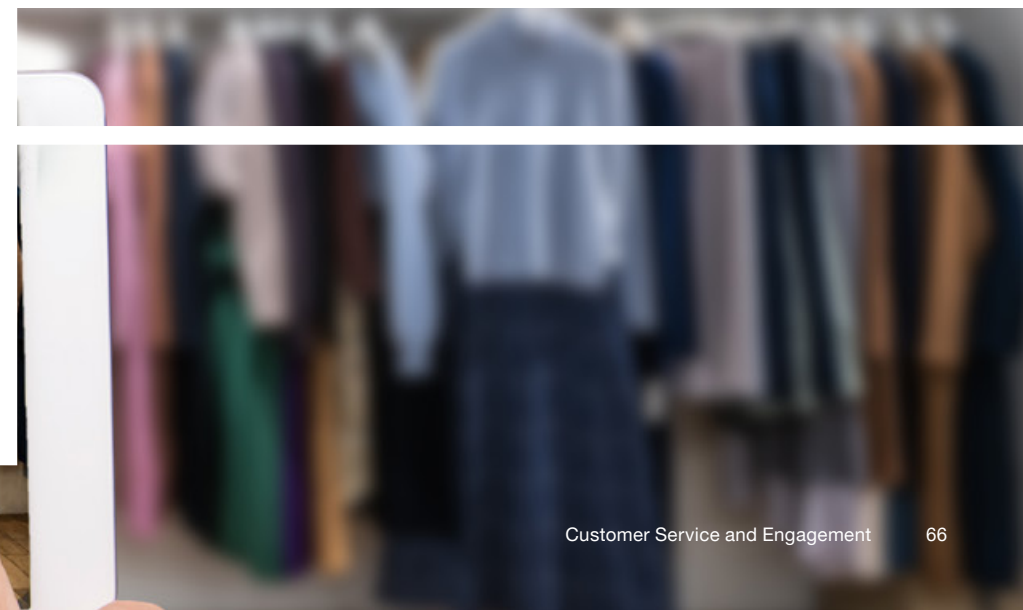
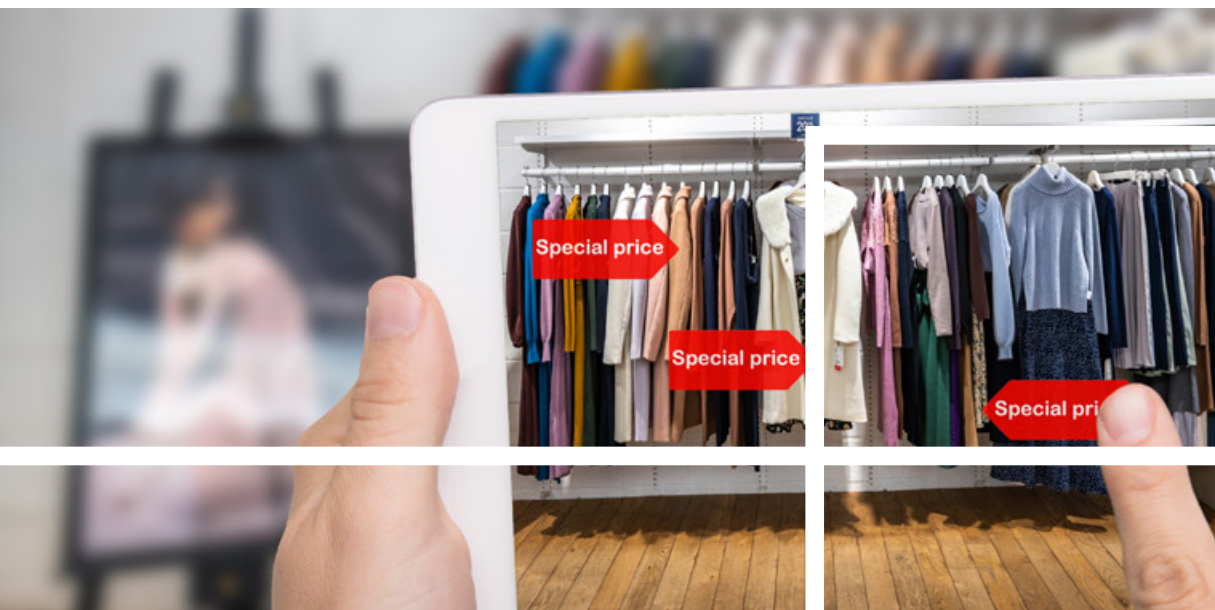
Many companies massively expanded their online presences and/or changed their business models: Suddenly, shipping, tracking of deliveries, and return management took centre stage instead of on-site shop management. Fulfilment services and remote customer services were often established in a rush, as were virtual shopping offers. This way, cars could now be viewed digitally from the inside, and consultations were able to take place via video chat or co-browsing applications.

In addition, many companies were trying to improve the customer experience, because digital interaction often remained the only interface to the customer besides classic customer service. Overall, a change in customer service began – from a cost centre to a differentiator.

4. Industry specifics

Retailers are companies that do not produce goods but only resell them, for example grocery shops, drugstores and fashion chains.

Consumer good companies are manufacturers of goods that they increasingly sell directly to customers (direct-to-consumer, D2C). Examples are brands like Adidas, Esprit, Bett1.de, but also car manufacturers like VW, Mercedes and Audi. The companies in this sector and their business models are very different; some are successful in the mass market, while others have local or global market niches.





5. Challenges

Food trade benefited from Covid-19 enormously. In contrast, some companies in the retail and consumer goods sector are facing the challenge of keeping up with the competition because they have not invested in online shopping, efficient fulfilment and (remote) service, or have not done so fast enough. This is especially true for smaller specialist shops and retail chains (“bricks & mortar”), which generate most of their sales in retail shops and were therefore particularly hard hit by the lockdowns. In fashion retail in particular, 45% of business in Germany now takes place online.³¹

In this context, larger companies and pure e-commerce companies have a clear advantage due to their years of experience in online trade. Should other coronavirus variants make further lockdowns necessary in 2022, this would once again exacerbate the situation for bricks-and-mortar businesses.

Covid-19 has reinforced existing consumer trends: in times of crisis, customers tend to look for cheaper offers. In addition, as in other sectors, increased customer expectations are a major challenge. Since lockdown, customers in the retail sector have also shown greater understanding for delays in delivery. Therefore, they are often more lenient in their dealings with customer service. However, if customer service consistently fails to meet their expectations, customers may switch to other retailers or manufacturer brands with direct sales. It is therefore essential for retailers and the consumer goods industry that customer concerns are resolved quickly and to a high standard.

Customer ratings and reviews are very important. Companies should take them seriously, because potential customers are increasingly making their purchasing decisions dependent on the reviews of others. If B2C companies want to keep up with e-commerce in the medium and long term, they should particularly improve payment options, opening hours and exchange rules in order to meet customer expectations.

In e-commerce, the main challenges are to further improve self-service and proactive service around delivery status, shipping and returns (fulfilment). The development towards a one-stop-shop is also challenging: many customers are not willing to gather the information they need to make a purchase decision from several sources. Instead, they prefer to receive everything from one shop. Larger companies gain a better overview of customer behaviour with the one-stop-shop approach and increase their conversion rates; smaller companies, on the other hand, are at a disadvantage if, for example, they are not represented on the most visited shopping platforms. And those who do not have an online shopping facility, must forego access to valuable customer data.



³¹ PwC (2021) Global Consumer Insights Pulse Survey



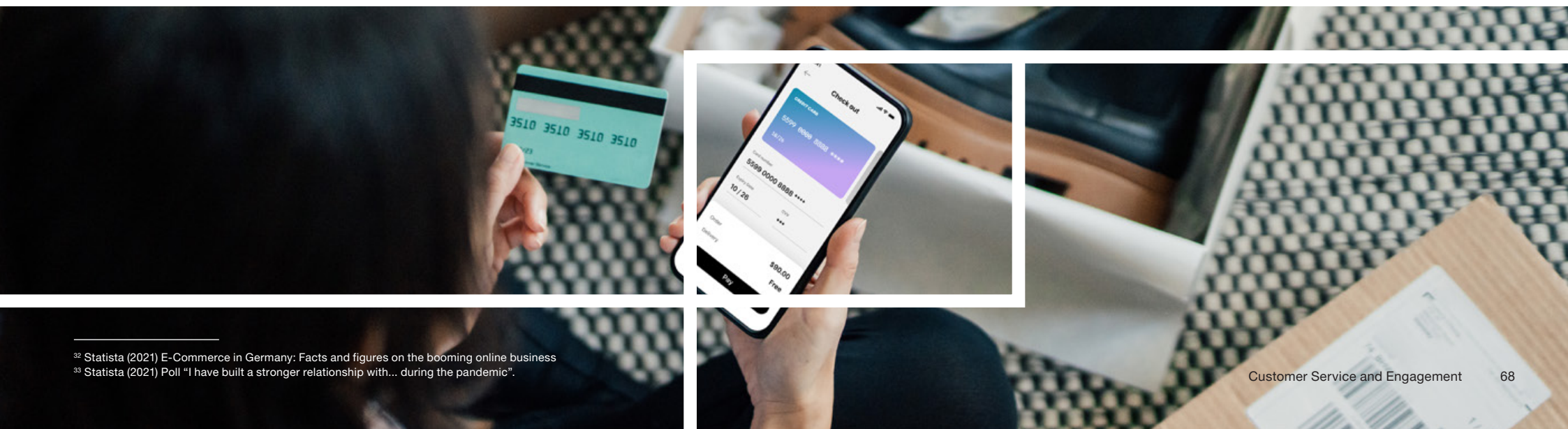
6. Opportunities and potentials

Even before the coronavirus pandemic, online trade had seen more growth than the rest of the retail trade sector.³² Covid-19 then provided a digitisation boost for many companies, as well as in customer service. Many customers tried e-commerce offers for the first time during the lockdowns. Even Amazon aggressively wooed new customers with radio advertising. It can therefore be assumed, that the pandemic has once again significantly increased the acceptance of online trade and will ensure further growth.

Competitive advantages over purely online operators can be offered by a strong link between online and offline activities. For example, products can be selected online, experienced and finally purchased offline in a physical store. The prerequisite for this is a smooth transition between online and offline activities. The intelligent interaction of both worlds is especially important for the customer experience with higher-priced goods such as automobiles or luxury items. Customer service tools and advice can motivate customers to visit or buy. They therefore represent a potentially sustainable competitive advantage. Provided they have a pleasant shopping experience, customers are apparently willing to continue to support physical retailers. For example, a Statista survey showed that customers feel more connected to shops and local retailers than they did before the crisis in view of the situation of retail trade, which in some cases threatens its existence.³³

Another opportunity is to offer customer service together with Shops-as-a-Service: ready-made online shops including logistics and customer service on demand. Companies like Scayle (About You Holding SE) bundle their service expertise and make their e-commerce platform available to partner companies.

Exasperated by the pandemic, customer service has increasingly become a differentiating factor in the retail and consumer goods sectors as well. There is also potential in addressing specific target groups and using customer profiles for up- and cross-selling. Chat or voicebots can be used, for instance, to successfully position appropriate response suggestions in service conversations or interactions and therefore generate added value for customers and companies. If a person buys a dog toy, for example, providers could offer them a discount on dog food at a later date.



³² Statista (2021) E-Commerce in Germany: Facts and figures on the booming online business

³³ Statista (2021) Poll "I have built a stronger relationship with... during the pandemic".



7. Practical example

With effective interactions: Virtual assistants improve service

Practical example from Nuance Communications Inc.

The customer experience has become increasingly important as a differentiating factor. An important aspect of this is customer service. In times when many company branches are closing – whether as a result of lockdowns, due to the pandemic or for other cost reasons – the digital space is transforming into the new “on-site” experience. Here, virtual assistants are increasingly used as the first point of contact to advise customers, answer questions, and offer solutions.

As early as 1975, the linguistic philosopher Paul Grice established four principles for effective interactions:

- **Quantity** – Communication should be as informative as possible, but not contain more information than necessary
- **Quality** – Communication should be true (to the best of your knowledge) and contain only information that has been proven
- **Relevance** – Communication should be relevant and consider the context of previous communication
- **Manner** – Communication should avoid ambiguity and be short and structured

These principles are crucial for any communication, regardless of whether humans are conducting the conversation or virtual assistants such as voice or chatbots. However, the former often implement Grice’s conversational maxims intuitively, while the artificial intelligence (AI) of virtual assistants must be trained on them first.

Nuance uses Natural Language Understanding (NLU), based on large data sets and deep neural networks to optimise the conversational design of its virtual assistants – they are able to recognise contexts, intentions and conversational units in addition to words. They feel more natural in conversations and reach their goal faster.

Better conversational design for better virtual assistants

This allows virtual assistants to be deployed in contact centres to resolve issues independently and relieve the burden on live agents. If a highly developed conversational design is used, they can incorporate requests and activities from the past into the solution and even predict customers’ wishes. Furthermore, due to the underlying NLU model, they can understand question combinations entered in free text and answer them in a personalised manner. Conventional chatbots, on the other hand, which are trained with a question-answer catalogue, are not able to understand the overall context and base their answers on a single keyword.

If a chatbot cannot immediately provide the customer with the information needed, smart platforms such as Nuance Digital Engagement are required to provide a seamless transition to service agents. The chatbot can then ask an agent to choose the right answer from a range of possible answers. This helps customers while continuing to train the chatbot. If the request is completely beyond his or her capabilities, he or she can forward it. Thanks to the Nuance solution, employees receive the complete call history. Customers do not have to repeat a request.

On average, virtual assistants in the retail sector can answer 85% of the queries independently. This reduces the number of calls to agents by 30%. At the same time, the Average Handling Time (AHT) is reduced by 26%, while sales are 12% higher.



Virtual assistants are the trend

These benefits have also won over fashion retailer H&M, which relies on the Nuance Intelligent Engagement Platform to help it manage steadily growing contact volumes and improve the experience for its customers with the help of the integrated chatbot. The solution helps them throughout the entire selection and ordering process and provides information in real-time. H&M has also further enhanced the digital customer experience by integrating the Nuance solution with Google Business Messages. Users can contact a chatbot or agent directly via services such as Google Search or Maps, without having to go on the company website. This seamless process makes it easier for companies to convert initial interest into a purchase.

A virtual assistant can significantly enrich the customer experience and relieve live agents. To do this, companies must first analyse customer data and activities – and find out at which point in the customer journey the virtual assistant will bring the greatest benefit. Companies can easily and quickly integrate the virtual assistant into existing systems to the depth they need for their requirements. This way, they can also tear down existing silos and connect the chatbot with all relevant departments, in order to offer their customers, the greatest possible added value.



Telecommunications

1. General market development

Decrease in outsourcing market volume by **-2.1% CAGR**,

caused by demand decline by **-4.1% CAGR**,

Despite price increase of **2.6% CAGR**

During the coronavirus pandemic, demand for service in the telecommunications industry increased in the short term because of the increase in people working from home. However, service volumes are expected to decline significantly by 2024. The main reasons for this are more stable networks, higher product quality, more robust service processes and simplified contracts with end customers. Providers continue to drive service automation. While more and more customers want to be served exclusively digitally, some still want face-to-face contact in certain situations, which somewhat mitigates the service demand decline. For business customers, the requirements are much more complex, and service demand will increase again in phases due to changes in service systems and additional service channels. In general, however, a reduction in service volumes can be expected due to further digitisation, standardisation, and simplification of business models. Online offers compensate for shop closures.

The increased service demand, especially during the lockdowns, was mainly covered by internal resources such as freed-up shop staff; service outsourcing did not increase during this period. The telecommunications sector will become less and less important for the BPO market in the medium and long term. Because service requests are usually not very complex, the price level is rather low compared with other sectors, but it will grow with the planned increase in the minimum wage at which many service employees work.





2. Maturity

Inside-out view

Overall, the industry is characterised by a very high level of service maturity in all categories considered. The telecommunications industry is the leading industry in all inside-out categories. It should be particularly emphasised that the industry is intensively concerned with customer service and is constantly working on its improvement. Dedicated customer service strategies and organisational units dealing with customer service ensure this. In addition, telecommunications companies started collecting and analysing customer data early on. Here they definitely have an advantage over other industries. For example, in-depth data is used profitably to train chatbots extensively.

Outside-in view

The telecommunications sector also performs above average in the outside-in analysis. Especially with the leading providers, customers have many virtual and personal contact options. The industry is a pioneer in the categories speed of solution, service availability, channel selection, and proactive service. In contrast, there is room for improvement in the categories of quality and empathy, particularly in the aspects of feedback opportunities and the solution in the first contact. The latter scored below average. This is mainly since technical problems in particular cannot usually be solved directly at first level.

The service offering also differs greatly from one provider to another: while leading companies focus on high availability and quality of their service channels, others differentiate themselves from the competition through their pricing strategy and rely more on automation and self-services.

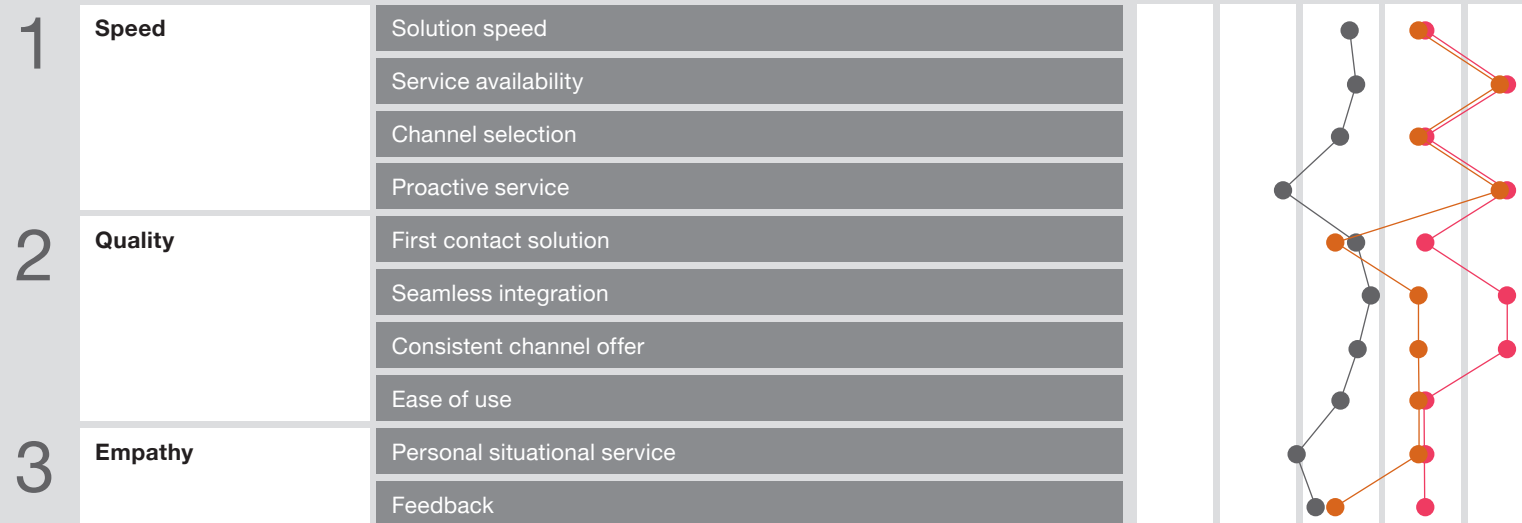


Fig. 23 Overview of digital maturity in the telecommunications sector, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

In the course of Covid-19, telecommunication services have become more important for all customers and have been used significantly more often. As a result, service volumes have increased in the short term.

The fact that many stores had to close (temporarily) helped reinforce the trend towards telephone and virtual services in the short-term. In many cases, customers who would normally have preferred face-to-face meetings were forced to switch to virtual channels as a result of national lockdowns. With many becoming accustomed to the convenience and ease of virtual meeting channels, this trend is likely to continue post pandemic.

Prior to the pandemic, market leaders had planned to close some branches. At Telekom, for example, 99 of the 504 shops in Germany were closed by the end of 2021.³⁴ Nevertheless, unlike pure online providers, Telekom is remaining with its shop infrastructure with personal advice and individual customer contact.

In the long term, service demand in telecommunications will decrease as network quality continues to increase and companies use more and more data-driven systems. Changes and developments in the B2B sector will occasionally cause service demand peaks.

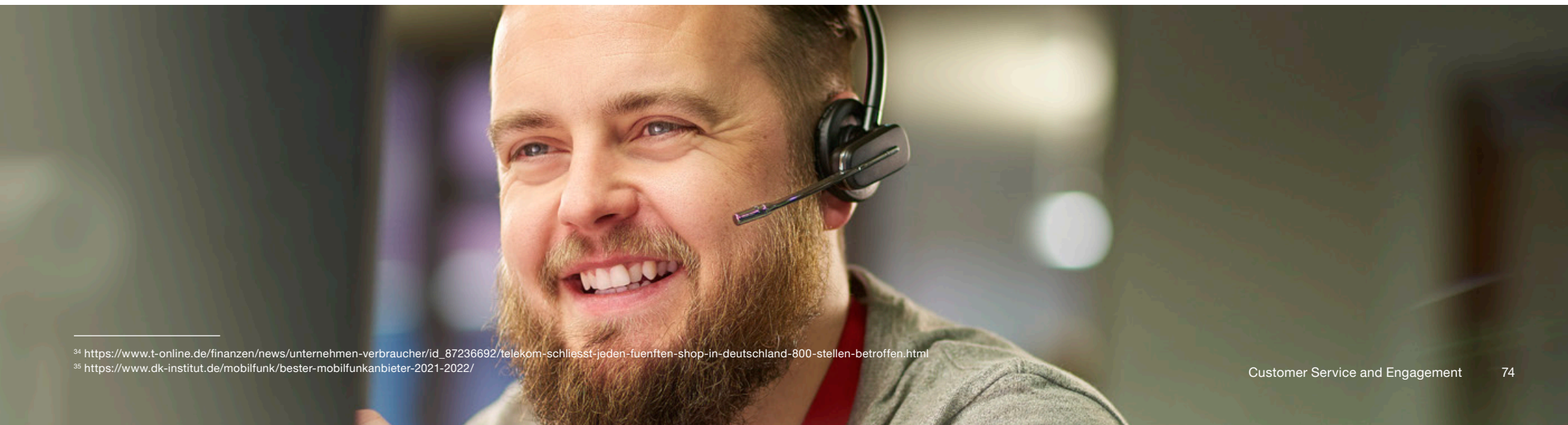
4. Industry specifics

The telecommunications industry is a pioneer in customer service digitisation and customer service automation in Germany. The large amounts of data that customers generate during usage make it possible to anticipate service needs and plan accordingly. In addition, IP migration has been completed in the past few years, resulting in fewer network faults – another reason why service volumes are decreasing. In addition, support processes have become more standardised and stabilised, and contracts have become easier for end customers. Customers only like to use customer service in exceptional cases because they expect technology to work at all times.

Telecommunications providers focus on customer service to very different degrees. Quality leaders have a high standard of service across different channels, including personalised service, which they are constantly developing. “Pure players”, on the other hand, try to avoid any customer interaction and only offer highly automated and standardised services. What is striking is the fact that inexpensive providers such as Aldi, Talk, and Congstar, performed very well with customers in relation to the scope of their service offering in the 2021 ranking of the German Customer Institute.³⁵

³⁴ https://www.t-online.de/finanzen/news/unternehmen-verbraucher/id_87236692/telekom-schliesst-jeden-fuenften-shop-in-deutschland-800-stellen-betroffen.html

³⁵ <https://www.dk-institut.de/mobilfunk/bester-mobilfunkanbieter-2021-2022/>





5. Challenges

A key challenge for several years now has been the commoditisation and heavy regulation of the industry's services. This will continue to create a high level of competitive pressure in the future, which providers will only be able to meet with innovation and/or cost reduction. This also explains the increase in price leadership by the "pure players", who benefit from the high affinity for technology of the younger generations.

Since service requests in the sector are usually quite simple, service agents do not need to be particularly highly qualified. This results in a comparatively low wage and price level. Data protection regulations allow advertising only with the customers' consent and therefore limit the providers' options.

The amendment of the Telecommunications Act in December 2021 will give customers new rights: they have the right to reduce and terminate their contracts if the bandwidth is low, and the notice periods for renewals of new and existing contracts have been shortened as well. In addition, contracts can no longer be concluded completely by phone; a summary of the presentation is required. On the provider's side, this requires a number of internal process changes.

6. Opportunities and potentials

New technologies such as RPA and AI are falling on fertile ground in the traditionally data-driven telecommunication industry. These technologies can be used to anticipate and solve increasingly complex service requests. Service, therefore, becomes a source of competitive advantage because it helps reduce churn rates and enables upselling.

In the B2B sector, new technologies such as 5G, IoT and EDGE computing are opening up new business areas. They have a significant impact on the industry, but not on customer service, which is the focus of this study.

With the amendment of the Telecommunications Act, existing contracts are no longer automatically extended by 12 months. Customers can terminate them within one month. Therefore, providers need to focus more on customers with expiring contracts; moreover, they can more easily poach customers with ongoing contracts.

Providers must also inform their customers annually about tariff optimisations. In this way, the legislator wants to prevent customers from being tied into expensive old contracts for too long. This will give providers with high-quality customer service and data-driven AI an advantage in the future, as they will be able to better identify the relevant customer segments and address them in a more personalised manner.





7. Practical example

“Ask Magenta”: From simple chatbot to solution system, even for complex problems

Practical example from Deutsche Telekom AG

Companies in all sectors are creating more and more web-based services. The maxim for action is “help for self-help”. After all, many customers want to solve their problems themselves. And they want to do so when they have the time, instead of being tied to opening hours and having to wait a long time on the phone for service staff.

Immense advancement

For simple concerns, questions and answers (“FAQ”) on company websites, search functions, chatbots, and live chats are suitable so that customers can help themselves. On the other hand, for more complex problems, they must first describe them precisely or know the appropriate search terms to find solutions. This can take time and be frustrating. To avoid this, Deutsche Telekom has designed a solution that allows customers to solve even complex queries via self-service. This solution is called “Ask Magenta”.

“Ask Magenta” started back in 2018 as a simple chatbot. Since then, Deutsche Telekom has developed the system immensely. Today, the solution can even resolve landline and internet TV faults. The bot is based on two integrated artificial intelligence (AI) instances and has natural language dialogue control and an input check.

If a customer calls (voice) or chats (written) about a problem with Magenta TV, for example, “Ask Magenta” can usually solve it completely without human assistance. If “Ask Magenta” cannot solve the problem, the customer is immediately connected to the appropriate employee. This takes a lot of pressure off the human colleagues.

Machine learning improves text recognition

Concrete example: A customer starts the dialogue on the Deutsche Telekom website via text chat (a customer who is already logged in gets a quicker and more personal start here) – and because he or she is connected to up to eight fault databases, the customer immediately has initial problem-solving approaches at hand.

To make it as easy as possible for the customer, “Ask Magenta” has entity buttons with predefined questions matching the customer profile. The order and content of the question modules are adapted in real time. Alternatively, customers can describe their concerns themselves.

Text recognition is based on natural language understanding, which is constantly being refined by means of machine learning and today recognises a large number of dialogues, including any spelling mistakes, abbreviations, etc. This is supported by Watson systems from IBM and – in the case of telephone speech recognition – dialogue systems from the company Nuance. Thanks to large data sets and Deutsche Telekom’s experience, the optimal dialogue design was introduced after only two months. More challenging was the connection to the legacy systems, which enable the bot to troubleshoot in the first place. This process took almost six months.



Remote maintenance also works automatically

In the past, customers first tried to find potential solutions to problems themselves – for example, via search engines or on the Deutsche Telekom website. Then they described their concerns to Telekom employees on the service hotline. It was often impossible for staff to deal with problems because they lacked the necessary competences and/or authorisations. Then they had to pass the customers on to other Telekom employees. Getting the right one was often a matter of luck. Even suitable routings could be associated with long waiting times for the customers. After all, the number of specialists who can carry out certain troubleshooting tasks is limited, even at Deutsche Telekom.

With “Ask Magenta”, on the other hand, the necessary authorisations are integrated so that the bot solves enquiries completely and usually without forwarding. Even remote maintenance is possible without human intervention. In the event of a fault, for example, the bot reboots the local router independently.

Excellent understanding even for business dialogues

Because “Ask Magenta” helps at any time and remembers enquiry histories, customers are independent of hotline operating hours and do not have to describe their concerns – after being forwarded – several times. In 2021, the bot answered enquiries in the mid single-digit million range and received an average of 4.5 out of 5 stars for its response quality. This puts “Ask Magenta” on par with Deutsche Telekom’s live chat in terms of quality rating, although the latter is attended to by humans who can (supposedly) respond to enquiries more flexibly and comprehensively.

The fact that “Ask Magenta” is a complete success is also due to the trained Natural Language Understanding (NLU). The bot completely understands and handles the majority of business dialogues. Deutsche Telekom customers also benefit from the bot system during peak periods because it is a reliable and highly scalable alternative to the classic service offering. “Ask Magenta” can process many enquiries in parallel – with consistently high quality. In this way, the bot keeps the backs of its human colleagues free so that they can concentrate on individual enquiries.

All this is one of the reasons why COMPUTER BILD and Statista have rated the solution as the leading digital assistant in the telecommunications industry for three years in a row.



Financial services

1. General market development

Outsourcing market volume growth of **5.8%** CAGR,
driven by demand growth of **2.1%** CAGR
and price increase of **4.1%** CAGR

Customer service in the financial services industry is strongly influenced by the increasing digitisation of services. Banks, for example, continue to close their physical branches and more and more customers are switching to online alternatives, partly due to the COVID crisis. The increased need for explanation of digital products is causing considerable additional work for providers. The need for customer service will also increase for digital payments in the medium term. In addition, many customers adjusted their insurance cover and financial investments during the coronavirus pandemic. For instance, the increased interest in securities generated many enquiries about opening a securities account at some providers, which sometimes resulted in considerable waiting times.

In the financial services sector, too, human service agents will mainly take on more complex tasks in the future due to the increasing automation of simpler service processes. This will increase prices and the demands on outsourcing service providers. Many companies see themselves under pressure from the market environment, low interest rates and increasing regulation of the already highly competitive market. Especially against this background, online tools can simplify customer service in a cost-effective way.

In the banking and insurance industry, new market participants such as FinTechs are increasingly causing greater competition. They offer customers disruptive solutions which put the customer service of traditional companies under pressure. Customer satisfaction is a key issue for the industry because its clientele is traditionally very willing to change. A certain degree of personal contact, desired by the customer, will therefore be maintained.





2. Maturity

Inside-out view

Banks

Banks are among the industries with the greatest digital catch-up potential. This is, among other things, due to the strong regulation of the industry (e.g., confidentiality obligations) and the fact that personal trust between bank and customer is essential.

However, banks were among the pioneers in the first wave of digitisation in the 1990s. The core banking systems that were changed back then have since become extremely complex and no longer fully meet today's requirements. Traditional banks in Germany still view cloud technologies sceptically, while pure online banks are much more open-minded.

Historically, services and systems in the banking sector have been largely unconnected. Gradually, however, a change in thinking can be observed. Banks are successively modernising their IT systems and landscapes. A growing number of FinTech start-ups are increasing the pressure on traditional providers in terms of customer orientation.

Insurances

The picture for insurers is mixed: service strategies are not yet defined in some companies. Nevertheless, customer service digitisation is on the agenda. In some cases, insurers have dedicated speakers/consultants/experts who work on digital topics and promote the exchange with other organisational units, especially marketing. While many insurers currently still rely mainly on manual processes in the back office, the first automations with RPA are already bringing noticeable relief. Many digital tools are already available to end customers. Nonetheless, many customers in the insurance industry value a personal, empathetic exchange with their insurer because they usually contact them in the event of a claim. Many customers therefore do not want a digital solution at all.

During the coronavirus pandemic, insurers lifted the obligation for their employees to be present in the customer centres. The industry has made extensive use of home office opportunities and implemented them quickly. Insurers are still below the overall average in upskilling initiatives and scheduling. However, the qualification of customer service employees is above average. In order to successfully solve complex issues, training and competence of employees are essential.

Forecasting and capacity planning systems do not yet work in real time and in an automated way for many providers. However, training and development opportunities are being expanded throughout the pandemic. Insurers do not yet use performance metrics to their full extent: they do determine KPIs on a daily basis, but not yet in a fully automated and dynamic way. The first dashboards, for example, are mapped via Power BI.

Some insurers do not yet work with CRM systems today but receive customer information and contact histories mostly from non-integrated inventory systems. This is also due to the fundamentally rather low contact frequency between customers and insurance companies.

Due to the separation of internal and external business at insurers, there are sometimes separate SAP systems, which prevent a 360° customer view. Instead, with the exception of pure online providers, personal contact employees from the field service team are traditionally the most important, since they usually build up and maintain the customer relationship over many years. The very good 24/7 customer service, which is already standard in the industry, should be emphasised. Generally speaking, insurers are generally very accessible to their customers in the event of a claim.



Outside-in view

Banks

From the outside-in view, the banking industry has potential for development compared to the overall industry average. The industry clearly focuses on traditional channels, but these are well developed and established. Hotlines are available around the clock every day – mainly for emergencies such as card blocking. Proactive service, on the other hand, usually only consists of a notice about a new account or a change in the terms and conditions. Overall, banks only provide such information if they are required to do so by law or by the Federal Financial Supervisory Authority (BaFin). However, digital offers such as video identification and electronic signatures have contributed to the fact that application processes for some products no longer take several days, but a few minutes.

Insurances

The insurance industry has an above-average level of maturity in some categories, for example service speed. If customers have to wait a minute, this is sometimes considered long. 24/7 contact options are the rule rather than the exception. The channel expansion or optimisation, for instance through voice- and callback bots, is on the agenda of all respondents. Insurers are already strongly focusing on case-closing processing, which they achieve by collecting information centrally. In the 24/7 marginal area, however, case-close processing is not always possible. In terms of user-friendliness, start-ups in particular are industry pioneers, while traditional insurers are often still lagging behind in this respect.

Some providers do not yet fully exploit the “lead potential in customer service” because internal and external business activities are often strictly separated. As a rule, customer service does not proactively draw customers’ attention to other insurance options, although the necessary information is available. Customer sovereignty lies with the sales department, while customers partly do not want full advice or cross – and upselling activities via customer service. As a result, personal, situational service scores the worst here compared to other categories.

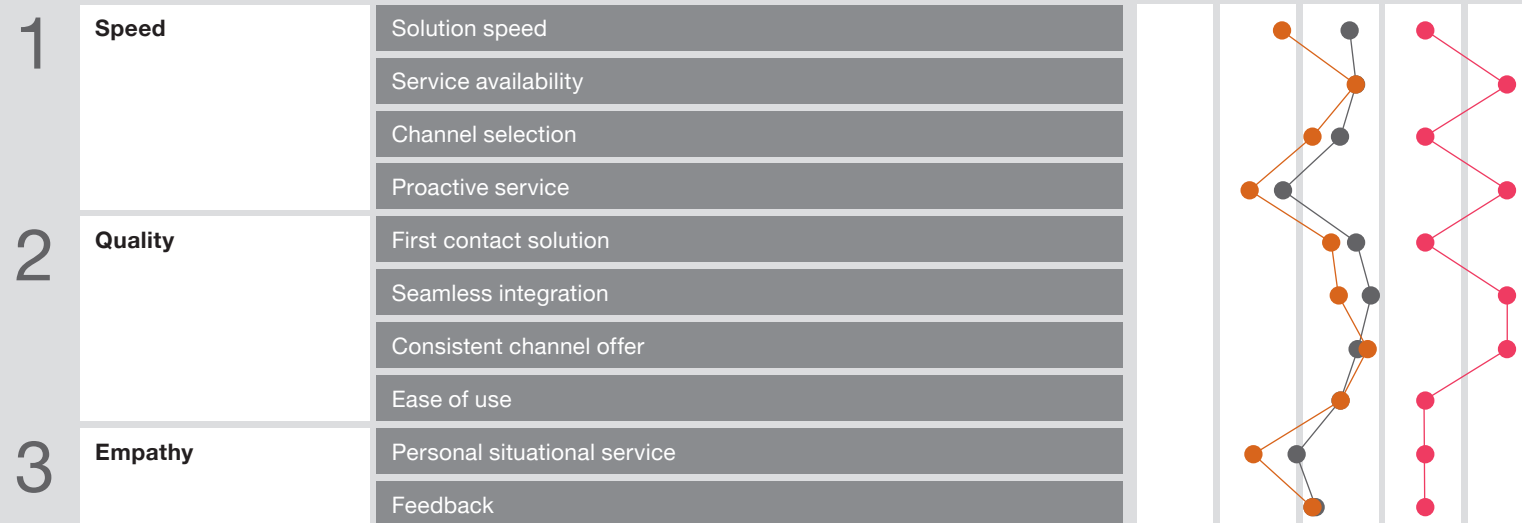


Fig. 24 Overview of digital maturity of financial services, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

Banking

For traditional banks in particular, the coronavirus pandemic has acted as a digitisation accelerator. Due to the “lockdown” in Spring 2020, institutions had to switch from branch to online service or telephone advice practically overnight. In order to serve customer enquiries, branch employees partly took over the tasks of those working in customer service. Digital solutions such as video counselling and co-browsing enable comprehensive digital consultation and have been implemented at top speed.

Direct and digital banks such as N26 also recorded strong customer and volume growth, especially in securities trading. During the pandemic, bank customers became more involved with shares and in some cases dared to take their first step on the stock market. The demand for advice on investment products and digital share portfolios has therefore increased significantly. This trend has once again been greatly accelerated by the introduction of negative interest rates.

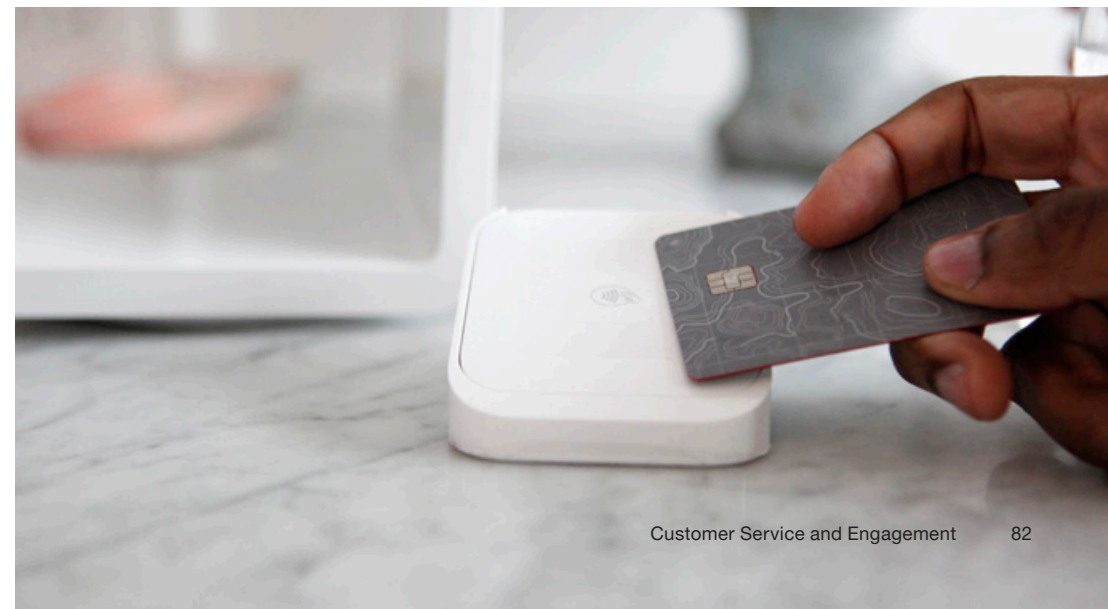
Insurances

The pandemic has accelerated issues in the insurance industry that were already preoccupying it before the crisis, such as automating manual workflows, bringing together fragmented technologies as well as optimising data sourcing and use. However, Covid-19 has also brought about new issues with a clear customer focus. Before the pandemic, about 90%³⁶ of new business was concluded through personal customer contact with an insurance intermediary. At times, this personal contact was completely eliminated, so insurers had to quickly replace it with digital technologies.

On the customer side, Covid-19 was a reason for many people to think about what they value, what they want to insure, and how they feel they are treated by their insurance company. These and many other topics such as digital sales, direct customer contact, automated advice, digital underwriting, and automated claims settlement are at the top of insurers’ agendas.³⁷

4. Industry specifics

The financial services industry is divided into two sectors: banking and insurance. Compared to other sectors, customers here are still quite reluctant to use digital channels. They prefer to take out insurance, loans, or investments via brokers or a personal bank advisor. The traditional companies have been under pressure from FinTechs and online banks for some time, but Covid-19 and the shift of many activities to the digital world have intensified this pressure. Digital customer interfaces have become indispensable – especially as customers are now used to a personalised customer experience from other digital companies.



³⁶ GDV Keyfact Booklet (2019) Facts about the German Insurance Industry

³⁷ PwC (2021) Interview with Insurance Leader Mathias Röcker (2021)



5. Challenges

Increasing digitisation and changing legal frameworks are challenges for the financial industry. The most important are:

From offline to online counselling

The coronavirus pandemic has further strengthened the trend towards online counselling. Whereas previously the focus was on personal customer contact, around 90% of physical counselling sessions had to take place digitally. In particular, the availability of data, also from the home office, was a major challenge for customer care. Digital tools, for example for co-browsing, had to be easily usable for clients and meet regulatory requirements.

Customer service had to do a lot of educational work in the financial sector, as it was mainly the technically unsophisticated groups that switched from offline to online advice at that time. The same trend could be observed for payment via smartphone. In addition, customer service from banks had to serve a significantly higher service volume during Covid-19. This was also due to the fact that many customers were dealing with their financial investments.

Manual processes

The financial services industry still has many immature, manual processes in the back office. Manual direct debit procedures, invoicing and other forms that have to be filled out tie up a lot of capacity and have a negative impact on customer satisfaction. Customer portals are also not very user-friendly and often do not yet meet the demands of the digital world. Simple tax office confirmations, for example, cannot be printed out automatically in some cases.

Market entry FinTechs

Another challenge the financial industry is facing, is the increasing number of start-ups and FinTechs offering disruptive solutions to their (potential) customers and putting noticeable pressure on existing companies, particularly within the field of customer service.

Legal framework and data protection

Perhaps the biggest challenge for the industry is still to provide a high-quality service to its customers, despite restrictive regulatory frameworks in data protection and data security. Further cost drivers are to be expected here. The Financial Markets Directive MifID, which came into force at the beginning of 2018 and expanded the documentation requirements for banks and insurance companies, has caused significant costs for many institutions. This has prompted some to use voice recognition, for instance, to reduce costs.

Due to GDPR, the industry is currently facing the challenge of not being allowed to use the digital input channel of a customer's service request as the output channel. This system break generates high volumes of negative customer feedback because it increases the response time. A major challenge along the insurers' service customer journey lies in (add-on) offerings. The industry is not geared towards cross- or up-selling initiatives because the sales partners have customer sovereignty. As a result, there is hardly any interest in proactively making offers to customers, which means that many efficiency improvements remain untapped.



6. Opportunities and potential

Financial services providers are required to update relevant customer data on a regular basis, at least every two years for high-risk bank customers. AI-based chat functions in customer service could check this in high volumes and implement possible changes. This would eliminate the need for manual queries and adjustments.³⁸ Intelligently used voicebots could provide the necessary two-factor authentication and help to avoid system breaks. In this way, documents and responses from customers could be viewed before they are received postally. This would shorten waiting times and minimise queries. In cancellation prevention, AI can be used to identify valuable customers with the intention to cancel and provide them with targeted, suitable offers.

The majority of German customers prefer personal advice independent of conventional opening hours as well as services that go beyond standards such as online banking. Chat-based service is a reasonable solution here. Thanks to machine learning and AI, chatbots are able to send automated reminders to private customers about their bank account or notice periods, in the case of savings investments. In addition, the analysis of account transactions makes it possible to make personalised recommendations for suitable financial products. Such individualised, time and location-independent services potentially increase customer satisfaction and loyalty. Chat offers also reduce correspondence and branch visits, which could free up service staff for other, higher-value tasks. Ideally, everything can be mapped digitally and initiated via a customer portal, from making appointments and video chat consultations to signing contracts.

Branch closures also increase the need for video-based customer advice, which Excellence Centres, for instance, could provide at a high level. For example, experts would advise customers exclusively on the product they want. This would reduce costs and at the same time increase the quality of advice. It remains to be seen whether the traditionally more conservative financial service providers will actually use such opportunities. It should also be considered that an increasingly digital-oriented way of doing business potentially increases the risk of fraud. Tools such as electronic signatures or video legitimization can mitigate these risks.



³⁸ PwC own article (April 2020)

Digitisation enables insurers to be in direct and more frequent contact with their end customers



Robert Mulatz
Managing Director Bosch Service
Solutions GmbH

With the help of digitisation, insurance companies are getting closer to their customers than ever before. With increasingly efficient and faster digital processes, they can improve the entire customer journey. Digitisation enables insurers to be more direct and supports frequent contact with their end customers, especially through automated self-service portals with omni-channel capabilities.

If insurance companies integrate these digital processes into their workflows, they can process customer enquiries more quickly and offer their customers tailored, personalised and, in some cases, completely new products and services. To do this, they must have access to state-of-the-art technologies such as omnichannel platforms, data analytics, and automation using RPA and AI-based tools. These contribute to a significantly better customer experience – a decisive and, in the future, important competitive advantage in the insurance industry as well.

The Internet of Things (IoT) is also driving digitisation, especially in building and motor insurance. Interconnected buildings, devices, and vehicles provide valuable information that enables optimised and individual risk assessment. Therefore, customers benefit from dynamic and customised insurance models.

In cooperation with various partners, different ecosystems with transparent data use can be created. A 'mobile life' offering, for example, would combine the data

- of a car manufacturer (configuration and ordering of a vehicle),
- of a financial institution and
- of an insurance company (e.g. for pay-as-you-drive policies and automatic claims processing based on data received from sensors in the vehicle in the event of an accident).

A similar approach could be applied to health services, for instance, personalised services such as telemedicine, health- and/or lifestyle advice and benefit the management.

As a result, both sides benefit from integrated ecosystems, since policyholders always receive a pleasant, effortless customer experience and insurance providers benefit from significantly greater efficiency.



7. Practical example

Insurance

CX expertise at Bosch: Digital breakdown and accident assistance for insurance customers

Practical example from Bosch Service Solutions GmbH

In 2019, an insurance company commissioned Bosch Service Solutions GmbH to implement digital Roadside Assistance (dRSA), which the insurance company offers for a fleet of company cars. The fleet includes more than 10,000 vehicles. The insurance policy also includes a breakdown and accident assistance service. However, the quality of the service did not always meet the demands of the users as well as the company that took out the insurance policy for the fleet. A frequent point of criticism were the long waiting times in case of breakdowns and accidents.

Time-consuming, manual processes

The main reasons for bad customer experiences were slow, inefficient processes on the insurer side and insufficient transparency about waiting times and processing statuses. Usually, a breakdown or accident report went as follows: The concerned drivers reported the case to the insurer. The insurance company's service staff then asked the person concerned for details about the breakdown. These calls were handled manually. Employees obtained all relevant information individually in exchange with the driver, the breakdown service provider, and, if necessary, with towing services. Information such as driver and vehicle data, damage specifics, towing service availability, or nearest repair shops was collected and the received information was entered manually into the claims processing system. All this took considerable time.

With the help of Bosch Service Solutions and its core competencies in process digitisation, its service design approach and digital roadside assistance, the necessary roadside assistance was to be digitalised from the ground up.

Digital from start to finish

Today, the roadside assistance for the insurance customer's fleet of company cars has been completely digitalised – from reporting the damage to invoicing. This saves valuable time. The technology required for this is based on the Bosch Mobility Service Platform.

Today, when drivers call the insurer in the event of a claim, they reach a voice selection, e.g. an automated Interactive Voice Response (IVR) system.

This offers various damage reporting options, such as reporting an acute breakdown. Once they have made their selection, they receive a link via text message to a web form in which they enter data relevant to the report, such as vehicle and driver data, and possibly photos of vehicle damage, etc. Bosch Service Solutions employees receive the completed forms as well as the automatically determined location data and request appropriate assistance from the contractual partners (roadside assistance providers or towing services).

Integrated service providers

Fully digitalised processes run in the background. If the causes of breakdowns or vehicle damage cannot be repaired on site, the order data is transmitted to an integrated towing partner network. The next available towing service provider accepts the orders digitally and carries them out.

Thanks to the digital system, the response time is not longer than six minutes. The drivers concerned are directly informed of the expected arrival time of the towing service via text message. With the help of digital processes, waiting times have been reduced by up to 75% – whereas previously the process took two hours, this has now been reduced to around half an hour.



Complex made usable

Bosch Service Solutions developed the employee front end of the software, the SMS solution as well as the interfaces to the insurance customer and partners and web forms. For the new breakdown and accident assistance system to be easy to use, complex links were necessary in the background. For example, the system has to take into account whether the insurance customer's affected vehicles still have factory warranties and have to be towed to brand workshops or to certain workshop partners of the insurance company.

The system also takes other specifications into account. For instance, it informs towing services digitally if special arrangements are needed for the transport. For example, a higher hook load insurance should be taken out for particularly high-value vehicles, or the transport of automobile prototypes should take place undercover.

Significantly higher customer satisfaction

Thanks to the digital processes, the fleet's drivers can now submit their feedback on the policy as well as the breakdown service digitally. The information can be evaluated more easily and used to further improve the processes – this further contributes to improved customer satisfaction. Bosch Service Solutions implemented the project in just eight weeks, largely thanks to its proven mobility service platform. In the case described here, the digital Roadside Assistance has been running since September 2019 and has been continuously optimised and expanded since then.



Financial service provider

Flexperto at MLP: Efficient online consultations with added value

Practical example from Flexperto GmbH

For MLP, one of the leading financial services providers in Germany, competent consulting and intensive client care are at the heart of the company's activities. Against the backdrop of rapidly advancing digitisation, MLP saw a need for action with regards to its own consulting offering and the expansion of its consulting channels.

Establish mobile online counselling

MLP wanted to create a hybrid model for consultant jobs and establish online consulting alongside analogue consulting. The latter should, among other things, provide more flexibility, e.g. independence of location for counsellors and clients, and also be interesting for new potential target groups. To achieve this, digital solutions for online appointments and Mifid 2-compliant records of counselling sessions were needed. In addition, the offer had to be modular and the change from offline to online counselling had to succeed quickly.

In a sprint to the prototype

For this purpose, selected divisions first determined their technical and professional requirements for customer communication. In addition, they had to evaluate restrictions and find robust solutions.

This has been achieved – with Flexperto, a software provider for digital B2C customer communication and collaboration. In the first implementation step, the partners completed a joint “sprint week”. The week consisted of workshops in which all important stakeholders – IT, consultants, branch managers, and data protection/IT security officers – jointly planned the complete implementation. This is how a prototype of the desired online counselling format came into being.

Rollout after a short pilot phase

The participants then developed a customer success plan for the introduction of the Flexperto software into the MLP consultant network, including onboarding and training. In the sprint workshops, the participants dealt with all questions relating to IT security and data protection, network and infrastructure, platform setup, integration into CRM, rollout as well as training and support concepts for MLP users.

The workshops were followed by a three-month pilot phase in which six branch offices and around 100 counsellors used the new tools for online appointments and online counselling. Since the counsellors and clients alike accepted the solutions positively, the complete rollout in the head office and all branches was completed at the beginning of 2020.

All communication via the cloud

All client communication now operates in MLP's Communication Cloud. It ranges from making appointments and digital consultation (also via video) to filling out documents together and concluding contracts digitally with the legally compliant e-signature³⁹. Since Flexperto is 100 per cent web-based, MLP can advise its clients online without them having to install extra programmes or download documents on their computers or smartphones. The entire counselling operation runs in a complex Citrix environment.

In addition, Mifid 2-compliant records were important to MLP. These were introduced in 2021. The Flexperto system records and transfers the records to MLP via an interface. MLP then archives them in a Mifid 2-compliant manner.

Up to 24,000 online consultations per month

MLP consultants now conduct up to 24,000 digital consultations per month. MLP Chief Sales Officer Oliver Liebermann says: “We stand for great proximity to our clients and comprehensive consulting in all financial matters. The online formats help us to keep our performance promise even in the digital age. Flexperto's agile way of working is a good fit for MLP. Together we will continue to further develop our clients' online consulting.”

³⁹ The legally compliant e-signature is provided by a third-party provider.



Insurance

Automation in the contact centre: Software robots improve the service business

Practical example from NICE Ltd.

A UK-based insurance company offers a wide range of products and services. Its products include motor, household, commercial and taxi insurance. For service purposes, it operates a contact centre in England with around 450 employees. The employees there have up to 2.4 million contacts with customers per year.

The insurance provider initiated a major transformation project to optimise the contact centre's workflows, performance, and engagement. To do this, it needed to move from its previously individually developed disparate process software platforms to a single, comprehensive third-party workforce management (WFM) solution.

Robots automate work processes

The biggest challenge was to adapt the various individually developed business processes to standard WFM functionalities. The tight implementation schedule predicted the transformation project was to be successfully completed within nine months – which increased demand even further. The team responsible for the transformation decided to simplify, automate, and therefore improve as many structures and processes as possible together with the departments involved. The main goal was to automate repetitive, time-consuming work processes in the contact centre. To do this, they relied on Robotic Process Automation (RPA), specifically on robots from the RPA specialist NICE that support the employees (operated) and work autonomously (unoperated).

“Winston” gets better and better

This led to significantly reduced processing times for insurance customers' concerns – and quality improvements at the same time, especially because the error rate of the employees dropped significantly. However, the insurance provider and NICE wanted more. Next, the insurance provider implemented the latest version of NICE Advanced Process Automation (APA). With this step, further infrastructure problems were fixed and the solution toolkit was expanded. The next step was to further harmonise the processes of the APA platform with those of the contact centre teams. After all, the APA solutions had to fit real-world requirements.

To ensure this, contact centre staff worked directly with the development team. They specified their needs, collected ideas for even more efficiency, further optimised automated processes together with the developers – and received training for a better understanding of automation.

Their constant feedback improved the automation programme further. Soon it was rolled out to the entire contact centre. The roll-out was designed in such a way that further adjustments could be made during the implementation. This allowed the automation to be further tailored to individual contact centre teams. They now always have the right information at the right time in the customer journey. The staff even gave the automation programme a name: “Winston”.



Faster processing and more engagement

“Winston” has paid off – for the employees in the contact centre and the customers alike. Calls from existing insurance customers are now more than 50 seconds shorter on average, and conversations with new customers are around three minutes shorter. In total, the insurance provider now saves annually the cost equivalent of 40 full-time employees with “Winston”. Despite this saving, the use of software robots increased the capacity of the contact centre, which can now handle almost 7,800 additional calls per month.

All information always at hand

Those involved in the transformation and the CEO of the insurance company praise the programme, customers give positive feedback and the Net Promoter Score (NPS) has increased by eleven percentage points from 32 to 43. This improvement is mainly due to the fact that the agents now have the right information for the required actions at hand more quickly. Therefore, they can focus more on their interaction quality. Before “Winston”, they also had to deal with procedural issues and search for basic customer information during interactions.

The company believes it can further increase its efficiency through increased automation and plans to continue to engage its contact centre staff to maximise the benefits of automation to provide the best possible service.



Public sector

1. General market development

Outsourcing market volume growth of **7.0%** CAGR,
driven by demand growth of **7.3%** CAGR
and a price increase of **0.7%** CAGR (2019–2024).

For some time now, the German government has been focusing on the digitisation of the German public sector. This will have a fundamental impact on the range of services and the provision of administrative services for almost all citizens and companies. A prominent example of a nationwide, large-scale digitisation project is the Online Access Act (OZG), which came into force in 2017. It states that by the end of 2022 almost 600 administrative services are to be digitalised. In addition to the traditional analogue way, such as in citizens' offices, they must also be available to citizens electronically, from the application to the final decision. This is a truly mammoth task for the administration – and an enormous improvement in service for the users.

In this context, a trend towards outsourcing contact centre services is clearly visible in the public sector as well. In numerous projects, the public administration is already using external service providers – and the trend is increasing. The coronavirus pandemic has once again increased the need for, and acceptance of, digital services by citizens. This is good news for BPO companies and the costs of service outsourcing. In the medium term, these are likely to adjust to the level of other industries.

Strong projected growth until 2024

The public services sector tends to be the most subject to political influences of all the sectors considered in this study. It is currently unclear, for example, to what extent the further digitisation efforts enshrined in the coalition agreement after the 2021 federal elections will affect public administration – and how quickly the new government will implement them, in addition to the projects already in progress.





Covid-19 also had – and still has – a strong impact on public services. New citizen services and tasks, for example contact tracing, coronavirus information hotlines etc., were added in a very short timeframe. They had to be flexibly adaptable at any time, for example in the case of changes to the Corona Protection Ordinance and to the derived local measures.

The sector has covered the resulting need for additional staff both internally and externally. Pandemic-related services will disappear in the medium term, which should then also be reflected in the market volume. However, in the long term, the public sector will become more important and, after healthcare and financial services, will develop into one of the industries with the highest demand for customer services by 2024.

2. Maturity

Inside-out view

The inside-out analysis of public services shows a below-average level of maturity compared to the other sectors examined. In the categories “Service performance and measurement” and the “provision of innovative service technology”, differences and, in some cases, a need to catch up with other sectors are evident. It should be noted, however, that public administration cannot implement digitisation measures and other structural changes that have a direct impact on service provision as quickly as other sectors due to various laws and regulations.

For instance, it is still not possible to introduce an overarching customer relationship management system because the individual institutions of the public sector do not or are only allowed to exchange personal citizen data to a limited extent, especially not digitally. In the course of the coronavirus pandemic, for example, some municipalities still struggle to pass on the data of infected persons to the health authorities; this is often still done by fax, and the data must be transferred manually. In contrast, the analysis results in the category “Digital Recruitment and Empowerment” is above average. This is mainly due to the strict guidelines for determining staffing requirements, on the basis of which requirements and competence profiles for individual positions in the citizen service are clearly defined and only appropriately qualified staff are deployed.

In the overall view of the public sector, digital customer and citizen service is most pronounced in the entrepreneurial public sector (e.g. in transport companies as well as utilities and waste disposal companies). This is reflected, among other things, in the variety of channels and other service options. However, these companies have more freedom to design their service offers than the administration. It is much easier to buy an annual pass from a transport company than to apply for an official document. In the latter case, the legally regulated processes must be strictly adhered to. Citizens often have to go to the citizens’ office in person for such procedures.

Outside-in view

In contrast to the inside-out view, the public administration scores above average in the outside-in view in a sector comparison. In the category “Quality”, the available (digital and analogue) services received a high rating. This is partly due to the fact that the optimal use and the necessary user orientation of services are analysed and tested in a very extensive planning process before they are introduced, for example through so-called digitisation laboratories.

In addition, the public sector does not focus on optimising costs when offering services, but instead on ensuring the services can be used, understood and accessed by all citizens and applicants without barriers. Established technologies and applications are often consciously used for this purpose.

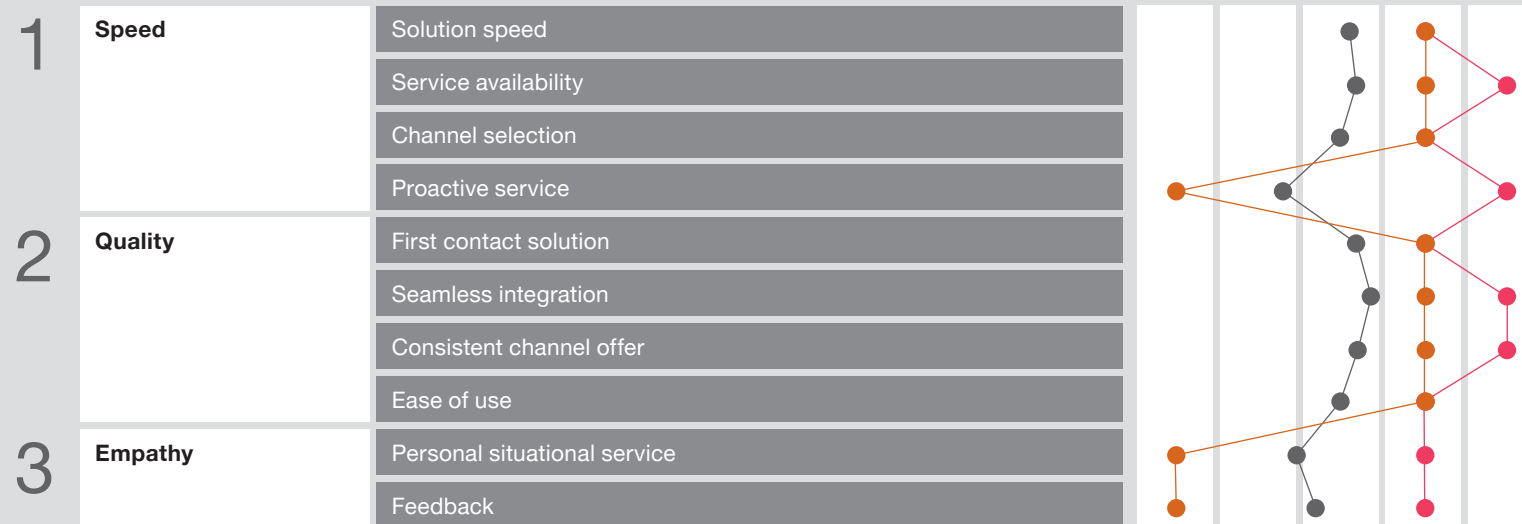
In the dimensions “empathy” and “proactive service”, however, the maturity levels are below average compared to the other sectors examined. This is partly explained by the fact that certain service aspects that could ensure a higher overall rating in these categories are not implemented or only implemented to a lower extent. One example is the personalised approach to users. In addition, some administrative services are compulsory for citizens, for instance when they change their residence. The associated administrative services and public services offer little scope for goodwill because deadlines and procedures are precisely defined by law. The conditions here are therefore fundamentally different from those in the private sector.

Fig. 25 Overview of digital maturity of the public sector, own illustration

Inside-Out



Outside-In



■ Virtual Star
 ■ Average
 ■ Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

The coronavirus pandemic had a strong impact on customer service in the public sector in Germany. While all other sectors mainly moved their employees to home offices, the public sector was not able to let employees work from home on an ad hoc (technically) well-equipped basis. In addition, some administrative processes currently cannot be carried out remotely because citizens have to appear in person at the competent authority for some services; applications and processing then take place in direct contact with the respective processor. Due to public health safety measures and limited on-site availability of the necessary staff, applicants have had and continue to have longer waiting and processing times, as fewer appointments are possible and the associated work processes have become more complex.

Another major challenge was the increased service demand due to Covid-19 for, among other things, infection tracking and information provision. Citizen hotlines are operated by the public sector in some federal states, while in others they are outsourced to external service providers.

In Lower Saxony, for example, the volume of contacts on the Corona hotline was much higher than expected; even large, experienced service providers had difficulties in dealing with them for the first time. In the second half of 2021, citizens had less need for information and the experience with the hotlines made it possible to deploy staff in a more demand-oriented way.

The new digital services and measures offered as a result of Covid-19 – in particular digital vaccination certificates and the Covid warning app – clearly show that citizens are now more accepting, using and demanding digital services from the public sector.

4. Industry specifics

Public administrative services in Germany are provided by salaried and civil servant employees. These are distributed among the Federal Government, the Länder and the municipalities. When offering services, there is an obligation to provide them. This is based on various laws and ordinances. In addition, the focus is on inclusion and the provision of services that are as comprehensive as possible. Monetary targets do not exist, with the exception of the entrepreneurial public sector. This means there are also very specific service offerings such as the sign telephone, a hotline for hearing-impaired and deaf citizens, or application channels in simple language. The provision of administrative services is still mainly done by analogue means. Measures such as the OZG contribute to making digital services more accessible.





5. Challenges

- Service delivery in the public sector is very different from other sectors. Whereas in the private sector customer service is primarily established to achieve customer satisfaction, service in the public sector is based on legal principles and must be fully accessible to all.
- Digitisation is currently one of the greatest challenges. Other European countries, such as Estonia, have shown how quickly administrative digitisation is possible in principle. For Germany, there is still a lot to do; the scope and speed of implementation depend heavily on the corresponding initiatives of the federal government elected in 2021 and measures derived from them.
- Other essential challenges that strongly influence digital service delivery in the public sector are:
 - **Strict legal framework:** In the public sector, customer service is generally subject to special regulations. Due to strict data protection regulations, the public sector cannot use some tools, like overarching CRM systems, in the same way as private sector companies. Therefore, they often have to forego the resulting benefits for all users. In addition, because of the applicable budgetary and procurement law requirements, contracts with service providers are associated with a certain processing time. The public sector often cannot commission them ad hoc.
 - **Delimited responsibilities:** The federal structures and different responsibilities in the public sector, which are also regulated by law, mean that individual authorities do not cooperate or only cooperate to a limited extent. Data can only be processed with difficulty. Synergy effects are lost as a result, and possibilities for standardisation and user-friendliness are limited.
 - **Service-orientation:** Service provision in the public sector is usually not based on service-orientation, but is designed on a legal basis, especially with regard to the time scope, documents supplied, attendance requirements, etc. However, long waiting times and inflexibility in the process do not match the service expectations of many citizens who are used to a different service promise from the private sector – and increasingly expect the same from the public sector.
 - **Lower acceptance of innovation:** The public sector attaches great importance to stability and security in technical systems. This also applies to digital tools and applications. The public administration therefore generally implements innovations later than the private sector due to long procurement chains and testing paths.

6. Opportunities and potentials

The public sector has certainly not been a pioneer in the digitisation of service delivery in the past. However, examples such as the OZG show that the legislator has taken up this challenge. The coronavirus pandemic has also created additional momentum and acceptance among citizens. It can therefore be assumed that public services will be expanded to include many digital offerings in the coming years.

Services in the public sector must be digitally accessible to all citizens and applicants. This presents significant challenges, but at the same time offers enormous potential: accessibility for all people ensures constant demand and offers good (outsourcing) opportunities for technology providers and service providers with broad solution portfolios. For cloud-based services, for example, SAP and Arvato are currently positioning themselves with the offer of a “sovereign cloud” specifically for German authorities and ministries.⁴⁰

The automation potential of (sub-)processes using RPA or OCR, for instance in automatic text recognition, in the public sector is also great. And with RPA, efficiency can be increased without changing the core systems of the administration from the ground up. It is also to be expected that once established, RPA solutions will remain in use for a long time, because the conversion of the administration's core systems takes time. Therefore, these solutions are interesting for both sides – for the public sector as a user and for solution providers.

⁴⁰ Handelsblatt (2022) SAP and Arvato launch cloud platform for public authorities
<https://www.handelsblatt.com/technik/it-internet/datendienstleistung-sap-und-arvato-starten-cloud-plattform-fuer-behoerden/28034906.html?ticket=ST-9154003-XgdL5hMrPVaavTac5dE3-ap1>



7. Practical example

Administrative digitalisation picks up speed: Applying for a driver's licence by smartphone and more

Practical example from PwC Germany

Hardly any free appointments, long waiting times, everything analogue: Anyone who has ever wanted to change their residence in Germany knows how tedious it is to apply for this at the citizens' registration office. This is just one of many examples of how Germany performs relatively poorly in the digitisation of administrative services in international comparison. This is supposed to change with the implementation of the OZG. However, it entails considerable strategic, organisational as well as IT architectural and technical challenges:

- **Strategic:** Create acceptance among citizens, businesses, and administration, lack of planning capability, municipal self-administration, establish support mechanisms for structurally weak municipalities.
- **Organisational:** High complexity of individual projects, excessive number of services to be developed, unclear responsibilities and processes at federal, state, and municipal level, lack of human resources in the public sector.
- **IT-architectural/technical:** Heterogeneity of IT, lack of standard interfaces, consistency and performance as well as data protection and IT security

Holistic implementation with partners

In order to master this Herculean task and provide functional, digital services for citizens and businesses on time, all federal levels are supported in various projects by diverse external companies – PwC also supports in several federal states. One PwC project is presented hereafter:

Since March 2021 until the end of 2022, an interdisciplinary PwC team has been supporting a client in a holistic OZG implementation. In doing so, we are working together with the client, various stakeholders of the state administration as well as other consulting firms and IT service providers. We collaborate on the following aspects:

- Inventory of the implementation of digital services from other countries and organisations (incl. implementation status assessment, implementation analysis and implementation prioritisation)
- Definition of an implementation strategy (incl. implementation and operating model for each online service, definition of architecture and IT security standards, identification of implementation alliances with other federal states).
- Operational support and holistic management of the programme in the federal state for the implementation of the OZG services within the agile SAFe methodology
- Support for process digitisation through Federal Information Management (FIM)
- Providing expertise on country-specific legal frameworks
- Linking and creating exchange formats for the stakeholders involved (e.g., federal and state ministries as well as subordinate authorities, other states, municipalities, and municipal umbrella organisations as well as IT service providers)

We support the client in process digitisation, for which the client is responsible according to the distribution of tasks in the OZG implementation, as well as in the after-use review of digital solutions provided by third parties.



Using more services faster

Thus, together with the state, we have already created significant added value and brought about positive changes, including the following:

- Administrative activities are recorded as processes and mapped digitally in compliance with the applicable law.
- Citizens and businesses can use more and more administrative services online.
- By accompanying the subsequent use of online services of other federal states, end users can use digital administrative services more quickly so that the implementation of the OZG can be completed on schedule.
- The digital administrative services are user-friendly, barrier-free, and data protection-compliant. They also meet various service standards.
- The online administration offer is constantly being further developed.
- Agile planning corresponds to modern programme management in public administration.

Driver's licence application and more from the comfort of your own home

Until now, millions and millions of people, especially young people, went to the driver's licence office to make an application. In the future, this will no longer be necessary, because driver's licence applications can be applied from home or other locations using any internet-enabled device.

Citizens usually submit such applications via a state portal. From there, they are transmitted to the responsible municipality, which processes the applications. There are various options for payments. In order for them to work smoothly, the entire process must be completely recorded, mapped, and digitalised. Due to the division of tasks, this is done by one federal state and then they make the service available to the other states for subsequent use.

In this project, we supported our client in aligning the service with the specific requirements of the state, connecting it to the so-called specialised procedures in pilot municipalities and linking it to the service account of the citizens. The result: citizens save themselves the trip to the driver's licence office, are flexible in terms of location and time – and simply receive their driver's licence by post.



Healthcare

1. General market development

Outsourcing market volume growth of **9.1%** CAGR,
driven by demand growth of **5.5%** CAGR
and price increase of **3.9%** CAGR

We expect BPO services in the healthcare sector to grow more strongly than in all other analysed industries by 2024. The healthcare sector will then also account for the largest market volume. The expected strong increase in demand for services is mainly based on new business models that will emerge as a result of the Digital Care Act; in addition, new market participants are developing new e-commerce strategies. The increasing cost awareness of customers is strengthening the outsourcing trend. In addition, there is solid overall industry growth – and the fact that customers are increasingly willing to disclose health-related data.

In the healthcare industry, digital advisory services such as telemedicine and telediagnosics are on the rise. The digital treatment pathway – from mobile check-in to discharge management and e-prescription to patient-reported outcome – is already possible today, but not yet a sector standard.

At the same time, the sector is increasingly focusing on customers. A central telephone number, for example, is intended to help them get on-site appointments more quickly. In the meantime, the on-call service of panel doctors also offers telemedical counselling.

In the medium term, AI will play an even greater role in the healthcare industry than it does today. One of many examples are AI-based applications that support human staff in diagnosing diseases and choosing the appropriate type of therapy.





2. Maturity

Inside-out view

In the study, we focused on statutory health insurers (SHI). Their overall level of digital maturity is below average. While most large SHIs have already developed a digital strategy for customer service, smaller market participants are mostly still at the beginning. In the aspects of digital service delivery and service development, the healthcare sector scored among the best. In the category of service organisation and personnel, the sector is also facing a transformation towards automation and digitisation. In process automation, its maturity level is already somewhat established. There is particular room for development in the service performance and measurement category; very few health insurance companies use centralised dashboards, often still analysing data manually. Overall, the sector is working on providing more digital services in order to gain a 360° view of patients. Therefore, many SHIs are currently starting to identify relevant groups of people, and in some cases, they are also using new tools to provide a seamless service experience.

Outside-in view

Against the criteria of speed, quality, and empathy, the picture is mixed. Especially where speed is concerned, the results in terms of speed of solutions, channel selection, and proactive service are average, while service availability is below average and shows the lowest maturity level of all sectors. This is primarily due to the fact that health insurance companies do not provide a regular telephone service outside their opening hours.

With regards to quality, the maturity level is above average because many concerns are already solved within the first interaction and channel integration works quite seamlessly. The only downside is an inconsistent channel offering due to limited synchronicity within processes and a lack of data transfer for self-services.

The level of maturity in terms of the empathy score is also slightly below average; here, only initial approaches to personal service and customer feedback can be observed – overall, there is still significant potential for improvement.

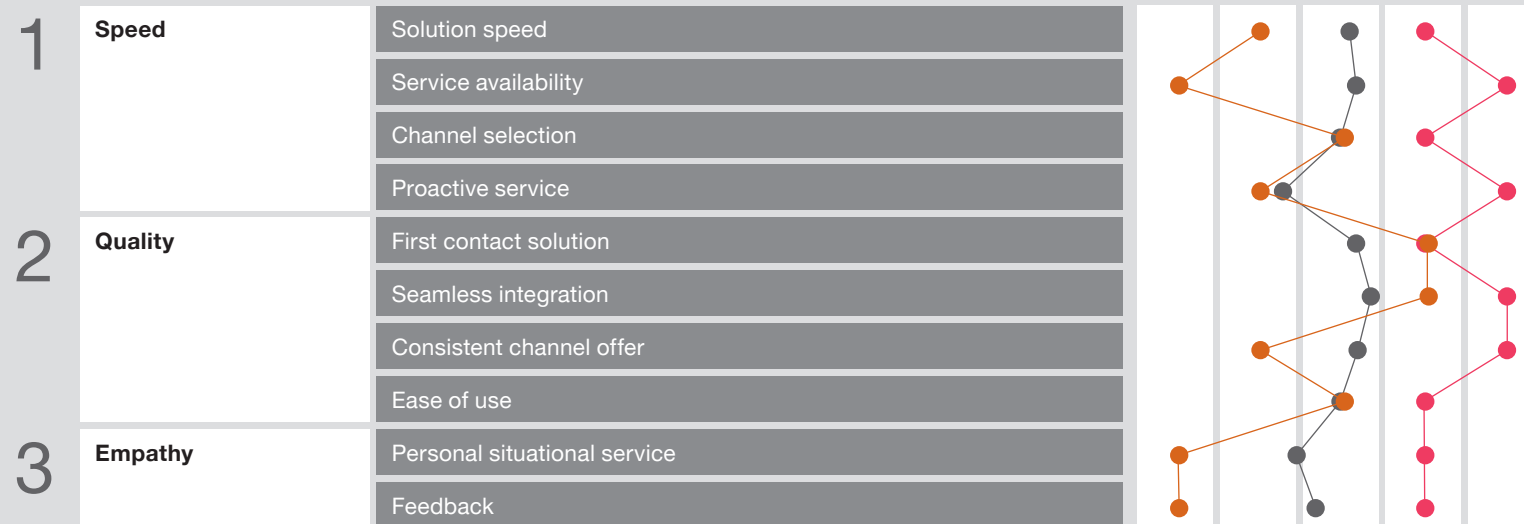


Fig. 26 Overview of digital maturity in the healthcare sector, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

Overall, the coronavirus pandemic has placed a heavier burden on SHI budgets than before because more people than usual became ill or even had to be ventilated. Since many patients postponed surgeries or preventive examinations, SHIs also anticipate a greater financial burden after the pandemic in the form of follow-up costs resulting from delays to procedures and care. During the pandemic, there were significantly more service requests to the SHIs, who were given additional tasks. For example, they had to provide information on a regular basis, resolve debts with the corona test centres, organise vaccination offers and much more. The coronavirus pandemic partly changed internal processes and ways of working in customer service. As in other industries, service staff at many health insurance companies had to work from home for the first time ever.

4. Industry specifics

The healthcare industry can be differentiated according to manufacturers (e.g. pharmaceutical companies, medical technology manufacturers), Payer (e.g. SHI) and providers (e.g. hospitals). The services offered and the degree of digitisation are quite different for these three segments. Across the board, however, increasing customer expectations and digitisation are prompting them to rethink their traditional business models. They are investing more in digital health solutions and in this context, the focus is on the requirements and needs of customers and patients because they are increasingly applying their digital experience gained from other industries, particularly in terms of flexibility and convenience, to the healthcare sector. As a result, competitive pressures increases, especially as large technology groups attack traditional segments. Amazon, for instance, is making aggressive strides within the pharmacy market while Alphabet (Google) has launched its own health subsidiary, Verily.





5. Challenges

From today's perspective, SHI faces the following key challenges:

- 1. Lack of data:** When interacting with customers, clerks can view general master data. For detailed customer profiles, key data is usually missing, and there are also legal restrictions. This is also one of the reasons why SHIs are only at the beginning of the automation journey. Furthermore, there is often a lack of data to proactively address customers and to trace the customer history quickly and comprehensively. Moreover, the data collected is of varying quality. Different cohort sizes, pseudonymisation, and anonymisation further reduce the scope for personalisation. Legal requirements, such as the principle of medical freedom of therapy, restrict the use of data as well.
- 2. Outdated core systems:** Core systems of the SHI are often 15 years old by now and mostly emerged from even older systems. They are therefore mostly slow and not very user-friendly, especially for digital services. It is possible to connect external tools, but legal hurdles make this difficult. In addition, many expert systems lack interfaces with browser- or cloud-based software tools. These may only be used partially due to legal requirements and changing providers can be costly and time consuming.
- 3. Organisational implementation of digital structures:** Many health insurance companies have not yet fully implemented digital structures. Large SHIs have already developed approaches in some cases, but smaller companies are unsuccessful in this regard as they lack the staff needed for implementation and/or do not have the required skill set. Working and managing at a distance are also major challenges for the SHIs. In addition, digital treatment paths will be necessary in the future, but most SHIs are not yet able to implement them. Another challenge is teleradiology. In future, for example, chatbots with diagnostic software could make a preliminary diagnosis and forward it with a recommendation for action to medical staff, who would then make the final diagnosis. With the Digital Care and Nursing Modernisation Act (DVPMG), digital applications will also find their way into nursing. The legislator has created the legal framework for this, it is now up to the sector to make it a reality.

- 4. Set up and expand customer portals:** There is also potential for development and expansion in the customer portal category. A key challenge will be to build data platforms as the basis for customer portals and to develop a digital ecosystem around them. If customer data is collected automatically, this brings considerable time and cost advantages. With digital customer portals, self-service solutions could also be proactively developed. Due to high demands on data sharing and processing, such platforms will tend to be hosted locally rather than in a cloud. The extent to which customers are willing to share health-related data is also still up for debate. However, an increased willingness can be observed in this regard.

6. Opportunities

The challenges mentioned above also represent opportunities for SHI to improve the service experience for patients. These include above all:

- 1. Creating digital added value:** Digitisation in SHI initially means using intelligent IT applications to automate organisational structures, speed up decisions, and minimise bureaucracy for patients. In addition, (more) digital communication channels need to be made available.
- 2. Enable a personalised approach:** A lack of data and stringent data protection regulations have so far prevented an individualised, proactive approach to patients. Since customer expectations are increasing, there is a particular need for more individualised services. Service staff should therefore have insight into the needs and medical history of the insured in order to address them in a personalised way and to offer them suitable support.
- 3. Introduction of the electronic patient record (ePA):** What medication does a patient take regularly, what pre-existing conditions exist and what examinations and therapies have already been carried out? In the past, such information was distributed among different doctors and hospitals. Since 1 January 2021, the ePA bundles them for SHI-insured persons. This makes data more available and processing times shorter.⁴¹

⁴¹ Federal Ministry of Health (2022), <https://www.bundesgesundheitsministerium.de/elektronische-patientenakte.html>



7. Practical example I

Via smartphone app: BKK Linde creates more digital customer proximity

Practical example from d.velop AG

BKK Linde was founded in 1952 as “Betriebskrankenkasse Linde der Gesellschaft für Linde’s Eismaschinen Aktiengesellschaft” (Linde Company Health Insurance Fund of the Company for Linde’s Ice Machines). Today, it serves around 155,000 insured persons and is one of the fastest-growing health insurance funds in Germany. The statutory health insurance fund sees further growth opportunities above all in the ongoing expansion of its service offering.

Paper-based challenges

One of the biggest obstacles to the optimisation of customer communication and services in the past few years was the continued prevalence of paper-based correspondence: notices were sent by post, insured persons’ notifications of incapacity to work were submitted in envelopes, etc. Delays in transit as well as the logistical challenges of working with both paper documents and already partially digitised processes made the focus of the digitisation project clear.

In order to simplify the insurance processes for its members, the insurer is successfully using the Health Insurance App from the document management specialist d.velop. This allows, among other things, certificates of incapacity for work, FitBonus+ vouchers, and applications to be sent electronically as photos. The data transmission is encrypted and therefore secure. “Today, the digitisation of customer contacts offers the greatest potential for innovation of services. Our intention was to create a very attractive unique selling point in the highly competitive health insurance market,” explains Robert Leubner, Head of Marketing at BKK Linde.

Inspiring service

Within four weeks of the launch, BKK Linde already had around 2300 registered users for the cloud-based app from d.velop. Ten percent of all certificates of incapacity for work were transmitted digitally in the first month alone. “The service app has had a terrific impact,” Robert Leubner is pleased about the popularity. “It has hit the nerve of the time and the needs of our customers.” Now BKK Linde is even more accessible to its users. The insurance company has proven itself to be an innovation leader. In the future, they intend to use apps even more intensively as part of customer communications.

Sick note via smartphone

With the app, insured persons can simply photograph their sick note with their smartphone and transmit it to BKK Linde at the touch of a button. The insured person automatically receives a confirmation via the app that their receipt has been successfully issued before receiving additional updates at each stage of the process. The information goes directly to the scan processing department. From there, the information required for processing is automatically read out and, thanks to individual workflows, sent to the team processing the transactions via the core system. The d.velop solution is integrated into all processes of BKK Linde, so that employees can continue to work within the familiar setting of their regular applications. Calling up and further processing of the documents is done seamlessly via the PC workstation, without the need for manual copies or printouts. Finally, the sickness notification is stored in the d.velop archive in a way that is suitable for audit.

In the meantime, policy holders can be kept informed via push notifications and a dedicated BKK Linde email account. Complementary service providers such as Teleclinic, Neolexon and Tinnitracks are also integrated into the app. Policy holders can also access a number of digital health applications that can be prescribed by doctors as an additional service benefit.



Fundamental rethinking

The project has changed the entire company. All BKK employees – from IT to accounting, human resources, and all clerks – viewed digitisation as an investment in the future. The board of directors also supported the project from the beginning. The management saw the introduction of a communication app as an integral part of the digitisation strategy and an important key to success – with clear ideas of what the initiative should do for the company. This sharpened the focus of all employees and managers and gave the employees the courage to actively pursue the path of digitisation.

Impressive results

Meanwhile, more than 30 per cent of policy holders are registered for the app, and more than 70,000 certificates of incapacity to work as well as more than 40,000 other documents are sent annually. A recent customer survey showed that ease of access to health insurance company services via the app is more important to members than an on-site office, while also resulting in greater satisfaction. Alongside these positive outcomes for “soft” factors – such as improved customer loyalty, greater proximity to the health insurance company, and higher transparency – the d.velop app leads to measurable process improvements. For example, processing times are now more than 50 percent quicker. In addition, the scope for error is significantly reduced compared to manual processing while the ability to provide information to customers and internal stakeholders of all levels is substantially better.

The authorisation system also ensures that only designated employees can process specific documents. In addition, the d.velop solution enables GoBD-compliant digital storage, so that the legally required regularity is also ensured throughout the entire process chain.



Travel and hospitality

1. General market development

Outsourcing market volume growth of **5.0% CAGR**,
driven by demand growth of **1.8% CAGR**
and price increases of **3.6% CAGR**

With the start of the COVID 19 crisis, booking volumes in the travel and hospitality industry slumped, while service volumes increased significantly. The main reasons for this were the heightened need for information on entry requirements, travel cancellations, and many other irregularities. To this day, they lead to an increased service demand, one that is particularly pronounced for airlines. Many companies initially assumed that service requests would decrease as booking volumes fell and reduced their capacities. While before the pandemic about every tenth passenger turned to companies with a service request, every third passenger now does so. In order to meet this massive increase in demand, companies are adding staff at short notice and becoming increasingly reliance on external service providers. However, this shift in demand will most likely only be temporary. In the medium term, a trend towards more self-service is also emerging for the travel and hospitality industry, with a growing degree of personalisation in the premium segment. Due to postponed travel, service demand in the industry is expected to increase initially.

In aviation, business travel volumes in Germany are expected to reach about 70–80% of pre-COVID levels in the medium to long term. This means that complex requests and recurring rebookings are likely to occur less frequent because they are less relevant for private travellers. In air cargo, more service requests occurred because demand for logistics services has risen sharply. The hospitality industry, like the aviation sector, is experiencing a significant decline in service demand, because demand as a whole has plummeted. In the long term, however, the market volume will remain relatively stable.





2. Maturity

Inside-out view

The digital maturity level of the travel and hospitality industry sits within the average of all industries across each of the four categories. In the categories process automation (organisation & personnel) and service development (service strategy), the results are comparatively high, but against most performance criteria the industry scores rather below average.

In the service strategy dimension, the categories digital service delivery and development and implementation still have potential for development. Differences within the industry are evident here: while large, international companies have a variety of digital channels and tools, many smaller companies are still lagging behind. In the dimension of service organisation & personnel, the travel and hospitality industry also scores below average in a sector comparison. In particular, the aspects of innovation governance and the virtual contact centre are only systematically addressed by some companies. In the dimension of technology, the industry has the greatest potential for improvement in the 360° customer view.

Outside-in view

Again, the travel and hospitality industry scores slightly below average in the sector comparison. An exception is the category empathy: Here, the values for personal, situational service and customer feedback are high. Particularly striking is the low level of maturity of proactive service (category speed). While customer expectations for empathy are largely fulfilled, quantitative factors such as service speed and service availability are below the required standard. Established solutions from industries such as telecommunications or retail, which are more mature from a digital standpoint, could help to better serve customer needs and desires.

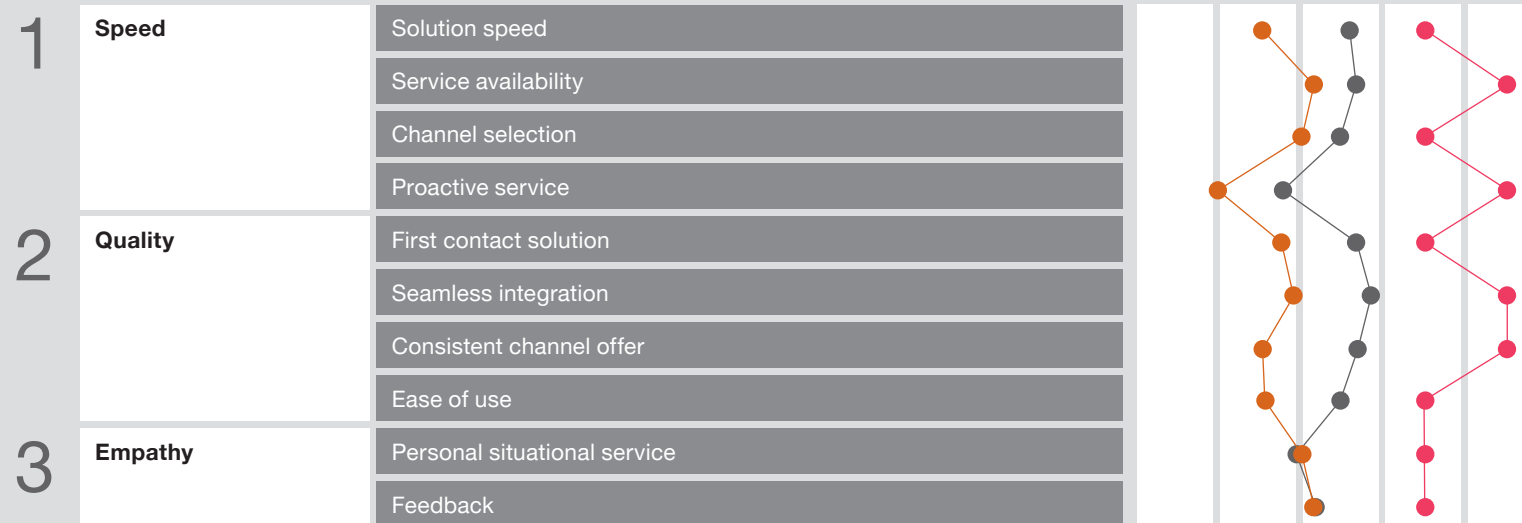


Fig. 27 Overview of digital maturity in the travel and hospitality industry, own illustration

Inside-Out



Outside-In



Virtual Star Average Branch

1 2 3 4 5



3. Impact of Covid-19 on the industry

The travel and hospitality industry is one of the sectors hardest hit by the coronavirus pandemic – in 2020/21, it experienced the biggest drop in sales since the end of World War II. In 2020, business travel alone declined by 54%, representing a drop in revenue of more than US\$ 820 billion.

While overall travel volumes at the end of 2021 were about half of pre-crisis levels, air freight has compensated for the drop in demand. Primarily due to travel restrictions, the aviation, cruise, tourism and hospitality sectors suffered the greatest losses, with demand falling by an average of 60–80% between February 2020 and February 2021.

In view of rising vaccination rates, particularly in the western industrialised nations, the industry is quite positive about the outlook for summer, despite the threat of potential new variants and any associated restrictions. Current booking figures for 2022 also give the industry hope for a recovery in the second half of 2022.

4. Industry specifics

As in other industries, a number of trends in customer service gained momentum in the travel and hospitality industry in 2021. Customers expect companies to be easily accessible and to solve urgent problems such as rebookings or refunds quickly. Furthermore, they expect above-average service quality, such as resolutions in the first contact. Travel industry customers in particular showed the greatest increase in the use of self service offers since the onset of the pandemic. Previous concerns about such offers (data protection, lack of individual approach) have been greatly reduced in the travel sector by Covid-19, especially through biometric identification procedures and chatbot solutions – presumably a long-term development that is likely to have a lasting impact on customer service requirements within the sector.





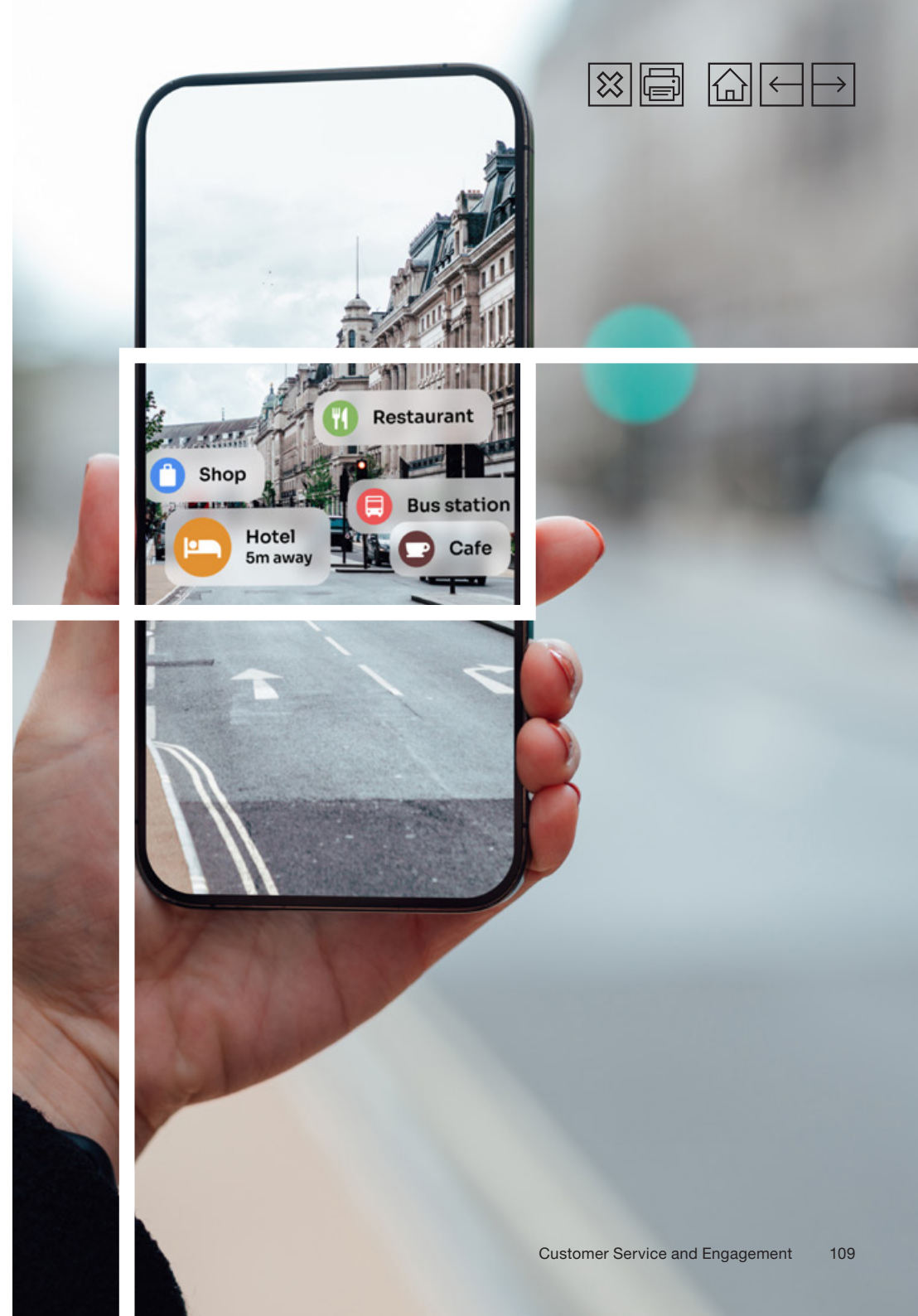
5. Challenges

Ideally, customers want to be able to switch seamlessly between digital and analogue contact options; companies should answer enquiries as close to real time as possible and provide information through a variety of digital channels. One of the greatest challenges is the 360° view of customers with all relevant (historical) interaction data and customer information. Bringing them together, evaluating them and assessing them with IT support is currently still difficult for many companies.

However, if such data can be analysed in a structured way, customers can be better served – and companies can improve their products and services if they receive an increasing number of service requests. They can leverage automation to better plan their service offering and anticipate spikes and dips in service capacity.

6. Opportunities and potentials

The potential benefits for companies are enormous. With a consistent service infrastructure, processes can be streamlined, thereby reducing solution times and improving solution quality. Companies can also optimise products and services themselves (tackling the root causes), identifying additional customer needs and addressing them with cross- and upselling offerings. In essence, the trend is moving in the direction of data-driven, proactive, and automated customer engagement. With flexibly available capacities, it looks after customers individually when a personal approach is indispensable, while the majority of service requests are largely automated and processed efficiently for both sides.





7. Practical example

Despite Coronavirus: Deutsche Hospitality invests in Service Digitisation

Practical example from Deutsche Hospitality

A positive example of how a company that has been particularly affected by the coronavirus pandemic continues to develop even during the crisis is Deutsche Hospitality (DH). Deutsche Hospitality operates more than 120 hotels under eight brands in 20 countries, including Steigenberger Hotels & Resorts and IntercityHotel. In normal times, business travellers account for more than 60 per cent of the guest volume. The decline in bookings due to the coronavirus pandemic was proportionately high, especially because of the lockdowns in 2020 and 2021.

Optimise and digitalise service processes

During the pandemic, Deutsche Hospitality (DH) set up a project to increase optimisation potential within its customer service function. Under the project management Kai H. Gehrmann, the main aim was to be able to present guests with selected offers even more actively and precisely, to make the channel portfolio consistent and user-friendly, and to continue to enable performance improvements. To achieve this, the project teams had to optimise and digitalise their service processes. The spectrum of topics ranged from the service operating model (centralised vs. decentralised), its depth of value creation, concrete technology and system support for existing processes – to the optimisation of concrete use cases.

Three levers for better feedback management

One of these use cases involved improving feedback management. The DH managers saw three levers in particular for this:

1. Bundle feedback via existing channels

Until now, DH employees had only processed guest feedback externally, in a way that was partly decentralised, unsystematic and analogue. With the introduction of a central guest feedback tool, customer satisfaction is now collected, consolidated and centrally evaluated throughout the entire customer journey at various touchpoints. With the convergence of a variety of analogue and digital channels, the comparatively time-consuming management of individual “silos” – for example, feedback in the hotel, letters to the managers, e-mails to service centres, etc. – are a thing of the past. Now feedback is organised in an integrated way.

2. Further develop existing contact channels

In order to be able to process the feedback itself more efficiently, DH set up a central reservation centre which has a high degree of process automation. The feedback is pre-qualified using modern technologies such as automatic call routing and processing, with Natural Language Processing (NLP). Even with partially manual processing, this allows for efficiency improvements.

3. Automate and optimise data processing

In addition, the processing of customer data is being expanded in order to get a better picture of Guests and their needs, to be able to serve them even more proactively in the future. To this end, the system landscape is becoming more closely integrated (CRM and contact centre software) and service requests are being automatically catalogued and evaluated.

These and other service initiatives from Deutsche Hospitality show that the company is focusing on improving its service processes even during the coronavirus pandemic – despite declining sales and resource shortages. This is particularly significant because digitally optimised customer service will help to provide an even better customer experience once the booking situation recovers. Ultimately, Deutsche Hospitality and its customers benefit.



Kai H. Gehrmann

Vice President Franchise,
Deutsche Hospitality



AI-based passenger compensation: lower costs, higher customer satisfaction

Practical example from PricewaterhouseCoopers Legal AG Rechtsanwaltsgesellschaft

If their flight is delayed or cancelled, passengers in the EU may be entitled to compensation. The number of such claims has increased massively since spring 2020 as a result of the measures taken against the coronavirus pandemic – especially for reimbursements of cancelled airline tickets.

As a result, airlines had to cope with significantly lower business volumes, considerable additional administrative expenses and unplanned outflows of funds. Passengers, on the other hand, sometimes waited months for a refund of their ticket prices.

The new normal is more efficient

The Covid-19 pandemic has increased pressure on airlines to process their customers' financial claims more efficiently. In particular, increasing digitisation and subsequent automation of business processes are helping to speed up procedures, reduce process costs and at the same time increase customer satisfaction. This optimisation of the cost base, as well as streamlining of processes, helps to make airlines fit for the “new normal” – now and after the pandemic.

Cost reduction of up to 75 percent

One way to master them is with the Mass Claims Machine (MCM) from PwC. By harnessing intelligent workflow management tools, the MCM enables fully automated processing of passenger claims. The outcome is the provision of a fast, intuitive, and proactive process that serves the interests of passengers while at the same time guaranteeing cost-efficient and controllable processing for the airlines. This also helped to cut lead times by over 90% while reducing associated costs by up to 75%.

Easy handling for passengers and airlines

As a software-as-a-service (SaaS), PwC's Mass Claims Machine can also be used independently and flexibly with relatively little integration effort. By means of preconfigured interfaces (APIs), it can be connected to the most common airline systems as standard. These include passenger service systems (PSS), operations tools, and selected communication channels (e.g., webform, e-mail).

The Mass Claims Machine automatically records messages from airline customers. With the help of an AI-based module, the core statements, such as financial claims and key information within these messages are read out and compared with current case law as well as EU directives (especially EC) and previous correspondence. The Mass Claims Machine then validates the respective booking and flight data and initiates an automatic response and – in the case of justified claims – a payment process.

Fig. 28 Process illustration PwC Mass Claims Machine, own illustration





Five advantages of using the tool

The advantages of the Mass Claims Machine are widespread, with the most important ones as follows:

1. Airlines are switching from a fixed to a variable expense model, where they only incur costs for compensation cases that are actually processed.
2. Case processing works in a fully integrated way: from case acceptance to client data, policy and jurisdiction checks to automated claim payment.
3. Airlines (re)gain the trust of their guests because the new process works quickly, transparently and reliably.
4. Airlines can control the processes on the basis of their own key performance indicators (KPIs) and evaluate them in real time.
5. The Mass Claims Machine can be adapted to national jurisdictions and other special features.

By digitalising what was previously a highly manual process – on both the airline and customer side – the Mass Claims Machine ultimately helps airlines to restore the trust and loyalty of their customers in critical business transactions. Increasing acceptance of self-service tools and digital empowerment of passengers in general will further support this development and enable airlines to handle service requests in a way that is increasingly cost efficient.



Dr Paul Bäder

Senior Manager, PricewaterhouseCoopers
Legal AG Rechtsanwaltsgesellschaft

Looking ahead

After looking at service maturity levels, market development, and potential opportunities, we now take a look into the future. To do so, we present an assessment of how virtual agents will change customer service moving forward and also share a BPO's perspective on current and future industry developments.



Service avatars

More human than humans? Virtual agents in customer interactions of the future

Practical contribution by Pinscreen Inc.

Pinscreen is one of the leading companies for the development of AI-controlled virtual agents. Bot interactions in customer service could soon become audiovisual rather than purely text based, helping to take the customer experience to a new level.

Studies show that 3 out of 4 customers want more human interaction as technology advances. They expect companies to make greater efforts to build trust and strengthen customer loyalty – customer service is central to this, especially the video interaction contact channel. It is particularly helpful with complicated or emotionally charged issues; video makes it easier to explain solutions and build an emotional connection with customers.

Virtual agents are emotional, fast, and powerful

According to forecasts, video interactions have great growth potential in the coming years and will increasingly become commonplace within customer service best practice. The problem is that video interactions with human agents are very expensive because they have to be specially trained.

This is where artificial intelligence adds significant value via the use of virtual agents created by computer technology. They combine the emotional commitment of a human being with the speed and performance of digitisation. The main advantages: instead of having to train individual agents at great expense, organisations can use as many virtual agents as they like, while the bandwidth and quality of the interactions remain the same.

Virtual agents as brand ambassadors

State-of-the-art AI technologies let virtual agents hear, see, think, understand and react with emotionally appropriate gestures. They look realistic and behave similarly to humans, for example they can smile. Nevertheless, they are deliberately not meant to appear fully human, but rather to encourage meaningful interactions. As a fully integrated part of the customer experience, they can complement human agents – and become brand ambassadors.

People interact more with virtual agents

In addition to cost benefits and improved customer loyalty, virtual agents offer another advantage: by responding empathetically, they encourage enquirers to speak more openly and ask more questions, for instance. Customers are thus more involved in the entire interaction, with higher levels of emotional engagement.

The unbiased basic attitude of the virtual agents favours a more “natural” exchange. They are never in a bad mood and, unlike humans, do not misinterpret (supposed) nuances. Furthermore, AI knows the precise preferences, intentions, and interests of customers. This allows companies to tailor their clients’ customer experience even more precisely, and the audio-visual channel is ideally suited for this.

Emotion-based customer data is a valuable asset

Virtual agents can also gather and respond directly to customer feedback. This makes customers feel more valued – which again strengthens customer loyalty. If the communication takes place on an emotional level, the information gathered gains an additional layer and becomes more valuable. Finally, companies gain even better-informed insights into how customers (emotionally) evaluate their products, their customer experience, and the company as a whole. The bottom line is that virtual agents can fundamentally improve the customer experience, perhaps even make it more “human” than humans ever could – and at moderate cost.

Fig. 29 Programming a realistic avatar, illustration by Pinscreen Inc.



Conclusion

Virtual agents can help deliver a whole new customer experience online – without escalating costs. Customer interactions are more effective and enjoyable, while emotion-based customer data can be used for a closer and longer relationship at the same time.

Customer Experience, Personalisation Automation, Agent Experience & Co: What will continue to move the BPO industry



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Customers today expect to be able to resolve their concerns conveniently at any time via the channel of their choice. Voice has become omnichannel and channels like social media continue to gain importance. In addition, customers no longer evaluate brands and companies based on individual experiences, but on the entire customer journey. By using large amounts of data – for example, customer data, information from previous interactions and from the current contact – interactions and product offerings can be personalised, which customers increasingly expect. Contact centre interactions, self-services, and automated interactions can progressively replace face-to-face contact with staff in physical locations.

Customer experience is a veritable driver of brand value

These developments were further intensified by the coronavirus pandemic. During pandemic-related “lockdowns”, brick-and-mortar retailers and banks, for instance, had to temporarily close their branches. Digital offers and contact centres have therefore also been used more by those consumer groups that would have rather avoided them before Covid-19. With increasing digital transformation, the customer experience has gained further importance and developed into a veritable driver of brand value. In the meantime, optimal CX management is crucial for success – and the BPO industry has become a major source of value.

Seamless and delightful customer experience remains central

These developments, combined with technological advances, offer providers the opportunity to develop new services. Services that target the total customer experience – CX consulting, customer journey design, data annotation and enrichment, and automation of direct marketing – demonstrate particular potential. At the same time, a seamless and delightful customer experience remains central because customers and the customer experience will continue to be the focus. And with that, the need for hyper-personalisation of services and offers also increases. With consistently applied analytics solutions, interactions can be aligned much more closely to the individual needs of each customer, for example with features such as Next Best Action, Speech Analytics and Sentiment Analytics.

To achieve this, Majorel has created its Customer Service Analytics tool. This solution bundles a wide range of applications to achieve a variety of objectives including optimised customer acquisition and tailoring of industry-specific offers. Analytics solutions such as Next Best Offer allow businesses to make individualised offers, while more comprehensive customer counselling dialogues can also be prepared automatically with analytics solutions. This offers not least great potential for cross- and upselling, which are becoming increasingly important for many companies. It is therefore important to consistently tap into this potential – in telephone contact and also on digital channels.

Automation, Self-Service and CX Consulting

Increased automation of contacts and processes will also remain important, if only for greater staff and cost efficiency. It also brings benefits for the customer experience. In the contact centre, the automation of interactions through voice and chatbots will increase strongly in the coming years. But it is also relevant for back-office processes, for example where the use of RPA and intelligent automation are concerned. The continuous optimisation of self-service offerings, for instance in apps, will also remain important.

However, digitisation and the changing demands of end customers still pose major challenges for many companies. In order to meet them as efficiently as possible and to make optimal use of the possibilities of digitisation, more and more companies are turning to external experts. CX Consulting offers very exciting potential in this context. Industry-specific solutions will continue to be highly relevant as well.

People remain central to the customer experience

But no matter how much interactions and processes are automated to the satisfaction of customers, as customer complaints or problems arise, personal contact will remain central. The same applies to issues that are particularly valuable for a company. Personal contact will also be needed for complex cases that cannot (yet) be automated or which require human consideration. The decisive interactions in the customer journey, the “moments of truth”, will therefore continue to be shaped by human colleagues in the future.

Humans will also increasingly train artificial intelligence, such as voice and chatbots, in the future, or provide data for training, as in data labelling. In the tourism industry, for instance, UX experts can configure and train voicebots and teach them target-oriented dialogue about travel and industry-specific terms. The bot interacts with the customer on a daily basis and passes on information to its human colleague when it is useful or necessary. Artificial intelligence, in turn, then makes suggestions for improvement based on the data obtained during operation, which are checked and approved by humans. Conversely, in the future, human employees could be “learning” more and **more** from AI solutions – for example, when bots listen in on customer conversations and, if necessary, give the human customer advisors tips on how they could deal with the issue.

They will continue to solve the more complex issues. This increases their qualification and training requirements – and thus the wage level. Clients must therefore be prepared for a higher price per employee hour. Nevertheless, we assume that the price per customer will decrease because fewer human contacts are required overall – provided that companies use automation and optimisation potential wisely and consistently.

Agent experience increasing in focus

Not least because of the shortage of skilled workers, the agent experience, i.e. the working conditions of service employees, is increasingly coming into focus – from the possibility of home office even beyond the pandemic to the equipment of the locations, the systems used, the corporate culture and benefits to new forms of work organisation, for example self-organising.

The field of CX Management remains exciting

CX management will continue to grow in the next few years – and to evolve continuously. Particularly exciting in this context are services that we are not yet so intensively involved with today, but which will play a very important role for our industry in the future. Content Services and Trust & Safety, for instance, hardly played a role before 15 years ago, but have since become an enormously important service sector. And such examples will continue to exist in the future.

Outlook and recommendations for decision-makers

The (technology) trends presented in this study will have a lasting impact on customer service in the future. The overarching trends will simplify interactions for all parties involved. Customers want to be advised and served better, faster and more personal. Or they want to quickly take care of their concerns themselves via PC or smartphone. Service agents want better working conditions. In this concluding chapter of the study, we would like to give all those who are responsible for customer service in companies some concrete guidelines with which they can raise the customer experience to the next level – and thus the success of the company as a whole.

Decision-makers in customer service should

- **Regularly ask customers about their expectations.** Every company has its own customers. Based on their preferences, companies should build and sharpen their own customer service profile.
- **Expand self-services.** Younger people in particular prefer to take care of their affairs via smartphone – irrespective of time and place.
- **Personalise contacts.** Customers feel better cared for when service agents provide them with personalised and individualised service. Meaningful data is the bedrock of this.
- **Focus more on the service staff.** If agents are more satisfied, end customers will be too – a better agent experience also improves the customer experience.
- **Make greater use of artificial intelligence.** In-house AI developments are possible, but mature systems available on the market are usually easier to implement. However, AI in itself does not improve inefficient processes. To fully exploit the potential of AI, process optimisation is therefore the first priority.
- **Implement omnichannel ecosystems.** Companies with significant contact volumes will sooner or later need omni-channel systems. These can be set up cost-efficiently via the cloud and are usually worthwhile for smaller and medium-sized companies as well.
- **Use (voice) biometrics.** What smartphone users are already used to will also become standard in customer service. Using voice as a password, for example, will make agent-customer interaction much easier.
- **Automate processes with RPA.** Some processes cannot be made more efficient; however, they can be handled faster and with fewer errors with RPA. Citizen-Led-Development and Human-in-the-Loop (see Part A) in particular simplify development and integration significantly. Because as RPA tools are becoming cheaper and cheaper, they are becoming attractive for more and more companies.



To find out how customer service will develop, how digitally mature it is in across industries and how strong they are influenced by the trends mentioned, we analysed eight sectors with our PwC market model and maturity model. In a practice-oriented manner, we have presented the most important challenges and opportunities in each case.

With our maturity model, we can carry out an individual analysis for each company and thus identify the most important fields of action. Companies of all sizes and from all industries benefit from this – regardless of how digitally mature their customer service already is.

The most important advantages of our maturity analysis at a glance

- **Determine status quo**

The maturity analysis gives your company an initial orientation on how advanced your digital customer service is in the seven most important dimensions.

- **Benchmark**

You will find out where your company stands in a sector comparison – and what “best-in-class” companies do differently.

- **Define and prioritise fields of action**

In which areas is the greatest potential improvement for your company? Find out where the ratio of investment to benefit is greatest.

- **Customer Service Roadmap**

Based on the maturity analysis and prioritisation, our PwC service experts work with you to plan how you can implement your customer service optimisation – step-by-step and following a modular approach. In doing so, we always take into account all industry- and company-specific factors.

Do you have questions about your individual situation and the optimisation potential of your customer service? Feel free to contact us at any time and without obligation. We look forward to talking to you!

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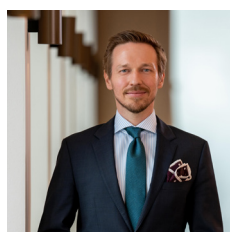
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