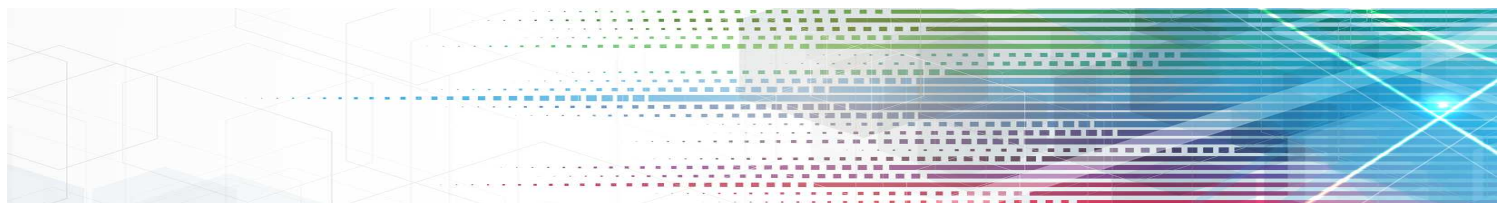


Lünendonk® Market Segment Study 2019

The Market for Customer Experience Services in Germany

Competitive Edge through
Customer Experience and Customer Centricity



A study by Lünendonk & Hossenfelder GmbH
exclusive version for

KPS

Contents

PREFACE.....	3
BRIEF SUMMARY OF THE MOST IMPORTANT FINDINGS	5
THE DIGITAL TRANSFORMATION IS IN ITS 3 RD AND FINAL PERIOD – THE TIME TO ACT IS NOW!	6
TECHNOLOGY – THE MOST IMPORTANT ELEMENT OF A CUSTOMER-CENTRIC STRATEGY.....	11
ORGANIZATION & CULTURE – THE SECOND MOST IMPORTANT ELEMENT OF A CUSTOMER-CENTRIC STRATEGY	14
CURRENT SITUATION IN THE DIGITIZATION OF CUSTOMER INTERFACES AND DEVELOPMENT OF NEW BUSINESS MODELS	18
INVESTMENTS IN CUSTOMER CENTRICITY	22
COOPERATION WITH CONSULTING AND IMPLEMENTATION SERVICES	24
EXPERTISE REQUIRED OF PROVIDERS OF CUSTOMER EXPERIENCE SERVICES	25
THE MARKET FOR INTEGRATED CUSTOMER EXPERIENCE SERVICES.....	26
THE MARKET VOLUME FOR INTEGRATED CUSTOMER EXPERIENCE SERVICES IN GERMANY.....	31
MARKET DEVELOPMENT AND FORECASTS.....	32
METHODOLOGY	33
CONCLUSION AND OUTLOOK.....	34
INTERVIEW	36
Simply imitating Amazon is not the key to retail success.....	36
COMPANY PROFILES	38
KPS.....	3
9	
Lünendonk & Hossenfelder GmbH.....	40

Preface



Mario Zillmann
Partner
Lünendonk & Hossenfelder GmbH

Dear Reader,

Now that we have entered the digital age, there has been a general move, even among companies from the so-called Old Economy, toward placing the customer at the center of the digital transformation. However, the strategies and measures employed by the different companies to make customer centricity a reality rather than a mere buzzword vary greatly.

What is clear is that, in many sectors, new providers with innovative and data-driven products and services have taken over the customer interface and redefined customer expectations of the shopping and user experience. What we are talking about here is the disruption of traditional value chains, which have been broken and altered permanently by the platform economy. Such successful business models are based on operating models that are heavily dependent on cloud computing, automation and artificial intelligence and can therefore be scaled to any degree.

Examples can be found in the hotel and tourism industry (booking.com, AirBnB), cinema and TV (Netflix, DAZN, Amazon Prime), the retail sector (Amazon, Alibaba, Westwing, Zalando) and financial services (Wirecard, N26).

And what of the Old Economy? Despite a long failure to respond to the trend toward digitization, German and European companies are finally starting to wake up and smell the coffee. Many of their customers have become more willing to go elsewhere given the many new alternatives offered by start-ups and tech firms.

In the digital age, digital services are becoming increasingly important, both for market differentiation and to secure long-term survival. German industry, for example, faces the not insignificant challenge of developing new, data-driven services around its core products, monetizing sensory data, and positioning itself within the global IoT platform economy. Other sectors, such as logistics and the retail and financial sectors, also face similar requirements. To survive in this age of data-driven platforms, businesses have to deliver digital channels and customer interfaces that customers perceive as valuable.

An intuitive, straightforward and seamless customer experience across all channels is integral to the successful scaling of new digital business models. Customers who are offered a unique customer experience will be happy to share their data with a provider, and monetizing these data is the key to building a leading position in the platform economy.

This is why businesses are investing ever more heavily in the modernization and automation of their processes, new digital customer interfaces, and digital services. They cannot complete this digital transformation on their own. In the context of digitization, cooperation with strategic service partners has become increasingly important. Shorter technology cycles increase the urgency to upscale products and services and bring them to market readiness faster. What companies require of



their service providers has also changed significantly in recent years as a result of this, with more and more companies translating the new challenges they face into new requirements for their partner consultancies, IT service providers, and digital and Internet agencies.

In this day and age, digital solutions have to be of high quality. That's hardly news. What is new for many companies, however, are the factors that influence the customers' perception of quality. Online processes have to remain stable and available at all times – even under peak loads. They must be accessible from different devices and it must be possible to switch from one device to another without data being lost or any change to the customer experience.

If digital transformation is to succeed, therefore, digital front-end solutions, such as apps and web portals, have to be connected to the process landscape and IT back-end. This too is already known, but pressure to finally start implementing the required change and adaptation projects is growing: Legacy modernization, cloud migration, process automation, artificial intelligence, and, above all, business models for the Internet of Things, in which, to date, Europe is only succeeding in one area.

Companies have therefore become more open to co-operation with their service providers in the development of innovations and new business models. Innovations and new ideas for business models and new products are increasingly created in the labs of consultancies, IT service providers, and digital agencies.

Since most new products and business models are based on IT technologies, software development tends to be an integral part of the initial concept and design phase. Moreover, new, digital interaction channels can no longer be separated from their back-end networks due to the expectation of seamless, end-to-end, automated processes across all channels. What this requires, therefore, are holistic approaches in the implementation of digitization strategies.

As a result of this trend, Lünendonk has identified an increasing overlap between the IT consultancy and digital agency markets in the past three years. In recent years, a number of digital agencies have been acquired primarily by management and IT consulting companies in response to changing customer requirements concerning the implementation of customer-centric strategies. Digital and Internet agencies too are gradually expanding their management and IT consultancy expertise.

However, the market for customer experience services associated with digitization of the customer interface and the development of new, predominantly digital business models is still very new and opaque. Important market figures are missing because this market segment is undergoing such dynamic change.

The purpose of this Lünendonk study, therefore, is to conduct an annual assessment of the market for customer experience services and to provide reliable facts and figures. The study looks at the subject from two angles. First, Lünendonk questioned 19 leading providers of customer experience services, including the leading management and IT consulting companies and the leading digital and Internet agencies. Second, 109 major corporations and groups, 65 percent of whom post annual revenues exceeding € one billion, were asked about their current situation and goals in terms of digitizing their customer interfaces and new business models.

The study was conducted in collaboration with Accenture Interactive, Cognizant, KPS, Publicis Sapient, and Valtech. We would like to take this opportunity to thank them for their expert input!

Yours,



Mario Zillmann
Partner

Brief Summary of the Key Findings



Companies are under immense pressure to innovate because of the overwhelming focus in recent years on the process level. In fact, 28 percent of companies feel that they are lagging behind their direct competition when it comes to the scaling of new products and services.



Compared to the difficulties companies face in developing new business models, they are much better positioned to enhance existing products and services with digital value-added services. 24 percent of respondents even consider their companies to have a competitive advantage. Industrial companies and the automotive industry in particular see themselves as market leaders in digital and data-driven services.



Both technological and organizational shortcomings are holding up the digital transformation of the major corporations and groups analyzed. Besides an outdated IT infrastructure, traditional, rigid processes and a hierarchical process organization present a major obstacle for 60 percent of the companies surveyed.



A particular focus over the next few years will be investments in the modernization of processes and cross-divisional networking in order to build digital channels for customer interaction. In the future, 87 percent of the companies surveyed plan to take a cross-divisional rather than silo-based approach to customer-centric strategies.



Investments will be dedicated, in particular, to improving the customer experience. To this end, the communication channels with the customers are to be digitized and become more automated. Just under 70 percent of companies anticipate major opportunities from the use of artificial intelligence in customer-centric processes.



77 percent of the customer experience service providers surveyed by Lünendonk saw revenue increase by more than 10 percent in 2017. In 2019, the market for customer experience services is expected to grow by more than 20 percent. In the procurement of consulting and implementation projects in this area, the trend is moving toward the awarding of end-to-end projects, for which the relevant experience and portfolio is required.

The Digital Transformation is in its 3rd and Final Period – the Time to Act is Now!

The pressure on companies in German-speaking countries to accelerate their digital transformation continues to grow. One of the reasons for this is the speed with which customers and competitors are adapting new technologies and starting new technology cycles. The new possibilities of digitization are increasingly breaking apart the traditional value chains, and new providers are taking over the interface with the customers.

To use an analogy; if the digital transformation were a soccer match, Germany would have lost both halves. There is still a chance, however, at least in respect of the Internet of Things (IoT), to make up for lost ground in digitization. It might be more fitting, therefore, to use an analogy from the world of ice hockey; in this case, Germany can be said to have lost the first two periods: the first being the fight for the data economy and the second the fight for e-commerce, multi-channel, and customer experience in the B2C arena.

Thus, the hopes of the German economy rest on the third and final period, with competitors fighting for market leadership in products and services in the area of the Internet of Things. However, the third period has already started and the pressure to develop new, IoT-based, business models and successfully place them on the market is tremendously high. Europe is currently lagging behind here too. Alongside 5G technology, digitization of the interfaces to customers and cooperation partners represents a key success factor for new business models, as do seamless, omnichannel sales and ordering processes. In the automotive, logistics, energy, and manufacturing industries, almost all major corporations have now finally started dealing with the question of how to develop new data-driven business models to

counter potential disruption from start-ups and technology companies. For digital and data-driven business models, a unique customer experience, through the use of modern digital interfaces to the customers and cooperation partners within the entire ecosystem not to mention the ability to gain important insights from analyzing mass data, plays an enormously important role.

In almost every sector, companies are being called upon to respond to new customer requirements. The main driver of this development is the use of mobile devices in almost all areas of daily life – from information absorption and communication through to consumption. Companies have to get their heads around this fact and, more importantly, they have to adapt.

A great many changes and adaptations are required here. Many customers would be happy with being able to change their customer data via web portals, or with fully digitized order acceptance and processing. Although such digital value-added services have become a basic requirement for most customers, which despite not enthralling the customers will at least satisfy them, they are not yet offered by all companies, as the following chapters of this study show.

CHANGING CUSTOMER REQUIREMENTS

Customer expectations of digital interfaces are now so high, however, that digital and omnichannel process chains are required as a matter of course. At the same time, consumer willingness to switch is high in many sectors and exit barriers are low, as start-ups and technology companies have taken over the customer interface with new, innovative solutions that allow customers to better compare products and prices online. Digital

pioneers like Amazon, AirBnB or Zalando have set a standard for customer experience and, in many industries, (one-time) start-ups, like Netflix, Flixbus, Delivery Hero, Spotify, myTaxi, Wirecard for example, have turned traditional business models and processes on their heads with integrated digital solutions.

BUSINESSES ADJUSTING TO NEW CUSTOMER POWER

Two thirds of the managers interviewed attested to a perceived increase in customer power by the major corporations and groups surveyed. A further 15 percent of respondents agreed that there was at least an element of truth in the statement that the relationship with their clients has changed. These changing customer requirements are particularly visible within the banking sector, where online banks are increasingly gaining market share, among the younger generation of customers in particular. Banks are also experiencing growing pressure in the area of mobile payments from challengers such as Wirecard or N26, who are taking over the customer interface. 93 percent of the bank managers surveyed thus agreed with the statement that the customer's position had become stronger.

Interestingly, more than half of respondents from the retail companies surveyed did not currently consider there to be any reversal in the balance of power between the customer and the retail sector. Relatively few respondents (47 percent) conceded that their companies were feeling more pressure from customers, although 29 percent agreed at least in part.

In the manufacturing industry (excluding automotive and consumer goods manufacturers), 44 percent of companies did not consider there to be any changes in their relationship with customers. One explanation for this snapshot is that many industrial companies operate in highly specialized markets, where they are the market leaders in some areas and therefore continue to rely on the international competitiveness of their products. On the other hand, a good half of the industrial companies surveyed perceive an increase in customer power, putting them under more pressure to focus more closely on their customers and offer new, digital and data-driven after-sales services.

INCREASING PRESSURE TO BECOME MORE CUSTOMER CENTRIC



Figure 1: Question: In many industries, digitization has brought greater transparency to the market, placing even more power in the hands of the customers and allowing them to compare offers and change providers faster. Would you say that this statement applies to your business and why? n = 109

THE 4 ELEMENTS OF A CUSTOMER-CENTRIC APPROACH

Companies need to take an array of measures in response to the altered customer markets. Figure 2 illustrates the different elements involved in digital transformation and a customer-centric approach. It is vital that customer-centric strategies cover the entire value chain and not just isolated areas.

To be able to sell more product-related and, above all, data-driven services to customers in the future (field services, predictive maintenance, connected car services, etc.), what is required first of all is a holistic approach to customer data, data analysis, and the monetization of these customer data. The automatic exchange of data between multiple platform ecosystems is a key characteristic of such business models. To facilitate this, it is important to network the various divisions, consolidate the databases, and connect better with the ERP and digital front-end solutions (apps, online platforms, and so on).

Industrial and logistics companies, for example, are increasingly developing digital solutions that remotely

monitor, optimize, and repair machines, equipment, and tools that are equipped with sensors. Such services complement the existing business models and increase customer loyalty to the company or product. Data-driven, product-related services offer industrial and logistics companies in particular the opportunity to successfully position themselves within the IoT environment and maintain a strong competitive position.

An important component in such digitization strategies is the digital customer interface (usually an app or web portal). This calls for the establishment of digital channels, which run on the prevailing operating systems (iOS, Chrome, etc.) and support third-party integration as well as enabling an intuitive and user-friendly process. Alongside process quality, therefore, the most important factor in successful digital services is process design. Process design focuses on guiding the customer through the service process as quickly and intuitively as possible. Another factor is the integration of back-end processes (ERP, PLM, CRM, data warehouse, etc.) to communicate with new software solutions and connect third-party solutions (such as Amazon Marketplace, Bosch IoT Cloud, connected car services, for example).

THE 4 COMPONENTS OF A CUSTOMER-CENTRIC APPROACH

INTERCONNECTION AND A HOLISTIC VIEW OF THE CUSTOMER (Where did he buy something and when? with whom?)



OPTIMIZATION OF EXISTING BUSINESS MODELS TO REACT ON CHANGED CUSTOMER REQUIREMENTS



CUSTOMER JOURNEY: Development and implementation of modern customer interfaces using process automation and data analytics



DEVELOPMENT OF NEW BUSINESS MODELS TO REACT ON DISRUPTION



Figure 2: The Four Key Elements in Customer-Centric Strategies

The analysis of the customer journey, in other words, how a customer navigates a process, is an essential aspect of process design and one of the most important differentiating features of digital business models. Start-ups and the tech giants Apple, Amazon et al have achieved success through a greenfield approach and by focusing on customer-centric processes and agile process models. By contrast, digital services that are not intuitive for the customer, that do not afford the desired user experience, and are perceived as deficient in comparison to the consumer apps, are not accepted and therefore will not achieve market success.

ASSESSMENTS OF THE COMPETITIVE POSITION

Lünendonk wanted to know from the managers surveyed how they felt their companies were doing compared to the competition with regard to the digital transformation.

While many companies in Europe have focused on improving process efficiency and cutting costs in recent years, innovation in digital and data-driven products has been somewhat neglected.

This has left room for many of the customer interfaces to be taken over by start-ups and technology companies with innovative ideas and customer-focused digital solutions, especially in the retail sector, financial services, and media industries. As a result, it is hardly surprising that many of the major corporations and groups surveyed are not scoring highly on the digital transformation of their front-end.

Lünendonk then wanted to know how the respondents felt their companies were positioned compared to the competition in terms of three important elements of a holistic customer-centric approach.

The responses from the interviewed managers indicate that at least every second company considers itself to be just as well or, depending on perspective, just as

badly positioned as their competition. Innovation management in particular scored particularly low. Only 18 percent of respondents considered their own company to hold a market-leading position in innovation; that is, in the development and realization of new business models. This reflects the current situation, as the major digital innovations of recent years have rarely originated from Europe, but instead largely from Silicon Valley or China.

In addition to the somewhat weak culture of innovation by international comparison, German and European companies struggle particularly with the scaling of marketable products. Accordingly, 28 percent of respondents see their companies as lagging behind in the scaling of new business models. This is due in part to the companies being slow to overhaul traditional operating models and introduce agile collaboration models and cloud technologies for example.

The one key advantage that digital disruptors from the New Economy have over most Old Economy businesses is that they are quick to develop and launch digital services while at the same time offering a high level of process quality and positive customer experience through daily software releases. Their predominantly cloud-based operating models allow them to scale flexibly, connect well with third-party providers, and merge into an ecosystem.

According to their managers, only 16 percent of the companies surveyed are better positioned to scale new business models than their competitors. From the analysts' perspective, rigid and hierarchical organizational structures are the main impediments to innovation management. While agile process models such as Scrum have already become well established within the IT sector, very few companies currently use agile methods such as Design Thinking and Lean Startup for developing new (digital) products and services.

INDUSTRY-SPECIFIC FEATURES

The percentage of respondents attesting to a high level of innovation at their companies was particularly low within the retail and insurance sectors. By contrast, 27 percent of the managers surveyed from industry felt that their companies were leaders in the development of new business models. The challenge facing these companies appears to be the scaling of new products and services, with half of the industrial companies surveyed feeling that they were lagging behind the competition in this respect.

In the retail sector, too, the proportion of companies that feel that they are lagging behind in business model scaling is above average at 31 percent. However, due to the strong shift to e-commerce, particular urgency is required in this sector in the development and launch of online-based distribution platforms.

DIGITAL SOLUTIONS AS AN ADD-ON

The companies surveyed consider themselves somewhat better positioned in terms of optimizing their existing business models and related products and services with digital added-value services. 24 percent of

the managers surveyed felt that their companies had a leading position in this regard. Examples of digital value-added services include customer portals and apps, connected car services, or even field services and predictive maintenance solutions for industrial products. Industrial companies in particular have made great strides in recent years in the development of new product-related and data-driven services in order to further differentiate themselves from the international competition through quality leadership and by tapping new service-related sources of revenue.

However, our findings also show that there is still considerable potential in the digitization of customer interfaces and the development of new, data-driven after-sales services for existing products and services.

It is also clear that historical pressure to digitize has not yet led to a significant modernization of customer-related front-ends and a consistent customer-centric approach – at least in the perception of the managers surveyed.

BUSINESSES ARE STRUGGLING TO DEVELOP AND SCALE NEW BUSINESS MODELS

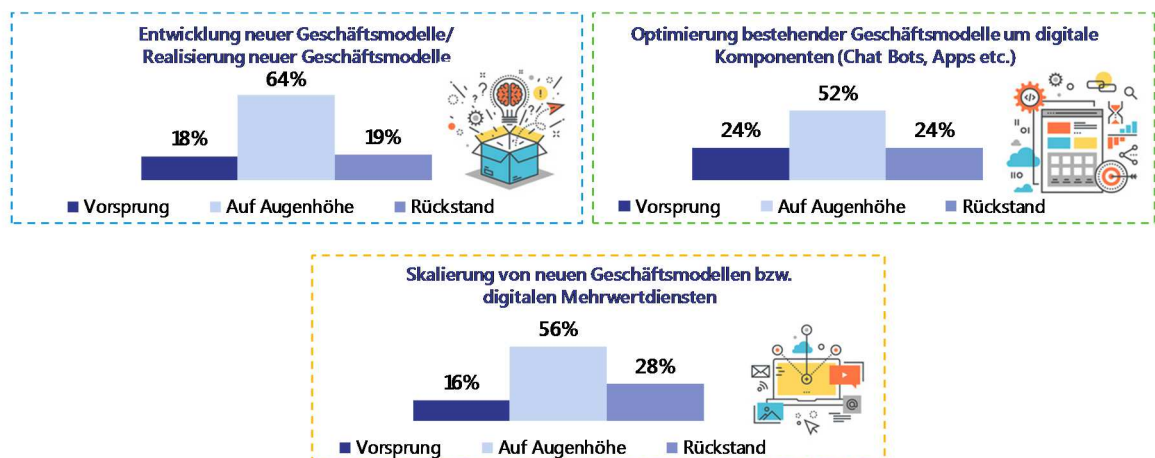


Figure 3: Question: How would you assess your company's current position compared to the competition in the following areas? n = 108

Technology – The Most Important Element of a Customer-Centric Strategy

A modern and open interface IT landscape is an essential prerequisite for the successful implementation of a customer-centric digitization strategy. Today, the majority of customers expect much more than simply a user-friendly, appealing user interface. For example, growing numbers of customers expect e-commerce and customer service processes, for instance, to support seamless switching between multiple mobile devices and for all relevant customer data to be accessible from the ERP and CRM systems.

In the platform economy, integrating digital front-end solutions with the IT back-end is just one of many essential prerequisites for creating a unique customer experience on the basis of big data analytics and artificial intelligence.

It is therefore important that the core business applications (ERP, CRM, PLM) are able to communicate with the new digital solutions and thus exchange data continuously. Application programming interfaces (APIs) are highly important in this regard, as they allow new software tools and solutions from third-party suppliers to be connected to the legacy systems for the automatic exchange of data flows. They can be used, for example,

to connect external payment service providers or price comparison portals and other third party providers to e-commerce platforms. The technical networking of business-specific IT applications and systems is also necessary in order to gain a standard view of all the relevant data (thus removing silos).

Before you can start implementing customer-centric strategies and data-driven business models therefore, you first have to modernize the back-end IT and organizational structures.

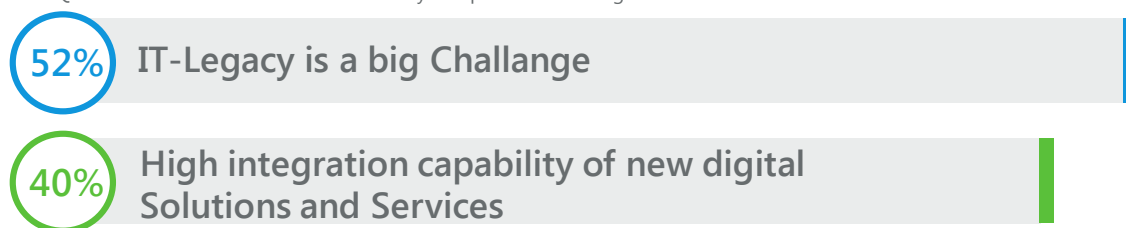
MANY IT SYSTEMS STILL HAVE A LOW INTEGRATION CAPABILITY

The responses given by the managers surveyed indicate that the majority of the major corporations and groups analyzed do not currently even have the basic technological prerequisites in place. Only 40 percent of respondents stated that their company's IT systems were highly integrated.

For the remaining 60 percent of companies, therefore, connecting new applications is significantly more complicated, impacting both process quality and customer experience.

TECHNOLOGICAL SHORTCOMINGS HINDER DIGITAL TRANSFORMATION

Figure 4: Questions: Recent studies show that many companies are having to contend with outdated software and IT solutions. Does



this also apply to your company? n = 106. Would you say that new digital solutions, like apps or new products and services, are easy to integrate within your business? n = 107

HIGH PROPORTION OF LEGACY SYSTEMS PREVENTS SMOOTH INTEGRATION OF NEW SOLUTIONS

A major reason for low integration capability and high integration effort are legacy systems that in many cases have evolved over time. Such systems are often proprietary or highly customized versions of standard ERP software, and used in individual divisions and subsidiaries. In the case of these IT monoliths, programming interfaces to JavaScript or PHP-based applications, for example, is usually extremely time-consuming and costly. What's more, some of these systems are already so ancient that the number of IT experts with the necessary expertise to modernize them is sorely lacking. The upshot of this is that digitization initiatives in technologically backward companies are often stalled by the fact that business cases for new business models are not financially viable on account of the excessive investment costs involved in modernizing the IT systems or connecting new applications to the IT back-end.

As a result, 52 percent of the managers surveyed asserted their businesses were having to contend with outdated IT systems.

The percentage of companies in the banking and retail sectors with an outdated IT infrastructure was well above average, which was in line with expectations. Both sectors have a high proportion of in-house developments whose replacement or transformation into a

standard ERP and CRM system (S/4 Hana, Microsoft Dynamics, salesforce, etc.) would be extremely complex and cost-intensive. Some major transformation projects have failed in recent times because of their high level of complexity or time involved.

STILL SCOPE FOR GREATER AUTOMATION OF CUSTOMER-RELATED PROCESSES

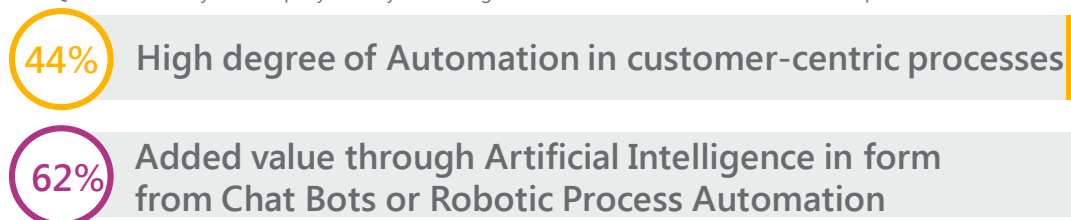
This failure among the majority of companies surveyed to adequately modernize their IT landscapes also means that they are also behind in automating their customer-related processes (customer service, marketing, order processing, for example). Only 44 percent of the managers surveyed agreed that their companies' customer-related processes were highly automated.

As more and more customers judge service quality on the basis of a provider's process quality and speed, automated processes are an enormously important basis for the customer experience – but are also often a rarity.

Artificial intelligence and data analytics are two enormously important aspects of successful automation. By reducing manual activities (manual order processing, simple customer correspondence, chatbots), for example, response speeds can be greatly increased and a 24/7 service guaranteed.

STILL SCOPE FOR INCREASING AUTOMATION LEVELS WITH GREAT POTENTIAL FOR ARTIFICIAL INTELLIGENCE

Figure 5: Questions: Does your company already have a high level of automation in customer-related processes? n = 107. Does artificial intelligence in the form of chatbots or robotic process automation in customer-related processes add value to your business? n = 107



cial intelligence in the form of chatbots or robotic process automation in customer-related processes add value to your business? n = 107

NEGATIVE EFFECTS OF TECHNOLOGY APPLIED INCORRECTLY

Moreover, after making a purchase, customers increasingly value recommendations for complementary products and services based on their consumption habits. However, unsophisticated versions of such solutions can in fact negatively affect the customer experience.

For example, being inundated with advertisements for coffee machines shortly after buying one is likely to annoy customers. As such, in automation projects for customer-related processes, equal importance must be afforded to data quality, big data analytics, and artificial intelligence. At 69% and 53% respectively, there is an above average proportion of energy suppliers/municipal electrical utilities and retail companies with a high

degree of automation. These sectors have been under significant pressure to retain customers for many years. By contrast, only 37 percent of the banks surveyed, and 38 percent of insurance companies admitted to a high degree of automation in customer-related processes.

SIGNIFICANT POTENTIAL FOR ARTIFICIAL INTELLIGENCE

With the tremendous opportunities offered by tools such as chatbots and robotic process automation in improving customer communications and process quality, 62 percent of respondents see significant potential in artificial intelligence for their businesses. The response was particularly positive from the banks surveyed (70%), the energy suppliers/municipal utilities (69%), and industrial companies (60%).



Organization & Culture – Another most important Element of a Customer-Centric strategy

Besides the modernization of the technological infrastructure and processes, suitable organizational structures and cooperation models are an important basis for successful digitization projects. The study highlighted shortcomings in the organizational structure as well as in an insufficiently innovation-oriented corporate culture.

According to two-thirds of the managers surveyed, a considerable number of planned and initiated projects for the digitization of customer interfaces or the development of new products and business models could not be brought to fruition. In 60 percent of the major corporations and groups surveyed, there was a failure to complete up to one third of the planned projects while for 28 percent of respondents, the number of uncompleted projects was as high as fifty percent.

An industry comparison reveals a number of interesting differences. For example, in 44 percent of the banks surveyed, half of the projects initiated were not completed. This figure was similarly high among 57 percent of the automotive companies surveyed. In the other sectors looked at, the majority of companies were unable to bring as much as one third of the projects initiated to the planned fruition.

These results indicate that the companies surveyed are experiencing both strategic and organizational difficulties in implementing the required change and adaptation process and steering their digital transformation. The reasons behind these failures to complete such a high number of projects and initiatives are complex and vary by industry.

COMPANIES EXPERIENCING DIFFICULTIES IMPLEMENTING DIGITAL TRANSFORMATION

66% cannot implement planned projects because ...

74% ... too many projects or initiatives are running at the same time.	50% ... Employees often do not fulfil the technical requirements of the projects, so that no project implementation can take place.
59% ... lacking agile structures do not allow fast implementation.	46% ... the corporate culture slows down innovations.
54% ... budgets and priorities lie in the implementation on other projects.	31% ... the department's concept cannot be implemented as it is not compatible with the IT strategy and IT landscape.
51% ... the silo structures and different objectives of the departments prevent the implementation.	29% ... data security and IT security requirements cannot be guaranteed.

Figure 6: Question: How many companies have experienced failures or delays in implementing planned projects to develop new business models and digitize customer interfaces? Has this been the case for your company? n = 104; if so: What would you say were the reasons? n = 76

PROJECT BACKLOG AS A RESULT OF PRESSURE TO DIGITIZE

First, an important factor, and one that is not confined to a specific sector, has been the significant increase in digitization projects from user departments.

According to Lünendonk® study 'The Market for IT Consulting and Services in Germany,' in fifty percent of the companies surveyed, the number of IT-related projects from user departments has increased by about a third over the past two years as a direct result of digitization.

According to over 60 percent of the CIOs and business managers surveyed, this has caused a long project backlog and meant that many projects and projects have not been brought to fruition. This trend is mainly due to the growing pressure to digitize and the resulting increase in the use of digital technologies, such as artificial intelligence, cloud, or automation solutions, by user departments to digitize their processes, customer interfaces, and business models.

HIGH PROJECT VOLUME NEGATIVELY IMPACTING PROJECT COMPLETION

The most commonly named reason for a failure to complete or continue projects or for the postponement of projects at the companies surveyed was the high number of projects running simultaneously.

According to 74 percent of respondents, there are too many digitization projects and initiatives currently running simultaneously, which therefore have to be prioritized based on available capacities. However, there are not enough skilled workers available for the required projects to address the various aspects. This is by far the most frequently proffered justification for project cancellations or postponements. This was often the case particularly for the banks, retail companies, energy suppliers/municipal utilities, and insurance companies surveyed.

CULTURE EATS STRATEGY FOR BREAKFAST

The second reason given was a lack of agile structures at the companies surveyed. According to 59 percent of the managers surveyed, traditional and hierarchical structures are holding up the implementation of digitization projects.

New structures and collaborative models are needed because digital transformation is not solely a question of technology, it is something that affects the entire organization and its ecosystem. As a result, while most companies have begun to adopt agile methods in some areas, many are still a long way from agile transformation.

Agile transformation is not simply about using Scrum in IT development teams, it represents a change of culture for the entire company. The transition to agile procedural models such as Scrum, Design Thinking, or Lean Startup has far-reaching effects on the working methods, processes, and leadership principles employed by the companies.

While many companies do succeed in developing new products and minimal viable products (MVPs) using agile innovation development methods, they often find it difficult to transfer these new ideas and concepts over to the "old" organizational structure for implementation. This often leads to conflicts with the core business, prevailing thought patterns, and defenders of the status quo.

While many studies indicate that the proportion of agile process models in the IT sector is already very high, especially in the development of digital solutions (e-commerce, connected car, IoT solutions, apps, digital marketing, etc.), the development of digital solutions certainly does not guarantee a positive customer experience or a customer-centric approach. Furthermore, many companies are experiencing considerable problems introducing and scaling agile methods, such as Design Thinking, Business Model Canvas, or Lean Startup



within innovation management and product development, and using Scrum to integrate them into a holistic innovation and implementation approach.

SILO STRUCTURES VERSUS CUSTOMER CENTRICITY

Accordingly, at fifty percent of the companies surveyed, the main factors quoted as holding up the implementation of digitization projects were silo structures and divergent objectives from the user departments. However, the closer integration of user departments and disintegration of departmental structures are central to the agile approach and lead to higher product development quality and a faster time-to-market. And because individual employees are given much more responsibility in agile development teams than traditional hierarchical structures, there is more scope for new and interesting ideas to emerge. For middle management on the other hand, the transition often proves more challenging.

From the responses of executives from major corporations, it is apparent that digitization projects often start out agile, but soon revert back to pre-agile modus operandi, ultimately resulting in no new ideas being adopted and a failure to scale new products.

Key reasons behind this are risk aversion in management and a need for control. As a consequence, agile teams eventually return to being hierarchical, and controllers and managers reject fail-fast approaches and business plans, and stop approving budgets for new ideas. Many managers also find it difficult to adapt to agile ways of working and to delegate responsibility because, in agile models, managers, as the product owners, have little or no authority to give instructions and have to relinquish control.

Simultaneous control over the core business and innovations (ambidexterity) has posed great challenges for companies for many years. Many companies failed to align their structure and corporate culture to the requirements of the digital transformation at an early

stage and ensure their competitiveness through innovation. German companies, in particular, have long focused on improving process and cost structures and have neglected the innovation side.

For Lünendonk, the key to a successful digital transformation, therefore, is to change the focus away from leadership principles, values, and organizational structures as important dimensions of change and onto agile process models. Change management is an area requiring further action, with 46 percent of respondents seeing organizational culture as obstructing the development and scaling of innovations and new ideas.

Investment is therefore needed in staff training as the digital transformation must be effected by the existing workforce, who require training in the new working methods and must be equipped with the necessary soft skills and methodological knowledge. The pressure on HR is already high, as the Lünendonk® study also confirmed.

According to the managers surveyed, a good fifty percent of the companies do not have enough employees or specialists in technology-driven subject areas, which has the knock-on effect of preventing the implementation of digitization and related projects within these companies. It has also become more difficult to acquire external service providers for digitization projects

primarily because of the extremely high demand by such companies for support in process automation, digital marketing, UX design or artificial intelligence for the customer interaction. Thus, the management and IT consulting companies analyzed by Lünendonk in 2018 saw more than a 10 percent increase in revenues in 2017. The digital and Internet agencies also achieved double-digit revenue growth, indicating a high degree of integration of external service providers into digitization projects in all three market segments.

SILO STRUCTURES TO BE ABOLISHED

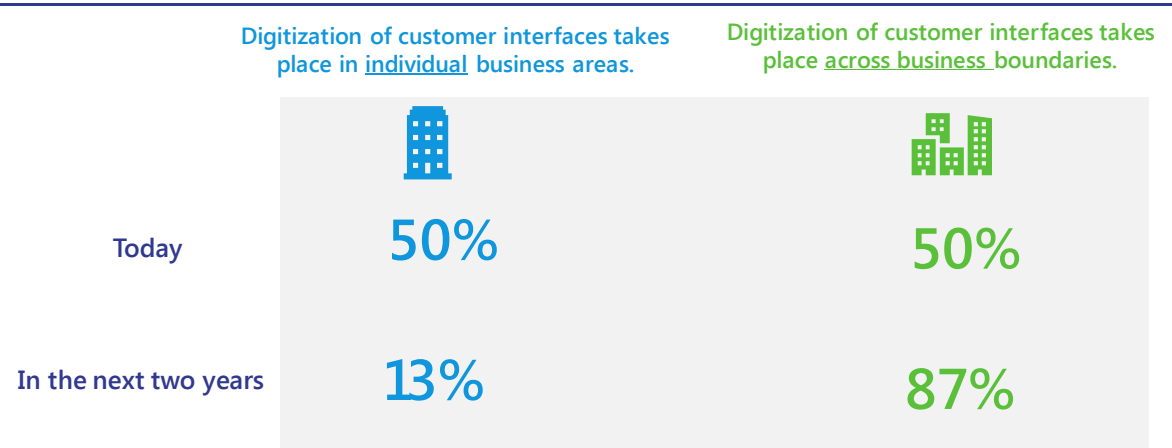
A lack of interconnectedness between the individual divisions and departments is a sign of agile transformation progressing too slowly.

The runaway success of tech companies such as Amazon, Google, Netflix, Zalando, and the many start-ups is primarily attributable to their agile and non-hierarchical structures, and their ability to quickly develop marketable software applications and publish new releases.

In fifty percent of the companies surveyed, most of which are from the Old Economy, digitization is still being implemented in individual divisions. This has resulted in user departments being given considerable freedom in their digitization strategies, their insufficiently networked systems making it harder to exchange

data. For this reason, only a very small number German-speaking and European based companies have successfully produced digital business models that have been able to scale the market. In order to operationalize business models, user departments require closely coordinated strategies and an open IT architecture to support smooth data flows. The proportion of cross-divisional projects was particularly low in the banks, retail and industrial companies analyzed.

From the responses given, we can surmise that, over the next two years, the companies surveyed are planning to replace their existing core business with new business models or optimize it with digital value-added services. For example, 87 percent of the managers surveyed expect customer interface digitization projects to be implemented across all divisions in the future.



COMPANY-WIDE CUSTOMER-CENTRIC STRATEGIES TO BE IMPLEMENTED IN THE FUTURE

Figure 7: Question: How would you best describe the focus of your customer-centric strategies? Today n = 107; in the next 2 years n = 105



Current Situation in the Digitization of Customer Interfaces and Development of New Business Models

The major corporations and groups surveyed have taken up the challenge of digital transformation and, in recent months, have embarked on a wide range of measures in order to respond to changing customer demands as well as new competitors with purely digital business models. Lünendonk asked the respondents about the investment focus from the past 12 months and then how investments will develop in the future.

The findings suggest that investments in the past year had been directed toward a redesign of the operating model, with key areas of focus being improving processes, digitizing business processes, and abolishing company silos.

NEED TO OVERHAUL CUSTOMER-CENTRIC PROCESSES RECOGNIZED BY COMPANIES

The digitization of customer interfaces and improving the customer experience were the most frequently highlighted areas of focus, involving both a redesign of customer-centric processes and the improvement of services over digital customer interfaces.

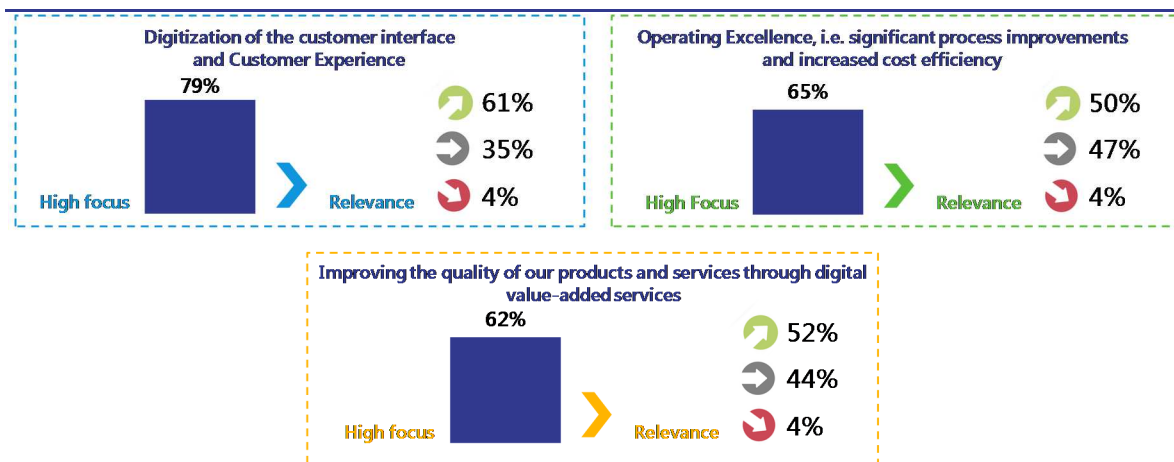
In 79 percent of the companies surveyed, special attention was being given to these customer-centric issues, the main focus being the establishment of digital channels to interact with customers, for example, to provide a better service and be able to market new data-driven products. The takeaway from this is that customer communication in the digital age is all about providing customers with integrated opportunities to interact at all

touchpoints (e.g. call centers, apps, websites). Key requirements for this are simple and intuitive processes as well as the collection and evaluation of data throughout the entire customer process chain.

However, the integration and analysis of data derived from mobile device use and third-party, platform-based business models present a major technological challenge here. Another challenge is the centralization of the (often locally-managed) master and process data. A large number of projects are therefore currently underway in major corporations to consolidate databases and connect the various divisions in a network. One example of this would be the integration of all relevant customer information for self-service portals to facilitate the display of a complete order history or relevant services for a particular customer. Another example in the case of artificial intelligence (chatbots for example) is the need to ensure high quality data, (customer) master data in particular.

INDUSTRY DIFFERENCES

Due to the significant competition facing banks and insurance companies from Fintechs and Insurtechs, digitizing the customer interface was a major focus of the past 12 months for almost 90 percent of the financial service providers surveyed. Examples include the digitization of distribution channels (online banking, online deals, chatbots in combination with artificial intelligence, etc.) or the digital processing of contractual amendments or claims.



COMPANIES PLACING A GREATER FOCUS ON CUSTOMER EXPERIENCE THAN PROCESS AND COST EFFICIENCY

Figure 8: Question: What was the focus of digitization projects over the last 12 months in your company and what will their future focus be? Current: scale from 1 = "low focus" to 4 = "high focus", 5 = "not an issue"; the percentages refer to the answers "high focus" and "somewhat high focus"; n = 108; Planned: scale from 1 = "less important" to 3 = "more important"; n = 108

By contrast, in the other sectors analyzed – industry and retail in particular – the number of companies focusing on digitization was below average. However, more than 70 percent of these companies plan to invest more heavily in the digitization of customer interfaces and customer experience in 2019 to make up for lost ground.

There is considerable potential in the use of artificial intelligence for semantic speech recognition, for example, or for scanning communications for particular keywords to permit a swift, automated response to the customer.

CONTINUED IMPORTANCE OF PROCESS AND COST EFFICIENCY IN THE CONTEXT OF DIGITIZATION

In addition to the front-end, the majority of the companies surveyed invested heavily in the back-end in the past 12 months to improve and accelerate processes and further improve their cost structure. Only one in two companies plan to invest more heavily in operational excellence in 2019 than 2018. For a further 47 percent, it remains equally as relevant as the previous year.

Improving process quality and, as a consequence, customer experience has a number of objectives:

- Faster turnaround thanks to automation
- Faster reaction speed, for example through the use of artificial intelligence and the cloud
- Stable processes and minimal downtime
- High integration of back-end processes via API (application programming interfaces) for new digital solutions
- Cloud-based processes for scaling digital business processes

These elements have a direct impact on the success of new products and digital business models and are an important foundation for successful, customer-centric strategies. Based on the responses of the managers surveyed, in 2018, the main focus of the major companies and corporations analyzed was on optimizing customer-related processes and supporting back-end processes.

For 2019, the companies again plan to focus on process-oriented optimization topics. Placing the focus of digital

strategies on the process level and new operating models is entirely reasonable since most of the companies surveyed have not yet achieved the necessary level of technological maturity (see Chapter 2). Companies are therefore investing heavily in modernizing their legacy systems and data centers to reduce data silos and create an open and flexible system landscape. Cloud sourcing plays a central role in these modernization projects, the private cloud by far being the preferred variant. A growing number of major corporations and groups are transferring parts of their application landscape (ERP, CRM, etc.) to the cloud. The reasons are many and varied, ranging from greater flexibility, to better integration with other applications, to enhanced security.

Furthermore, cloud solutions, such as Amazon Web Services or Microsoft, at first glance offer a major advantage as part of new operating models: These provide software toolkits with AI capabilities, which support the development of data-driven business models / services and the integration of third-party solutions. Data analysis is often the responsibility of the cloud providers, and the tools are connected to the application landscape via API (application programming interface).

POTENTIAL FOR DIGITAL VALUE-ADDED SERVICES

Digital products and new business models can only prevail on the market and be scalable if the customer experience is perceived as positive or even unique. And a unique customer experience can only be created if the process landscape is stable, integration-capable, scalable, and flexible.

Despite falling short on the technical requirements in some cases, 62 percent of the companies surveyed admitted to investing in digital solutions to increase the value of existing products and services.

An increasing number of industrial companies, for example, are introducing product-related service offerings in the area of remote monitoring of machines, systems, vehicles, and devices for the prevention or swiftly

resolution of disruptions and failures (predictive maintenance). Conversely, the findings also show that, for 38 percent of the companies, customer-centric digital solutions had not been a particular focus in recent months.

52 percent of the managers surveyed did however indicate in their interviews for the Lünendonk® Study that they would be investing more heavily in new digital services in 2019.

DIGITAL BUSINESS MODELS

58 percent of respondents answered yes to the question of whether their companies had developed new, predominantly digital and data-driven business models in the past 12 months. This was compared to 18 percent who said their companies currently had no plans to develop digital business models.

The development of new, predominantly digital business models was particularly prevalent among the industrial companies surveyed (69%). Almost half of these industrial companies were developing and implementing these new business models alone without any support from third parties or cooperation partners. However, 73 percent of industrial companies were planning to use external support and a partner ecosystem to develop new business models in the future. These results provide a good reflection of the maturity of digital transformation: In the first stage, the focus is on developing the core digital service-related products while the focus of the next stage is on integrating these into platform ecosystems, such as IoT platforms.

Among the banks surveyed, there was also above average (63%) development of new, digital business models.

By contrast, this figure was particularly low for the municipal utilities/energy suppliers and retailers surveyed although more than a quarter were planning to develop new business models in 2019.

The energy industry will, however, be given a push by electromobility and smart home, for which energy providers will provide the infrastructure.

What is interesting about these results is that, in almost all the companies that have already developed new, predominantly digital business models (98%), the development of further digital business models is also planned for 2019.

METHODS AND STRATEGIES FOR THE DEVELOPMENT AND IMPLEMENTATION OF NEW BUSINESS MODELS

Companies that have already developed or are currently developing new, digital business models employ highly agile methods, such as Business Model Canvas, Design Thinking, Lean Startup, and Scrum.

In addition, 68 percent of the companies have established digital units in order to set up agile units outside of their own process organization and significantly increase the speed and quality of the innovation and implementation process.

DIGITAL BUSINESS MODELS ALREADY DEVELOPED BY MORE THAN FIFTY PERCENT OF THE COMPANIES

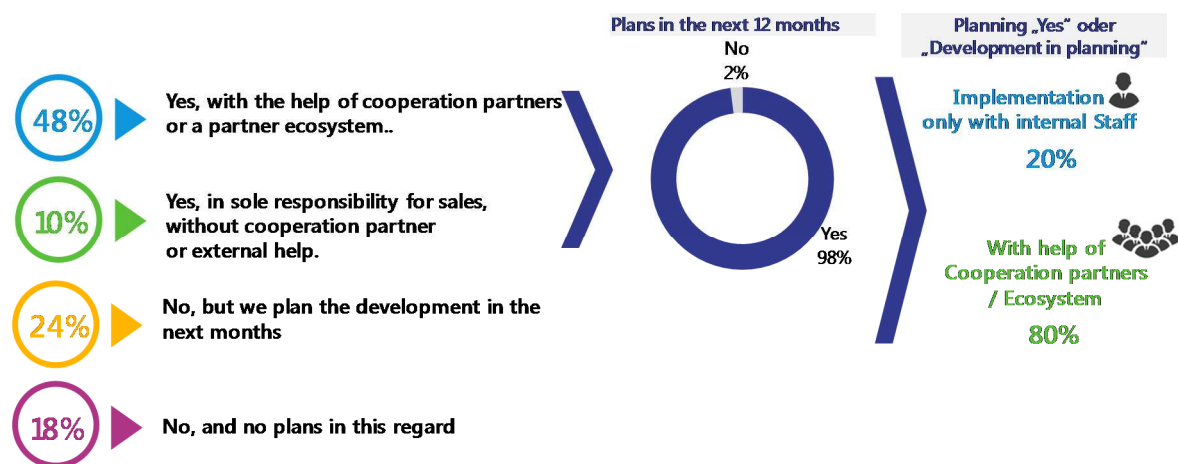


Figure 9: Questions: Has your company developed new, predominantly digital and data-driven business models in the past 12 months? n = 108 if "yes": Is your company planning to develop new, predominantly digital business models over the next 12 months? n = 64. If "planning yes" or "no, but planned": How does your company plan to develop these new business models? n = 85

Investments in Customer Centricity

The planned investment priorities of the companies analyzed provide a good insight into the specific areas of focus of their customer-centric digitization strategies.

Three-quarters of the major corporations and groups surveyed expressed an intention to make significant investments in the areas of "optimizing customer communication channels" and "automating customer interaction processes" in 2019. Consequently, process modernization, in respect of improving the customer experience and re-designing customer-related processes, is certainly on the agenda.

In terms of technology, greater investment is being made in customer journey analyses, rolling out marketing and customer service applications with AI capabilities, as well as consolidating CRM systems and integrating these with ERP systems and business apps. In this context, 60 percent of the companies surveyed also plan to invest heavily in digital marketing in 2019.

The analyzed companies are planning similarly high investment in online sales channels. A major focus of this investment will be on building API-compatible digital customer interfaces (web portals) that can connect seamlessly to platform ecosystems, such as, for example, the operating systems of Apple (iOS) and Google (Chrome), IoT platforms (Siemens Mindsphere, Bosch IoT Suite etc.), or the retail platforms Amazon, Alibaba, or Zalando.

In summary, the focus for 2019 will be very much on the process level. Only one in every two companies (53%) plans to focus on developing new business models and investing accordingly. By contrast, 65 percent plan to optimize their core business with digital value-added services in an effort to respond to the changing and higher service expectations of many customers and to tap new sources of growth. The essential prerequisite for businesses wanting to scale new digital solutions are digital and customer-centric channels to the customer.

COMPANIES ARE INVESTING IN CUSTOMER-RELATED PROCESSES AND THE CUSTOMER EXPERIENCE

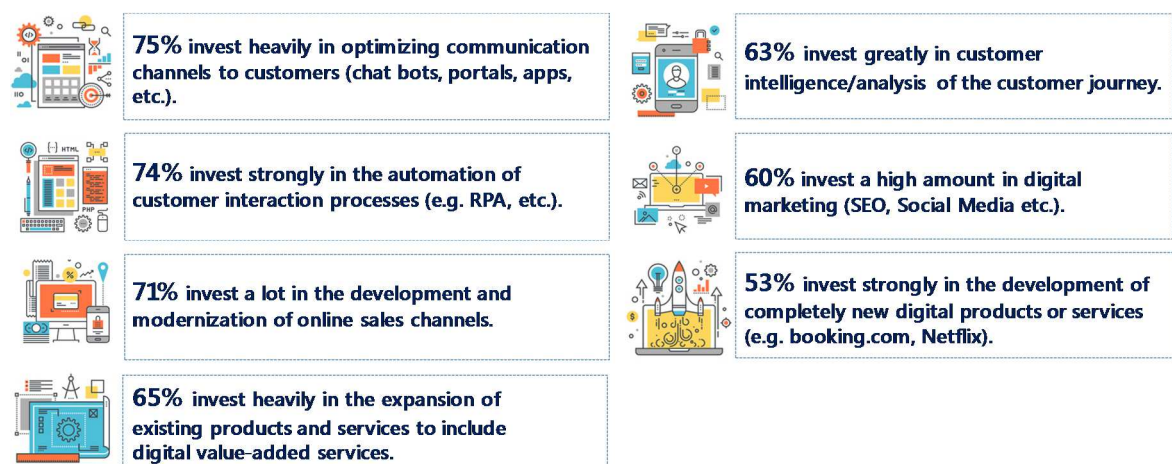


Figure 10: Question: In which of the following will your company be investing in the coming years? Scale from 1 = "not at all" to 4 = "very heavily"; the percentages refer to the answers "very heavily" and "heavily"; n = 108

HIGHER BUDGET DEDICATED TO IMPLEMENTATION OF CUSTOMER-CENTRIC STRATEGIES

The pressure to implement customer-centric strategies is also reflected in the planned investments of the investigated companies. In 2019, the managers surveyed expect their companies to invest an average of 3.3 percent of revenue in areas relating to the digitization of customer interfaces and new (digital) business models. That would represent an increase of around 40 percent compared to 2018. The motivation behind this increased investment are the measures and areas of action identified as necessary to keep pace with the digital transformation and make up for lost ground.

In 2018, investments in the digitization of customer interfaces by the banks analyzed were particularly low, averaging 1.5 percent of revenue. In 2019, however, this

figure is expected to rise to an average of 3.9 percent. For industrial companies too, the average investment in digital channels was low, at only 1.3 percent, but is also expected to increase in 2019 to an average of 2.1 percent of revenue.

By contrast, the retailers surveyed were the biggest investors in customer interface digitization, investing an average of 3.4 percent of revenue. By 2019, however, this percentage is expected to drop marginally to 3.1 percent of revenue.

The insurance companies surveyed did respond to the high pressure to digitize in 2018, investing an average 3.2 percent of revenue in new digital channels and the customer experience. In 2019, this investment is expected to rise to an average of 4 percent.

GROWING INVESTMENT IN CUSTOMER CENTRICITY



Figure 11: Question: Can you give a rough figure as to what percentage of your revenue is spent on digitizing the customer interface and developing new business models? n = 41

Cooperation with Consulting and Implementation Services

Individual customer requirements and interfaces to the customer, both for B2B and B2C, are increasingly becoming the core focus of the digital transformation. In view of this, the companies surveyed plan to automate more in the future to be able to better scale new products and services. Omnichannel processes (digital marketing, social media, e-commerce) play a major role in this, as does the analysis of all collected data from the various customer touchpoints and points of interaction. To be able to navigate these areas successfully, companies need a host of (in some cases entirely new) skills in customer experience design not to mention strategic, technological, creative, design, and operational expertise. This is compounded by the fact that the speed of development has accelerated and technologies and digital innovations have increasingly shorter half-lives.

Consequently, companies are unable to implement their digitization strategies on their own and therefore rely on cooperation with external consulting and implementation service providers.

The problem these companies then face, however, is that there is simply too short a supply of the specialists they require to implement their digitization projects. Since this is the first time that many companies are having to contend with the Internet of Things, the cloud, artificial intelligence, or digital marketing, they lack experience in implementing technology concepts, prototyping, and scaling. As a result, consulting and IT service providers are becoming more integrated within the value creation process.

The companies most frequently invited to participate in tenders relating to the customer experience and new business models are IT consulting companies (70%) and digital and Internet agencies (69%). 60 percent of the managers surveyed would additionally include strategy and management consultancies in the selection process for the development and implementation of customer-centric strategies. These results underline the increasing involvement of creative and design services with the translation and implementation of concepts and prototypes in the process landscape.

CUSTOMERS WORK WITH ALL THREE TYPES OF CUSTOMER EXPERIENCE SERVICE PROVIDER



Figure 12: Question: Which of the following supplier groups would you include in the service provider selection process for projects relating to the development and marketing of new business models and customer experience? n = 107

Expertise required of Providers of Customer Experience Services

The redesign of communication channels and the development of new products and services associated with the digital transformation are placing different requirements on service partners. The respondents' answers to what criteria are important to them when selecting external consulting and implementation partners indicate that a high level of innovation as well as industry and technical expertise are greatly sought after in a service provider. In addition, 69 percent of respondents attach great importance to strong creativity and design credentials and 68 percent to IT expertise in integrating digital solutions into the back-end processes. These top requirements alone illustrate the changing trend in the consulting market toward bringing together different individual disciplines in an integrated consulting, development and implementation approach.

Speed is particularly important in innovation and product development to be able to take advantage of the faster technology cycles. Many companies are also frequently delegating concept development to their ser-

vice partners. 71 percent expect their service providers to develop prototypes for digital solutions, making them strategic development partners. As a result, service providers are required to concentrate closely on new technologies and the needs of their clients' customers, and to invest in their own innovation management. 68 percent of respondents, for example, expect their service partners to offer visionary ideas and 83 percent expect them to have knowledge about the customer journey of their customers.

58 percent emphasized the importance of an end-to-end portfolio due to the diverse requirements of digital transformation and the high demand for expertise and specialist know-how. It is apparent that, in the digital age, customers expect a unique interface and high product quality. Digital solutions cannot therefore be limited to just one channel or one technology, but must cover the entire customer journey from start to finish, avoiding media disruptions along the way and interfaces within the projects.

USERS WANT SERVICE PARTNERS THAT CONTRIBUTE TOWARD VALUE CREATION

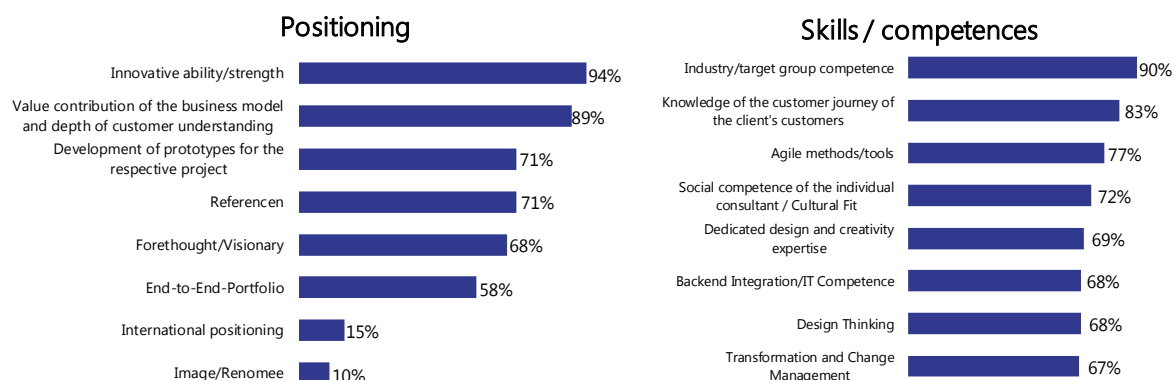


Figure 13: Question: What would you say were the important criteria in choosing a service provider to develop new business models and customer experience services? Scale from 1 = "not at all important" to 4 = "very important"; n = 108, only percentages for "very important" and "important"



The Market for integrated Customer Experience Services

As part of this study, Lünendonk interviewed 19 consulting and IT service providers to permit a 360-degree analysis of the Digital Customer Experience Services market segment and to analyze the changes in the customer experience service provider market. The companies interviewed include four of the top 10 leading Internet agencies from the Bundesverband Digitale Wirtschaft (BVDW).

These service providers have a broad consulting and implementation portfolio in the three key elements of customer experience services (see Figure 14). The service partners have to employ all of these elements in many digitization projects to ensure that new product and service development is more customer-centered and high quality.

As a result, aspects such as "strategy and management consulting", "IT consulting/system integration" and "creative and design consulting" are increasingly converging and being put out to tender in combination. For

example, customers are increasingly expecting the same service providers to design the digital solutions (apps, web portals, etc.), develop the applications, and, at the same time, integrate the systems.

The result of this trend is that digitization strategy implementation partners are increasingly being integrated within the value chains of their customers and duly afforded greater responsibility for complex, strategic projects. 84 percent of consulting firms and agencies surveyed thus reported that their customers value the ability of their service partners to manage end-to-end projects.

To increase their prospects of winning tenders in the digital environment and guarantee delivery capability, service providers require a broad-based portfolio and must be able to "deliver" in every respect and at all times. Lünendonk refers to these providers as "business innovation/transformation partners".

THE THREE KEY ELEMENTS IN THE DEVELOPMENT OF DIGITAL PRODUCTS AND SERVICES

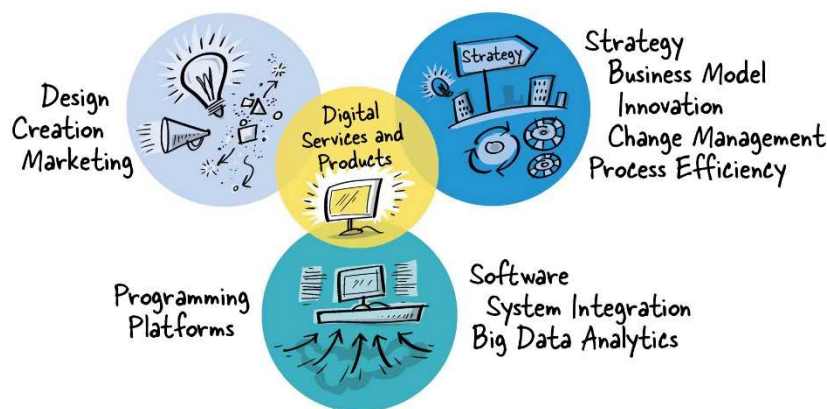


Figure 14: In the development of digital products and services, a holistic and connected approach, and a broad palette of services is becoming increasingly important.

Lünendonk considers business innovation/transformation partners (BITP for short) to mean companies that have both management consulting and IT implementation in their portfolio and generate significant revenues in both. This convergence of the consulting and IT services markets is now being accompanied by a greater connection to the digital agencies market.

For several years, Lünendonk has observed an increasing convergence of the management consulting and IT services markets. For about three years now, the activities of management consulting and IT service companies have encroached upon the market of digital and Internet agencies.

Companies such as Accenture, Cognizant, Deloitte, IBM, or PwC have been particularly active in expanding their portfolio of creative and design services through the acquisition of agencies, and are now among the world's leading agencies in terms of segment revenue.

According to analyses by Lünendonk, there are currently (still) around 25 consulting and IT service providers in Germany who combine consulting and IT services

with creative and design expertise and achieve significant revenues from this.

Figure 16 shows the companies that Lünendonk identified as providers of creative, strategic, organizational, and IT consulting services that also participated in this study. Relevant providers such as Reply and Serviceplan do not feature because they did not take part in the study. In total, Lünendonk identified approximately 30 total service providers of integrated customer experience services; 19 of these took part in the study.

The criteria for being invited to participate in the Lünendonk study are shown in Figure 15 below. A key requirement is that the service providers have to generate significant revenue in "creative and design", "management consulting", as well as "IT implementation", and thus offer an integrated portfolio.

PROVIDERS OF CUSTOMER EXPERIENCE SERVICES FROM THE PERSPECTIVE OF SERVICE PROVIDERS

There are a large number of different provider groups in the customer experience service market. On the one hand, we have traditional consulting and IT service providers, which offer many of the all-round services required by customers in this area.

LÜNENDONK DEFINES "PROVIDERS OF INTEGRATED CUSTOMER EXPERIENCE SERVICES" AS FOLLOWS:

At least 60 percent of revenue must be generated from services such as consulting and IT services.

In addition, providers of integrated digital customer experience services offer creative, consulting, and IT services along the value chain for the development, implementation, and marketing of digital business models.

The following services should therefore be included in the portfolio:

"Digital consulting (analysis/strategy/proof of concept)," "development (design thinking & prototyping)," "organizational consulting," "digital business modeling," "process optimization (automation, end-to-end)," "customer journey management," "change management," "software and systems integration" and the "operation of marketing platforms."

Figure 15: Lünendonk's Definition of Providers of Integrated Customer Experience Services



But while consulting and IT service providers have significant process and IT skills, most of them lacked creative and design expertise. By bringing in creative and design expertise, they have added another string to their bow in terms of supporting the development of new products and front-ends. Companies such as Accenture Interactive, Deloitte, Cognizant, KPS, Valtech as well as BCG and McKinsey have expanded their agency expertise in recent years. Other consulting and IT service providers rely primarily on cooperations and partnerships in specific areas.

The case of Capgemini illustrates the importance of focusing the portfolio on customer experience. In the fall of 2018, the company completed a reorganization, bringing not only management consulting, but also agency acquisitions, including idean, Fahrenheit 212, and liquidhub, under the Capgemini Invent brand, thereby creating a new entity with a predominantly customer-centric focus.

Providers like Accenture and Deloitte have taken similar steps to better position their digital assets and move into areas that were formerly the domain of agencies. Lünendonk believes that other consulting and IT service

providers will pursue similar strategies in the coming months.

Digital agencies are experiencing the exact opposite: Extensive expertise in creative services and content creation is no longer sufficient in the face of growing customer requirements for organizational consulting and IT implementation.

Lünendonk therefore asked the 19 consulting and IT service providers which providers they felt were genuinely positioned as customer experience service providers. By analyzing the service providers' answers, we can gain useful insights into the market reality, as these providers generally have a better overview of the market as a whole than their clients, who often see the situation from a business perspective. These responses indicate that a wide range of providers are currently active, and successfully positioned on the market for customer experience services.

Accenture was most often cited as a relevant provider, followed by Publicis Sapient and – somewhat further behind – Deloitte Digital. IBM iX follows in fourth place.

PERSPECTIVE OF DCX PROVIDERS: MANY CONSULTANCIES HAVE SUCCESSFULLY POSITIONED THEMSELVES AS CUSTOMER EXPERIENCE SERVICE PROVIDERS

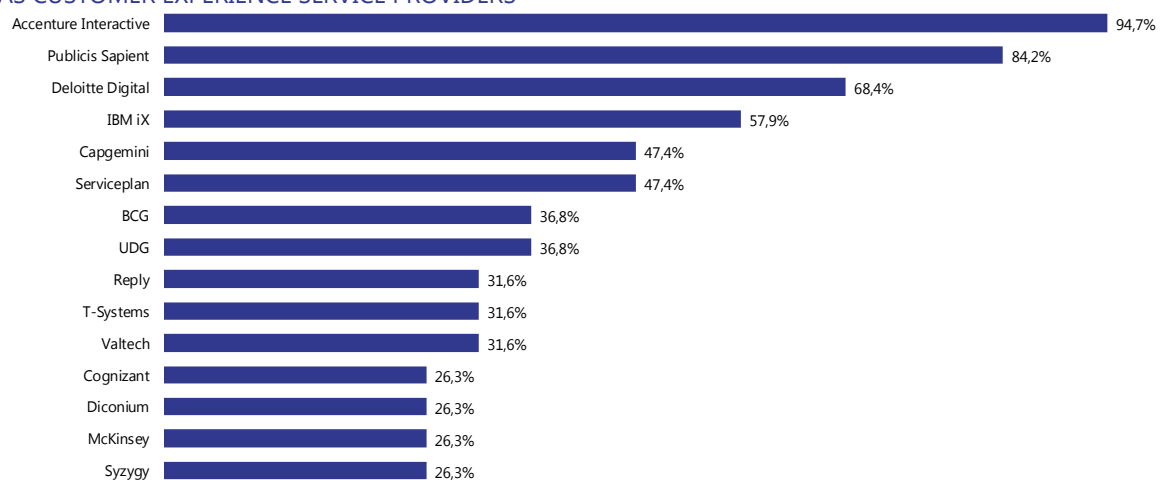


Figure 16: Question: Which of the following would you say were consulting and transformation service providers in the development and marketing of products and services in the area of digitization? n = 19

Capgemini and Serviceplan round out the top six service providers most frequently perceived as providers of customer experience services. BCG and McKinsey, the two world-leading strategy consultancies, are also among the providers positioning themselves in the area of customer experience.

SCOPE OF SERVICES

From which consulting and implementation services do the providers of customer experience services identified and interviewed by Lünendonk generate revenue?

A few core elements dominate the portfolio of total customer experience service providers: The high importance of the back-end integration of digital solutions is reflected in the revenue generated from "software and system integration" by the providers surveyed. On average, 27.1 percent of revenue is generated from this individual service.

By far the largest share of revenue is generated from software and system integration. This bears out the importance of integrating digital solutions into existing IT processes. Providers that already have comprehensive IT capacities are therefore generally at an advantage

when tendering for projects requiring an end-to-end approach.

The second most important service element is "digital consulting"; that is, the development of strategies for the digitization of customer interfaces and the development of new products and services. In this context, the "development of new (digital) products and services" is one of the most frequently commissioned services with an average share of revenue of 11.9 percent. "Process optimization" has a similarly direct impact on the customer experience of digital channels and products/services. As a result, an average of 12 percent of revenue is generated from process-related aspects.

REVENUE DEVELOPMENT

The high demand of user companies for external support in customer interface digitization, new business models, and digital processes is also reflected in the revenue development of the 19 service providers analyzed.

77 percent of the service providers surveyed experienced revenue growth of more than 10 percent and, for a further 17 percent, revenue increased by between 5 and 10 percent. As a result, most service providers met their revenue growth projections for 2017, which stood at 17.1 percent.

IT BACK-END INTEGRATION CURRENTLY THE FOCUS OF DIGITAL TRANSFORMATION

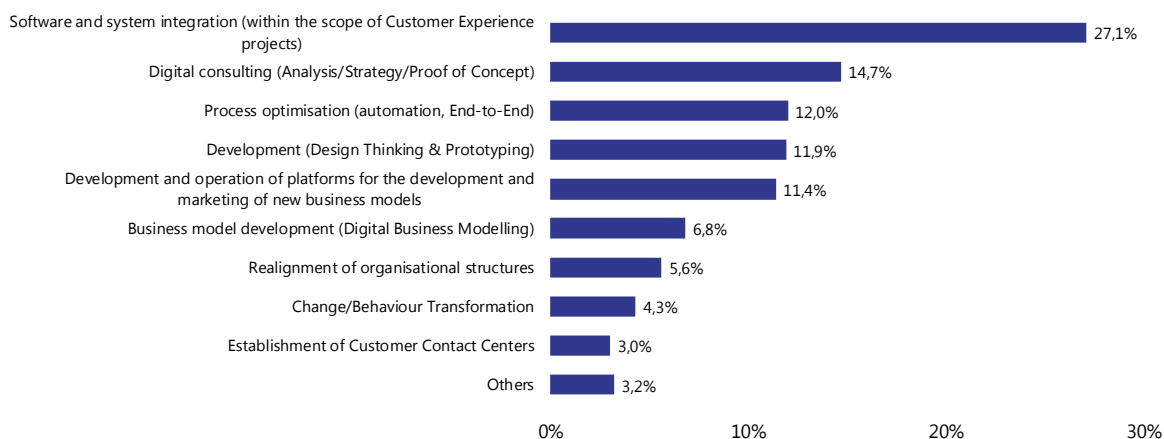


Figure 17: Question: What percentage of revenue does your Digital Marketing / Digital Customer Experience division generate from the following services? n = 13



INCREASE IN END-TO-END SERVICES

According to 47 percent of the service providers surveyed, the nature of the tenders has changed to the effect that customers often plan the implementation of digitization strategies as complete, all-in-one projects and accordingly advertise them as such. They then work together with just one service partner. There are also customers that break down their projects into individual phases (e.g. concept development, prototyping, programming, IT integration), but still work with the same service provider throughout all project phases.

FREQUENTLY EMPLOYED SKILLS

Like the diverse services required by the 19 consulting and IT service providers and digital agencies surveyed, certain skills and competencies are particularly called upon for client projects.

58 percent of the service providers surveyed indicated a strong demand for UX designers and software developers (53%) in projects. These are primarily required for setting up digital channels, apps, and web front-ends to create a positive customer experience.

Every third service provider surveyed perceives a very high demand from the market for consultants with specialist expertise, in digital marketing, artificial intelligence, or process automation for example. However, subject and industry expertise is also increasingly in demand for CX projects.

GREATER INVESTMENT BY SMES

For the service providers included in this study, revenue from customers in the SME sector has increased since the last market analysis. Thus, the share of revenue from companies with up to 5,000 employees has risen from 20 percent (2017) to 25 percent (2018).

By contrast, revenue from major corporations with more than 50,000 employees fell by 8 percentage points from 41 percent to 33 percent. This statistical decline is explained by the fact that the DCX market is growing strongly (market forecast 2018: 17.1%) and much greater demand is now originating from SMEs.

The need to make up for lost ground in the area of digital services is also significantly greater for SMEs than major corporations and groups; this trend therefore represents a logical development of revenue classes.

PRESSURE TO DIGITIZE IN SME SECTOR LEADING TO GREATER DIGITAL INVESTMENT

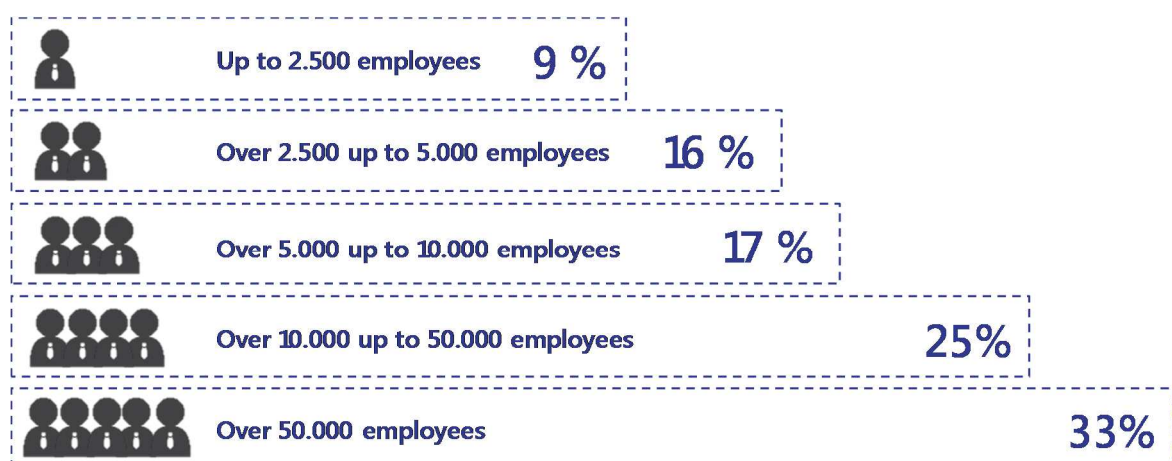


Figure 18: Question: What sizes are your client companies in the area of customer experience services? n = 17

The Market Volume for integrated Customer Experience Services in Germany

Lünendonk estimates the market volume for customer experience services in Germany at € 6.4 billion. Lünendonk is thus adjusting its estimate of the market volume from 2017 and the first edition of this series of studies. The reason for this adjustment are new findings on the proportionate revenue of the leading management consultancies and IT service providers. According to analyses by Lünendonk, the 25 leading IT consulting companies in Germany alone generate proportionate revenues of around 18.4 percent from customer experience-related activities. With the top 25 IT consulting companies in Germany generating an accumulated domestic revenue of € 12.5 billion, this market segment alone represents € 2.3 billion in revenue.

Management consultancies are also important service providers in the area of customer centricity. Statistically, 10.5 percent on average of the management consulting industry's revenue stems from customer experience ser-

vices.

The Bundesverband Digitale Wirtschaft (BVDW) collects annual figures for the third relevant provider group, the digital and Internet agencies. According to these figures, the leading digital and Internet agencies generated total revenues of € 1.6 billion in Germany in 2017, an increase of 12 percent compared to 2016.

In addition, there are digital and special agencies, which also offer individual DCX services and generated an estimated € 0.6 billion in this area.

In German-speaking countries, these providers of DCX services are catering to a total digital transformation market worth € one billion: The major corporations and groups surveyed by Lünendonk plan to invest 2.3 percent of their revenues in 2018 in projects to digitize their customer interfaces and new business models.

TOTAL MARKET VOLUME FOR CUSTOMER EXPERIENCE SERVICES IN GERMANY (2017)



Figure 19: 1) Lünendonk estimates of proportionate revenue from customer experience services and digital business models. The estimates are based on the Lünendonk® Study "The Market for Management Consulting in Germany"; 2) Lünendonk estimates of proportionate revenue from customer experience services and digital business models. The estimates are based on the Lünendonk study "The market for IT consulting and IT service in Germany"

Market Development and Forecasts

Given the fact that the 19 providers of integrated customer experience services surveyed by Lünendonk benefited greatly from the demand for external services relating to the digitization of customer interfaces and new (digital) products and services in 2017, they are extremely optimistic both in respect of the current year 2018 and for 2019.

For both 2018 and 2019, the consulting and IT service providers surveyed as well as the digital agencies expect a significant increase in their customers' demand for support in the development and implementation of digital business models and digitization of the customer interface.

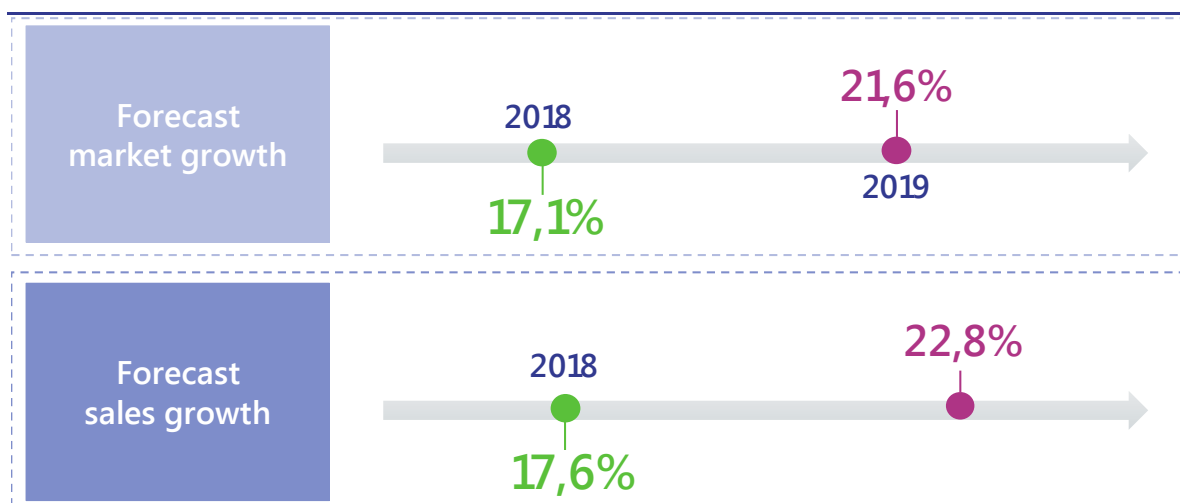
The business expectations of the providers surveyed are supported by the specific investment plans for customer

interface digitization of the user companies surveyed. According to these, the expenditure of the user companies surveyed is to increase by 40 percent on average.

Since a large number of projects cannot be handled on their own, the user companies will be required to spend more on external services.

As a result, the mood among service providers is very positive and revenue growth for 2019 is expected to average at 22.8 percent.

The forecasts for the entire "Integrated Customer Experience Services" market segment are similarly positive due to rising market demand and optimistic sales forecasts.



FORECASTS FOR MARKET AND REVENUE GROWTH CLEARLY IN DOUBLE-DIGIT RANGE

Figure 20: Question: By how much is revenue in your Customer Experience Services division or the volume of the digital marketing/customer experience services segment likely to change? n = 16

Methodology

The Lünendonk® Study on “The Market for Integrated Customer Experience Services in Germany” summarizes the findings from two perspectives. On the one hand, 19 of the leading providers from the IT and management consulting segments, the big 4 auditing and tax consulting companies as well as digital agencies with a full-service portfolio were asked about their market and business perspective in writing.

The provider companies surveyed include market-leading consulting and IT service providers as well as representatives from the leading digital agencies in Germany.

The perspective of the supplier companies is reflected and supplemented by the perspective of the client companies (users). The data was collected in telephone and face-to-face interviews with 109 major companies and corporations.

This Lünendonk® study only included managers with responsibilities for customer interface digitization, digital marketing, and new business models. The most frequently interviewed group were department heads (44%).

Among the participating companies, 20 percent generate revenue of over € five billion, 45 percent generate revenue of between one and € five billion, and a quarter generate revenue if between € 500 million and one billion.

To optimize the analytical value of the data material, a number of different filters were used. This often permits more nuanced statements to be made. Minor deviations from 100 percent are due to rounding differences.

COMPANIES INCLUDED IN THE STUDY

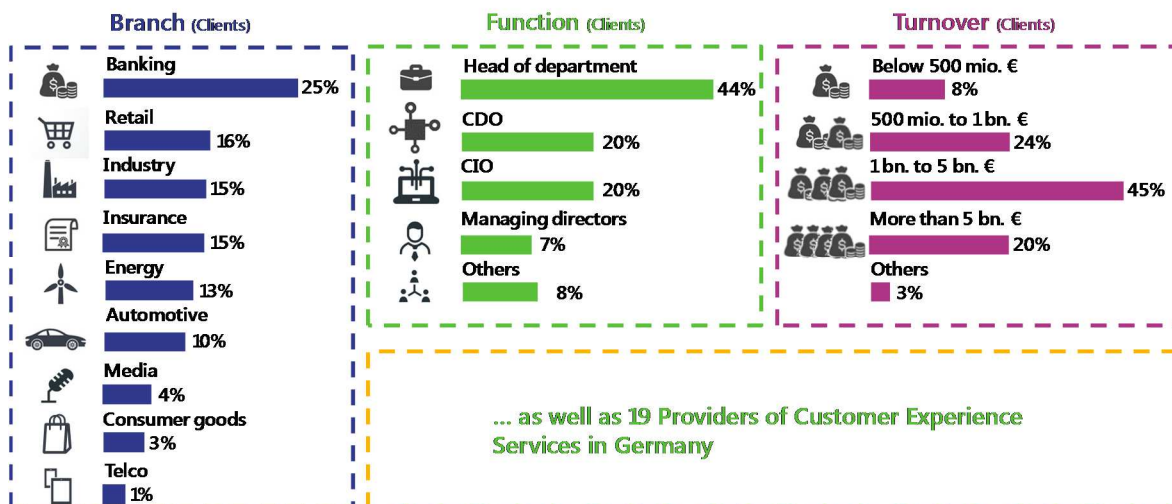


Figure 21: The user companies interviewed by Lünendonk come from a variety of industries and are largely major corporations and groups generating revenues in excess of € one billion . n = 109

Conclusion and Outlook

This Lünendonk study shows that the major corporations and groups analyzed are in the midst of their digital transformation and have already implemented or started a series of measures. In addition to the restructuring of their organizations and modernization of the IT back-end, a major focus of the initiated measures was on digitization of the customer interfaces; interaction channels with the customers in other words. According to estimates by the managers surveyed, 2.3 percent of revenues on average were invested in digital channel-related areas as well as new, predominantly digital and data-driven products and services. However, the plans of the companies surveyed show that these investments will not be sufficient. According to these, average expenditure for customer interface-related digitization projects is expected to rise to 3.3 percent of revenue in 2019.

In addition to the optimization of the communication channels, the companies intend to dedicate a significant proportion of investment to process automation and online-based sales channels. Despite the high technological focus of these aspects, they have a direct impact on the customer.

In the digital age, customer experience is the obstacle that companies from the so-called Old Economy have to overcome to survive in their markets over the long term.

Many industries have already had to contend with or are currently facing competition from new providers from the digital world. Countless traditional value chains have already been changed for good by tech companies, for example in the tourism industry, the financial sector, or in the retail sector. However, companies from other sectors too are also facing the challenge of how to market their products and services in the digital world in the future.

In e-commerce, for example, we are currently only just beginning to appreciate the full scale of the disruption and power of data and platform ecosystems. Amazon dominates the German online retailer market with revenues of € 8.8 billion (2017). Behind Amazon, by some margin, are Otto (at € 2.9 billion) and Zalando (€ 1.2 billion), which are the only sales billionaires. Nor are there any European companies among the 20 largest Internet companies, which all hail from either China or the United States. And what about European and German companies? With the exception of SAP, there is currently very little on the horizon. Besides Zalando, there is one more MDax company in the form of start-up Delivery Hero from the start-up forge Rocket Internet; and Wirecard is a mobile payment provider that has made it into the Dax30.

The great opportunity for Germany as a business location will probably not lie in developing new, disruptive business models, but rather in developing complementary data-driven services to support the many globally successful traditional business models, thus finally benefiting from the IoT trend. There are already a number of successful examples in industry, in areas such as predictive maintenance or field services. Sixty-two percent of the companies surveyed focused on optimizing their products with digital and data-driven value-added services in 2018, and in 2019, more than half of the companies plan to continue the measures already underway.

However, the Lünendonk studies also highlight a number of obstacles to digital transformation. For example, digitization still often takes place within the old organizational structures. And for many companies, there is still much work to be done at a technological level, replacing obsolete IT systems, for instance, which prevent automation and thus a continuous flow of data for end-to-end processes. In many of the face-to-face interviews, it became clear that even major corporations still

lacked a uniform master data landscape and did not network their decentralized IT systems with each other. After all, many major corporations and groups are embarking on an S/4 Hana transformation in order to bring their ERP landscape, the heart of corporate management, into the digital world.

The list of tasks and challenges is long and for most companies cannot be tackled on their own. Furthermore, there are a variety of different challenges to be addressed simultaneously. Integrated approaches are more in demand than ever. 58 percent of the managers surveyed therefore expect their consulting and IT service partners to offer a broad range of digital transformation services – an end-to-end portfolio.

As a result, a number of service providers have positioned themselves in recent years as providers of customer experience services. On the one hand, we have management and IT consulting companies, which have expanded their portfolio in the recent past through the acquisition of digital agencies. Digital agencies are also gradually acquiring consulting and IT skills to respond to new customer requirements.

The service providers identified and surveyed by Lünendonk as providers of customer experience services generate almost 80 percent of their revenues in this area from specialisms such as digital consulting, process automation, new product development, and IT implementation. This perfectly demonstrates the crossovers that now exist between the "digital agency", "management consulting" and "IT consulting" markets. Lünendonk expects this trend to continue in the coming years. The more processes are connected to each other and the more that IT becomes more business critical, the more the front-end and the back-end will converge.

For both clients and service providers, these developments pose some challenges. Many of the interviews

conducted during this study showed that companies lack a market overview of which service providers are even properly positioned to perform the new digitization tasks. In addition, many companies find it difficult to define the tendering requirements for external service providers, as well as to deal with the trend toward agile process models.

And the service providers? The application of agile process models is an tremendously important requirement, precisely because the clients struggle with agile implementation. The adoption of agile application development projects by service providers has therefore grown enormously in recent months. Deliverability in this area is therefore an important criterion. Above all, many customers want strategic service partners to help them with the digital transformation. This is very much about a shift in product development from the client to consulting and IT service providers as well as to digital agencies. The need for service providers to invest in their own innovation capabilities has therefore become enormously important as has the ability of consultants to empathize with clients' customers in order to develop new approaches.

However, this also means that service providers must undergo an agile and digital transformation in order to integrate themselves more deeply into the value chains of their customers. In the future, the combination of 'design and creation', 'business model and operating model', and 'IT implementation' will be even more important than it is today. Service providers who are already positioned to offer this triad of services are well prepared for future demands. Because one thing is also very clear in the study: The digital transformation is just beginning and, in the next few years, the investments of user companies will have to increase greatly so as not to miss the digital boat. These companies are greatly dependent on strategic partners.



Interview



Simply imitating Amazon is not the key to retail success



Stefan Metzger
Partner

LÜNENDONK: KPS is one of the leading consultancy firms for digital transformation in the retail sector. How has the sector changed over the past year in respect of issues such as digitization and customer experience?

STEFAN METZGER: Customer experience has become an increasingly important issue and now is not only relevant for the retail sector, but is also a major concern for the consumer products and energy supply industries. Where, in the past, technology and individual products were the focus, today, there is now an almost universal awareness that the customer or user must be at the center of the action and therefore must also be at the center of all processes.

LÜNENDONK: From your experience, is there already a trend of retailers winning back traditional buyer groups they had lost to digital leaders like Amazon?

STEFAN METZGER: I think many retailers are aware that simply imitating Amazon is not the key to success. The retail sector must find other ways and score points

where Amazon is clearly at a disadvantage. Every retailer has to think individually about how it wants to be perceived by its customers so as to survive in the market and win back lost buyer groups: qualified advice, personalized services, customer experiences that really address the individual wishes of the buyer. In short: The retailers need to take full advantage of the omnichannel, as they have a clear advantage over Amazon or other online platforms.

LÜNENDONK: Do you see a trend toward implementing customer experience projects even among small and medium-sized retailers?

STEFAN METZGER: The trend is consistently visible. Smaller companies are finding it even harder to assert themselves in a digitized world; on the other hand, they are often closer, or more personal, to the customer. Again, creative ideas that put the customer at the center will get them on course for success.

LÜNENDONK: From your point of view, what are the most important issues that will occupy the retail sector most in the next few years?

STEFAN METZGER: Artificial intelligence will become increasingly prevalent. Achieving faster and better results, saving costs, and thus creating room for creativity will be a decisive factor. Meaningful data acquisition, analysis, and use also have much work to be done. IoT scenarios combined with smart services and ever-better personalization will strengthen customer loyalty. How-

ever, retailers in this field will increasingly have to compete with manufacturers. It will be interesting to see if this situation will lead more to a confrontation or to a meaningful cooperation.

LÜNENDONK: The study concludes that SMEs are focusing more on digitizing the customer interface. Can you confirm this observation??

STEFAN METZGER: That's right and a logical consequence of the trend towards a customer-centric way of thinking that SMEs, of course, implement just as much as major corporations.

LÜNENDONK: What are the key challenges facing medium-sized retail companies?

STEFAN METZGER: One solution certainly does not fit all. "Digitization involves an interplay of compelling apps, mobile services, desktops and other front-ends, appropriately integrated CRM, marketing, the retail sector, PIM and CMS systems, and most importantly, intelligent, effective, enterprise-wide change management. Effectively orchestrating these areas ties up resources and can hardly be realized without external support.

LÜNENDONK: In this context, the question arises: Can you still meet the increasing demands of your customers or have you already reached your capacity limits?

STEFAN METZGER: This question is indeed justified because overall there are not enough experts to face the increasing demand. KPS is investing a lot in recruitment and we are becoming more and more interesting as an employer. There are various reasons for this: our broad portfolio, Europe-wide projects with leading companies

and flexible working time models are key factors. In my opinion, however, the size of KPS is a decisive differentiating factor. KPS is not one of the giants on the market and still offers the familiar touch with flat hierarchies and an incredibly collegial corporate culture. On the other hand, we stand out clearly from smaller competitors and thus provide the necessary security and individual development opportunities. And last but not least, our new location on Lake Phoenix in Dortmund, which is under construction, will play its part in impressing many interesting new colleagues.

LÜNENDONK: Many clients also build their own digital skills and compete with you in recruiting professionals. How do you see this situation?

STEFAN METZGER: We actively support our customers. Our methodology has its own cornerstone, the so-called campus approach, in which we start the project together from the beginning. Over the project period, we often develop together as a team and so also train the employees of our customers – if so desired. This might sound a bit contradictory at first, but we strongly believe that a long-term partnership will only work if you deal with such issues openly and support the client in their desired development.

In addition, the employees who work on the customer side usually differ from consultants. As a consultant, you are confronted with a variety of challenges and opportunities. The constant relation to the latest technologies, changing customer and project situations, diverse development and training opportunities, and being part of an ongoing innovation process, which is always promoted in our company, make us quite attractive as an employer!



Company profiles

KPS

LÜNENDONK & HOSSENFELDER

COMPANY PROFILE

KPS



KPS is Europe's leading management consultancy for business transformation. The consultancy has been offering strategy, process, and technology consulting services in combination with implementation expertise since its foundation in 2000.

KPS thus covers the entire process spectrum for all business areas, from classic ERP and e-commerce to digital customer management. Starting with a digital transformation and omnichannel strategy, the consultancy optimizes, integrates, and implements best-practice, end-to-end processes on the basis of standard software packages.

KPS' proprietary Rapid Transformation® method RT4.0 accelerates transformation projects through the parallel performance of activities at every project level and the simultaneous assurance of transparency. Besides minimizing risk, this approach also leads to a fifty percent reduction in lead times and costs.

Reference customers include Hugo Boss, Christ Juwelen & Uhren, Delvaux, Deichmann, Lidl, Fressnapf, Globus SB-Warenhäuser, Spar/Hervis, Dansk Supermarked, Coop, Arla Foods, Dodenhof, XXXLutz, home24, Puma, SportScheck, Zur Rose AG, Helm AG, Coca-Cola, Bacardi, Freudenberg, Velux, Bayer, Bosch, VW/Audi, Hermes Fulfilment and Lufthansa.

Founded in 2000, the company's consultants are involved in projects throughout Europe.

CONTACT

KPS AG

Stefan Metzger

Beta-Str. 10 H, 85774 Unterföhring

Phone: +49 (0) 89 35631 – 0

Fax: +49 (0) 89 35631-0

E-mail: stefan.metzger@kps.com

Website: www.kps.com



Lünendonk & Hossenfelder GmbH

Lünendonk & Hossenfelder GmbH (Mindelheim) analyzes and advises companies from the IT, consulting, and services industry throughout Europe. With its competency³ concept, Lünendonk offers one-stop independent market research and market consulting. Since 1983, our market research division has been responsible for the Lünendonk® Lists and Studies, which have been recognized as market barometers, and for all market observation operations.

Coming under the service portfolio of Lünendonk & Hossenfelder GmbH, the Lünendonk® Studies are part of our "Strategic Data Research" (SDR). In combination with the services offered as part of the "Strategic Roadmap Requirements" (SRR) and "Strategic Transformation Services" (STS) portfolio elements, Lünendonk GmbH is able to provide its consulting clients with support ranging from strategy planning to collecting and analyzing necessary information to implementing solutions in day-to-day operations.

CONTACT

Lünendonk & Hossenfelder GmbH

Mario Zillmann

Maximilianstrasse 40, 87719 Mindelheim

Phone: +49 (0) 8261 73140-0

Fax: +49 (0) 8261 73140 - 66

E-mail: zillmann@lunenendonk.de

Website: www.lunenendonk.de

ABOUT LÜNENDONK & HOSSENFELDER

Since 1983 Lünendonk & Hossenfelder GmbH has been specializing in methodical market research, sector and corporate analysis and market consultancy for information technology companies, consultancies, and other highly qualified service providers. Our market research division is responsible for the Lünendonk® Lists and Studies, which have been recognized as market barometers for decades, and for all market observation operations. Coming under the service portfolio of Lünendonk & Hossenfelder GmbH, the Lünendonk® Studies are part of our "Strategic Data Research" (SDR). In combination with the services offered as part of the "Strategic Roadmap Requirements" (SRR) and "Strategic Transformation Services" (STS) portfolio elements, Lünendonk & Hossenfelder GmbH is able to provide its clients with support ranging from strategy planning to collecting and analyzing necessary information to implementing solutions in day-to-day operations.

Auditing/
Tax Consulting

Management Consulting

Technology Consulting/
Engineering Services

ICT Market

Facility Management/
Industrial Services

Personnel Recruitment/
Staffing Services



IMPRINT

Published by:
Lünendonk & Hossenfelder GmbH
Maximilianstrasse 40
87719 Mindelheim

Author:
Mario Zillmann, Lünendonk & Hossenfelder GmbH

Phone: +49 (0) 82 61 731 40 – 0
Fax: +49 (0) 82 61 731 40 – 66
E-mail: zillmann@lunenendonk.de
Website: www.lunenendonk.de

Copyright © 2019 Lünendonk & Hossenfelder GmbH, Mindelheim
All rights reserved



Find out more at
<http://www.lunenendonk.de>