



Lünendonk® survey 2022

The market for Digital Experience Services in Germany

Strategies, developments & trends for more customer centricity and digital experience from service provider and user perspective

A survey by Lünendonk & Hossenfelder GmbH
in cooperation with



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Foreword

Dear readers,

You are reading the third edition of the Lünendonk® Survey on the Market for Digital Experience Services (DXS) in Germany, which was published for the first time in this form in 2020.

Lünendonk understands "Digital Experience Services" to mean the project-specific combination of different disciplines, competences and skills that are required for the development and implementation of customer-centric strategies and for designing a digital experience. At the same time, matters are examined such as customer experience consulting, customer journey analyses, UX design, digital marketing, development and steering of digital campaigns, data analytics and – most importantly! – IT implementation services such as software development and system integration. In fact, digital technologies such as AR/VR, cloud native or data analytics are gaining a tremendous amount of importance in marketing and sales because the customer language and interaction is shifting more and more to digital channels.

Addressing customers through digital channels and offering them a strong digital experience has not only long been a weighty issue for conventional B2C businesses, which have already relied on cross-media campaigns and digital channels for years. Bearing in mind that in many places there is a high degree of customer centrality in the B2C business, there is often an acute need to make up for lost ground in the B2B segment while there is tremendous potential at the same time in the digitalization of customer interfaces and in the design of customer centrality with digital experience.

COVID-19 WAS THE STARTING SIGNAL FOR CUSTOMER CENTRICITY

The relevance of the digital transformation has also seen an enormous rise in the B2B segment since the outbreak of the COVID-19 crisis. In fact, according to Lünendonk-Research, it is by far the most important strategy field in the period up until 2025 – besides equally important topics such as sustainability, innovations and growth. The reason is obvious: During the COVID-19 pandemic, companies have experienced how not only efficiency and cost advantages can be reached by means of digitalization, but also how products can be sold, how transaction processing can be supported by integrated customer portals and platforms or how new forms of collaboration with other businesses can emerge under the definition of the digital platform economy.



Mario Zillmann
Partner



Tobias Ganowski
Consultant



The market for Digital Experience Services in Germany

Besides this, digital channels offer the opportunity for B2B enterprises not only to present complex products better and aimed more specifically at the target groups by using visual technologies (VR, metaverse) but also to develop them more quickly (digital twin). In the same way, B2B businesses perceive ever more strongly that there are potentials offered to them in the after-sales business by customer centricity and digital experience, and with an overall improved customer service: Accordingly, new sources of income can be tapped with additional services to thereby take advantage of cross- and upselling potentials. Examples are predictive monitoring, predictive maintenance or remote maintenance. But also sales of products in digital marketplaces and online shops are gaining relevance in the B2B business.

CUSTOMER CENTRICITY MEANS HOLISTIC THINKING

Today and much more so in the future, consistent customer centricity involves putting the needs of each individual customer at the center of product development, service, marketing and sales and to act accordingly as a business. Scaling and consequently higher profitability in turn follow from the consistent digitalization of processes and realignment of the organization and corporate culture on a new kind of business model and customer orientation.

The big future challenge for enterprises is consequently managing the explosion of communications channels, making the comprehensive knowledge based on customer data usable and designing the entire dialog with customers in a more personal and customized way.

DIGITAL TALENTS AND EXPERIENCE VALUES ARE MISSING – THE RELEVANCE OF DIGITAL EXPERIENCE SERVICES IS RISING

While in the course of the digital transformation, the number of projects with a focus on digitalization and IT has increased massively since 2020 and as these projects must be implemented simultaneously for the most part, the recruitment of qualified staff with corresponding digitalization competence represents a big problem to the majority of businesses.

Lünendonk is already observing that many businesses have to prioritize their planned transformation programs and can only focus on the essentially necessary programs. This goes hand-in-hand with a higher demand for external service providers – either as selective support in projects or as strategic partnerships by awarding contracts for complete work packages. Strategic partnerships could be seen in the recent past primarily in the development of digital interaction and e-commerce platforms as well as custom software. Quite especially a novel kind of service providers is profiting from this trend and the overall strongly risen demand for digital services: the providers of digital experience services. They have become much more important in recent years.



FOREWORD

The market for Digital Experience Services in Germany

This Lünendonk® survey provides comprehensive insight into the market for digital experience services – from the perspectives of both the leading providers of digital experience services providers as well as large user firms. In this regard, the future tasks, planning and challenges of large user firms in the German-speaking region are described in depth, besides the market structure and leading service providers. This makes this survey a unique 360-degree analysis of the digital experience services market in the German-speaking region.

The survey, thanks to the support from the companies Adesso, Plan.Net, Reply and Valtech, is available free of charge. The authors thank the survey partners for the substantive contribution and help with this project.

We hope you will enjoy the read, find it interesting and most of all useful.

Kind regards,

Mario Zillmann
Partner

Tobias Ganowski
Consultant

Management Summary

- Customers are becoming more digital and expect high-quality results online as well as offline. The digital experience is therefore essential and creates competitive advantages. Enterprises that have internalized this mentality and have rigorously aligned their business strategy on customer needs are therefore perceived as a threat by one out of two businesses. But what about the digital experience of enterprises in the German speaking regions? Among the survey participants, 11 percent estimate their digital experience to be above the average compared to the competition. 82 percent evaluate it as average; this represents a strong increase by 17 percentage points compared to the previous year. Only 7 percent of the businesses still evaluate their digital experience as lagging behind. In spite of this positive development, it should be noted that very few businesses create digital innovations and customer centricity. The main causes of this are the shortage of qualified personnel to implement digital projects, so that adopting new technologies and adjusting the IT environment can prove difficult, while optimal knowledge of customer needs is lacking or corresponding strategies and processes are not implemented. The trend toward shorter innovation and technology cycles and the handling of rising data volumes and fragmentation of customer channels present challenges to the businesses.
- The demand for modern marketing and sales solutions such as e-commerce shops, Customer Data Platforms (CDPs), Product Information Systems (PIMs) or extended reality software solutions continues to be high. The metaverse as well is already on the agenda at some businesses. It is still in a hype phase with businesses evaluating use cases and testing initial scenarios. However, there are already a few practical examples in the retail and fashion industries. 45 percent of all businesses participating in the survey therefore believe the metaverse is already highly relevant. Additional technology trends are data, analytics and marketing automation platforms, cloud native software development and artificial intelligence. Based on a stronger use and the linking of digital solutions, in addition to the tense cyber security situation, cyber security has very high relevance to all businesses.

82%

of companies rate their digital experience as average compared with their competitors.

45%

of companies are already dealing with the metaverse.

49%

of companies see themselves threatened by competitors who have a high digital experience.



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- 90 percent of the business expect that by 2025 the major part of customer-centric processes will be digital, automated and controlled based on data. 71 percent further expect that the divide between digital early adopters and late adopters will become deeper – especially because of the shortage of trained personnel. DXS service providers are therefore important partners. 56 percent of the businesses want to cooperate with them more in the future in order to develop digital and customer-centric solutions. Businesses therefore search for strategic and reliable partners with a broad full-service portfolio, who also have high competence for the target group.
- DXS service providers are not just sparring partners for technical development and implementation, but they also apply a holistic and interdisciplinary approach so as to assist in the development of new business models or digitalization strategies and the management of online channels, which are supplied with creative content and analyzed along the entire customer journey. DXS Providers therefore often come from the digital agency segment, IT consulting or the management consulting industry, but they develop into hybrid DXS Providers. This approach is in high demand by customers: Service providers are expecting an average increase of revenues from digital experience services by 17.8 percent in 2023.

56%

of companies would like to work more closely with service providers in the future as a result of the shortage of IT specialists.

By 17,8%

on average in 2023, the revenue of service providers with digital experience services is expected to increase.



Method and survey sample

As a market research and market analysis firm, Lünendonk has surveyed the B2B service markets for many years. While the IT service market has been surveyed since 1983, further markets such as the management consulting, auditing, temporary work and facility services market have been analyzed over the course of years. The central market developments and service providers of the respective markets are presented in the Lünendonk® surveys and Lists.

The Digital Experience Services (DXS) market segment has been surveyed by Lünendonk since 2017. For the first time in 2020, a Lünendonk® List and a Lünendonk® Portfolio were published, visualizing the market strength as well as portfolio breadth and depth of the service providers.

ABOUT THE SERVICE PROVIDER SURVEY

As in the previous year, 26 leading IT service provider firms, consultancies, and digital agencies operating in Germany participated in this year's survey. They were surveyed in writing in the period from May to August. Both providers with headquarters in Germany as well as the German subsidiaries of international providers were subjects of the survey. The information gathered in writing by means of questionnaires was validated in detail by Lünendonk; if necessary, information was researched subsequently and numerous background interviews were held with the survey participants.

To be categorized as a service provider in the digital experience services segment and to get the opportunity to be entered in the Lünendonk® list, the service providers had to meet the following criteria:

- 1) They have to earn at least 60 percent of their revenues with management and IT consulting, digital agency services, software development and roll-out or system integration.
- 2) In reference to the revenues from digital experience services, significant revenues must be earned in each of the three segments (digital consulting services, digital agency services and digital technology services). If they have a DXS revenue share of more than 50 percent, no further requirements apply to businesses.
- 3) Businesses with a DXS revenue share between 30 and 50 percent must earn at least 100 million euros in Germany from DXS services.
- 4) Businesses with a DXS revenue share below 30 percent must earn at least 200 million euros in Germany from DXS services.

26

service providers met the participation criteria and took part in the survey.



REQUIREMENTS FOR THE PARTICIPATION AT THE LÜNENDONK® LIST „LEADING PROVIDERS OF DIGITAL EXPERIENCE SERVICES “

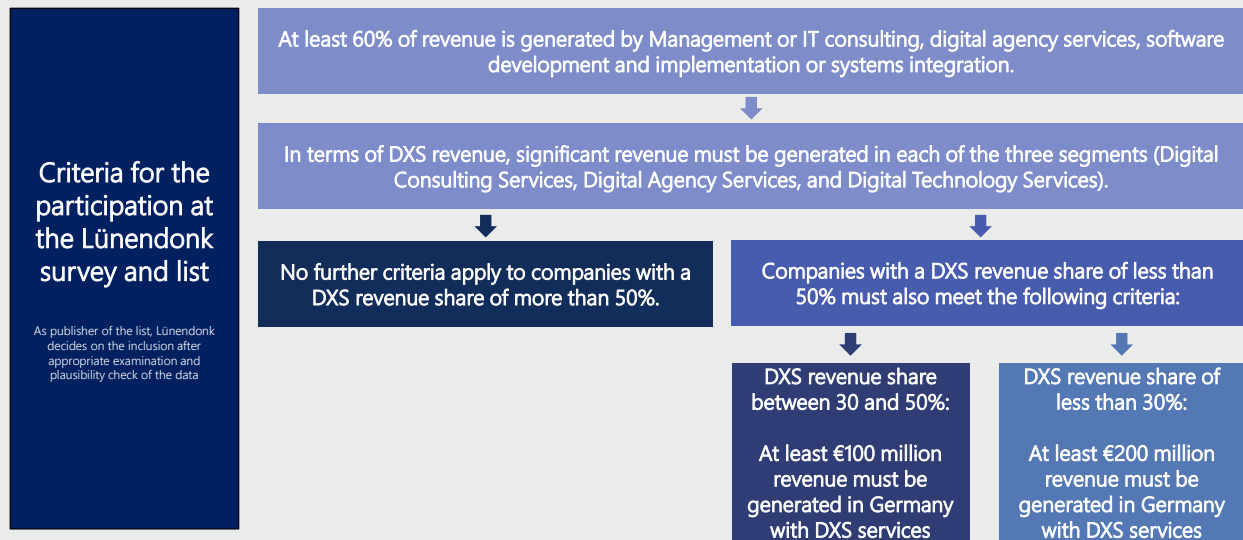


Fig. 1: Requirements for the participation at the Lünendonk® list

It was reviewed if the criteria are met based on the completed and submitted questionnaires, corresponding plausibility checks by Lünendonk, and in select cases by detailed background interviews including the submission of skill distributions and testimonials. The businesses, which have participated but which have not met the criteria, were not included in this survey. Individual responses of these businesses were nonetheless considered for the survey.

The leading providers – measured by domestic revenues – were included in the Lünendonk® List. No ranking by DXS segment revenue was applied, since the exact segment revenues especially of hybrid service providers cannot be validated from public sources and because a razor-sharp distinction could sometimes not be made due to difficulties to delineate, which was also experienced by the service providers themselves, so that comparability would not be given. Since the Lünendonk® List holds claims of completeness and correctness, businesses that did not fill out a questionnaire, but which nonetheless met the criteria and had the required size, were estimated and accordingly flagged in the list as estimates.

ABOUT THE USER SURVEY

The second part of the survey is dedicated to the customer perspective. More than 120 user firms were surveyed mostly by telephone in the period from May to July 2022. The enterprises operate in the industrial sector, automotive segment, retail and Fast-Moving



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Consumer Goods (FMCG) segment, the financial industry as well as the chemicals/pharmaceuticals, telecommunications and energy sectors.

Half the businesses have a B2B business model and almost one out of every four enterprises (27%) operate in the B2C segment. The remaining businesses operate in both segments.

Since B2C and B2B have a few differences when it comes to the level of digital maturity and the requirements for customer centricity and digital experience, a few questions in the survey have been analyzed separately for the respective segment.

Most of the businesses (81%) are from Germany, a small portion from Switzerland (10%) and Austria (9%). 48 percent of the businesses come from the upper middle class and have revenues of up to 1 billion euros; 52% have revenues of more than 1 billion euros.

Since the survey is laid out for the long term and is intended to be published at annual intervals, the fundamental distribution of businesses regarding their characteristics and the number of participating businesses compared to 2021 was largely maintained to be able to receive a year-on-year comparison of the results. However, since only a small portion of exactly identical businesses and people was surveyed, a direct comparison of the results with the different years is statistically not definitively verifiable. The survey therefore holds no claim of being representative. It was, however, still possible to illustrate trends and development, which we have done.

127

User companies were asked about their digital strategy, developments and investment behavior.

SAMPLE OF SURVEYED USER COMPANIES (1/2) SURVEY PERIOD: MAY TO JULY 2022

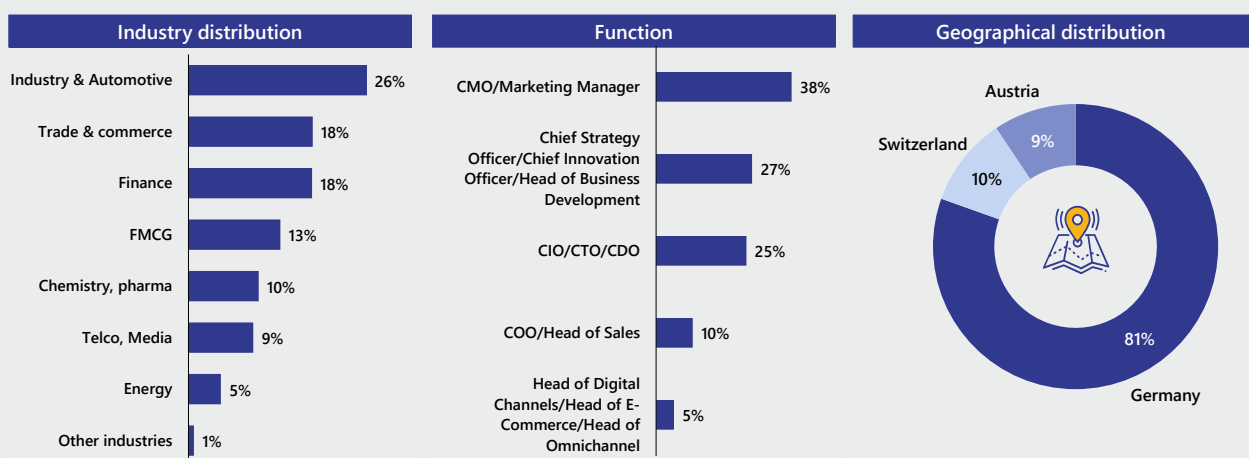


Fig. 2: Question: Industry distribution; function, geographic distribution; n = 127

METHOD AND SURVEY SAMPLE

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SAMPLE OF SURVEYED USER COMPANIES (2/2) SURVEY PERIOD: MAY TO JULY 2022

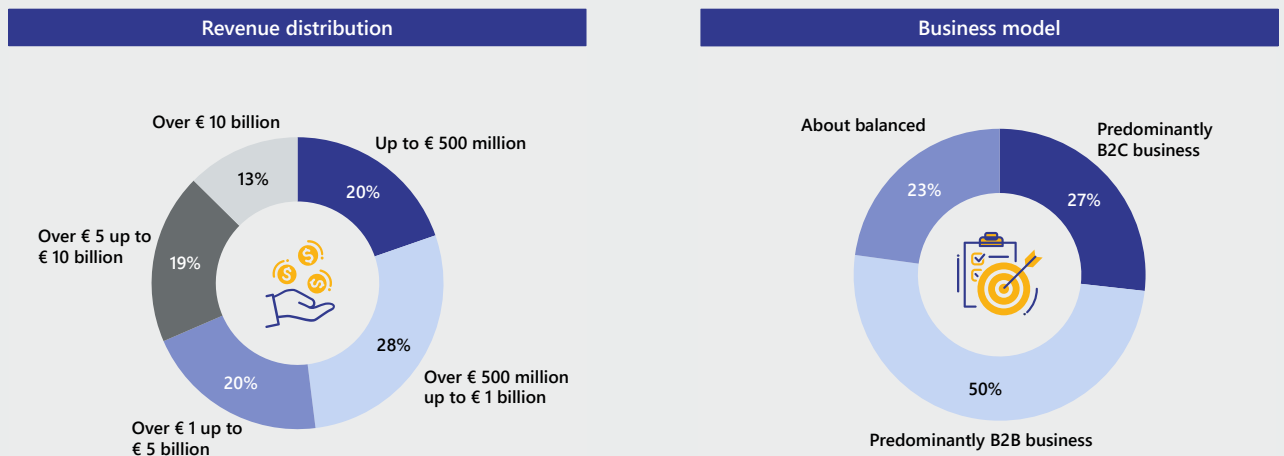


Fig. 3: Question: Sales distribution, business model; n = 127

Introduction: The market segment Digital Experience Services (DXS)

DIGITAL EXPERIENCE SERVICES – AN INTERDISCIPLINARY SERVICE APPROACH

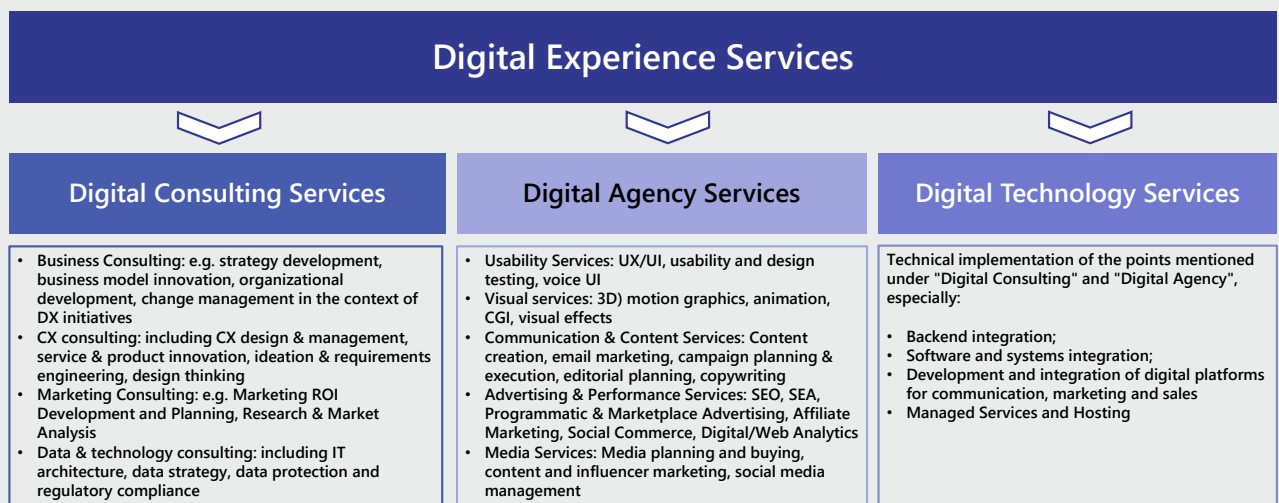


Fig. 4: Portfolio of DXS providers

In recent years, the demand for digital experience services has continuously increased according to various Lünendonk® surveys. Digitalization pressure at the customer interfaces is, among other, responsible for this, which very many businesses have found themselves confronted with since the start of the COVID-19 crisis.

Yet, also in the years prior to COVID-19, a lot of business (especially B2C enterprises) have invested in the organization of digital marketing and sales platforms as well as digital business models. They also respond this way to the disruption by digital attackers – foremost in e-commerce – and the changed requirements of younger or more digitally savvy target groups. In fact, the number of digital channels had seen a massive jump even before COVID-19. This development has intensified more drastically again because of COVID-19. It suddenly became clear to a lot of businesses that they had invested too little in the past in their own digitalization and in that of their business models and their own transformation had not progressed enough. Topics such as e-commerce, customer centricity and the digital platform economy very quickly made it onto the agenda of the top management.



The market for Digital Experience Services in Germany

The question of how businesses can align themselves on more customer centricity and how they can stay competitive in an ever more digital world demands attention for the following points:

- Definition of digital customer journeys, steering of cross-media campaigns and the collection as well as analysis of data
- Redesign of the process environment into end-to-end process chains
- Modernization of legacy IT and scaling of digital technologies via platforms

DATA IS KEY TO CUSTOMER CENTRICITY AND THE DIGITAL EXPERIENCE

Without the use of analytics and artificial intelligence (AI), an important objective of customer centricity can only be reached with difficulty: the personalized sales pitch (personalization) on the basis of consumer insights. By means of digital experience platforms, based on data and a central customer ID, businesses can analyze, for example, which products and services the customers like in order to target them in highly personalized ways in customer service.

Personalization is one of the megatrends in modern marketing because content about the brand and product that is customized to target groups becomes more and more relevant – for B2C as well as B2B. While digital product presentations have been used for a longer time in the consumer goods segment to get customers excited and win their loyalty for a brand, this topic is increasingly gaining relevance in the B2B segment, which is illustrated, for example, by the trend relating to virtual reality and the metaverse.

Data and digital experience additionally have an interdependency that should not be underestimated: The willingness to share data is rising along with the quality of the customer experience. If the use of a digital service is considered to be indispensable from the customer's perspective, the willingness to share personal data is high.

The gathered customer-related data in turn can be used for personalization or to improve products or processes based on customer feedback. An entirely new dimension and true transformation is offered by the use of AI and virtual reality/metaverse in the area of data-based business models. Accordingly, plant and machine makers are, for example, working on how they can make data analyses and simulations relating to the performance of used machines, usage behavior or necessary maintenance steps available to their customers. Online marketplaces such as Douglas, Otto or Zalando, in contrast, transfer information about the purchasing behavior (search queries, interests, etc.) of the people in question to the cooperating provider firms, which can then optimize their marketing strategies by means of targeting on this basis.



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WITH END-TO-END PROCESS CHAINS AND PROCESS QUALITY TO THE DIGITAL EXPERIENCE

Omnichannel strategies and an integrated end-to-end process chain play a vital role for the design of a digital experience. In consequence of a virtual explosion of the channels in marketing, sales and customer service, it is essential that customers can switch seamlessly between multiple channels (app, portal, website, store, etc.), use several channels for purchases and service requests (click & collect, ship from store, etc.), and query status information in real time (e.g., track & trace in logistics, performance of machines and equipment, product availabilities). Short response times on all customer channels – for example, to requests for quotations, claims reports or other service inquiries – are also part of organizing a digital experience.

In all of these aspects, interlinked and automatically controlled smart process chains play a key role. This will succeed by breaking down historically grown IT and process silos and by networking individual processes into microservices that can be modified and adjusted flexibly.

CREATING THE BASES FOR THE DIGITAL EXPERIENCE WITH IT MODERNIZATION AND CLOUD TRANSFORMATION

At the same time, however, the technological conditions in many places are still not available to a sufficient extent due to the oftentimes still prevalent legacy IT (including outdated IT core systems) to meet the requirements for the targeted implementation of a customer-centric strategy. Accordingly, there is frequently the problem that new, digital customer interfaces (portals, apps, etc.) can in fact be built quickly, but the existing IT system environment is overwhelmed by its integration and operation. IT transformation programs, which are highly complex and have therefore not been prioritized or even postponed in recent years, frequently under cost considerations, are consequently an important technological measure for the development of customer centricity.

A number of requirements should be considered to achieve high process quality in digital services:

- Scaling: Coverage of peak loads by means of infrastructure, flexible adjustment to traffic/accesses
- Regular updates, patches and releases for digital products, which are developed within a very short period of time and which are uploaded without downtimes
- Availability: 24/7 performance, no downtimes, worldwide availability if necessary
- Interoperability/end-to-end compatibility: services communicating with each other and exchanging data continuously
- Flexibility: APIs and microservice architecture to dock new services and undock them again if necessary

Digital technologies enable - and demand - a new self-image of the digital experience and customer centricity.



The market for Digital Experience Services in Germany

DIGITAL EXPERIENCE SERVICES STRONGLY GROWING IN IMPORTANCE

Businesses cannot implement this host of issues on their own but must rely on the support from external service providers. Many user firms are often also lacking digital skills and experience values or they plainly do not have enough qualified technical staff for all aspects needed in the digital transformation.

A novel kind of service providers is especially profiting from this digitalization pressure as described above and the overall strongly risen demand for digital services: the providers of digital experience services. They have gained a lot of importance over recent years. According to Lünendonk, even in the COVID-19 year 2020, revenues of the providers of digital experience services rose by 7 percent on average.

Context: Revenues in the IT services market increased significantly slower at 5.8 percent and even fell by 3.4 percent in the management consulting market. In 2021 as well, the leading IT consulting firms operating in Germany profited from the effects of making up ground when it comes to digitalization, with an average growth around 16 percent, in the same way as digital agencies, which managed to increase revenues by more than 20 percent in the statistical mean.

SERVICE MARKET DISTINCTIONS BECOME BLURRY – DIGITAL EXPERIENCE SERVICES EMERGE

A key driver for the new provider type "digital experience service" is that the conventional classification into individual categories such as IT service provider, creative agency, management consultants or system integrators does not work as often as it used to for tender invitations from the customer's perspective. Providers that can operate as full-service providers become important strategic partners to customer businesses for the digital transformation in the course of the high implementation pressure. This has already been shown by some previous Lünendonk® surveys such as the survey series "Business Innovation & Transformation" of the years 2002–2017.

But also last year's Lünendonk® Survey "The Market for Digital Experience Services in Germany" showed: While agreement with the relevance of a full-service portfolio as an important selection criterion was still measured at 58 percent in the year 2018, 85 percent of surveyed businesses in 2021 already considered an end-to-end portfolio to be important for the selection of service providers. A trend can be discovered in addition after many interviews held by Lünendonk with CXOs and leading service providers that more and more businesses prefer cooperating for certain tasks with a service partner that offers all relevant implementation services from one source and is responsible and in charge of ever bigger work packages.

Lünendonk defines management and IT consultancies and digital agencies that have both a broad and comprehensive portfolio in the areas of consulting/innovation development/product development, digital agency services, and IT implementation as digital experience service providers (DXS providers).



INTRODUCTION: THE MARKET SEGMENT DIGITAL EXPERIENCE SERVICES (DXS)

The market for Digital Experience Services in Germany

SELECTED ACQUISITIONS IN THE DIGITAL EXPERIENCE SERVICES MARKET

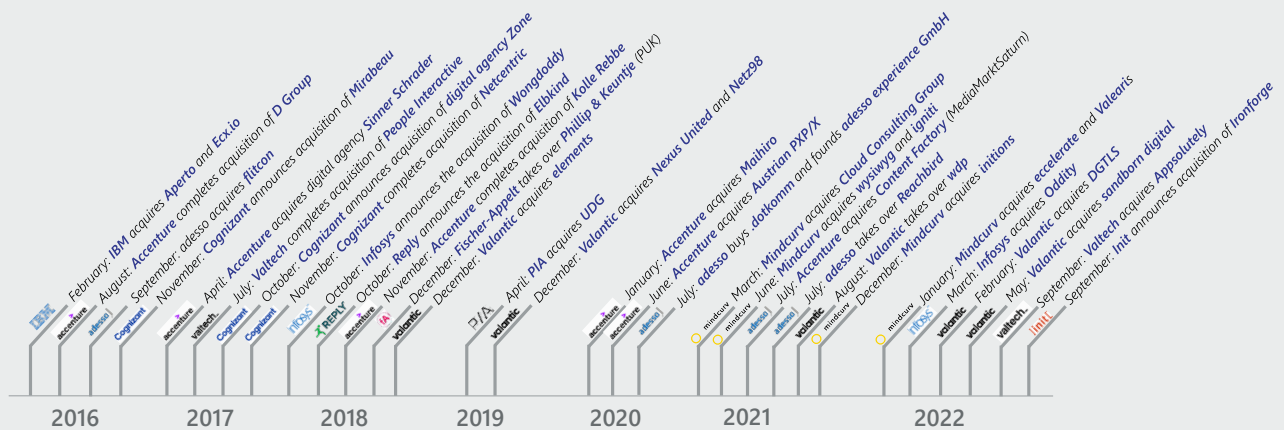


Fig. 5: Selected acquisitions in the DXS market

A decisive consequence from these developments is that a clear delineation of the markets for management consulting, IT consulting and digital agencies is becoming increasingly difficult, as the boundaries between the different services blurry. In reference to the implementation of digitalization strategies with customer-centric contents, Lünendonk calls the part these three markets share "digital experience services".

Accordingly, not only consulting and IT service providers, but also digital agencies with historically high affinity to digital technologies in fields like e-commerce, digital content or UX have started to build up their consulting and system integration expertise to satisfy demand for holistic digital solutions.

Foremost as relates to subjects tying into software development and the designing of digital platforms for the implementation of customer-centric strategies (e-commerce, content, digital marketing or IoT), this development can be clearly observed – among other, because in-house expertise and experience values for digital topics are missing at many customer businesses, which are available at the service providers. Long-term partnerships and the selection of preferred partners consequently become increasingly important.

A full-service portfolio in the area of digital experience services comprises strong competencies and high capacity to deliver especially when it comes to the following subject matters:

- Consulting (processes, customers)
- Innovation methods
- Design and creativity
- Software development (embedded systems)
- UX design
- Data analyses and artificial intelligence
- Ability to have responsibility and control over complete projects
- Transformation strength





Part I: Perspective of DXS service providers

List of participants

The list shows all businesses that have participated in the survey in alphabetic order. Businesses that have returned a questionnaire but do not meet the criteria for participation are not entered in the list of participants. Answering the questionnaire sent out by Lünendonk is the key requirement for inclusion in the survey.

Individual responses from these businesses about market forecasts were considered nonetheless, so that for some questions, the case number (n) is higher than the number of businesses listed here (26).



LIST OF PARTICIPANTS

The market for Digital Experience Services in Germany

Company, headquarter

]init[AG für digitale Kommunikation, Berlin

Accenture GmbH, Kronberg

Adesso SE, Dortmund

Ausy Technologies Germany AG, Munich

Capgemini Deutschland GmbH, Berlin

Deloitte GmbH, Munich

Diconium GmbH, Stuttgart

Digitas Pixelpark GmbH, Hamburg

Diva-e Digital Value Excellence, Munich

Exxeta AG, Karlsruhe

FischerAppelt AG, Hamburg

Futurice GmbH, Berlin

IBM Deutschland GmbH, Ehningen

Intive GmbH, Munich

KPS AG, Unterföhring

Mindcurv GmbH, Essen

NTT Data, Munich

Plan.Net Germany GmbH & Co. KG, Munich

PwC GmbH, Frankfurt on the Main

Reply Deutschland SE, Gütersloh

Syzygy AG, Bad Homburg

Team neusta GmbH, Bremen

T-Systems Multimedia Solutions GmbH, Dresden

Valantic GmbH, Munich

Valtech GmbH, Düsseldorf

Wipro Limited, Frankfurt on the Main

26 services providers
met the participation
criteria.



Portfolio focus of the DXS providers

The listed providers of digital experience services (hereinafter: DXS Providers) have their roots in the management consulting, IT services and digital agency services markets. They therefore place different emphases in their portfolio. In this chapter, we illustrate how the revenues are broken down over the three subsegments of digital consulting, digital agency services and digital technology services.

Overall, digital experience services account for 74.7 percent on average (2020: 73.9%) of the total revenues of all survey participants. The increase is foremost due to the fact that the management and IT consulting services providers included in this survey could grow their revenues with digital experience services. However, the high percentage also indicates that digital experience services are in very high demand by customers, which is why the service providers orient their portfolios more and more in this direction. Accordingly, management and IT consulting services providers invest more into the structuring of a digital agency services, while digital agencies become stronger especially in data consulting. All provider groups have in common that they consequently develop or have already developed into full-service providers.

14 of the service providers covered by this survey could be regarded as so-called "native" DXS Providers, as they earn a major part (more than 75%) of revenues from digital experience services. Of these 14 service providers, which have their roots almost completely in the digital agency market, the DXS portion is naturally higher, notably 96.6 percent on average. These 14 DXS Providers are presented in a separate sub-ranking (see Chapter "Sub-ranking of Businesses with Digital Experience Services as Core Business Field").

DIGITAL TECHNOLOGY SERVICES ARE THE BIGGEST SERVICE ELEMENT – ALSO FOR DIGITAL AGENCIES

As a part of the examined leading DXS Providers historically come from the IT consulting segment and as digital technologies are more and more becoming a basis for customer centrality and digital experience, technology services contribute on average 34.5 percent (2020: 33.4%) to total revenues and represent the largest sub-segment. Examples of digital technology services are app and software development as well as digital platform integration for marketing, sales or communication purposes, e.g., customer experience platforms.

An interesting fact is that the service providers, which achieve more than 75 percent of their revenues with DXS Services (DXS Natives), earn even 44.6 percent of their revenues with digital technology services – thus, much more than with digital agency services. This illustrates

74,7 %
of their revenue is
generated on average
by the service providers
surveyed with digital
experience services.



PORTFOLIO FOCUS OF THE DXS PROVIDERS

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very clearly that not only software development and system integration services, but also managed services and hosting become increasingly important to traditional digital agencies and are in high demand by their customers, respectively, and expected to be included in the offer as a portfolio component. However, this also indicates that it becomes more difficult to delineate creative and design services from IT implementation topics while they are requested as end-to-end service. The business of digital agencies and IT consulting service providers is consequently moving closer together.

On average, 20.9 percent (2020: 22.6%) of total revenues are attributed to digital agency services. This includes subjects such as the creation and design of digital customer touchpoints, the development of omnichannel strategies, marketing automation and content creation. Interestingly, the portion of DXS Service Providers with agency services declined in 2021. Lünendonk believes this does not mean a loss of relevance of agency services, but instead has to do with the fact that many of the surveyed digital agencies having been strongly involved in technical implementation in 2021 – for example, in the development and implementation of customer data platforms or the development and roll-out of infotainment systems or e-commerce shops.

The smallest segment, as was also the case in the survey of the previous year, was digital consulting with a contribution of 19.3 percent to revenues (2020: 17.9%). This segment includes fields such as CX consulting, marketing consulting or data & technology consulting.

RIISING DXS REVENUE SHARE AMONG THE SURVEY PARTICIPANTS - ESPECIALLY EXPANSION OF DIGITAL CONSULTING & DIGITAL TECHNOLOGY SERVICES

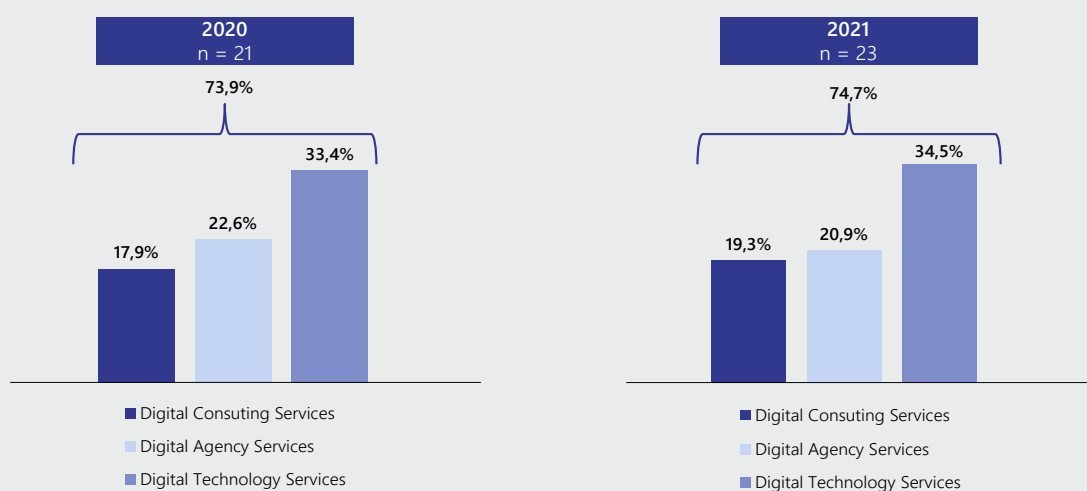


Fig. 6: Question: What percentage of your total sales in Germany did your company generate in each of the following three categories?; n = 23

PORTFOLIO FOCUS OF THE DXS PROVIDERS

The market for Digital Experience Services in Germany

ONE OF EVERY TWO EMPLOYEES WORKS FOR DIGITAL TECHNOLOGY SERVICES

The area of digital technology services not only generates the biggest portion of revenues, but it also employs the largest percentage of personnel. 49.5 percent of employees working for the surveyed DXS Service Providers can be attributed to digital technology services. Even at the surveyed 14 digital agencies, meaning service providers with more than 75 percent DXS revenues, 50.8 percent of employees work in the area of digital technology services and just about one-quarter (26.7%) in the area of digital agency services. This again reflects the trend that digital technologies are more frequently the enabler for marketing and sales strategies. Examples are digital and cross-media campaigns, hyper-personalization or the structuring and operation of e-commerce shops.

THE DISTRIBUTION OF EMPLOYEES IS ALMOST IDENTICAL TO THE DISTRIBUTION OF REVENUE

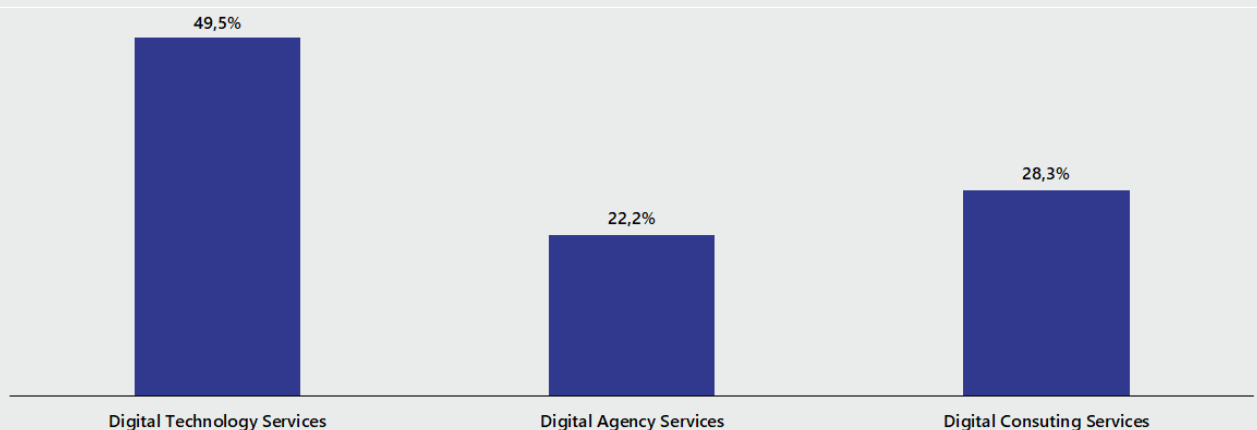


Fig. 7: Question: Employee split among the three topics; n = 23

NEARSHORE AND OFFSHORE LOCATIONS AS RESPONSE TO THE SHORTAGE OF QUALIFIED PERSONNEL

Interviews between Lünendonk and representatives of leading service providers clarify time and again that the biggest challenge to business development is recruiting and the difficulties in finding new qualified personnel slow down further growth and the staffing of projects.

In the course of the rising demand for digital experience services, especially in areas such as UX design and software development, it consequently becomes more difficult to find a sufficient number of qualified personnel to staff projects. For example, the leading IT consulting service providers in Germany are already reporting that they cannot service about one of five project requests due to the lack of consultants.



The market for Digital Experience Services in Germany

Establishing nearshore and offshore business locations is therefore an important part of the HR strategy and is a top priority to the service providers to absorb the effects of the shortage of qualified personnel to some extent. On average, in 17.3 percent of the projects nearshore and offshore services have been performed by providers of digital experience services in the year 2021. The biggest portion is allocated to nearshore regions, while offshore regions are used comparably rarely with an average portion of 6.7 percent. In 2022, even 26.4 percent of the projects are to involve the use of nearshore and offshore services, meanwhile the biggest increase is expected in the nearshore regions.

NEAR- AND OFFSHORE BECOMES MORE IMPORTANT TO REMAIN ABLE TO DELIVER

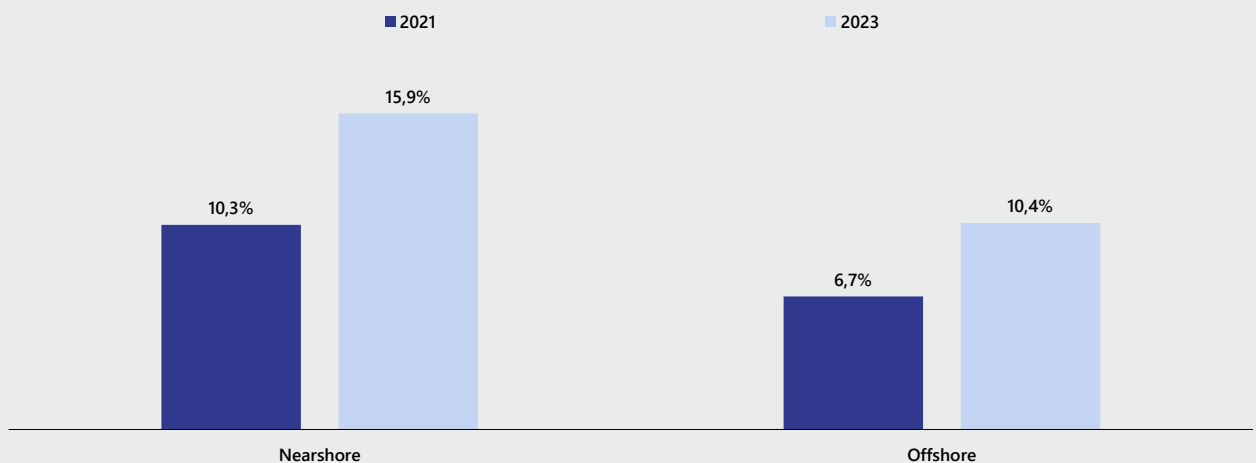


Fig. 8: Question: What is the average nearshore and offshore share in digital experience projects and your expectation for 2023?; n = 22



Key competitors in the DXS market

As will be shown further below in the next chapter based on the Lünendonk® list, the market segment of Digital Experience Services is dominated by IT service providers, consultancies, digital agencies and the digital divisions of two of the big-4 companies.

While the Lünendonk® lists traditionally provide insight into which service providers are leading measured by revenues in Germany, the answers to the question of which service providers are most frequently named as competitors permit further conclusions as to the relevance and market strength of the service providers.

The surveyed service providers were asked to freely name the four service providers they believe are their biggest competitors in the digital experience services segment. In this respect, it is interesting to see if the service providers ranking at the top of the Lünendonk® list are also the ones that are often actually perceived as competitors on the market.

The analysis of who are believed to be the strongest competitors shows that consulting and IT service providers have developed into key providers of digital experience services and define and dominate this market besides the traditional full-service digital agencies.

ACCENTURE REMAINS THE MOST IMPORTANT COMPETITOR

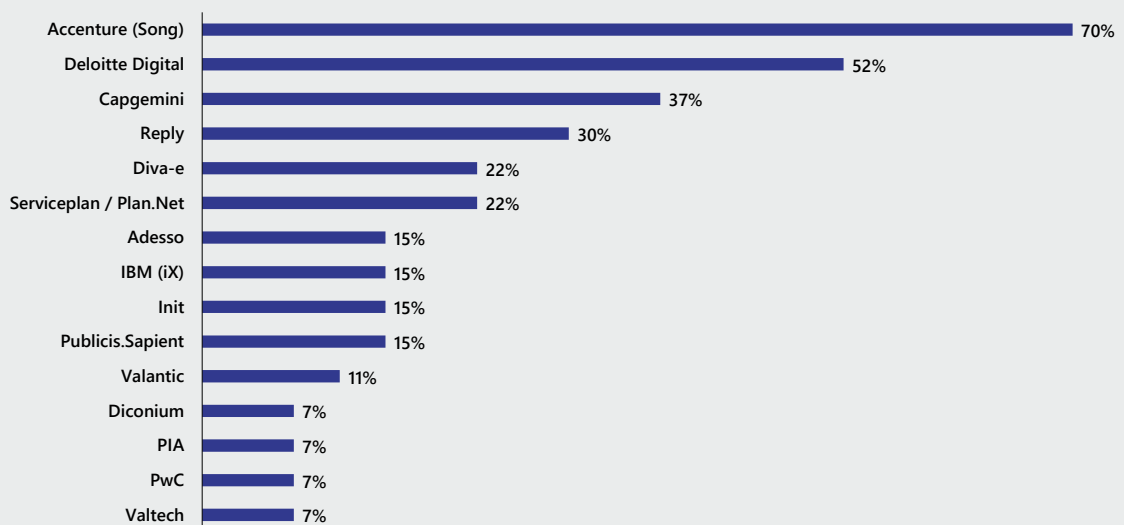


Fig. 9: Question: Which companies are your four most important competitors as a full-service provider of digital experience services?; n = 27

KEY COMPETITORS IN THE DXS MARKET

The market for Digital Experience Services in Germany

As in the year 2021, Accenture (Song) again received most of the votes for being one of the four top competitors this year. The second most frequently named competitor was Deloitte (Digital) at 52 percent. In the previous year, it was 39 percent who considered Deloitte to be one of their top-4 competitors.

37 percent of surveyed providers of digital experience services stated Capgemini as one of their four main competitors. In 2021, this value was 32 percent. Reply received 30 percent, thus also a rounded one-third of the mentions.

Trailing at some distance behind these were the digital agencies diva-e and Plan.Net, each receiving 22 percent of mentions. Adesso improves a few places this year and was named by 15 percent (2021: 11 percent).

Diconium and Valantic were newly included in the ranking of key competitors this year. PIA and Publicis Sapient, in contrast, experienced a big drop, which was also why they are no longer included in this year's survey.



Lünendonk® list 2022

"Leading providers for Digital Experience Services in Germany"

Rank (change)	Company	Revenue 2021 in Mio. € in Germany	Digital Experience Service Portfolio - Revenue shares with...		
			Digital Consulting	Digital Agency Services	Digital Technology Services
1 ●	Accenture GmbH, Kronberg *) 1)	2.650,0	●●	●●	●●●
2 ▲	Capgemini Deutschland GmbH, Berlin 1) *)	1.700,0	●●	●	●●●
3 ▼	IBM Deutschland GmbH, Ehningen *) 1) 2)	1.650,0	●●	●●	●●●
4 ▲	NTT Data Deutschland, Munich/Bielefeld 4)	890,0	●●	●	●●●
5 ●	PwC GmbH, Frankfurt am Main (only advisory revenues) 3)	885,0	●●●	●	●●
6 ▼	Deloitte GmbH, Munich (only advisory revenues) 3)	819,0	●●	●	●●●
7 ●	Adesso SE, Dortmund	550,0	●●	●●	●●●
8 ▲	Wipro Limited, Frankfurt am Main *)	450,0	●●	●	●●●
9 ▼	Reply Deutschland SE, Gütersloh	295,0	●●	●●	●●●
10 ●	Valantic GmbH, Munich	220,0	●●	●	●●●
11 new	T-Systems Multimedia Solutions GmbH, Dresden	204,0	●●	●●	●●●
12 ▲	]init[AG für digitale Kommunikation, Berlin	152,6	●●●	●●	●●●
13 ●	Plan.Net Germany GmbH & Co. KG, Munich 5)	151,6	●●	●●●	●●
14 ▲	Diconium GmbH, Stuttgart	147,0	●●	●	●●●
15 new	Ausy Technologies Germany AG, Munich	119,0	●●	●	●●●
16 ●	Team neusta GmbH, Bremen	112,7	●●	●●	●●●
17 ▲	Valtech GmbH, Düsseldorf	94,1	●●	●●	●●●
18 ▼	Exxeta GmbH, Karlsruhe	92,0	●●	●●	●●●
19 ●	Diva-e Digital Value Excellence GmbH, Munich	86,3	●●	●●	●●●
20 ▲	Digitas Pixelpark GmbH, Hamburg 5)	70,5	●●	●●	●●●
21 ▼	KPS AG, Unterföhring	67,6	●●	●●	●●
22 new	Intive Group GmbH, Munich 6)	61,0	●	●●	●●●
23 ▲	FischerAppelt AG, Hamburg 5)	58,5	●	●●●	●●
24 ▲	Syzygy AG, Bad Homburg	47,8	●●	●●	●●
25 new	Mindcurv GmbH, Essen	42,0	●●	●	●●●



Criteria for participation at the Lünendonk® list:

Only companies that generate at least 60 percent of their revenue from services (e.g. management and IT consulting, digital agency services) and generate significant revenue in each of the three segments Digital Consulting, Digital Agency Services, and Digital Technology Services are included. Companies with a DXS revenue share of less than 50 percent must also generate at least €100 million from DXS services, and companies with a DXS revenue share of less than 30 percent must generate at least €200 million in DXS revenue.

Footnotes:

*) Revenue figures and portfolio shares are estimated.

- 1) Revenue also include revenue from management consulting.
- 2) Sales relate to IT consulting and systems integration.
- 3) Figures relate to the advisory business.
- 4) Includes revenues from NTT Data Business Solutions AG and NTT Data Deutschland GmbH.
- 5) Revenue represents fee revenue.
- 6) Data refer to Intive GmbH and Intive automotive GmbH.

Revenue share with the digital experience portfolio:

- Share of the digital experience portfolio is over 40 percent
- Share of the digital experience portfolio is between 20 and 40 percent
- Share of the digital experience portfolio is up to 20 percent

The Lünendonk® list shows the leading service providers in the digital experience services segment (DXS). With the rising relevance of this market segment and the convergence of the markets for IT consulting, IT services, digital consulting, management and innovation consulting, a new edition of the Lünendonk® List has been published every year since 2020.

Based on the dynamic further development of the market in consequence of the strongly rising demand for digital experience services, more and more service providers are expanding their portfolio, thereby meeting the criteria for inclusion in this Lünendonk® list (e.g., Ausy Technologies, Valantic, Wipro). At the same time, however, companies that have lost relevance in the DXS segment compared to the previous year are also no longer included in the ranking (e.g., PIA, Dentsu).

There has been a Lünendonk® list of the leading providers of digital experience services since 2020 in response to

- the increasing importance of this market segment,
- the blurring of boundaries between the individual segments,
- the rising need for information and guidance of user firms, and
- the clear positioning of a large number of leading management and IT consulting firms, as well as digital agencies as providers of digital agency services.



The market for Digital Experience Services in Germany

A ranking by DXS segment revenues was not made by Lünendonk, as primarily the exact segment revenues especially at hybrid consulting and IT service providers cannot be validated based on public sources. Likewise, many service providers cannot clearly distinguish between the segment revenues because of difficulties in delineating them from other services. An exact presentation of revenues earned with digital experience services and comparability are therefore not given.

ACCENTURE INTERACTIVE BECOMES ACCENTURE SONG

Three companies earned total revenues of more than 1 billion euros in 2021. As in the previous year, Accenture leads the pack with estimated revenues in Germany of 2.65 billion euros. Accenture acquired the technology consultancy umlaut among others in 2020, which is now included in revenues and employees for 2021. In the traditional digital environment, the takeover of the MediaMarktSaturn in-house agency Content Factory, which had been called Redblue Marketing until 2020, was the most recent acquisition of Accenture in Germany.

Accenture announced the re-branding of Accenture Interactive to Accenture Song in April 2022. Accenture Song is the digital unit of Accenture and is to employ a staff of 2,000 in the DACH region. The re-branding also made the digital agencies that were taken over, Kolle Rebbe, SinnerSchrader and Mackevision disappear from the market, and they will be part of the Accenture Song brand from now on. Matthias Schrader left Accenture Song in the course of these changes in September 2022. Ronald Mayr has since been in charge of the management in Germany. As new global CEO of Accenture Song, David Droga, who sold his agency Droga5 2019 to Accenture, was introduced in 2021 already. By the end of the financial year 2022 (August 31, 2022), Accenture Song is expecting global revenues of rounded 14 billion US dollars.

TRADING PLACES IN RANKS 2 AND 3

Compared to the previous year, Capgemini and IBM traded places in rank 2 and 3. With estimated revenues of 1.7 billion euros in Germany, Capgemini is slightly ahead of IBM Germany with revenues estimated by Lünendonk in the amount of 1.65 billion euros. In the same way as at Capgemini, the revenues of IBM Germany include the proportionate revenues earned with management consulting.

Capgemini has been offering services for digital innovations, digital experience, design or data analytics under the brand Capgemini Invent since 2018. Around the world, roughly 10,000 employees work in 40 creative studios and thereby bundle various disciplines. Capgemini Invent also includes the affiliated agencies frog, Purpose, Synapse, Idean, Fahrenheit 212 and June21.



The market for Digital Experience Services in Germany

In IBM iX, IBM has a leading digital agency in Germany, which takes a strong market position in the business with authorities and public administration, health insurers as well as industry and others. The digital agencies Aperto and Ecx.io that were taken over a few years ago and operate under the name IBM iX. About 1,200 people work for IBM iX in Germany, Austria and Switzerland.

NTT Data follows in 4th place. Lünendonk bundles the two IT consulting service providers of the NTT Group, NTT Data Business Solutions AG (formerly itelligence AG), Bielefeld and NTT Data Deutschland GmbH, Munich, under this name. In 2020, the group announced the launch of NTT Data Design Network, integrating the creative and innovative development of digital products and services. Besides, NTT Data has in Tangity several hundred design and creative experts working at different near- and offshore sites, and in the digital agency Sybit, it has more than 300 local experts available for the technical implementation of SAP customer experience solutions.

BIG 4 IN RANKS 5 AND 6

Following in 5th and 6th place, PwC and Deloitte are two original audit and tax advising firms, which are also among the world's biggest consulting service providers at the same time. Deloitte with its management consulting unit earns globally 21.2 billion euros and PwC reaches 14.4 billion euros. As the highly regarded Ad-Age ranking shows, both companies with sales revenues of 9 billion US dollars each are internationally leading digital agencies (as is Accenture Song and IBM iX), which also have a strong representation on the German market.

To receive a better comparability with the other service providers in the ranking, the advisory revenues of the two companies, which include consulting, IT advisory and transformation revenues, were considered instead of total revenues. In Deloitte Digital, Deloitte has a brand of its own for the digital business, as does PwC in PwC Digital Services. Likewise as Deloitte, PwC has taken over several businesses in the digital and information segment in recent years. The advisory revenues of PwC in Germany amount to 885 million euros, followed by Deloitte with about 819 million euros.

RANKS 7 TO 10: ADESSO, WIPRO, REPLY, VALANTIC

Trailing at a clear distance is Adesso ranked 7. Around the world and in Germany, the company of Dortmund was able to increase its revenues in 2021 by about 30 percent. In Adesso experience GmbH, Adesso mobile solutions GmbH and a separate line of business "Digital Experience", the IT service provider expanded its portfolio relating to customer-centric applications continuously over the past years.



The market for Digital Experience Services in Germany

Wipro is also showing strong, even if predominantly anorganic growth. The IT service provider from India bundles its digital competences also under its own brand, Wipro Digital. The acquired companies Designit and Rational Interaction are integrated under it.

Reply, having grown by nearly 10 percent, takes 9th place. In the digital agency ranking published by the Bundesverband der Digitalwirtschaft (BVDW) [German Association for the Digital Economy], Reply tops the ranking – measured by revenues earned with digital experience services. By taking over the consulting firm Fincon in 2022, which is specialized in banks and insurances, Reply's revenues should grow in the coming year by more than 50 million euros.

Valantic as well is further expanding its DXS portfolio. In February 2022, the Munich company announced the takeover of the digital agency DGTLS with more than 100 employees, making it the biggest Pimcore provider in Europe. This was followed by the takeover of the digital consulting provider mm1 in September 2022. In previous years already, Valantic acquired, among other, the digital agencies Netz98 and Nexus United. The Valantic customer experience team by now counts 800 employees.

RANKS 11 TO 20: FROM START-UPS TO SECTOR CONSTANTS AND GROWTH CHAMPIONS

Newly represented in this year's Lünendonk® List is Ausy Technologies. Ausy originally concentrated on the development of industrial software, web portals and front-end design. In recent years, the service range kept expanding to include subjects such as business consulting, UX design and customer journey design. Likewise newly included in the survey was the Telekom subsidiary, T-Systems MMS, which offers a comprehensive DXS portfolio.

As in the previous year, the digital agency init grew by more than 60 percent. The digital consulting firm with concentration on the public sector profits in particular from the Online Access Act (Onlinezugangsgesetz, "OZG") and the development of digital solutions for townships, municipalities, and the national and state governments. In September 2022, init announced its plans to expand the public sector business in Switzerland with the takeover of Ironforge.

DIGITAL TRANSFORMATION IN THE AUTOMOTIVE SECTOR INCREASES THE BUSINESS OF THREE LEADING DIGITAL AGENCIES

With about 151.6 million euros in revenues, just 1 million euros less compared to init, the Serviceplan subsidiary Plan.Net follows in rank 13. Plan.Net reported an increase of revenues by around 47 percent. Plan.Net acquired the consulting firm Future Marketing in late 2020 and took a minority share in the management consulting firm thaltegos in 2021.



The market for Digital Experience Services in Germany

Plan.Net is a core part of the collaborative agency model consisting of MediaMonks, Serviceplan Group/Plan.Net Group and Berylls Strategy Advisors. The Marcom Engine was set up specifically for BMW as an agency model and has been responsible for the EU-wide and data-driven product and marketing communication for the BMW and MINI brands since 2020.

Diconium accomplished to grow by 77 percent. As a subsidiary of the Volkswagen Group, Diconium is much involved in the development of digital services and sales solutions or new mobility offers.

Another driving force in the automobile sector but also in other branches is Valtech. Valtech managed to grow by around 20 percent in 2021 and thereby move up to rank 17. In 2018, Valtech and VW, respectively CARIAD, founded the joint venture Valtech Mobility to develop digital products (apps, embedded systems) together in the area of vehicle development. Besides the automotive sector, Valtech works for many well-known B2C and B2B companies and develops and implements technology-based experiences.

DYNAMIC FIELD OF PURSUERS

The Lünendonk® List features two new entries with Intive and Mindcurv taking ranks 22 and 25. Together with the two subsidiaries Intive GmbH and Intive automotive GmbH, Intive could grow by more than 60 percent to now 61 million euros. Intive strengthened its international presence in 2021 by the takeover of Spark Digital and Ammeon.

Mindcurv has been well on track of expansion with the joining of its investors, Genui and Primepulse. The companies Public Cloud Group, igniti, wysiwyg, initions, eccelerate and Valearis have since then been integrated in Mindcurv. Counting the most recent takeovers, Mindcurv has nearly 600 employees.



Lünendonk® portfolio 2022

"Leading providers for Digital Experience Services in Germany"

Besides the Lünendonk® list, the Lünendonk® portfolio gives a transparent overview of the positioning and market strength of the leading DXS Providers.

The Lünendonk® portfolio compares the surveyed service providers in aspects of their respective portfolio concentrations, market shares and their recognition on the market. The two axes of "market relevance" and "portfolio depth and breadth" are influenced by several components at the same time

Figure 10 shows which criteria Lünendonk has used to evaluate the service providers. The evaluations are based on a series of criteria, among them, revenues from digital experience services, market shares and ratings of service providers from a provider and customer perspective. Among other, the surveyed service providers and customer companies were each asked to rate the providers of digital experience services in the three fields of "digital consulting", "digital agency services" and "digital technology services", and also to state which service providers they recognize at all as providers of digital experience services.

METHODOLOGY OF THE LÜNENDONK® PORTFOLIO

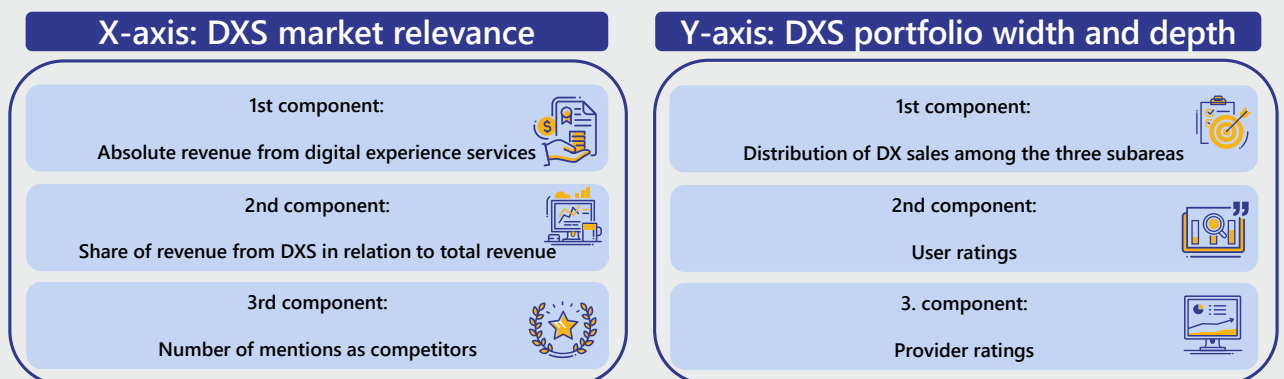


Fig. 10: Methodology of the Lünendonk portfolio

LÜNENDONK® PORTFOLIO 2022

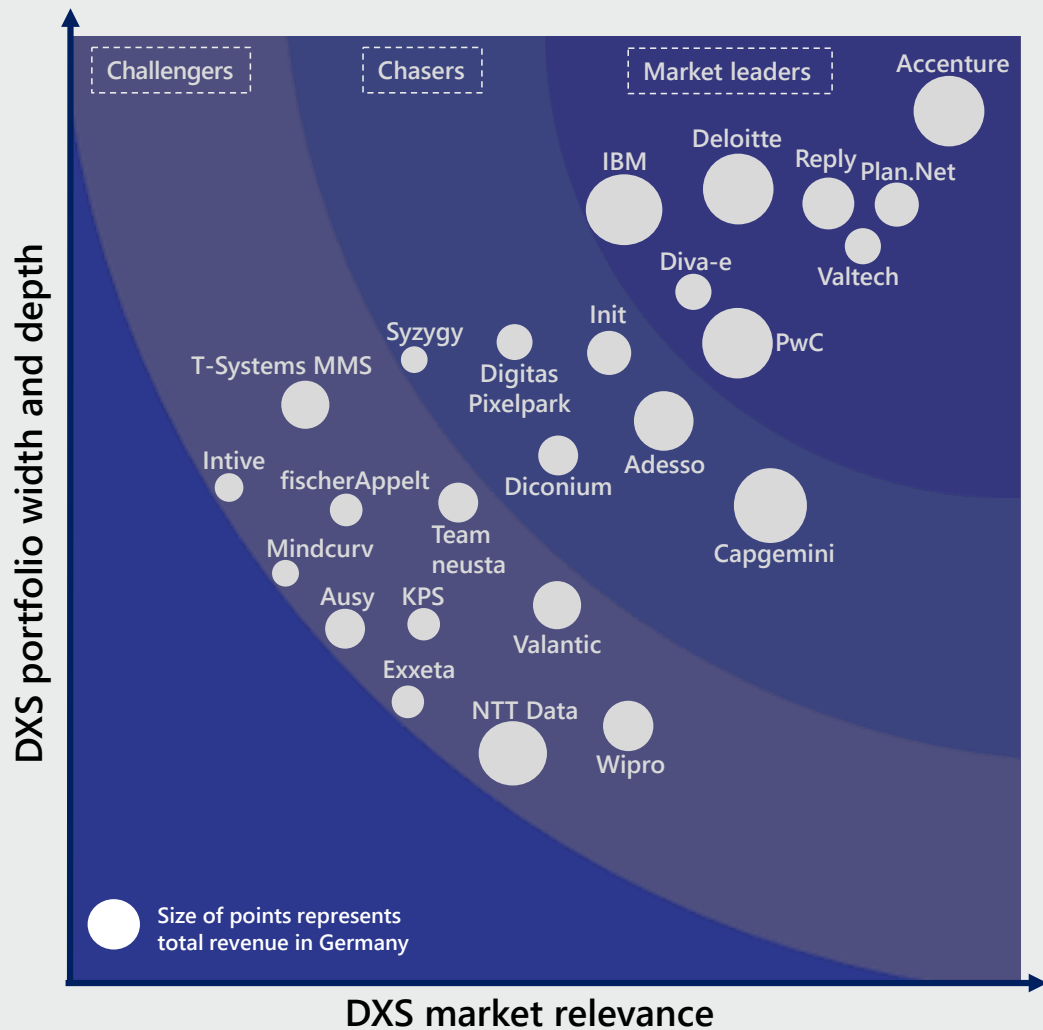


Fig. 11: Lünendonk® portfolio 2022 „Leading providers for Digital Experience Services in Germany“

To put the rankings into context, it should be noted that all of the service providers included in the Lünendonk® Portfolio offer a broad range of digital experience services. All of them are therefore generally able to perform certain tasks relating to customer centricity, experience, digital marketing or digital platforms.

They differ, however, in their thematic depth and coverage of digital experience services, as well as the ability to provide end-to-end implementation of projects. Accordingly, some service providers cover the complete value creation of customer-centric subjects (sales, marketing, product development, after-sales, logistics), while others are full-service provid-



The market for Digital Experience Services in Germany

ers in particular fields (e.g., digital marketing, e-commerce platforms) or industries (public sector, retail, automotive). Other service providers, in turn, actually have a comprehensive DXS portfolio, but they do not have the needed depth in the service range yet compared to others, while some still have potential in terms of market strength.

There were no changes in 2022 compared to 2021 in the field of DXS Providers with an above-average broad portfolio and high market relevance (market leaders). However, the positions of the individual providers have changed.

THE MARKET LEADERS

As the company leading the Lünendonk® List, Accenture was identified in the Lünendonk® Portfolio by the mentions it received for being a key competitor and the customer ratings. By the takeovers of Kolle Rebbe, SinnerSchrader, PXP/X, D-Group or the American creative agency Droga5, Accenture has made a tremendous further development and strengthened its Accenture Song range in recent years. The Ad-Age ranking has Accenture Song as the biggest digital agency at an international level, and Lünendonk also estimates it to be the biggest at the national level in Germany.

The three digital agencies Reply, Plan.Net and Valtech have in particular gained market strength especially due to big revenue increases, portfolio expansions and positive customer ratings. Most of all Plan.Net has made enormous gains with revenues higher by rounded 47 percent – which was driven, among other, by the joint venture The Marcom Engine, an agency model customized to BMW. Valtech as well could report gains of about 21 percent, and Reply managed to grow by 13.5 percent in the DXS segment (see BVDW-Ranking 2022).

In relation to the development of this group of three, Deloitte and PwC have slightly weakened in terms of market relevance but they remain among the market leaders. For example, both consulting firms have very strong expertise in the areas of digital consulting and digital technology services, and they are two of the biggest digital agencies around the world.

With little market relevance compared to the aforementioned DXS Providers, but still among the leading DXS Providers, IBM holds its position in particular with its IBM iX brand. The digital agency Diva-e is likewise classified as one of the market leaders, being a relevant full-service provider in the booming e-commerce business.

THE FOLLOWER

Closing the gap to the DXS market leaders are init and Adesso. Especially init was able to further improve its positioning in this year, also because of revenue gains of almost 65 percent from 2020 to 2021. At the same time, Adesso continues to gain relevance in the DXS



The market for Digital Experience Services in Germany

segment, working for a number of major corporations and groups on matters relating to customer centricity, digital experience and e-commerce. The rising relevance of Adesso in this segment is also expressed by the increasing number of mentions as being a key competitor and by positive customer ratings.

Compared to 2021, Syzygy has made big improvements, particularly because the company has regained market strength with an increase in revenues of 5.7 percent after the weaker financial years 2019 and 2020. Syzygy is also the digital lead agency of Lufthansa and devotes its competencies to developing strategy, concept, design and prototyping of digital campaigns. Syzygy is additionally the digital lead agency for the Miles&More incentive platform.

Digitas Pixelpark and Diconium also have above-average portfolio breadth and depth when it comes to DXS services, but a slightly below-average market relevance. Both of them could slightly improve their positions in the portfolio compared to the previous year.

The subsidiary of the Publicis Group, Digital Pixelpark, operates largely independently on the market and is specialized in customer experience. Based on the independence and brand recognition, Digitas Pixelpark was entered separately in the ranking and not in consolidation with Publicis Sapient.

THE CHALLENGERS

Following to various takeovers in the digital agency market in 2021, Valantic acquired the full-service digital agency DGTLS GmbH in 2022, making the company a future leading provider in e-commerce. With the takeover of the digital strategy consultancy mm1, Valantic is simultaneously significantly expanding its digital consulting services.

A comparably low market relevance among the leading providers in Germany for DXS is attributed to NTT Data, Exxeta, KPS, FischerAppelt and Wipro. The evaluation, especially in the case of NTT Data, is related to the focus continuing to be heavily on IT services, the company acting in a comparably decentralized manner and the DXS segment actually constituting an important, but relatively small portion of revenues. Wipro under Wipro Digital, in contrast, bundles all of its digital activities under one roof.

The two companies newly included in this Lünendonk® survey, Intive and Mindcurv, still have comparably little market relevance with potentials when it comes to the expansion of their DXS portfolios.

KPS can be considered to be a management and technology consulting firm with historically strong focus on retail and SAP technologies. KPS focuses on the two fields of digital



consulting and digital agency, whereas digital technology services are not as strong compared to other competitors. In the course of the takeover of the e-commerce specialist Getit, a digital unit was created, which has developed into one of the leading service providers for e-commerce in retail, B2B markets as well as the consumer goods industry.



Sub-ranking of businesses with digital experience services as core business field

The Lünendonk® list of the 25 top providers of digital experience services, especially in the top half, comprises large, broadly based consulting and IT service providers due to the ranking criterion "total revenues in Germany". To them, digital experience services may indeed be an important part of their portfolio but not the core business. To describe transparently which service providers place their core business on digital experience services, Lünendonk also examined which service providers earn at least 75 percent of their revenues with digital experience services in a sub-ranking this year.

These 14 service providers were – likewise measured by their total revenues in Germany – included in the following sub-ranking. This ranking is not intended to judge which service providers are more or less suitable for customer-centric projects. Instead, it is intended to demonstrate which DXS Providers have aligned their overall portfolio on digital experience services and have their roots in the digital agency market.

In comparison to the Lünendonk® list, the international IT service providers and consulting firms fall out of the ranking, as digital experience services are just one component of many given their portfolio depth, and they earn much less than 50 percent of their revenues with DXS services.

First place in this sub-ranking is taken by Reply. T-Systems MMS, init and Plan.Net, following in the ranks directly below, also earn rather large portions of their revenues with DXS services (more than 150 million euros).

Newly represented in the sub-ranking are T-Systems MMS, Intive, Mindcurv and Futurice.



The market for Digital Experience Services in Germany

LÜNENDONK SUB-RANKING: NATIVE DXS PROVIDERS IN GERMANY

Rank	Company, headquarter	Total revenue 2021 in Germany in € Mio.
1	Reply Deutschland SE, Gutersloh	295,0
2	T-Systems Multimedia Solutions GmbH, Dresden	204,0
3	]init[AG für digitale Kommunikation, Berlin	152,6
4	Plan.Net Germany GmbH & Co. KG, Munich 1)	151,6
5	Diconium GmbH, Stuttgart	147,0
6	Team neusta GmbH, Bremen	112,7
7	Valtech GmbH, Düsseldorf	94,1
8	Diva-e Digital Value Excellence GmbH, Munich	86,3
9	Digitas Pixelpark GmbH, Hamburg 1)	70,5
10	Intive Group GmbH, Munich 2)	61,0
11	FischerAppelt AG, Hamburg 1)	58,5
12	Syzygy AG, Bad Homburg	47,8
13	Mindcurv GmbH, Essen	42,0
14	Futurice GmbH, Berlin	15,9

Fig. 12: The sub-ranking does not claim to be complete, but only represents a sub-ranking based on the list of participants.

1) Revenue represent fee sales.

2) Data refer to intive GmbH and intive automotive GmbH.



Revenue development and forecasts

In spite of a cyclical phase of weakness and effects such as the COVID-19-related lockdowns and the global supply chain disruptions, the digitalization trend resulted in increased spending by businesses for digital and IT projects as well as higher demand for external services. The entire consulting and IT service market profited from this and the digital agencies market developed very positively as well in 2021.

Accordingly, the management consulting market examined each year by Lünendonk grew by 20.6 percent on average, while IT consultants reached median growth of 16.1 percent. The Bundesverband Digitale Wirtschaft (BVDW) also assessed two-digit growth rates of digital agencies in some cases.

Concretely, the following developments in Lünendonk's view have had positive effects on the growth of digital experience services:

- At many companies, catching-up effects occurred in process digitalization in result of projects that had been postponed from the year 2020.
- Enterprises are accelerating the digital transformation and the realignment of their business models, which is reflected in higher spending. Especially in the e-commerce and digital marketing segments, big investments have been made.
- There was strong demand in areas such as data analytics, custom software development and UX design.
- The need for digital and IT experts in light of the catching-up effects in the digital transformation arising is now higher than never before. Since many of the required skills are not available to the enterprises internally, external service providers are relied on more and more.

The providers of digital experience services analyzed in this survey could increase their revenues in 2021 by 15.6 percent on average. In contrast, the service providers earning more than 75 percent of their sales with digital experience services grew much stronger. They could even add 24.1 percent on statistic average, which is a clear confirmation of strongly higher investments the companies have made in areas of e-commerce and digital marketing and the digital transformation on the whole.

SERVICE PROVIDERS EXPECT STRONGLY INCREASING REVENUES IN SPITE OF THE ECONOMIC CRISIS

In spite of great economic insecurity due to recession and inflation, the surveyed service providers felt optimistically for the financial year 2023 including the expected demand.

15,6%

is the average growth rate of the service providers surveyed in 2021 (total revenue in Germany).



REVENUE DEVELOPMENT AND FORECASTS

The market for Digital Experience Services in Germany

The data for this survey was gathered between May and August 2022, thus, during a time when the signs of crisis could already be seen. The reason for the optimism is partly based on the robustness of the digital and IT markets during the COVID-19 crisis. Accordingly, even in the first COVID-19 year 2020, revenues of the DXS Providers rose on average by 7.0 percent. Additional reasons are the enormous catching-up effects occurring in connection with the digital transformation and the pressure to reorganize traditional business models toward customer-centric and digital business models.

In fact, the DXS Service Providers surveyed by Lünendonk expect median growth of 16.5 percent for 2022 and even 17.8 percent for 2023.

What is remarkable in the results is the discrepancy between the actual revenue development of the service providers, which earn more than 75 percent of their sales with digital experience services, and their forecasts. While their sales revenues in 2021 rose by 24.1 percent on arithmetic average, they expect increases in revenues for 2022 of "just" 14.3 percent and for 2023 of 15.8 percent. Although these forecasts are still at a very high level, they suggest there are some decelerating factors.

REVENUES FROM DIGITAL EXPERIENCE SERVICES TO GROW STRONGLY IN THE NEXT FEW YEARS

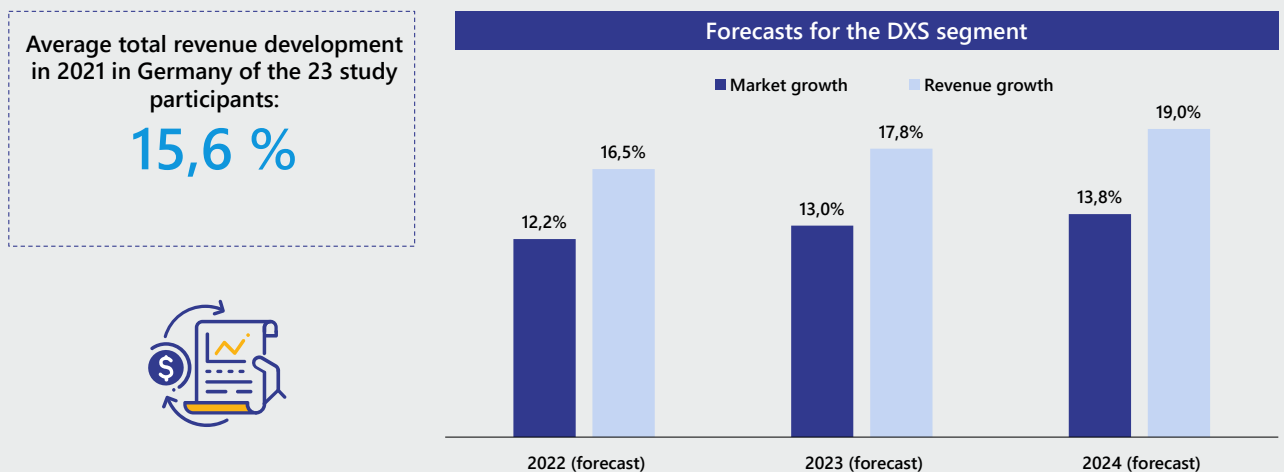


Fig. 13: Question: Revenue development 2021; n = 23

Question: How is the market volume and revenue of your company in the "Digital Experience Services" segment expected to develop in Germany?; n = 24 (market growth), n = 23 (revenue growth)

The market for Digital Experience Services in Germany

AREAS IN DEMAND 2022

A look at the current financial year 2022 shows that the surveyed service providers have particularly strong demand in some areas. The biggest consistency in terms of demand is found in business consulting: 93 percent report very high to high relevance here. CX consulting, digital platform design, and data & technology consulting are other key topics causing demand during the current year 2022 according to the estimations of 89 percent of survey participants.

However, not just the design but also the operation of web portals, e-commerce systems or customer data platforms is becoming more relevant. 89 percent of the surveyed service providers report a high relevance of managed services and hosting.

In contrast, matters such as media services and visual services are still niches to the survey participants, which, however, is also due to the fact that these matters are often covered by specialized agencies. Marketing consulting in contrast has high relevance for 71 percent and advertising & performance services for 54 percent in the year 2022.

STRONG DEMAND FOR TECHNOLOGY AND CONSULTING SERVICES

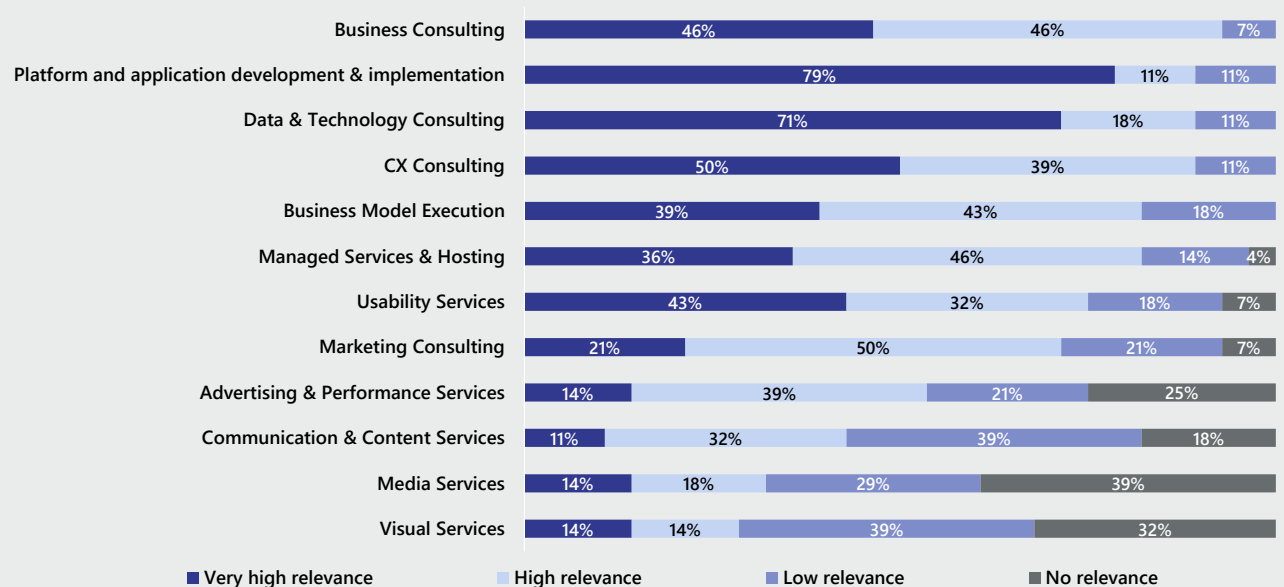


Fig. 14: Question: Which topics influence the demand for your services? Scale from 1 = "no relevance" to 4 = "very high relevance"; frequency distribution; n = 28

Customer industries and work areas of DXS providers

The analysis of the key customer industries of the surveyed DXS Providers shows that the automotive industry and retail are the two most important industries to the majority of the survey participants.

Especially the automotive industry has gained a lot of relevance for the providers of digital experience services in the course of its digital transformation and the trend toward the software-defined car. For example, 86 percent of the surveyed service providers stated they perform a lot of work for automotive customers. Digital agencies such as Diconium, Plan.Net or Valtech reported good growth in the automotive sector, among others.

82 percent of the service providers perform a significant amount of work for retail, which is also in the midst of tremendous transformation because of the trend toward e-commerce. Nearly all conventional stationary retailers are faced with the challenge of responding to purely digital retail platforms such as Amazon and rebuilding their business models and processes. This also includes attracting new customer groups with digital offers.

In addition, there is high demand for the service providers by the "logistics, transport, traffic", "industry" and "banking" sectors. Between 71 and 78 percent of surveyed service providers are heavily involved in these sectors.

The results suggest that there is high competitive pressure in the top-5 industries, as nearly all of the surveyed service providers have lots of business in these industries. Yet also at least two-thirds of the service providers are still active in the "telecommunications, media, IT", "consumer goods" and "insurance" sectors.

Due to the very high requirements for expertise, comparably few service providers operate in the energy sector or the chemicals and pharmaceuticals industries, in contrast, which is why there are only few to report of corresponding high demand. The same is true for the public sector. While half of the analyzed service providers cooperate closely in projects with public agencies, the public sector is not particularly relevant to the other half. Since authorities and public institutions are generally subject to the law on the award of public contracts, the selection process for tender invitations is often complex and therefore not appealing enough to many service providers under a weighing of risks.



CUSTOMER INDUSTRIES AND WORK AREAS OF DXS PROVIDERS

The market for Digital Experience Services in Germany

THE MANUFACTURING INDUSTRY AND THE RETAIL SECTOR ARE THE MOST IMPORTANT CUSTOMER GROUPS

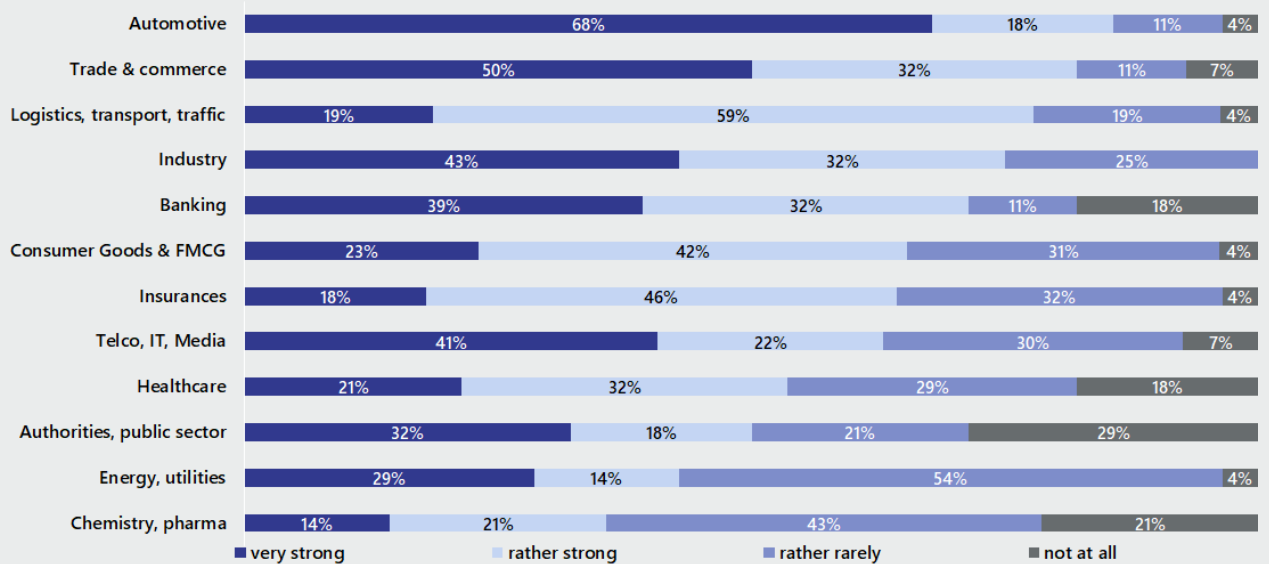


Fig. 15: Question: In which of the following industries is your company active with digital experience services? Scale: from 1 = "not at all" to 4 = "very strongly"; frequency distribution; n = 26

WORK AREAS OF DXS PROVIDERS

A clear majority of providers of digital experience services continues to be heavily used foremost by customers in the areas of IT, marketing and sales. However, the results on annual comparison illustrate that the number of project requests from IT departments has significantly declined. Likewise, project requests from the two core areas of marketing and sales are slightly lower, which Lünendonk attributes to the fact that massive digitalization investments have already been made in these areas in recent years and there is now a certain degree of maturity.

The number of requests from areas such as operations and customer care, in contrast, has tremendously increased in year-on-year comparison. As consistent customer centricity is not just dependent on marketing and sales, but on the total customer experience along the complete customer journey – thus, also in the areas of customer service and operations – it is only logical that enterprises now place a stronger focus on digitalization in these fields.

CUSTOMER CARE IS AN INTEGRAL PART OF CUSTOMER CENTRICITY

The interplay of marketing, sales and customer service is essential for consistent customer centricity. It is therefore crucial to network the oftentimes different customer service applications and the required silo solution to structure a customer journey without media dis-



The market for Digital Experience Services in Germany

ruption. At the same time, ever new service touchpoints emerge – whether via chat bots or self-service portals. It is becoming increasingly important, for example, to analyze quality feedback from customers using methods of artificial intelligence, among other, from verbal communication with service hotlines or via text messages in chat bots or email correspondence. Using natural language processing it becomes possible, for example, to capture natural speech and process it computer-based by means of rules and algorithms. At the same time, customers have high standards here as well for the design and usability of the customer touchpoints. An increasing number of enterprises have the objective of automating and accelerating customer service more to thereby raise customer satisfaction and gain the customers' loyalty for the long term.

In the coming years, correspondingly high investments will be needed for these measures, for example, in the development and introduction of new (cloud-based) self-service portals, user-friendly interfaces, end-to-end processes or new customer journeys in the processing of service requests. Not least, massive investments are currently made in the conversion of operational and IT architectures into a microservice-oriented and open-interface service architecture to interconnect the different service touchpoints and channels and this way, get a consistent look at a customer relationship.

After the digitalization in marketing and sales was pushed ahead intensely in the years 2020 and 2021, ever more companies now take the next step toward customer centricity by investing more in the digitalization of customer service and the design of digital touchpoints. Apart from the relevance of good customer service for customer satisfaction and loyalty, more and more enterprises discover that there is a lot of potential in after-sales for new sources of income. This is demonstrated, among other, by 74 percent of the surveyed service providers frequently receiving project requests from the "customer care/after-sales services" segment. For comparison: In 2021, this figure was still much lower at 63 percent of survey participants.

NO INDUSTRY 4.0 AND PLATFORM ECONOMY WITHOUT DIGITAL EXPERIENCE

Even bigger gains than in the customer care segment were meanwhile reported in project requests from operations (purchasing, supply chain, production). While still 46 percent of the service providers stated in 2021 that they frequently receive project requests from this area, this portion climbed to 62 percent in 2022.

The fact that providers of digital experience services are much more frequently consulted for the digitalization of core operative processes ties into a few developments:

- Increasing digitalization of operational technology (control of production and logistics processes) along with the Internet Of Things poses new requirements for



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user interfaces of control units on the shop floor, for example. Human-centered design is gaining ever more relevance in the development of portals.

- The growing share of software in products (e.g., medical technology, automotive, manufacturing) leads to a rise in the development of embedded systems that also have to provide a good user experience. Here, too, human-centered design and questions surrounding the design of a customer journey become increasingly relevant – which can currently be observed foremost in the automotive industry.
- More and more businesses are digitalizing their operative core areas and are rolling out new software solutions. For the improvement of the employee experience, UX design is gaining importance in new digital process chains.

Not related to marketing and sales traditionally representing the most important customer segments to digital agencies, the results confirm the development that has been in the works for years, namely that a proportional number of project requests for digital and IT-related subject matters is successively shifting from traditional IT departments to the operational departments. Accordingly, also the [Lünendonk® Survey 2022 "The Market for IT Services in Germany"](#) shows that only 57 percent of project requests received by the analyzed IT service providers in 2021 originated from an IT department, 32 percent were received from operational departments and 11 percent from cross-functional teams.

PROJECT REQUESTS: STRONG DEMAND FROM SUBJECT AREAS, BUT ALSO THE IT DEPARTMENT

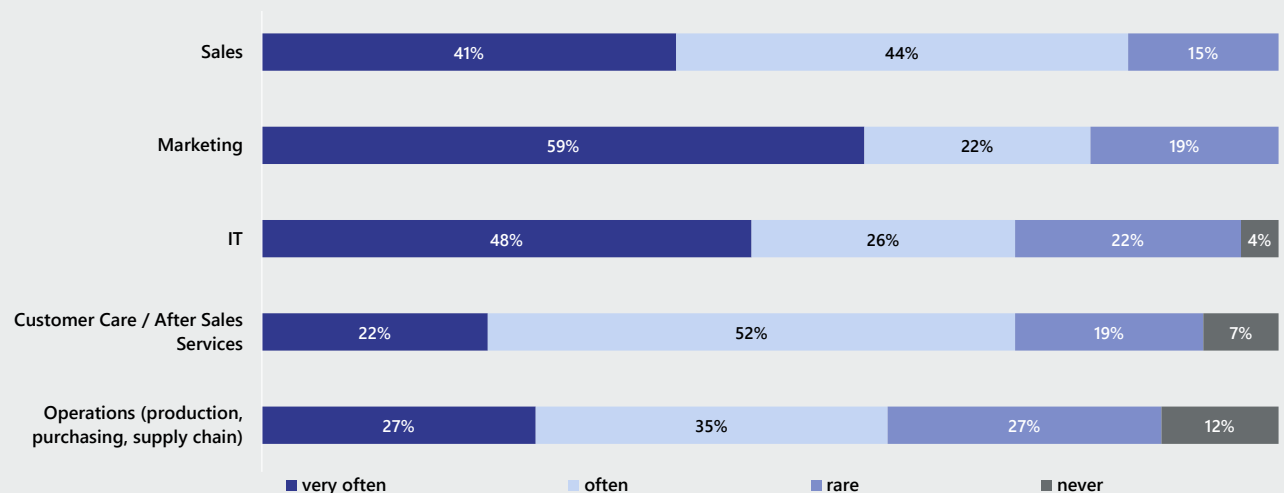
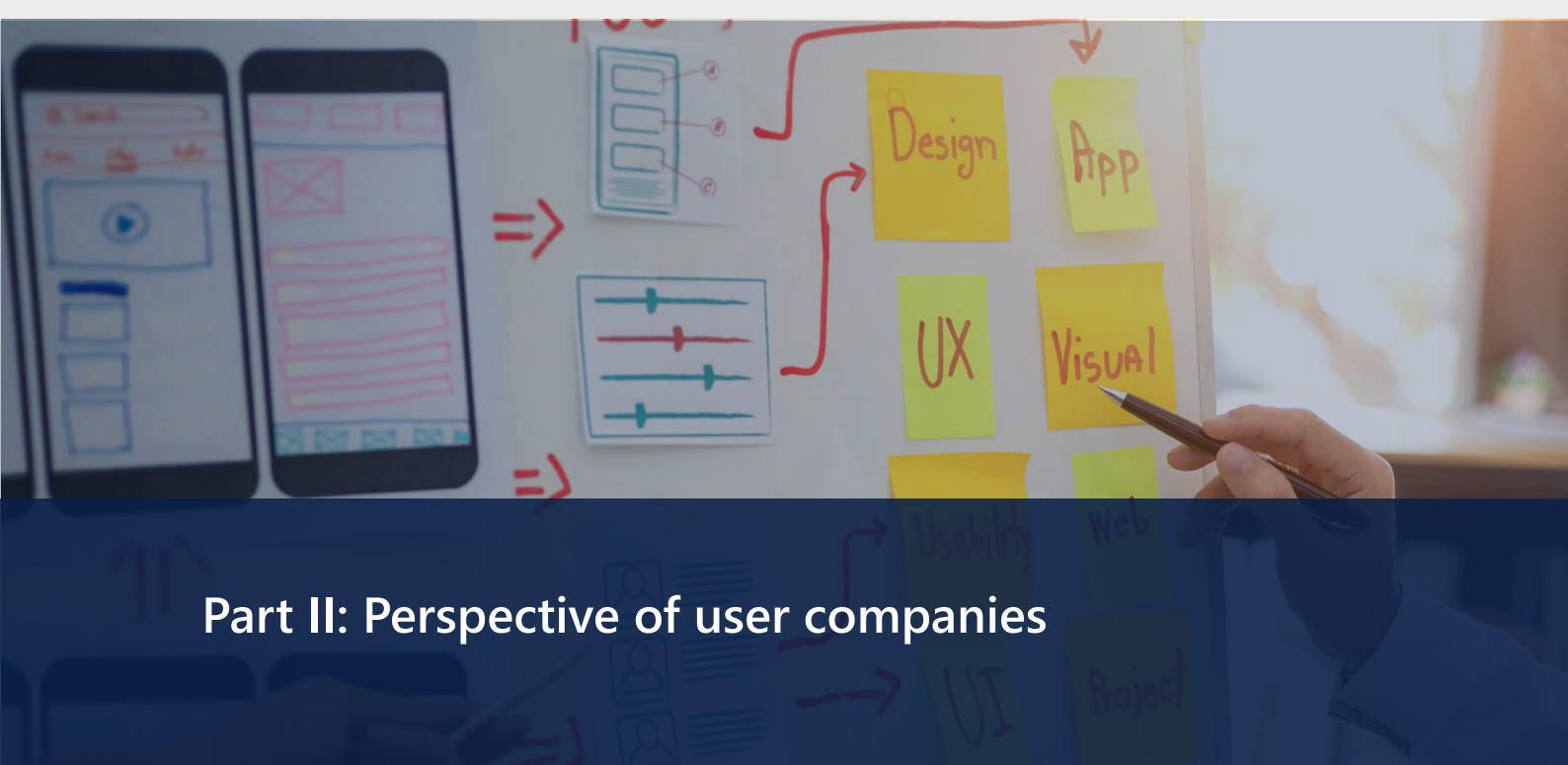


Fig. 16: Question: From which areas do you receive project inquiries from customers? Scale: from 1 = "never" to 4 = "very often"; n = 26





Part II: Perspective of user companies

Status quo in customer centricity and digital experience

The COVID crisis is (largely) overcome. Due to the war in Ukraine, the rising energy and production costs, the supply chain problems, inflation and interest rate hikes, the economy is nevertheless still on choppy waters. Now that the German economic growth in 2020 declined by 3.7 percent, economic development recovered in 2021 and grew by 2.6 percent. For 2022, growth between 1.5 and 2.5 percent is expected – there are no reliable forecasts for 2023 yet. In the course of rising inflation and energy prices, some large companies have meanwhile corrected their forecasts downward. Companies are still in uncertain times. A reliable long-term planning is therefore possible only with difficulty in this "BANI" world (brittle, anxious, nonlinear, incomprehensible). There can be no mention of continuity.

Digitalization in contrast ensures continuity. For many years, the term has dominated the agendas and strategy papers of businesses. While digitalization projects in the past have focused more on internal processes and



The market for Digital Experience Services in Germany

efficiency measures, business models have been revamped increasingly into digital and data-based models for a few years now and the development and marketing of digital products and services has been accelerated. The resulting transformation process not only has a big impact on the use of digital technologies or the IT architecture, but also on the fundamental company strategy, as well as organization and culture – and, therefore, on the vision and the purpose of businesses.

STANDARDS FOR THE DIGITAL EXPERIENCE HAVE RADICALLY CHANGED

In recent years, the way and manner of how customers perceive brands and (want to) interact with them has fundamentally changed. However, their demands for products, customer service and the customer touchpoints are by now entirely different than what they were just a few years ago. As the best product or the best service in the digital world – and increasingly also in the B2B segment – is often just a mouse click away, an experience that is perceived as being of high quality by the customer is a prerequisite for future growth. Digital experience is no longer just a nice gimmick but an elementary part of business success! A new type of digital experience, however, is not only created by the quality of touchpoints but it results as the total customer experience along the complete customer journey – meaning consulting, sales, customer service and marketing.

The design of a positive customer experience necessarily involves a seamless interplay of all channels and customer touchpoints in areas of sales, marketing and service.

Digital experience consequently becomes a central factor of success – notably not only with regard to the user experience on one online channel but along all physical and digital touchpoints (customer journey). But how do the surveyed businesses evaluate the quality of their own digital experience?

THE RACE IS ON FOR THE BEST DIGITAL EXPERIENCE

92 percent of survey participants still evaluate the quality of the digital experience as average – measured by the competition, so not to compare apples and oranges. Just 11 percent of the businesses already see themselves as early adopters of the digital experience. 17 percent of the companies on the revenue scale from 5 to 10 billion euros believe slightly more frequently they are DX early adopters, while much fewer, 7 percent, of those on a scale above 10 billion euros in revenues believe this is the case. A significant difference between B2B (13%) and B2C enterprises (12%) cannot be seen.

In an industry comparison, the results in retail are the most ambivalent, however: 18 percent classify themselves as early adopters, equaling 18 percent who think they are late adopters; 64 percent believe they are at eye-level with competitors. Since a high level of

82%

of companies rate their digital experience as average compared with their competitors.



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digital experience is particularly relevant to retailers due to the trend toward digital marketplaces and online retail and due to enormous competitive pressure, it is an interesting result that two-thirds of the retailers have not yet developed any competitive edge through their digital experience.

7 percent of all companies rate their digital experience as backward. This is big progress from the year 2021, when still 26 percent of the business believed they lagged behind in the digital experience. These assessments match the observations of Lünendonk that massive investments were made into the digitalization of customer interfaces, especially in the years 2020 to 2021. While 5 percent of the B2B enterprises see themselves as late adopters of the digital experience, this is even 12 percent among B2C enterprises.

MOST COMPANIES SEE THEMSELVES ON A PAR WITH THEIR COMPETITORS WHEN IT COMES TO DIGITAL EXPERIENCE

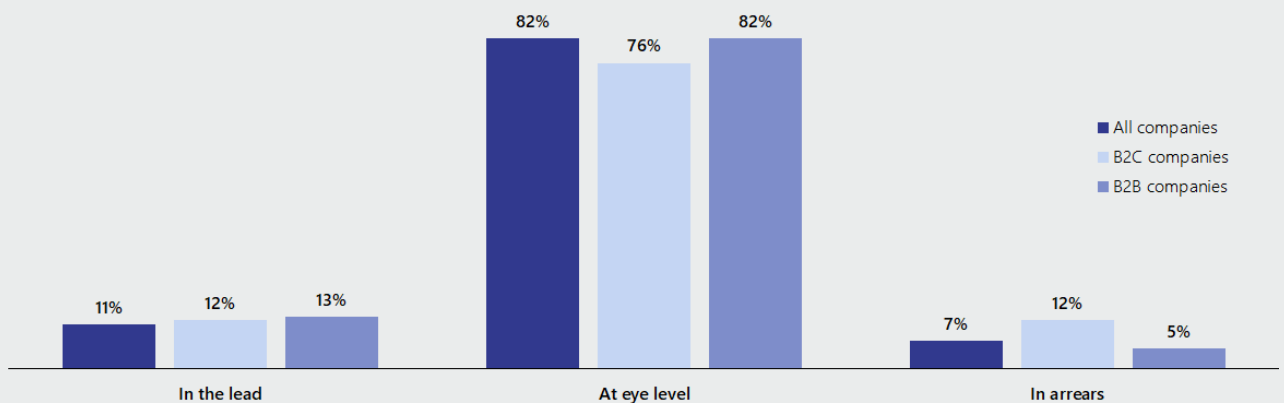


Fig. 17: Question: How do you currently rate the quality of the digital experience along the customer journeys in your company compared to the competition?; n = 122 (all companies), n = 33 (B2C companies), n = 61 (B2B companies)

INVESTMENTS IN RECENT YEARS LEAD TO A HIGHER DIGITAL EXPERIENCE

It is fortunate that quality has improved at many enterprises. In surveys of previous years, still 26 percent estimated their digital experience to be behind in competitive comparison, 65 percent rated it "at eye level", while 9 percent saw themselves as early adopters. In this year-on-year comparison, however, as explained in the Chapter "Methodology", it can be seen that the sample of the 2022 and the 2021 surveys has remained nearly identical, but that the companies and persons actually participating change from year to year.

The biggest progress was made by businesses with revenues between 1 and 10 billion euros. While 35 percent of the businesses lagged behind in 2021, this portion is now just



STATUS QUO IN CUSTOMER CENTRICITY AND DIGITAL EXPERIENCE

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6 percent. In the same way, the portion of B2C enterprises fell from 31 percent to now 12 percent. Among the companies with B2B focus, the portion of those with a deficit dropped from 20 to 5 percent so that now more companies find themselves "at eye level".

DIGITAL MATURITY ON THE RISE: INVESTMENTS MADE IN RECENT YEARS PAY OFF

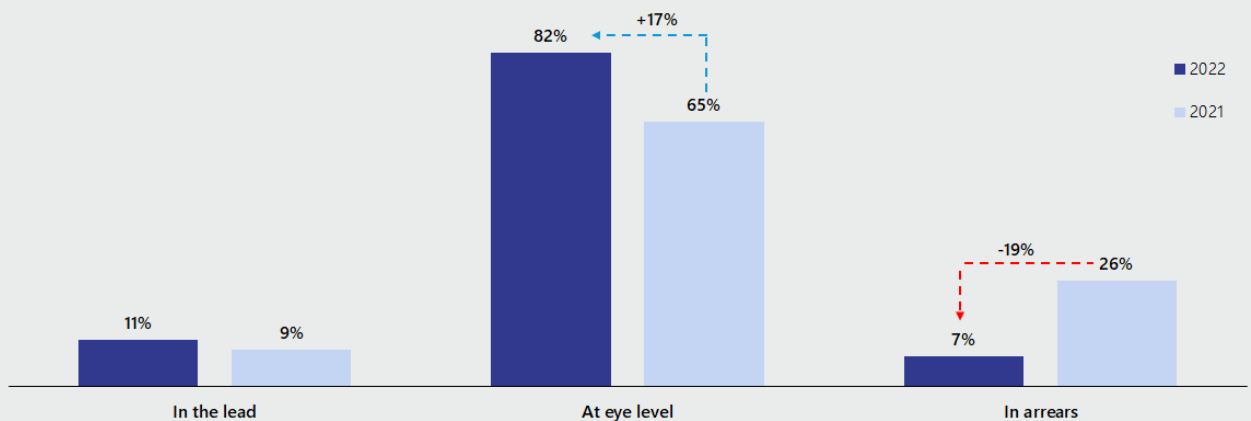


Fig. 18: Question: How do you currently rate the quality of the digital experience along the customer journeys in your company compared to the competition?; n = 122

CUSTOMER CENTRICITY: FOCUS ALL ACTIVITIES ON THE CUSTOMER

Digital technologies can be used for a large variety of use cases and are therefore relevant to basically all divisions at a company. Digital technologies also have great influence on the areas of marketing, sales and service that are in the focus of this survey. As these three areas have direct contact with customers and therefore influence the quality of the customer experience and customer satisfaction, the participating businesses were asked how they perceive the strength of their customer centrality.

According to the responses, 31 percent of the companies indicate high customer centrality, 52 percent believe there is at least a high level. As expected, the portion of B2B enterprises with very high customer centrality is lower at 16 percent, since B2B enterprises frequently produce and sell capital goods and consequently pursue a more product-oriented approach. 22 percent rate themselves as less customer-oriented; the vast majority (63%) is therefore at a high level.

The surveyed banks and insurance companies find themselves to be particularly customer-oriented in the industry comparison: 43 percent rate their customer centrality as very high, 48 percent as high. Among the surveyed retailers, 48 percent estimate the degree of



STATUS QUO IN CUSTOMER CENTRICITY AND DIGITAL EXPERIENCE

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their customer centrality to be very high and 43 percent as high. 31 percent of the manufacturing companies estimate it to be low in contrast and 3 percent as very low.

However, 17 percent believe their companies are not organized in a very customer-centric way – which is a high value in light of disruption, speed of technology and changed customer requirements. On the one hand, these are largely B2B enterprises, 22 percent of which do not evaluate themselves as very customer-centric (B2C: 15%). In the industry comparison, the surveyed manufacturing companies stand out: 34 percent of them do not believe they are organized in a customer-centric way.

COMPANIES LARGELY RATE THEIR DEGREE OF CUSTOMER CENTRICITY AS GOOD - B2B COMPANIES WITH SLIGHT NEED TO CATCH UP

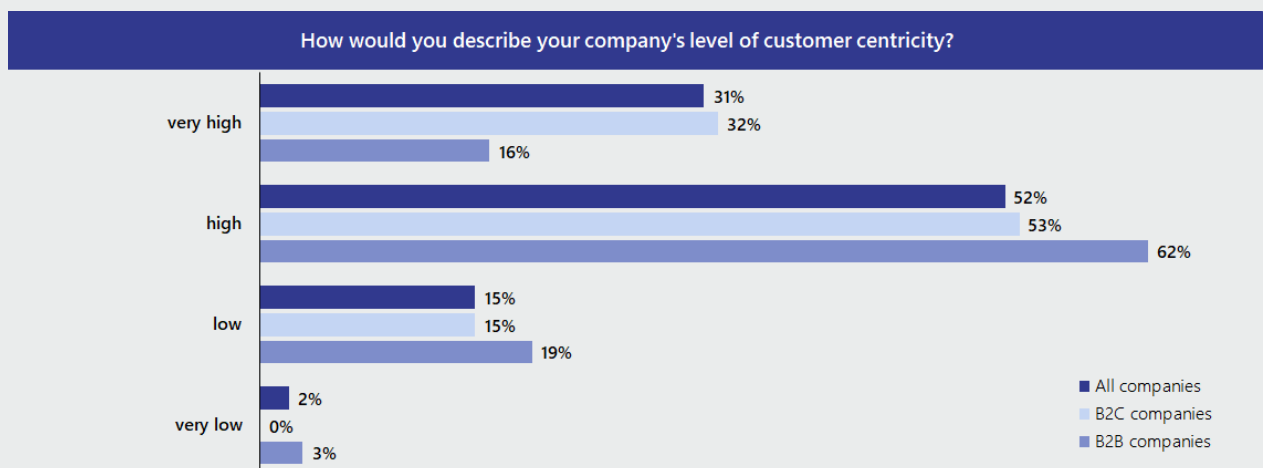


Fig. 19: Question: How would you describe your company's level of customer centrality?; n = 127 (all companies), n = 34 (B2C companies), n = 64 (B2B companies)

COMPANIES WORRY ABOUT COMPETITORS WITH MORE ADVANCED DIGITAL MATURITY

Digital technologies – besides organization and culture – are an important leverage to attain customer centrality. The past has proven that new business fields and new customer groups can be tapped by using digital technologies both in design of front ends as well as for process quality. The total of front-end design (UX) and process quality (end-to-end process chains) is the digital experience perceived by the customer.

49 percent of those surveyed see competitors, who are successful in enabling simple and convenient access to products and services by means of a high-level digital experience, as a big threat. In 2021, this value was at 53 percent. Some businesses therefore find themselves slightly better positioned over their competitors.



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The results meanwhile also indicate that in this year, just one-quarter of the analyzed B2B enterprises perceive a threat from competitors with strong customer experience – this was almost one-half in 2021. An explanation (apart from the random sample having changed) can be that B2B enterprises having invested heavily in their own digital experience in the years 2021 and 2022 no longer rate the threat as critical. In contrast, 71 percent of the surveyed B2C enterprises stated they felt a threat from competitors with better digital experience on the customer interface.

The use of digital technologies, however, is not only important to the digital experience in the front end but also at a process level. This also becomes clear from the fact that 49 percent of the enterprises feel threatened by competitors that managed to build up significant competitive advantages through the use of digital technologies. This turns most of all on process quality, which likewise has direct effects on the customer experience, for example, by business processes being interlinked with process chains. The use of technologies such as automation, robotics, cloud native, APIs, microservices or data analytics can improve the response speed when requests are received. But also process stability and availability are very important factors for customer satisfaction in digital business models. Interestingly, it is primarily the surveyed B2C enterprises, who perceive a corresponding threat from their competitors (65%; B2B: 33%).

49%

of companies see themselves threatened by competitors with a high digital experience.

DIGITIZATION IS BECOMING A COMPETITIVE FACTOR FOR MORE AND MORE B2B COMPANIES

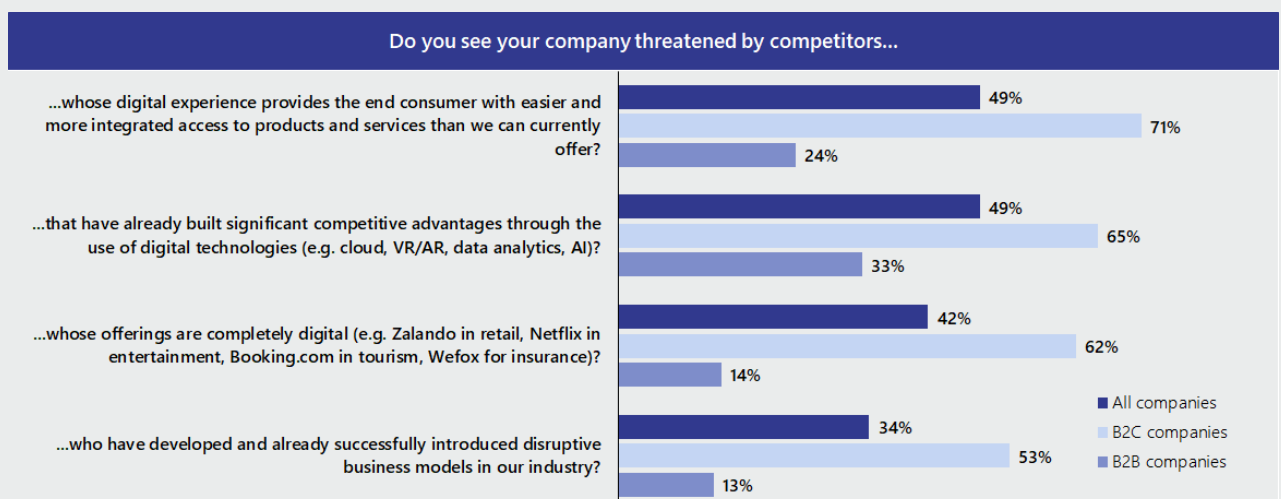


Fig. 20: Question: do you see your company threatened by competitors,...; scale from 1 = "no threat" to 4 = "very big threat"; values refer to the answers "very big threat" and "big threat"; n = 125 (all companies), n = 34 (B2C companies), n = 62 (B2B companies)

COMPLETELY DIGITAL BUSINESS MODELS ARE MORE OF A B2C TOPIC

41.7 percent of the businesses see themselves threatened by competitors that have completely digital business models. This, however, is more of a threat perception shared primarily by the B2C enterprises (62%). In contrast, just 14 percent of the B2B enterprises stated to feel threatened by competitors that have completely digital offers.

FEAR OF DISRUPTION DWINDLES

A reduction compared to the previous year can be noted on the question of whether competitors with a disruptive business model have a strong influence on an industry and are therefore perceived as a threat. While 56 percent still agreed in 2021, this was just 34 percent in 2022. This demonstrates that the lead over disruptors has reduced slightly because massive investments have been made in digitalization and new business models in recent years.

However, there are clear distinctions between B2B and B2C here. Just 12 percent of surveyed B2B enterprises find themselves threatened by competitors that have developed disruptive business models – which may also be due to the fact that there is still too little disruption taking place in the B2B segment in light of the more complex business models. In contrast, 53 percent of B2C enterprises actually see a threat in disruption, for example in digital marketplaces, which can be noticed increasingly in retail or also among product manufacturers.



Progress in the transformation: more light, less shade

The progress in the improvement of the digital experience and customer centricity at many companies is also reflected in the progress made in specific areas, which promote customer centricity and digital experience.

THE PATH FROM GATHERING DATA TO ITS PROCESSING, INTERPRETATION AND AUTOMATION IS A BIG CHALLENGE FOR BUSINESSES

Hyper-personalization, predictive maintenance and marketing automation – all of these applications require data. The volume of available data as well as its relevance will continue to increase strongly in the future as well. The International Institute for Analytics believes that companies using data will attain production advantages amounting to 430 billion US dollars by 2026 over those that do not make use of data. Part of these added values is made possible by virtue of customer data. Many more surveys as well as analyses of Lünendonk confirm this trend that data plays an important role for the future business success.

63 percent of the businesses see themselves more or less advanced in gathering data at all touchpoints on customer behavior. 52 percent believe instead they are not yet able to derive measures on the basis of this data.

Even fewer companies, notably 42 percent, find themselves advanced in automating data-based measures, inter alia controlling target-group specific content automatically. While data gathering therefore does not represent the biggest challenge, the processing, analysis and interpretation of the data are much higher hurdles to take. There are no differences between B2C and B2B enterprises regarding the degree of maturity in data analytics.

CUSTOMER-ORIENTED PRODUCT DEVELOPMENT BY MEANS OF TECHNOLOGIES AND ORGANIZATIONAL CHANGES

The companies participating in the survey see themselves much better positioned in the development of products and services with which they pursue a customer-centric approach whereby they are oriented strongly on the real worlds of customers. 83 percent find themselves well advanced on this point.

Interdisciplinary teams, which are composed of operational departments and IT and which cooperate in agile processes, are an important element to achieve a better and quicker development of digital products and innovation. The stronger interlock between development

48%

of the companies see themselves advanced in deriving suitable measures on the basis of customer data.



The market for Digital Experience Services in Germany

and operations is pushed ahead to make applications available at higher speed by means of DevOps teams and to be able to implement user feedback rapidly and directly. 74 percent of the businesses see themselves to be on a good way in the structuring of agile teams and introducing principles such as DevOps. B2B enterprises have a harder time with this: 67 percent believe they are advanced here while this is already 82 percent in the B2C environment.

IT STRATEGY FOLLOWS THE BUSINESS STRATEGY

To implement digital business models, the IT architecture must be aligned correspondingly – quite in line with the motto "IT strategy follows business strategy". As the [Lünendonk® survey 2022 "The Market for IT Services in Germany"](#) and the surveys of the previous years show, businesses have increased their investments in IT modernization and have been consistently following the path leading to the cloud for years.

78 percent of the managers interviewed in this survey consider the degree of maturity of their IT landscape to be high already – their companies consequently had an open-interface and scalable technology stack.

The progress and investments in the technology stack are already expressed by 72 percent of analyzed enterprises as the ability of customers to switch seamlessly on their entire customer journey between multiple channels (product portals, customer service portals, etc.) by means of an integrated end-to-end process. As expected, the B2C enterprises (76%) are clearly more advanced here than the B2B enterprises (61%).

DATA AND TECHNOLOGY ARE ALREADY WIDELY USED FOR CUSTOMER ORIENTATION, BUT NOT YET CONSISTENTLY ENOUGH EVERYWHERE

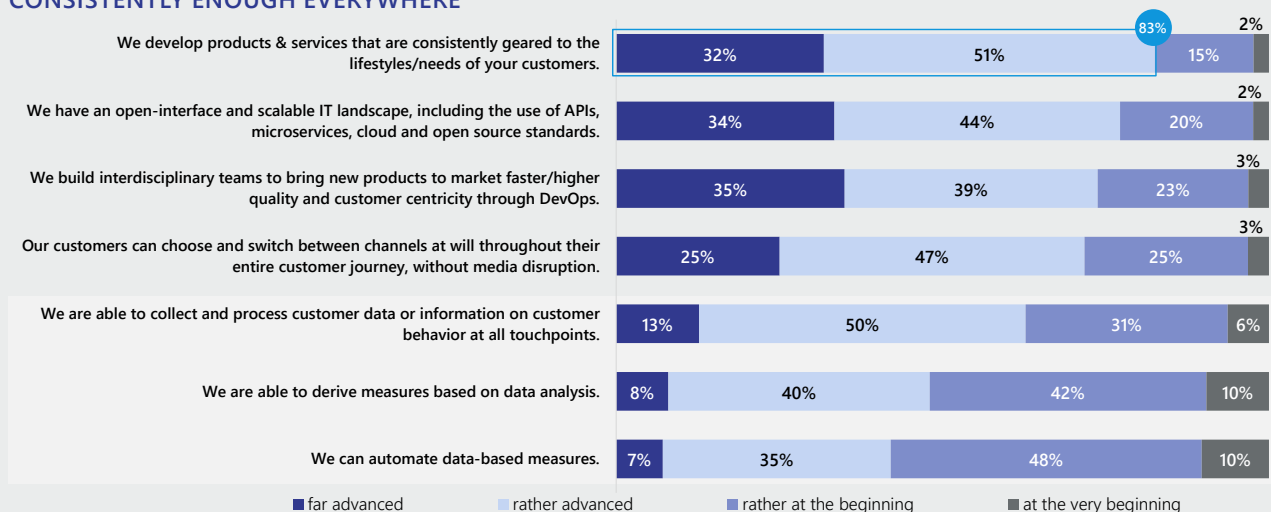


Fig. 21: Question: How do you see your company positioned with regard to the following topics?; Scale from 1 = "at the very beginning" to 4 = "far advanced"; frequency distribution; n = 122

The customer interface of the future

The progress with the digitalization of the customer interfaces and the organizational changes described in the previous chapter are also necessary because the surveyed businesses want to continue working on the digital transformation in the coming years. Accordingly, Lünendonk asked about which topics they are dealing with as relates to customer centricity.

DIGITAL MARKETING AND DIGITAL SALES ARE TO TAKE PRIORITY IN THE FUTURE

94 percent of those surveyed expect for the future that sales via digital channels will predominate. In 2021, just 82 percent agreed with this theory. It is surprising in this regard that the portion among B2B enterprises is not substantially smaller, meaning they also work intensely on significantly expanding their digital customer channels.

Among the surveyed businesses with revenues of up to 1 billion euros, the portion at 98 percent is even slightly higher than on the overall average.

There are almost identical numbers in agreement when it comes to customer communication and customer acquisition. Here, too, the big majority (93%) pushes ahead with digitalization of the marketing and communication channels, so that customers will be primarily targeted in the future via digital channels and instruments. While the value rose substantially for digital sales on annual comparison, 92 percent confirmed the trend toward digital marketing in 2021 already.

MODERN DIGITAL MARKETING AND MODERN DIGITAL SALES REQUIRE OMNICHANNEL MANAGEMENT

Customers – especially in the B2B segment – have more and more digital touchpoints available for interacting with companies or brands. The linking and data exchange between the different touchpoints (omnichannel management) to enable a consistent brand experience for customers keeps businesses well occupied. 89 percent are treating this topic intensely so that, like all touchpoints, it can be covered and presented transparently by end-to-end process chains along the customer journey. With this, they aim primarily at a high-quality and consistent brand experience.

B2C ENTERPRISES TRANSFORM THEIR BUSINESS MODELS MORE THAN B2B ENTERPRISES

Even one step further go 69 percent of the enterprises: They put their present business models to the test and evaluate options for increased digitalization of the existing business models.

94%
of the survey
participants assume
that sales via
digital channels will
predominate in the
future.

What is interesting here is that 79 percent of B2C enterprises are addressing the transformation of their business models, while just 49 percent among B2C enterprises are doing so. Lünendonk believes this is also tied to the lower degree of digital maturity found at many B2B enterprises. Accordingly, many B2B enterprises are initially focused on a higher digital share in marketing and sales and on IT and process modernization, before investing in the next step of digitalization (digitalization of products and business models). Another reason is that in the capital goods sector, which is an important part of the B2B segment, the value creation continues to result from the development and physical production of goods. However, the share of software in products (embedded systems) is also on a continuous rise here, and products are developed and controlled increasingly digitally in the lifecycle based on a digital twin. This way, more and more data are available from which, in turn, new digital and data-based add-on services such as predictive maintenance, updates, etc. are created. In fact, 89 percent of the surveyed B2B enterprises stated that they are developing more products and services that are flanked by additional value-add services and oriented on their customers' needs along their customer journey.

SALES AND CUSTOMER COMMUNICATION WILL MAINLY TAKE PLACE VIA DIGITAL CHANNELS IN THE FUTURE

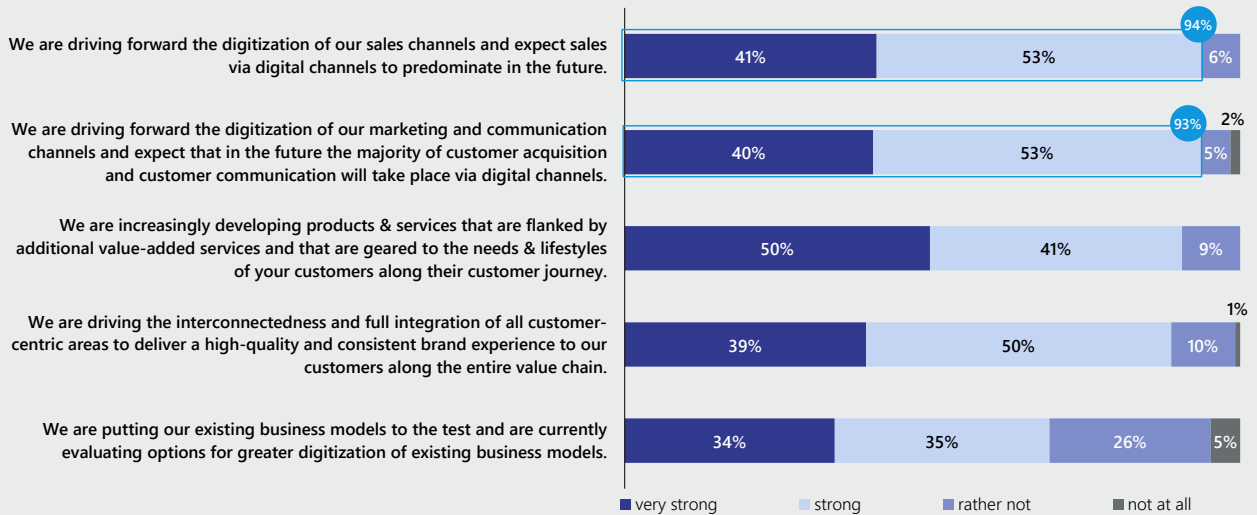


Fig. 22: Question: To what extent does your company currently deal with the following topics related to Customer Centricity?; Scale from 1 = "not at all" to 4 = "very strongly"; frequency distribution; n = 125

Challenges in the digital transformation and the digital experience

Generally, from the answers to the question of what the greatest challenges are the pattern emerges that companies, which believe their digital experience to be minor, are facing a bigger challenge than those where digitalization and their digital experience is already more progressed.

LACK OF IT SPECIALISTS COMING TO A HEAD

While still 75 percent of the business stated the shortage of IT and digital professionals to be a big challenge in 2021, this is now (2022) 81 percent. Even all of the businesses with revenues of more than 1 billion euros perceive this as a big challenge – same as among all of the surveyed companies that find themselves lagging behind with their digital experience. According to the IT industry association Bitkom, the number of vacant jobs for IT specialists in Germany rose by 12 percent from 86,000 to 96,000 from 2020 to 2021.

The lack of digital talents weighs all the heavier because ever more tasks are headed the way of companies in the course of the digital transformation and the implementation pressure for digitalization and transformation is rising. For example, there has been a shortage of trained personnel in digital disciplines – most of all in the areas of software development, cloud architecture, data analytics and new technologies such as AR/VR/metaverse or many other digital marketing fields. Since, however, companies invest massively in precisely these fields, the need for digital and IT experts is extremely high. Accordingly high was the demand for digital services providers in 2021, as explained in the first chapters of this survey.

Various Lünendonk analyses of the consulting and IT services market show that many service providers have been working at full capacity for years already and are facing big challenges trying to satisfy project requests – at least in the areas with very high demand as described above. In fact, according to the Lünendonk® survey "The Market for IT Services in Germany" of 2022, 93 percent of the surveyed CIOs and IT administrators reported of a shortage of digital and IT experts. It regularly becomes clear from interviews with company representatives that the shortage of trained personnel is currently the most pressing problem and has the potential of massively slowing down the digital transformation of the economy and society. What influence does the shortage of specialized professionals have in the digital experience environment is described in more depth in the Chapter "Cooperation with DXS Service Providers".

81%
of the surveyed
companies, the
shortage of IT
specialists represents a
major challenge.



The market for Digital Experience Services in Germany

TECHNOLOGIES DEVELOP FASTER THAN COMPANIES CAN ADJUST

To 75 percent of the surveyed businesses, adopting new digital technologies and the high speed of the digital transformation presents a challenge. In fact, different surveys by Lünendonk show that the employed digital technologies do not yet result entirely in high utilization. This depends not only the shortage of trained personnel, but also on the complex change process at the companies themselves.

Accordingly, the use of digital technologies to establish customer centricity not only pivots on their implementation and use in particular areas such as marketing, sales and customer service, but rather on breaking down those silos and interconnect them into fully integrated overall systems (end-to-end). But precisely this aim is associated with very strong organizational and cultural changes and consequently the need for a high willingness to change among the employees and managers. The organizational and cultural transformation is a much more crucial factor than the mere technology implementation.

Likewise, shorter innovation and technology cycles present a big hurdle from the perspective of those surveyed. Accordingly, digital technologies do promote innovations while at the same time, this shortens their lifecycle because of ever more rapid technology jumps. The consequence: The development time until market launch (time-to-market) must be shortened continuously. This dichotomy is considered by 65 percent of those surveyed as a challenge.

STEERING OF CAMPAIGNS THROUGHOUT THE ENTIRE CUSTOMER JOURNEY

The stronger the use of digital touchpoints and the multitude of new channels, the more fragmented the customer journey becomes to the effect that it also becomes harder for companies to get an overview of all customer activities. This increasing fragmentation of the customer touchpoints and the development of corresponding omnichannel communication strategies is perceived as a great challenge by 45 percent of the enterprises.

Designing cross-channel digital experience lines along all customer touchpoints is a big challenge to 50 percent, the development and implementation of cross-media content strategies is so to even 61 percent. For example, this issue concerns the trend of playing campaigns completely digitally through several channels and very strongly customized to particular customers (or customer groups).

To 64 percent of the companies participating in the survey, it is another big challenge to gather and monetarize data on all customer interfaces. This information, for example, may flow into or be used in product development to personalize targeting more and play content that is specific to the target groups. This aspect is meanwhile becoming ever more

75%

of respondents find the adaptation of digital technologies and the high speed of digital transformation challenging.



The market for Digital Experience Services in Germany

important in order to gain valuable insights from the mass of customer data that is gathered along the different customer touchpoints (information, purchase, service, etc.) For this reason, a lot of projects in the evolution to becoming a data-driven enterprise can also be seen on the market.

THE CUSTOMER INTERFACE IS SECURED

The surveyed businesses perceive a threatened loss of the customer interface to digital competitors or platform companies to be much less of a challenge. While 62 percent still felt threatened by this in 2021, this applies to just 33 percent in 2022.

This decline may relate to the strong investments by many companies in their own e-commerce solutions and the expansion of the direct-to-customer business (D2C) among many product manufacturers in recent years so that the dependency on marketplaces and online shops of third parties has dwindled.

SKILLS SHORTAGES AND THE DIGITAL TRANSFORMATION ARE SEEN AS THE BIGGEST CHALLENGES

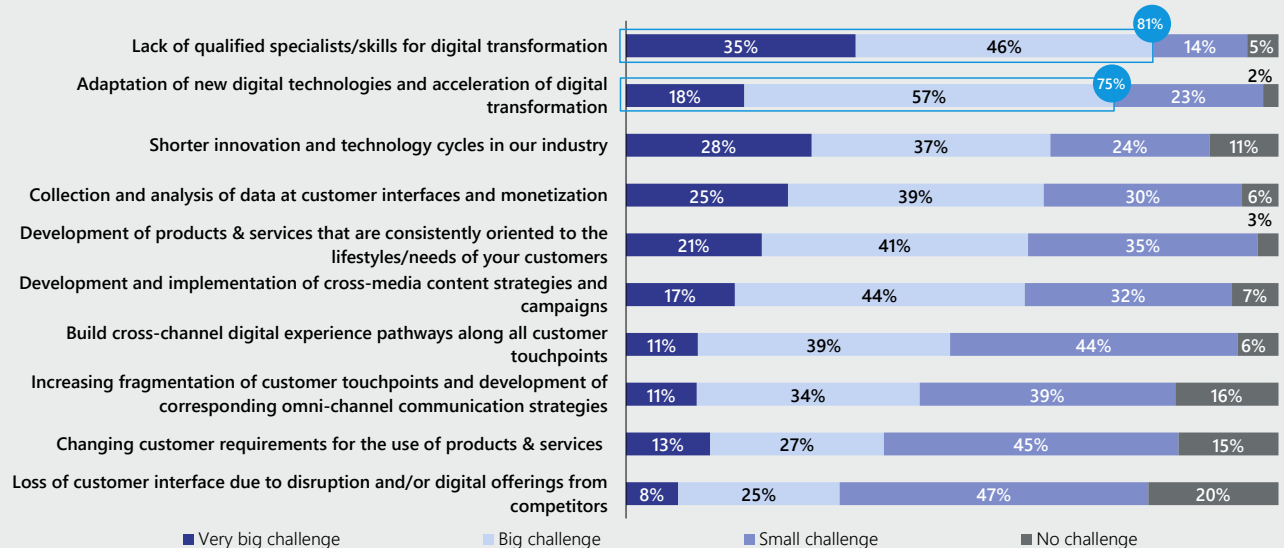


Fig. 23: Question: How would you rate the following (influencing) factors as a challenge for your company in the next two years?; Scale from 1 = "no challenge" to 4 = "very big challenge"; frequency distribution; n = 120

Technology trends 2022 versus 2025

Digital technologies are important instruments to promote customer centricity and develop innovative products and business models. Furthermore, they also serve the design of new process chains. In marketing and sales, there is currently quite a number of technologies with rather high market maturity already, while there are also emerging technologies such as AR/VR, blockchain or the metaverse.

Lünendonk therefore asked which technology topics are particularly relevant in the year 2022 and how this relevance will likely develop until 2025. There are by now no two opinions about the relevance of technologies for marketing and sales at this point: Digital technologies such as cloud, data analytics, open source, augmented reality or artificial intelligence, for example, enable creating completely new experiences and brand perceptions and therefore represent new differentiation factors on the customer interfaces by means of a novel kind of touchpoints, more automation and end-to-end processes. They are, however, also the condition for data existing in the company, e.g., as relates to the purchase and user behavior of customers or customer feedback, being systematically gathered at all and analyzed for specific purposes. At the same time, technologies such as cloud native (Platform as a Service), DevOps, Low Code or CI/CD play an important role in software development as well.

CYBER SECURITY IS THE TOP TECHNOLOGY ISSUE – ESPECIALLY AT THE CUSTOMER INTERFACE

Nearly all survey participants name cyber security as a central technology issue in the current year 2022. This is no big surprise, as IT security must continue its development at an equal pace based on the risen degree of digitalization at companies. Accordingly, the Bundesamt für Sicherheit in der Informationstechnik (BSI) describes the IT security situation as "tense to critical". In fact, for example, the number of malware variants increased significantly in 2021 already and there is no end in sight.

According to the Lünendonk® survey 2022 "From Cyber Security to Cyber Resilience", 82 percent of businesses believe there is a serious threat of falling victim to professional hacker attacks. In the event of a successful attack, 87 percent expect severe damage to their image and reputation and three-quarters of the business expect a loss of customer data. Cyber security therefore has strong influence not only on how secure customer data is but also on how well the companies are protected from hacker attacks during product use and, thus, how well protected they are against manipulations. The increasing digitalization of business models and a continuously growing share of software in products (embedded

94 %

of companies place an investment focus on cyber security solutions.



software), for example, in household appliances, medical technology, machines or vehicles, also require a stronger consideration of security by design during the development of digital products so as to make digital interfaces resilient to cyberattacks. Nearly all companies, whether of the B2C or B2B segment, expect for 2025 as well that they will place technological emphasis on cyber security.

NOT JUST FRONT-END DESIGN: AUTOMATION OF THE MARKETING AND SALES PROCESSES IS ALSO AN IMPORTANT PREREQUISITE FOR EXPERIENCES

The surveyed marketing, sales and IT managers also focus on process automation to create efficiencies and relieve employees in both 2022 as well as 2025. For this, however, there must be interconnected process chains in the back end so that process automation will not stop at systems and department silos (interoperability) but rather so that processes can be mapped completely. According to the [Lünendonk® survey 2022 "The Market for IT services in Germany"](#) more than 70 percent of the enterprises are planning to increase their budget for process optimization. Issues such as hyper-automation are already investment focus points for 47 percent. After the phase of robotic process automation, this is regarded as the next step in the evolution, meaning automation of routine tasks that can be standardized in the back office. Through the increased use of Machine Learning (ML) and algorithms, many company are now trying to automate entire process chains to be able to use efficiency leverages on the one hand, while improving the customer experience by shorter response times and raising the process quality on the other hand.

CLOUD NATIVE AND DEVOPS

In particular cloud native software development will grow rapidly in terms of relevance in the future. More and more companies align their software development units on agile work methods, interdisciplinary teams, cloud native software development, DevOps and more automation by means of Continuous Integration/Continuous Deployment (CI/CD). This is required to substantially increase the cycle times of new releases as well as the quality and customer centricity of software products at the same time.

With stronger use of services out of the public cloud, increasingly many businesses want to respond to changed requirements of customers, the innovation pressure and shorter time-to-market cycles. Accordingly, the Lünendonk® survey 2021 "Cloud Native Software Development" showed that more and more applications, especially at the customer interface, are developed as cloud native, meaning on the basis of a cloud architecture and as a modular microservice, which in turn has positive implications for the user experience.

"Cloud native" means much more than just a lift & shift of applications into the cloud and it utilizes instruments and principles like Kubernetes, serverless, Infrastructure as Code (IaC)

For 20

percentage points
from 78 percent (2022)
to 98 percent (2025),
the relevance of cloud
native technologies is
expected to increase.

or function-as-a-services. The increase by 20 percentage points by 2025 illustrates that businesses recognize the potential of cloud native and invest more in it. This also applies to DevOps, which in view of 2025, will also gain a lot in relevance (+14 percentage points).

DATA PLATFORMS ARE IN HIGH DEMAND

Data and analytics platforms will also gain a lot in importance. These are understood to mean applications, which present an "intermediate layer" between the place where the data is generated and where the data is used. Data and analytics platforms are to turn data into usable information, whereby better decisions can be made, customers are addressed in a more personal and individual way, and businesses develop overall into a data-driven organization.

Basically all survey participants expect that data and analytics platforms will play a key role for their enterprises by 2025 – this is a climb by 28 percentage points.

The surveyed businesses also forecast a strong gain in customer data platforms. They are database software programs that create permanent and standardized records of customer data. A customer data platform permits a 360-degree look at each individual customer. It is therefore also called "single customer view" and represents an ever more important basis for conducting and analyzing marketing activities. Today already, 76 percent of those surveyed believe customer data platforms to be highly relevant – by 2025, however, 94 percent believe they will be an important technology in marketing and sales.

With an increasing maturity of customer data platforms, marketing automation will also be made more practicable. Consequently, the relevance of marketing automation is rising in parallel to the customer data platform (2022: 79%, 2025: 97%).

EXCURSION: DATA ANALYTICS

80 percent of the enterprises already agree with the statement that they use data analytics to utilize the gathered data for a personalized customer approach. Likewise, 70 percent of the enterprises have already advanced to approach customers along the entire customer journey with the right products through the right channels, thereby creating strong customer loyalty.

Artificial intelligence or machine-learning tools are also used for this purpose in some cases to process the tremendous data volumes more efficiently and reduce the effort and expense.

79 %
of the respondents,
customer data
platforms are highly
relevant.



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DATA ANALYTICS SHOULD STRENGTHEN THE CUSTOMER RELATIONSHIP

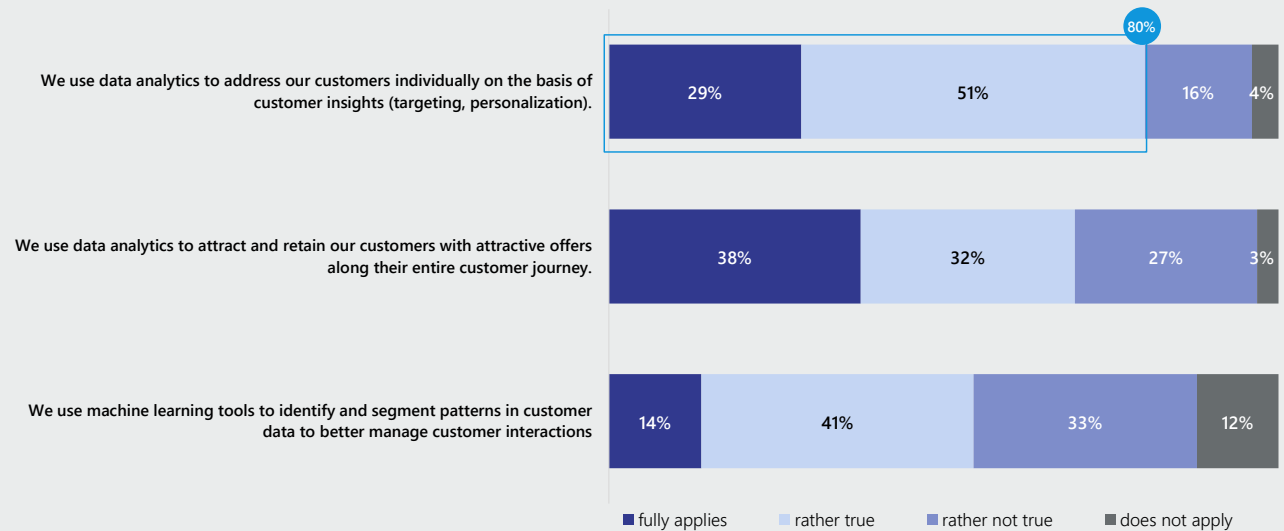


Fig. 24: Question: On the subject of data, we would like to know a little more about it: How does your company use data in the area of digital experience?; Scale from 1 = "strongly disagree" to 4 = "strongly agree"; frequency distribution; n = 123

INTERCONNECTED IOT WORLDS

The networking of physical and virtual products, the (industrial) Internet of Things will likely gain a lot of importance by 2025 according to the survey participants. By interconnection and communication between devices, machines or vehicles, processes can be made more efficient and more automated. At the same time, new business models are feasible. Products therefore are more frequently equipped with sensors and actuators as well as software. According to the [Lünendonk® survey 2021 "The Market for Engineering Services in Germany"](#), the portion of products containing or even based on software is to increase strongly. The rise by 34 percentage points in this survey emphasizes this. Among the surveyed automotive and manufacturing companies, this value is even at 94 percent for 2025.

METAVERSE – THE NEXT BIG THING?

One of the most hotly debated technology trends is the metaverse, also called "Web 3.0". According to estimates, Meta CEO Mark Zuckerberg is believed to invest about 10 billion US dollars into his metaverse division by the name of Facebook Reality Labs. By 2026, the corporate group wants to create 10,000 jobs in Europe relating to the metaverse. Apple, Microsoft or Nvidia besides many service providers are also investing heavily into Web 3.0.

The metaverse is the next level of the internet; it creates virtual 3D environments where virtual experiences, real-time 3D contents and other related media are interconnected. These virtual 3D environments can be used by means of augmented/virtual reality (AR/VR) or



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conventional end devices such as PCs or smartphones. Designed as Web 3.0 internet, users can delve into virtual worlds, use avatars as digital substitutes of themselves, and exchange virtual objects by means of new technology.

INCREASING RELEVANCE OF ALL DIGITAL TOPICS BY 2025

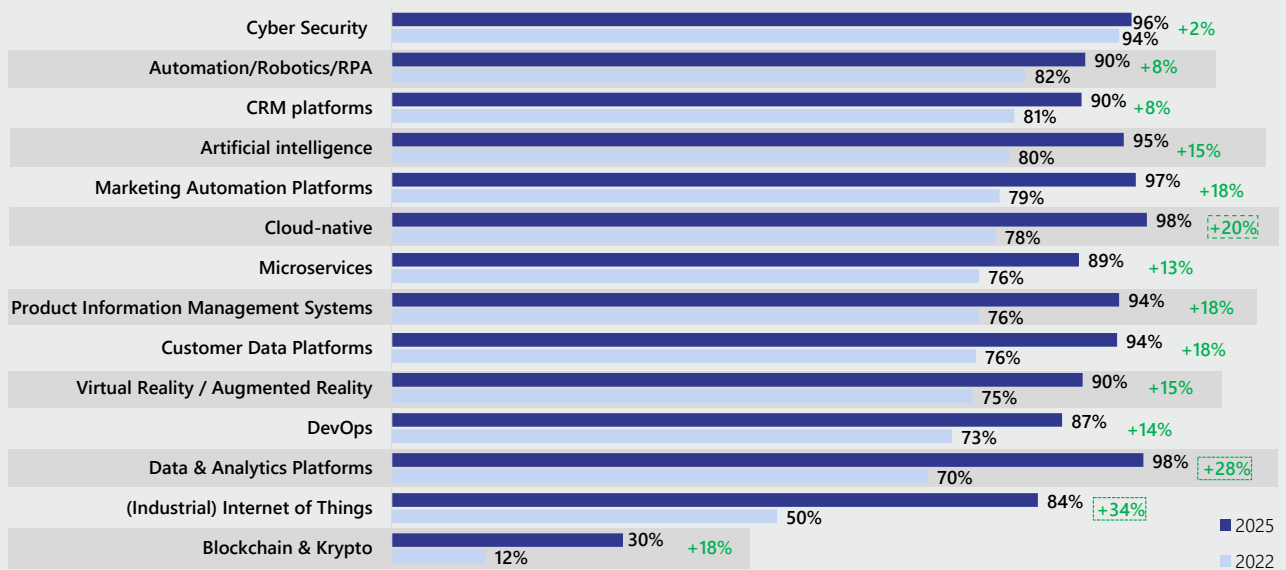


Fig. 25: Question: How do you rate the relevance of the following technologies in relation to your company? 2025; Scale from 1 = "no relevance" to 4 = "very high relevance"; values refer to the answers "very high relevance" and "high relevance"; n = 117

Although there is quite a hype around the metaverse currently, a whole number of early adopters is already taking first steps and gathering experience. Analysts as well see a huge market in the metaverse: The US consulting firm Earthweb for one expects that the metaverse will have a market value beyond 700 billion euros by 2024. Grand View Research in contrast believes that this value will be reached not before 2030 and that the market will grow annually by around 40 percent.

The metaverse allows retailers, for example, to create their own virtual shopping worlds and set up new customer loyalty programs to offer customers the possibility to earn and sell non-fungible tokens (NFT) that activate access to new, fascinating experience worlds.

Product manufacturers, in turn, can create new possibilities for storytelling and sales by means of the metaverse. They can integrate their brands authentically into the virtual world of the metaverse and thereby specifically approach young or digitally savvy target groups. New sources of income can be tapped by the sale of products.



At the same time, tremendous potentials are offered in industry, for example, through the digital twin. Accordingly, products can be developed and tested initially in a virtual world, which helps save production costs. Likewise, machinery and equipment can be serviced or updates and releases be installed more efficiently in virtual environments. Virtual worlds can be of help whenever bridges, offshore wind parks or other difficult to access plants can be serviced by remote maintenance.

RELEVANCE OF THE METAVERSE IS HIGHLY DEPENDENT ON THE BRANCH OF INDUSTRY

What the metaverse will be like in the medium and long term and what use cases will prevail will only be revealed in the coming years. To 45 percent of the companies participating in the survey, the metaverse is already relevant so that they are dealing with it and evaluating possible use cases. The companies with revenues of more than 10 billion euros prove to be the least willing to experiment in this regard: Just 29 percent of them attribute a high relevance to the metaverse. Banks and insurances also involve themselves in the metaverse less than average, while 72 percent of retail and FMCG enterprises believe it is highly relevant. The answers do not indicate any significant differences between B2C and B2B regarding the relevance of the metaverse.

45 %
of the companies are
already dealing with the
Metaverse.

APPLICATION CASES: FROM VIRTUAL MEETING TO PRODUCT DEVELOPMENT

The question of what the metaverse actually is and what purpose it is to fulfill cannot be answered by all. In part, it is also confused with VR, AR or the digital twin, whereas VR and AR are more the technologies that are used to create the metaverse, a virtual room the user enters as an avatar. As the question about the technology trends has shown, those surveyed believe AR/VR and crypto/blockchain will gain strongly in relevance by 2025.

60 percent of the enterprises, which regard the metaverse as important to their business, perceive potential application cases for their company to be events, meetings and trade fairs. In particular, industrial companies believe there to be potential, for example, to be able to replace elaborate and expensive physical events for product presentations.

Almost one out of two companies (47%) can imagine use cases in the e-commerce context. Virtual showrooms and change rooms can be named as concrete examples. Among the surveyed retail firms, the agreement is therefore particularly high, 82 percent can conceive of such use cases. The metaverse can also be used for virtual product presentations and brand communication.

44 percent see potentials in product development from the metaverse. Microsoft Germany CEO Marianne Janik forecast at the 2022 Hannover Trade Fair that the metaverse will also



conquer the industrial sector and have a decisive influence on production and manufacturing processes – for example, by simulating machines virtually to test scenarios and functions. There is no clear differentiation from the digital twin here but the term "digital twin" is more commonly used in industry. The metaverse meanwhile pursues an ever more immersive approach so that not just a machine is built virtually but you, as a person, also live in a virtual world that feels real.

THE METAVERSE ALREADY HAS A HIGH DEGREE OF RECOGNITION

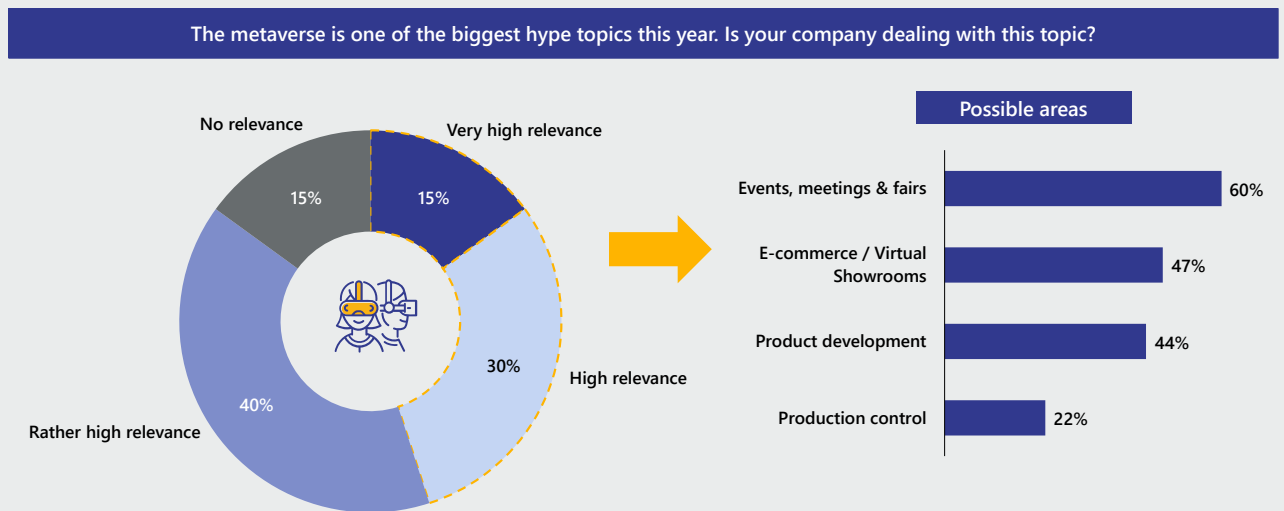


Fig. 26: Question: The metaverse is one of the biggest hype topics this year. Is your company dealing with this topic?; Scale from 1 = "no relevance" to 4 = "very high relevance"; n = 124
Question: If yes, in which areas can you imagine use cases for your company?; n = 55

Investments in digital experience

The number of tasks presented to operational departments and the IT department for digitalizing their customer interfaces, creating digital experiences, standing out from the competition or tapping new sales markets by means of innovative digital products and digital technologies (e.g. metaverse) is increasing further along with progressing digitalization and rising transformation pressure. Lünendonk therefore wanted to know in which areas the surveyed large mid-sized companies and groups will make investments in the coming years.

DIGITAL PLATFORMS ARE TRENDING

The highest investments are expected to flow into the development and implementation of digital platforms. 93 percent are planning high or very high investments in this area. Across all analyzed industries and size classes, big investments are to be made. For a few years, more and more businesses have been trying to add, for example, digital marketplaces, e-commerce or IoT platforms to their present business model or – especially in retail – entirely convert their business model into a platform business model. Douglas for one announced, for example, in 2020 already that it no longer wants to be an omnichannel retailer but intends to act as a beauty platform from now on, where the point-of-sales business, online shops and marketplace are integrated more strongly. An increasing number of such business models can be found especially in retail. But also companies in other industries are building and expanding platforms. Telekom, for example, is developing a digital management platform for the roll-out and operation of charging columns for charging infrastructure operators, the steel dealer Klöckner is consistently expediting its development into a digital marketplace.

DIGITAL PRODUCTS AND NEW BUSINESS MODELS BOOST DIGITAL MARKETING

Analogously to the high investments in the digital platform economy, the requirements for marketing and sales are evolving as well. Customers are more frequently approached digitally and with digital contents.

82 percent of the business will consequently invest heavily in their marketing strategy and the related activities in 2023. This includes, for example, data-driven marketing strategies, market research analysis or the development of conversions and leads with a more efficient ROI.

82 percent will likewise accelerate the topics of advertising and performance. SEO, SEA, affiliate marketing or programmatic advertising will therefore become more important. B2C and B2B enterprises attribute an equal weight to these topics. Accordingly, 78 percent of the

93 %

of companies plan to invest heavily in the development and implementation of digital platforms.



surveyed B2B enterprises stated they will significantly raise their spendings for advertising and performance, while this is even 93 percent among the companies with B2B and B2C business.

GREATER NEED FOR CONSULTING

78 percent of the enterprises will invest in their data and technology strategy in the coming two years. Against the background that many of the surveyed businesses have not advanced very far in the analysis and exploitation of customer data or in steering the integrated customer journey, higher investments in data management are a logical conclusion. 84 percent of B2B enterprises even want to raise their spending for data & technology consulting.

76 percent of businesses – equally many in B2C and B2B – will continue to increase their spending for business consulting, while 59 percent will provide more money for their CX strategy. The CX strategy includes CX design, ideation & requirements engineering or design thinking, meanwhile business consulting is foremost about strategy and organizational advising and business model innovation.

CONTENT PRODUCTION

A somewhat inconsistent pattern emerges for planned investments in the areas of "communication & content" and "media production". 61 percent of the enterprises will raise their budgets for communication & content and 58 percent will do so for media production. However, more than 70 percent of surveyed businesses in retail, telecommunications/ media and the consumer goods industry want to invest much more in both areas.

Visual design compared to the other marketing technologies is a niche. But at least 43 percent will increase their spending for visual design – interestingly also 37 percent of the B2B enterprises said they will do so.

CUSTOMER CENTRICITY THROUGH DIGITAL TECHNOLOGIES

A noteworthy while logical result is that the companies that believe their level of maturity in customer centricity to be very high will make above-average investments in all of the queried areas.

77 %
of the survey
participants will invest
heavily in their data and
technology strategy in
the next two years.



INVESTMENTS IN DIGITAL EXPERIENCE

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INVESTMENTS ARE TO BE MADE IN PARTICULAR IN THE DEVELOPMENT OF DIGITAL PLATFORMS AND MARKETING STRATEGIES

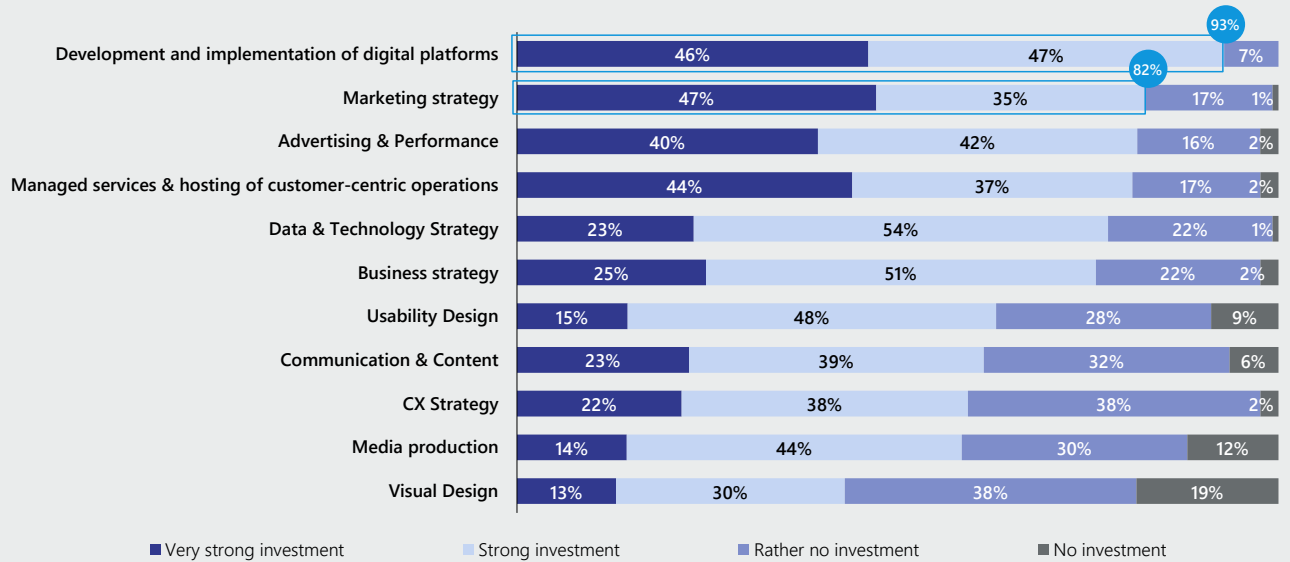


Fig. 27: Question: In which of the following areas of digital transformation is your company investing in the next two years?; Scale from 1 = "no investment" to 4 = "very strong investment"; Frequency distribution; n = 124



Strategies for project implementation in a tight market for qualified personnel

More and more work is headed the way of companies and the implementation pressure for digitalization and transformation is rising. However, for many years, trained professionals in IT, particularly in the areas of software development, cloud architecture, business architecture, data and various marketing technologies, have been lacking. Since, however, companies invest massively in precisely these fields, the need for digital and IT experts is extremely high. The demand for external IT services in 2021 was accordingly high, as explained in the first chapters of this survey.

With the expected rising digital and IT spendings for 2022 to 2024 in a simultaneously tight IT labor market, the problem of staffing digital and IT projects with qualified specialists will be further exasperated.

Various analyses show that many service providers have been working at high capacity for years already and are facing big challenges trying to satisfy project requests – at least in the areas with very high demand as described above. Especially in the digital environment, businesses have difficulty with recruiting staff. According to the digital job monitor of the Index Group, the number of job openings between January and March 2022 compared to the same period in the previous year rose by nearly 70 percent, for example, for jobs in the areas of cloud computing, online marketing, e-commerce, AI as well as social media.

In fact, 59 percent of those surveyed reported a big shortage of digital and IT experts. It regularly becomes clear from interviews with company representatives that the shortage of trained personnel is currently the most pressing problem and has the potential of massively slowing down the digital transformation of the economy and society.

EFFECTS OF THE LACK OF TALENTS

A development, which will materialize in all probability, are rising fee rates for certain topics – for example, as relates to data analytics and AI, technology consulting or individual software development with high professional standards. 84 percent of those surveyed expect higher fees for the future.



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SHORTAGE OF SKILLED WORKERS HINDERS THE DEVELOPMENT AND IMPLEMENTATION OF CUSTOMER-CENTRIC STRATEGIES

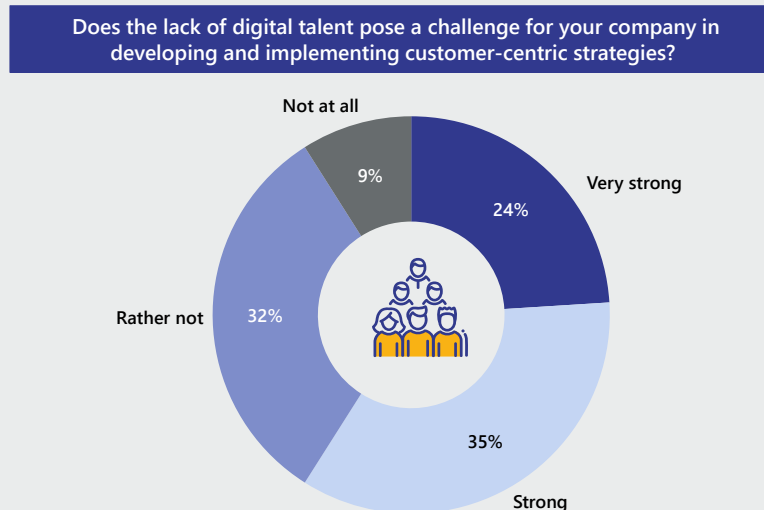


Fig. 28: Question: Does the lack of digital talent pose a challenge for your company in developing and implementing customer-centric strategies?; Scale from 1 = "not at all" to 4 = "very strongly"; n = 119

78 percent of surveyed businesses expect that due to the lack of trained personnel, the digital transformation will take more time at their companies, and 65 percent are only focused now on the central strategic digitalization programs and projects, which in turn will slow down the transformation and result in a slower innovation speed. However, since most enterprises have to struggle with this challenge, there is a fear of competitive drawbacks only in very few cases.

The high relevance of external service providers in the implementation of digital projects is confirmed by 65 percent of the surveyed business trying to award more work contracts to external service providers.

FOUNDING OF OWN DIGITAL SUBSIDIARIES IS AN OPTION TO MANY COMPANIES

44 percent of the enterprises are even contemplating founding their own digital subsidiaries due to the shortage of digital talents in order to be positioned better on the labor market. However, since specialized personnel are missing in the entire market, it is more than doubtful if this strategy will pay off. Interestingly, 56 percent of those surveyed mid-sized companies earning less than 1 billion euros in revenues consider this idea more than most – in contrast to just one-third of corporate groups with revenues of more than 1 billion euros that do so.



The market for Digital Experience Services in Germany

44 percent believe another way is founding joint ventures with digital agencies. Some examples can already be found on the market. The businesses can envision this, especially for networking and system integration of customer interfaces, the general strategy development and the implementation of the digital experience, the creation of design and content or matters relating to cyber security, VR and the metaverse. Two noteworthy examples have developed in the automotive industry over the past two years. In 2020, the joint agency model of MediaMonks, Serviceplan Group/Plan.Net Group and Berylls Strategy Advisors was founded and has since been responsible for the EU-wide and data-driven product and marketing communication for the BMW and MINI brands.

Further joint ventures in the digital sector exist in Valtech Mobility (Volkswagen and Valtech) and amplimind founded in September 2022 between Lufthansa Industry Solutions and Audi. The latter works on agile individual developments, integration and operation of strategic applications and consulting services in the fields of IT security and cloud platform development according to Audi.

Not a conventional joint venture but a company participation has existed at Voith since 2017 already. The machine manufacturer took over 60 percent of the shares of the Digital Service Provider Ray Sono in order to develop digital solutions in the fields of (I)IoT and Industry 4.0.

Joint ventures can be a very good model to secure know-how and competencies on the market in strategically important fields (e.g., software development or data analytics) over a long period. Of the surveyed medium-sized businesses with revenues between 500 million and 1 billion euros, two-thirds are very open-minded regarding such models, while every other company earning revenues between 5 and 10 billion euros is open toward joint ventures. On the industry side, especially the surveyed banks and insurance companies (60% each) are open to joint ventures.

RELEVANCE OF NEAR- AND OFFSHORE SERVICES

52 percent of the enterprises want to respond to the local lack of digital experts by increasingly shifting work to nearshore and offshore locations. Answering a separate question, nine out of ten survey participants stated that nearshore and offshore delivery was important in the development and implementation of digital experiences. An interesting fact is that this is no longer just about the classic IT topics such as managed services and software development but that there is also a high willingness or high pressure at the companies by now to outsource to nearshore and offshore regions when it comes to creative and design services. Another new development is that the analyzed mid-sized companies are by now also very open to near- and offshore solutions.



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THE SHORTAGE OF SKILLED WORKERS AFFECTS THE LEVEL OF FEES AS WELL AS THE SPEED OF DIGITAL TRANSFORMATION

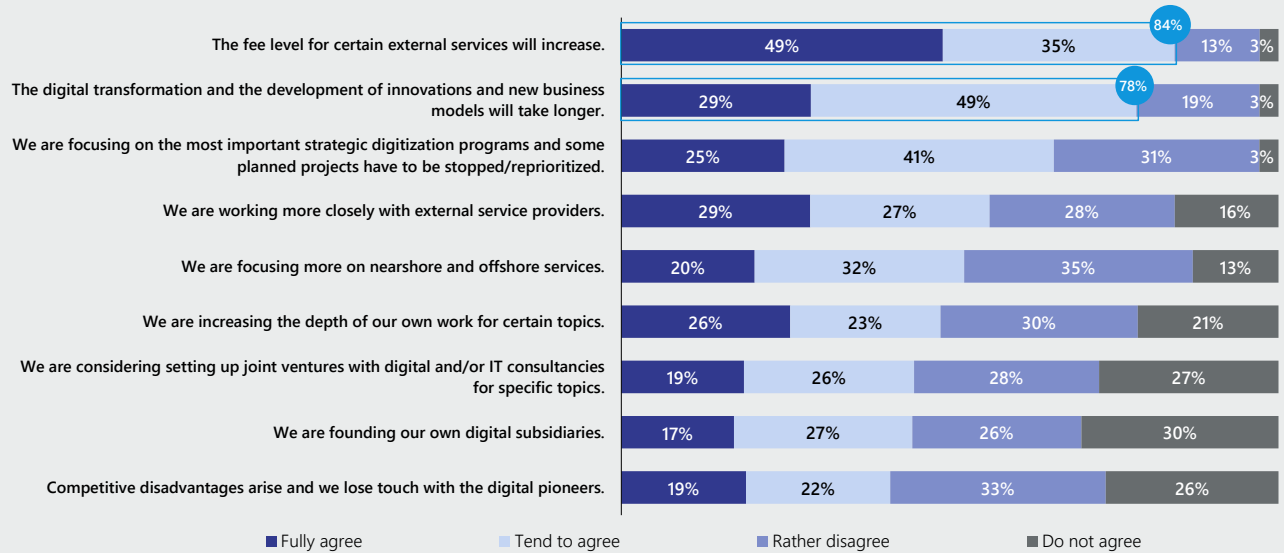


Fig. 29: Question: What impact does the shortage of skilled workers have on your IT organization?; Scale from 1 = "strongly disagree" to 4 = "strongly agree"; frequency distribution; n = 68

NEAR- AND OFFSHORE DELIVERY IS HIGHLY RELEVANT FOR CUSTOMERS IN ALL SECTORS

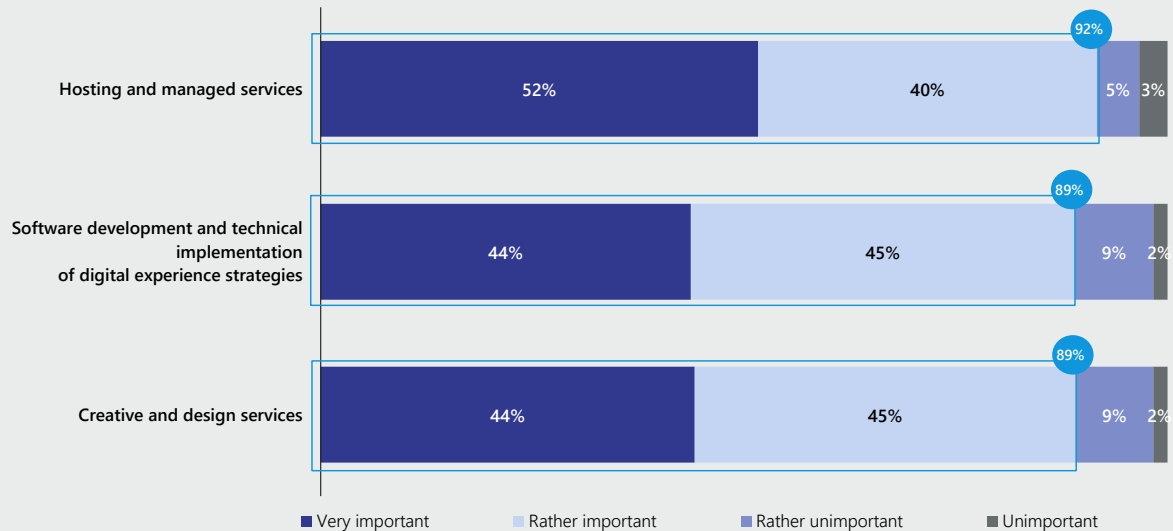


Fig. 30: Question: How important is near- and offshore delivery for your company in the development and implementation of digital experiences in the following areas?; Scale from 1 = "unimportant" to 4 = "very important"; frequency distribution; n = 119

Cooperation with DXS service providers

The businesses were also asked which collaboration models they pursue in the development and implementation of digitalization strategies. The majority (71%) relies on long-term, continuous collaboration only with select service partners.

58 percent of the enterprises develop digital products and services with external partners in the form of co-creation. Co-creation is an innovation process in which you are open to third parties and develop a result together with them – in the context of the survey, digital products or business models. The value creation chain is therefore a product of all involved partners. While just 43 percent of B2C enterprises stated they used this model often, 62 percent of the B2B enterprises said they are convinced of it and regularly resort to co-creation models. This may also be related to the comparably few experience values regarding challenges relating to customer centricity and digital experience.

Slightly more than half (57%) of the companies are looking for a lead agency – independently from topics – which takes general responsibility by being in charge of the overall budget for the specific topic and coordinating and directing other service providers. Differences between the size classes of survey participants do not become apparent in this respect, but B2B enterprises prefer this approach more (65%) than B2C enterprises do (44%).

Inversely to the propositions above, 41 percent of the enterprises attempt to primarily implement digital experience projects with their own resources and involve external service providers only if needed. This is the case especially among the surveyed B2C enterprises (57%), whereas just 32 percent of the B2B enterprises aim for a high share of internal service performance.

REQUIREMENTS FOR SERVICE PROVIDERS

As in the survey of the previous year already, a high industry and target group competence represents the most important requirement of the businesses for external service providers. The changes in customers' wishes regarding physical or digital channels or the transformation of their living worlds are central analyses for customer-centric actions. 94 percent believe industry and target group competence to be important. High competence in customer-centric methods and approaches is important in the selection procedure to 92 percent of those surveyed.



FOR B2C COMPANIES, LONG-TERM AND CONTINUOUS PARTNERSHIPS WITH SERVICE PROVIDERS ARE PARTICULARLY IMPORTANT

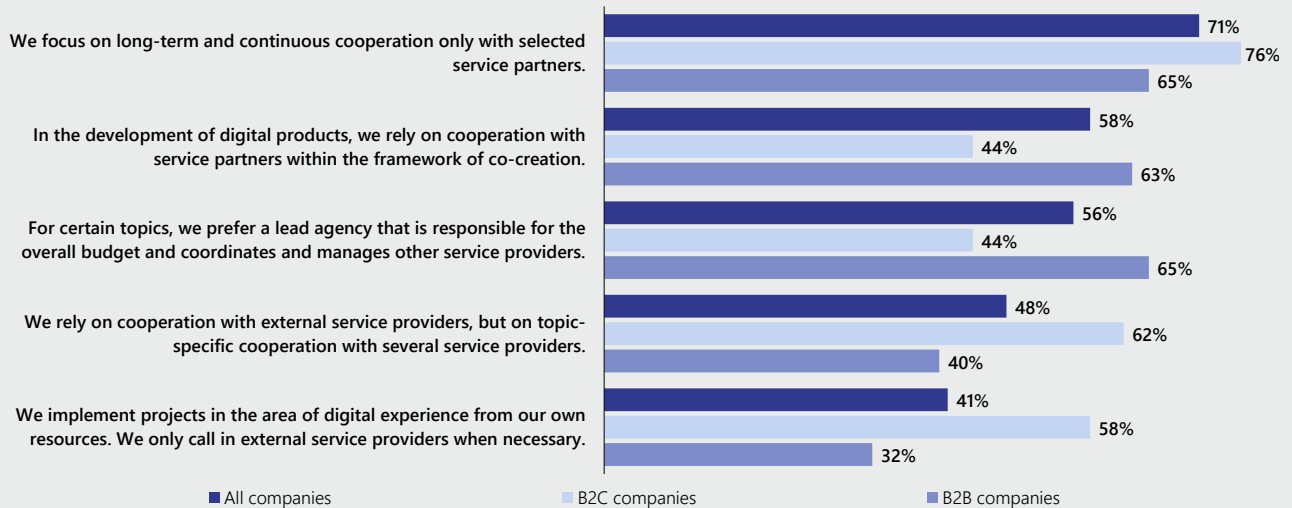


Fig. 31: Question: What collaboration models does your company pursue when developing and implementing digitization strategies? Scale from 1 = "never" to 4 = "regularly"; values refer to the answers "regularly" and "rather regularly"; n = 125 (all companies), n = 33 (B2C companies), n = 62 (B2B companies)

Digital touchpoints – regardless if for customers, business partners, suppliers or employees – require a high-level user experience to create acceptance. Strong design and creative expertise in the development of digital solutions or products is a further core requirement for external service providers to 88 percent of those surveyed (B2B: 93%, B2C: 91%).

DIGITAL TECHNOLOGIES ARE THE BASIS FOR EXPERIENCE AND NEW BUSINESS MODELS

Another highly rated competence requirement is IT know-how, for example, in software development or system integration. 93 percent of those surveyed (B2B: 89%, B2C: 97%) place great value on the IT competence of their potential service partners in the selection process. By now, this is a basic requirement, since all digital solutions are designed either with regard to the existing business and IT architecture or they are combined with other applications and need to be integrated in the IT back-end systems.

A full-service portfolio comprising consulting, design and creative as well as IT services is also highly relevant. As in the survey of the previous year already, 85 percent (B2B: 82%, B2C: 91%) of those surveyed believe an end-to-end portfolio is important.



SERVICE PROVIDERS URGENTLY NEED INDUSTRY AND IT EXPERTISE

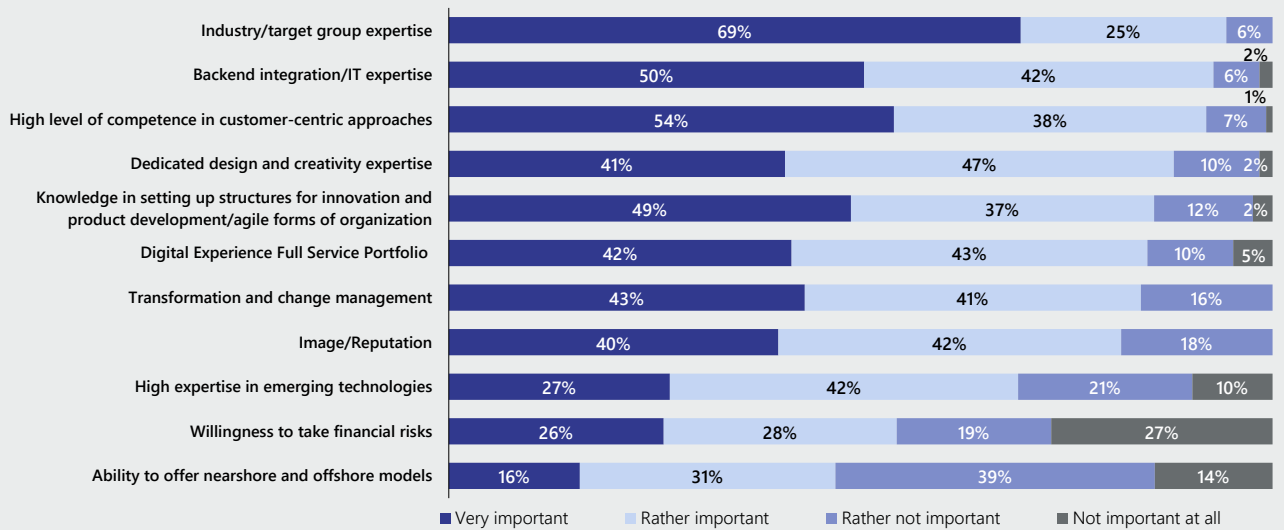


Fig. 32: Question In your view, what are important characteristics for choosing a service provider for digital transformation projects?; Scale from 1 = "not at all important" to 4 = "very important"; frequency distribution; n = 123



Conclusion and outlook

THE DIGITAL TRANSFORMATION BECOMES REALITY

After most companies have concentrated primarily on internal optimization in digitalization before the COVID-19 crisis, both B2C as well as B2B enterprises have taken the changed consumption habits of their customers and the progress with digital technologies as impetus to catch up with long overdue innovations and transformation programs on the levels of marketing, business models and products.

THE MOST IMPORTANT TRENDS AND DEVELOPMENTS AT A GLANCE

- 1) Products and services are much more strongly marketed through digital channels than was the case before the crisis. Therefore, the requirements for the design of customer touchpoints as well as the use of digital products with regard to process consistency (end-to-end) have massively evolved.
- 2) It is essential to the design of a digital experience and corresponding differentiation criteria not just to define the digital experience by the digitalization of the touchpoints but as the sum of customer experiences along the entire customer journey. This includes the networking of offline and online channels, the integration of often still isolated areas like product development, sales, customer service and marketing, and the competence to generate added values for customers from the gathered data.
- 3) Moreover, the digital age with its short innovation cycles and ever new technological disruptions for companies makes it crucial for companies to search for new differentiation advantages by trying, among other, to develop products and services much more strongly based on the customer (customer centricity) and bringing it to market maturity faster (time-to-market).
- 4) Digitalization offers entirely new possibilities here to create new added values for customers with a digital business model. Examples are data-driven models in the context of IoT in industry because the data that can be gathered from the use of a machine can be analyzed by plant and machine manufacturers and smarter add-on services can be offered to the users. Such ideas are being discussed intensely at this time in industry, and a high level of digital experience plays a central role for such digital add-on services.

SCENARIOS FOR THE YEAR 2025

Nearly all surveyed user firms (90%) believe it is probable in view of the future (year 2025) that their customer-centric business processes will be controlled predominantly digitally, by automation and based on data. Among B2C enterprises this portion is even 97 percent. Digital technologies such as customer data platforms, data analytics and cloud therefore



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play a central role in marketing and sales. For this reason, all surveyed companies continue to invest in their digital transformation.

At the same time, 71 percent of the companies participating in the survey believe it is probable that the divide between digital early adopters and late adopters will deepen in the future. The crucial factors for this are likely the missing access to digital talents and the lacking effectiveness in the introduction of new technologies and the transformation. 88 percent of the enterprises with revenues below 500 million euros believe this is even (very) probable.

Digital and customer experience are presently in high demand, so that accordingly big budgets go into the relevant topics. There is no consent among survey participants whether the height of this hype has already been reached or if this will come in 2025 or only at a later point. 58 percent believe it is likely that the peak will be reached in 2025 and that DX budgets will not climb further, meaning 42 percent can conceive that budgets will continue to rise even after 2025.

The relevance of full-service providers in the digital experience segment will stay strong in the future as well. 60 percent of the surveyed businesses rely on service providers who cover planning, design, implementation, content creation and the management of platforms for cooperation in matters relating to the digital experience. In the B2B segment, this portion is even slightly greater (61%) than in the B2C segment (55%). Mid-sized companies, however, also want to rely more frequently on full-service providers in the future. This is related, among other, to the fact that the IT departments of many mid-sized companies are comparably small in contrast to those at large group corporations, and experience values are often missing in the operational departments to be able to master the big tasks presented in the organization of customer centricity and digital experience.

The trend observed for some time now of handing off the responsibility for media planning and media purchasing to a lead agency is confirmed by 57 percent of surveyed businesses. Interestingly, 57 percent of the B2B enterprises believe this development is probable, while just 47 percent of B2C enterprises share this assessment.

This is shown alongside 42 percent of those surveyed, who expect that their companies will establish their own internal digital agencies in the future. These are to be in charge of the development and implementation of digital experiences and make the companies less dependent on an external specialist market. In this context and in Lünendonk's assessment, M&A activities by user firms will continue in the future in order to strengthen their position by takeovers of IT consulting firms or digital agencies. Just one-third of survey participants believe instead that joint ventures such as Valtech Mobility or The Marcom Engine will prevail more in the future.

71 %

of the survey participants expect the gap between digital pioneers and laggards to widen.



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BUSINESS PROCESSES AND COLLABORATION MODELS TO BE REVISED BY 2025

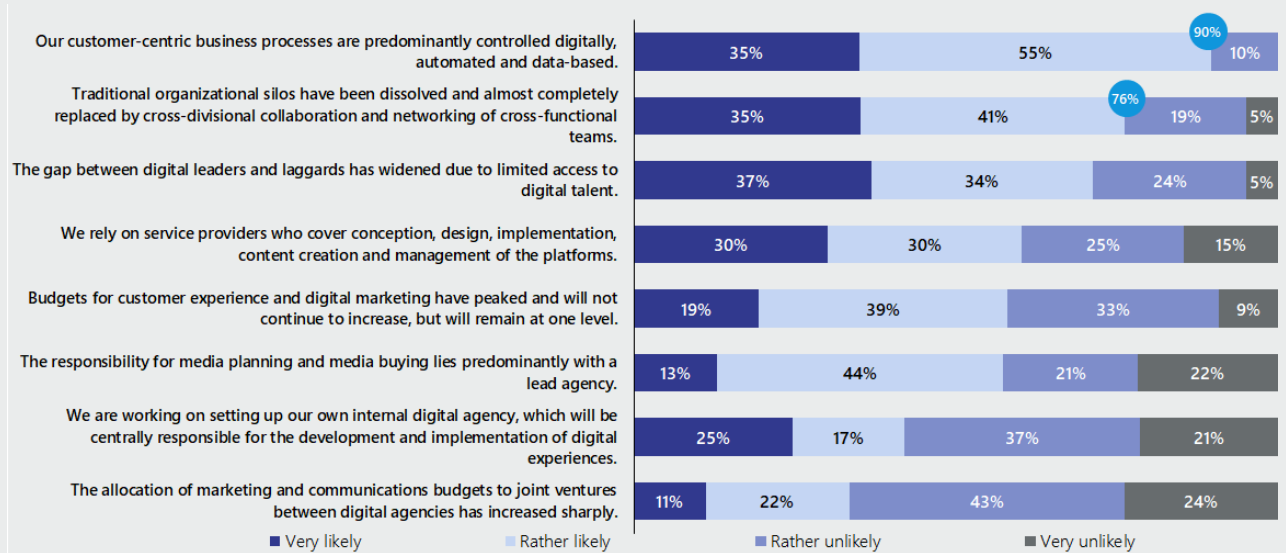


Fig. 33: Question: How likely do you think the following theses are with a view to the year 2025?; Scale from 1 = "very unlikely" to 4 = "very likely"; frequency distribution; n = 118



Postface

Such a comprehensive survey of the German market for digital experience services would not have been feasible without external support. For this reason, we thank the following service providers for their friendly assistance in the implementation of the survey:

- Adesso
- Plan.Net
- Reply
- Valtech

At this juncture, our special thanks are also due to all participating businesses and the analysis teams of Lünendonk & Hossenfelder GmbH. Thank you very much for the extensive support in the development of this Lünendonk® Survey.

Lünendonk & Hossenfelder GmbH continues to strive and is sure to deliver solid results and interpretations after nearly 40 years of intense market analyses and in a constant dialog with experts from the economy, businesses and associations.

Nonetheless, we believe that new aspects, ideas and improvement suggestions arise all the time. We are always grateful for such suggestions and would like to ask the readers of this survey to share them with us.

Thank you very much in advance!

Mario Zillmann
Partner

Tobias Ganowski
Consultant



Interview with Reply

According to this year's Lünendonk list, Reply is one of the leading service Digital Experiences Services. Also Reply is also an established player in the IT consulting market. size. Dr. Oliver Bohl and Dr. Thomas Hartmann report in this interview on the topics their customers are concerned with and why and why customer centricity pays off.



DR. OLIVER BOHL

Managing director
Triplesense Reply AG



DR. THOMAS HARTMANN

Chairman of the board
Reply Deutschland SE

LÜNENDONK: This year Reply is once again one of the leading IT and technology consultancies in Germany and generates a significant share of its revenues in the Digital Experience segment. What were the major highlights and customer projects for you in the past year?

THOMAS HARTMANN: The current surge in digitalization is having a major impact on almost all sectors of the economy. Companies are striving for new digital solutions and business models. They also need to make their businesses more data-driven in order to become customer-centric and reduce costs. This is the only way they can remain competitive in difficult times and be less susceptible to crises. The key to success in ensuring sustainable customer relationships lies in an intelligent and value-adding combination of data, technologies and creativity.

We therefore see our mission as one of combining creative minds with experts in data analysis and technology in order to be able to accompany our clients' complex projects – from the conceptualization, to the creation, to going live and beyond. Understanding customer requirements and the technical possibilities is one of the key criteria of success for implementing sustainable digital strategies.

For example, we have seen a surge in demand from customers for applications that use AI approaches. We are also seeing a large demand for robotics solutions. Reply is currently working for the Hamburg Port Authority in this field, for example: In a ongoing project, Spot, the robot dog, is inspecting the interior of Hamburg's Köhlbrand Bridge for damage.



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Using IoT edge-to-cloud technology, Reply is making sure that Spot lightens the workload for the bridge inspectors there and takes maintenance to a new level using AI. Last year's highlights also included projects centered around the metaverse, in which we help our clients merge the physical world with virtual experiences. For example, for our client Opel, we used basic metaverse-relevant approaches – such as VR, game engine technology and the like – to greatly simplify content production processes and by doing so drastically reduce the time and effort required by marketing and communications managers.

LÜNENDONK: What trends are you observing in the market for digital experience services right now? And what digital topics are most relevant to your clients?

THOMAS HARTMANN: Our clients are focused on investments in new technologies and on AI-enabled business models. AI can be used to optimize existing processes, use data in a targeted manner and develop new business models. Even the design of customer experiences can no longer function without the use of AI. This concerns both the analysis, planning and implementation of projects, customer experiences and campaigns. AI has a significant impact on the digital experience of the future in order to address customers more individually, make accurate predictions and react with more agility to movements in the market.

Another trend we are witnessing is the strong demand for cloud-native solutions. Cloud-native technologies allow enterprises to develop scalable applications in dynamic environments and in public, private and hybrid clouds. Implementation in the cloud translates into short project run times and lower overall project costs.

OLIVER BOHL: As part of an integrated and comprehensive customer experience, it is critical that brands effectively and repeatedly engage and captivate consumers throughout the entire customer journey. Sentiment analysis, for example, helps companies to determine the emotional value of their communication. Ultimately, marketers want to identify whether an opinion expressed by a consumer is positive or negative. You need to understand and pick up on subtle undertones in order to communicate relevantly. Irony, cynicism or euphoria can now be assessed in context by AI and interpreted in real time. This is true of all conversational marketing approaches – because both verbal and written information can serve as the basis.

LÜNENDONK: Which topics do you expect to see particularly strong demand for in the future?

THOMAS HARTMANN: With customer engagement spread across a variety of touch points, many companies have the adaptation of more digital technologies on their agenda. This includes the topic of metaverse – just like last year. This involves expertise in the

AI has a significant impact on the digital experience of the future in order to address customers more individually.



Dr. Thomas Hartmann
Reply

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design of virtual environments and digital twins, the development of real-time 3D content, spatial computing, and blockchain technologies to facilitate, for example, the use of NFTs (non-fungible tokens).

We are currently working on integrating AR/VR technologies into cloud-based AI services to develop immersive applications that support staff in industrial manufacturing and control, or even consumers. We expect demand to increase for the use and integration of mixed reality solutions, for example. Use cases for this can include virtual showrooms which facilitate the visualization and exploration of 3D models for e-commerce platforms, or multi-user remote visits which allow artworks in museums or at historical sites to be experienced virtually.

OLIVER BOHL: We are also seeing two topics from the retail sector gaining importance:

In social commerce, comprehensive ecosystems – often based on social networks – capture the imagination of consumers and as a result not only make it possible to communicate with each other, but also to make direct transactions. Whether it's attracting attention using powerful targeting methods, co-creation, or the use of a service or product – the buying process and the entire customer journey can be radically simplified.

Data-driven commerce is also fundamentally changing commerce. AI plays an essential role here as well, going beyond up-selling and cross-selling. We are talking about AI-powered approaches here that enable "phygital" shopping offline, online or, in the future, in the metaverse.

LÜNENDONK: Especially against the background of the hype around the metaverse, VR/AR and immersive experiences in the digital experience environment are among the most important topics: What do you think about the developments?

OLIVER BOHL: Our digital daily lives take place in purely virtual and hybrid environments. Perceived realities are blurring and customer experiences are being constantly shaped in a digital fashion. AR/VR approaches and immersive technologies such as volumetric videos create novel user experiences and transform digital experiences from 2D into 3D worlds. The metaverse is regarded as an extension to physical worlds. This is true in both our professional and private lives – a universal digital layer is emerging to cover our everyday lives.

THOMAS HARTMANN: Even though the widespread use of immersive technologies is still a thing of the future, opportunities are already opening up for companies. They can leverage these technologies when on-boarding employees, for meetings and training, for

With customer engagement spread across a variety of touch points, many companies have the adaptation of more digital technologies on their agenda.



Dr. Thomas Hartmann
Reply



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promoting sales, and for novel shopping experiences. AR/VR technology will increasingly find its way into the working world for immersive meetings and remote collaboration. Examples in private daily life include digital concerts, fashion shows or entire brand worlds in 3D form. Immersive experiences are on the rise when it comes to online shopping. In the future, the metaverse can also function as an additional sales channel and offer users a more emotional shopping experience through virtual stores. What we're seeing with our customers right now: concrete questions concerning possible uses of the metaverse for business are on the rise.

LÜNENDONK: Digitalization is also fueling an increase in the number of cyber threats, as confirmed by the companies questioned in the survey. What can be done to counter this?

THOMAS HARTMANN: Cyber security is a high priority in the implementation of new technologies, since it plays a significant role in our day-to-day lives. Whether we are talking about smart homes, connected cars or robots, the focus is on creating and maintaining the trust of the consumer. It is therefore necessary to develop automated and AI-based solutions to thwart the increasing number of cyber threats. Cyber attacks currently count among the greatest risk factors for the economy. Attackers are increasingly using multi-layered attack strategies that were previously only used in cyber espionage. With the Reply Cyber Security Challenge for students and professionals, which we initiate every year, we want to raise awareness about this important topic among young people.

LÜNENDONK: According to the survey, customer experience and customer centricity are becoming a key success factor for digital business models. In your experience, what is the reason for this and what do companies need to keep in mind?

OLIVER BOHL: For us, true customer centricity is at the heart of all projects. Through individual dialogs with customers and targeted analytical measures, companies can gain valuable insights into their customers and then refine their services and products. Analytical expertise is essential for this. Individually tailored communication, services and products are the norm for customers. The willingness to share data for this purpose is given – as shown by the consent which is generally quickly granted with Apple, Google, and Facebook & Co. However, it is also important for companies to work on their own culture in order to identify any activity that fails to put customers at the very center. For the subsequent packages of measures, data is the be-all and end-all, as W. Edwards Deming so aptly put it: "In God we trust; all others must bring data." The technology – the use of which is (unfortunately) then still subject to major knowledge and competence deficits – must support this cultural change.

Through individual dialogs with customers and targeted analytical measures, companies can gain valuable insights into their customers and then refine their services and products.



Dr. Oliver Bohl
Triplesense Reply



Reply Deutschland SE



Contact

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Reply specializes in the development and implementation of solutions based on new communication channels and digital media. Comprised of a network of highly specialized companies, Reply supports the leading European industrial groups in telecommunications and media, industry and services, banking and insurance, and public administration in defining and developing business models enabled by the new paradigms of AI, Big Data, Cloud Computing, Digital Media and Internet of Things. Reply's services include: Consulting, Systems Integration and Digital Services.

Reply relies on innovative technologies, data-driven insights and lived creativity to design a compelling Digital Experience that engages brands, customers and employees alike. We meet our customers' complex challenges with highly efficient, integrated solutions developed by industry-leading experts in our network of companies. Data-Driven Customer Centricity and Human-Centered Design are Reply's credo - and thus the guiding principle that ensures that the products, services, content and experiences we offer meet the needs and desires of our customers and end users. Advanced Analytics and Data Science inspire our creative processes, form the basis for marketing decisions and for innovative, data-driven business models. Our approach is to create scalable platforms for communication, commerce and digital services by consistently thinking in terms of ecosystems and customer journeys. By using Artificial Intelligence, we increase the efficiency and effectiveness of marketing and open up the possibility for companies to create a completely new, personalized Customer Experience for their customers.

Reply companies in the field of Digital Experience unite interdisciplinary teams of specialists with their respective competencies and thus jointly find solutions for internationally positioned customers in various industries. In the German BVDW Internet Agency Ranking 2022, Reply once again takes first place. Internationally, the IT research and strategy consulting company Gartner, positions Reply as a "Leader" in its Magic Quadrant for CRM and Customer Experience implementation services.



Lünendonk & Hossenfelder GmbH

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Lünendonk & Hossenfelder, based in Mindelheim (Bavaria), has been analyzing the European business-to-business (B2B) services markets since 1983. The market researchers focus on the sectors of management and IT consulting, auditing, tax and legal consulting, facility management and maintenance as well as personnel services (temporary employment, staffing).

Our portfolio includes studies, publications, benchmarks and advice on trends, pricing, positioning or contracting procedures. The large data pool enables Lünendonk to derive findings for recommendations for action. For decades, the market research and consulting company has published the "Lünendonk® Lists and Studies", which are regarded as market barometers.



Many years of experience, in-depth know-how, an excellent network and, last but not least, a passion for market research and people make the company and its consultants sought-after experts for service providers, their clients and journalists. Every year, Lünendonk and a media jury honor deserving companies and entrepreneurs with the Lünendonk Service Awards.

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