



Lünendonk® Survey 2023

The Market for Digital Experience Services in Germany

Strategies, planning and new collaboration models for the customer-centric enterprise

A survey by Lünendonk & Hossenfelder GmbH in cooperation with



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Foreword

Dear readers,

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

Lünendonk defines "digital experience services" as the combination of different disciplines, competences and skills that are required for the development and implementation of customer-centric strategies and the creation of digital experience along the entire value chain. This includes topics such as experience strategy, brand experience, digital commerce, customer journey analyses, digital marketing, personalisation and targeting, data analytics and – most importantly! – IT implementation services such as software development and system integration.

Taking a closer look at the current year, this survey series shows very impressively that so far German-speaking companies are continuously developing their digital transformation and gaining more knowledge in terms of customer centricity and digital experience. Nevertheless, there is still a lot to do. Most companies are still a long way from offering their customers a consistent brand experience and a uniformly high digital experience on all channels and interaction points (customer service, logistics, etc.). But also with regard to their own employees, there is still a lot to do. For example, historically developed and often overcomplicated processes as well as outdated tools are still present in many companies.

NEW STRUCTURES AND A NEW MINDSET

However, new and digital business models also require a rethinking of structures and processes. And employer attractiveness is also increasingly linked to the digital experience of a company: in order to remain an attractive employer in times of demographic change, companies, but also public authorities, should offer not only their customers but also their employees a high experience in the form of modern tools and simple processes. To achieve this, collaboration models and responsibilities in companies will have to change and silo structures will have to be dissolved. Responsibility for a digital product such as a customer app, a sales channel or an entire customer journey will increasingly be carried by dedicated product teams; in short, human-centric organisation.



Mario Zillmann

Partner



PRESSURE FOR CHANGE IS THERE

The technological and social developments of recent years have led, among other things, to an increasing number of companies understanding that they need to transfer their traditional business models more aggressively into the digital world. Different studies by Lünendonk show that most companies will therefore evolutionarily rebuild their business models in the next few years by looking at options for greater digitisation. This means that the core of the business models will remain, but will be supplemented by digital elements. In contrast, some other companies – especially in industries that are very strongly affected by disruption, such as banking or retail – will more often look at investing in the development of completely new and disruptive business models. This is driven by the concern of an even greater loss of their customer interface in the future, especially if competitors such as the large online groups succeed, for example, in meeting the changed requirements of customers along the customer journey with better digital offers.

DIGITAL BUSINESS MODELS REQUIRE CHANGES IN THE TECHNOLOGY STACK AND PROCESSES

Regardless of the extent to which existing business models are digitised or transformed, in the future more and more transactions of companies with each other as well as with end customers will be conducted on the basis of platform-based business models. In this context, the digital offers of the platform operators as well as the platform participants must be sufficiently developed in terms of their user experience for the users to be willing to share their data, which in turn results in enormous opportunities for process improvements and individualised customer approaches through the use of artificial intelligence or algorithms. Last but not least, personalisation and targeting also play a central role in achieving cross-selling and upselling effects, and so does data. Decisions are increasingly being made on the basis of data and predictive models. Methods in the field of artificial intelligence are highly significant here – for example for the intelligent automation of business processes or for customer segmentation and individual customer targeting (hyperpersonalisation). Generative AI is currently being intensely debated, especially in topics related to marketing and sales.

COMPOSABLE BUSINESS LEADING THE DIGITAL TRANSFORMATION

A stronger digitisation of business models and company processes requires a number of procedural and technological prerequisites. Open interfaces and modular technology platforms are two of the basic principles of digital business models, for example, in order to be able to integrate additional digital services from third-party providers into one's own offering via APIs or, conversely, to connect one's own products to other platforms or to link different applications across system boundaries to end-to-end processes and continuously exchange data. However, this requires companies' technology platforms to become much



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more agile, flexible and open to external services in order to support the new, platform-based business processes. Companies will not solve these challenges on their own.

This Lünendonk Survey® provides comprehensive insight into the market for digital experience services – from the perspective of both the leading providers of digital experience services as well as large user companies. In addition to the market structure and the leading service providers, the future tasks, planning and challenges of large user companies in the German-speaking region are described in detail. Therefore this survey is a unique 360-degree analysis of the market for digital experience services in the German-speaking region.

The survey, thanks to the support of the companies Adesso, Diva-e, Plan.Net Group, Reply, Syzygy Group and Valantic, is available free of charge. The authors would like to thank the survey partners for their substantive contribution and support in this project.

We wish you an interesting and above all useful read.

Kind regards,

Mario Zillmann



Management Summary

- Due to the amount of digital impressions experienced by customers in the course of their online activities, ads and websites are expected to address all people individually. In order to be able to hold their own in this competitive field, many companies rely on the services of DXS providers. These achieved a revenue growth of 18.3 per cent in 2022. This high demand for DXS providers has not only been caused by their expertise; the shortage of skilled workers is also a known trigger. But DXS companies are not spared by this issue either. In 2022, they provided 24.6 per cent of their services at near- and offshore locations because the workload could no longer be handled by their own staff.
- Companies are increasingly recognising how they can achieve strategic competitive advantages from digital experience. At least 13 per cent of companies consider the quality of their digital experience as advanced, only 2 per cent as lagging behind. Nevertheless, every second company is concerned about losing customers due to an underdeveloped customer experience. This is reinforced above all by new, disruptive technology trends such as metaverse and generative AI, whose early use and development of know-how set digital leaders apart from other companies. The survey participants see further challenges in the implementation of sustainability aspects in their digital business models. Seven out of ten companies find it difficult to reconcile the use of IT resources with a low carbon footprint. Shortening innovation and release cycles is also difficult to manage, according to user companies.
- Companies have a strong focus on the unified orchestration of customer journeys. 68 per cent want their customer channels and customer touchpoints to be closely integrated, allowing them to switch between platforms as desired. Data and personalisation are key to customer centricity and digital experience – human-centric organisation puts people at the centre. The collection of customer and user feedback and holistic data collection are indispensable aspects of this. Surprisingly, six out of ten companies said that collecting and monetising data at customer interfaces is a major challenge for them. Therefore, 94 per cent of companies demand a high level of competence in customer-centric approaches when working with DXS service providers.

18.3 %

average revenue growth of DXS providers in 2022.

24.6 %

of their services are being provided at near- and offshore locations.

13 %

of companies consider the quality of their digital experience as advanced.

94 %

demand a high level of competence in customer-centric approaches when working with DXS service providers.

- The demand for customer data platforms, microservices and marketing automation platforms remains high. But new technology trends and hot topics are also on companies' radar. Both DXS providers and user companies predict a huge increase in the importance of generative AI. While 96 per cent of DXS providers expect great potential in terms of content creation, the majority of user companies (74%) want to benefit primarily by using this technology for customer and employee communication. The areas of application are diverse and generative AI promises great productivity and cost advantages through its high automation potential. In connection with generative AI, the metaverse as well as Virtual Reality (VR) and Augmented Reality (AR) are also major hot topics for the coming years. DXS providers expect an increase of 33 percentage points for VR and AR. Cyber security continues to be of enormous relevance for companies, especially regarding the increasing number of cyber attacks.

Generative AI

is gaining relevance.

High demand

for Customer Data Platforms, Microservices and Marketing Automation Platforms.



Methodology 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 analysed over the course of many years. The central market developments and service providers of the respective markets are presented in the Lünendonk® Surveys and Lists. Lünendonk has surveyed the Digital Experience Services (DXS) market segment since 2017. For the first time in 2020, this was expanded by a Lünendonk® List and a Lünendonk® Portfolio, visualising the market strength as well as portfolio breadth and depth of the service providers.

ABOUT THE SERVICE PROVIDER SURVEY

28 leading IT service providers, management consultancies and digital agencies operating in Germany participated in this year's survey. The written survey was conducted in the period from May to July. Both providers with headquarters in Germany and the German subsidiaries of international providers were invited to take the survey. In total, 18 German and ten international DXS service providers were interviewed. 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 categorised as a service provider in the Digital Experience Services segment and to get the opportunity to be included in the Lünendonk® list, service providers had to meet the following criteria:

1. They have to earn at least 60 per cent of their revenues from management and IT consulting, digital agency services, software development and roll-out or system integration.
2. With regard 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 a business has a DXS revenue share of more than 50 per cent, no further requirements apply.
3. Businesses with a DXS revenue share between 30 and 50 per cent must earn at least 100 million euros in Germany from DXS services.
4. Businesses with a DXS revenue share below 30 per cent must earn at least 200 million euros in Germany from DXS services.



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

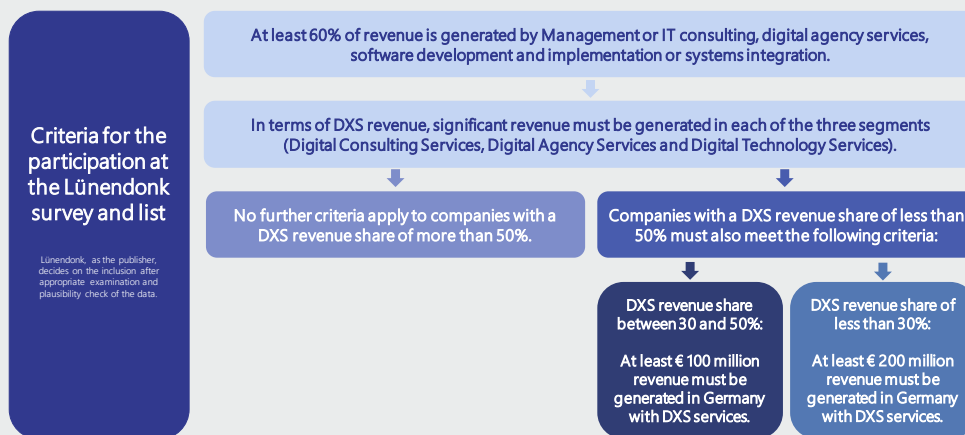


Fig. 1: Requirements for the participation at the Lünendonk® List

The criteria are checked based on the completed and submitted questionnaires, corresponding plausibility checks by Lünendonk, and in select cases through detailed background interviews including the submission of skill distributions and testimonials. Businesses that participated but that did not meet 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 cannot be validated from public sources, especially for hybrid service providers, and because a razor-sharp delineation could sometimes not even be made carried out by the service providers themselves. This would have impaired comparability. Since the Lünendonk® List aims to be complete and correct, businesses that did not fill out a questionnaire, but that 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. In the period from May to August 2023, 148 user companies were surveyed – mostly by telephone. The companies operate in the industrial and automotive sectors, retail, the fast-moving consumer goods (FMCG) sector, the financial sector as well as the chemical/pharmaceutical, telecommunications and energy sectors. Half of the companies pursue a B2C business model, while almost every third company (30%) operates in the B2B sector. The remaining companies operate in both segments.



The Market for Digital Experience Services in Germany

Only companies from German-speaking countries were surveyed. The majority (80 per cent) come from Germany, with 10 per cent each from Switzerland and Austria. In terms of company size, 51 per cent of the companies have revenues up to 1 billion euros and thus are in the upper Mittelstand, while 49 per cent generate a turnover of over 1 billion euros. As there are some differences between B2C and B2B in terms of digital maturity as well as customer centricity and digital experience requirements, significant differences were pointed out in the interpretation of the results.

Since the survey is designed for the long term and is published in an annual rhythm, the basic distribution of companies in terms of their characteristics and the number of participating companies from 2022 were largely retained in this year's survey in order for the results to be comparable. However, since only a small proportion of surveyed companies and persons were exactly identical, a direct comparison of the results of the different years cannot be statistically assured. The survey therefore has no claim to representativeness; but identifying trends and developments is nevertheless possible and has therefore been undertaken.

SAMPLE OF USER COMPANIES SURVEYED (N = 148)

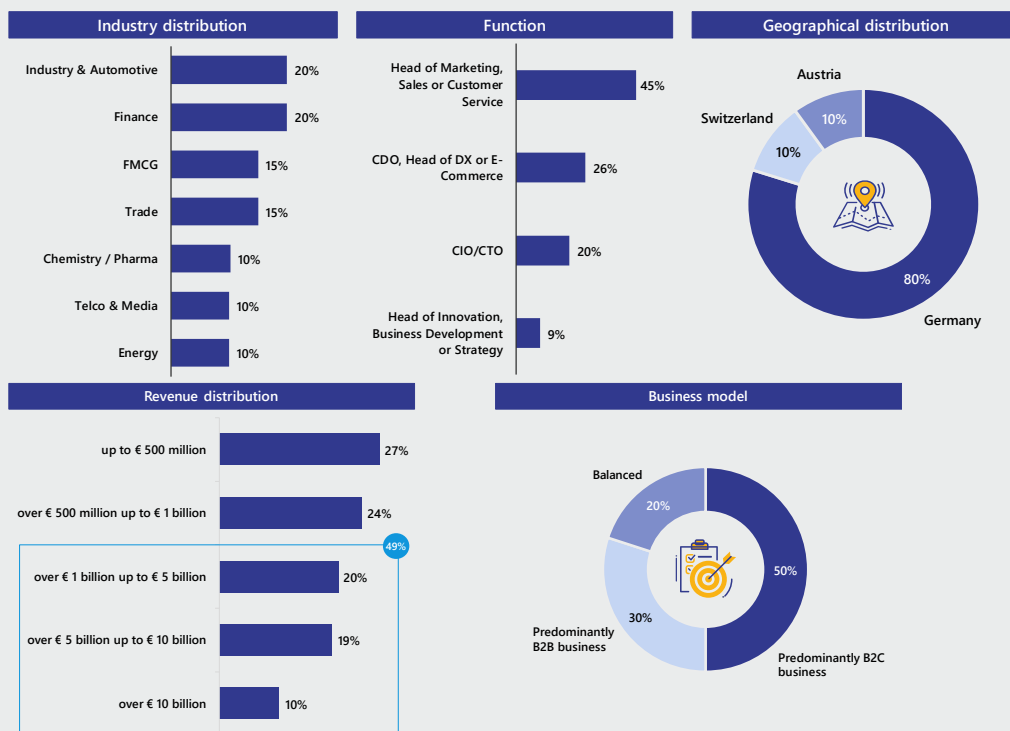


Fig. 2: Question: Revenue distribution; Business model; All participants; n = 148

Introduction: The market segment Digital Experience Services (DXS)

According to various Lünendonk® Surveys, the demand for digital experience services has increased continuously in recent years, particularly due to the fact that more and more companies have understood the relevance of consistent customer centricity and are increasingly adjusting their products, services and processes towards putting the customer or user at the centre. It is therefore important to point out that digital experience is not exclusively about the customer perspective; rather, for a successful digital transformation, employees must also be much more empowered to use new digital technologies (keyword: Human-Centric Organisation). This can be achieved, among other things, by designing and developing new digital applications from the user perspective. In addition, modern digital workplaces and new technologies such as generative AI, the industrial metaverse, but also user-centred process design are an increasingly important component for employer branding, i.e. for recruiting and retaining digital talents.

Regarding the question of how companies can become much more customer- and user-centric in the future and also remain competitive in a digitalising world, there are a number of points that need to be addressed more intensively:

- Modification of traditional organisational structures to a Human-Centric Organisation, process design
- Establishing structures and incentives to promote innovation
- Re-design of the process and technology landscape to end-to-end process chains
- Better use and democratisation of data and intelligent automation
- Modernising the IT legacy and scaling digital technologies across platforms
- Definition of digital customer journeys, control of cross-media campaigns as well as collection and analysis of data
- Control of the customer relationship via a central customer ID and integrated control of the customer journeys, including personalised customer approach

THE USER MUST BE THE CENTRE OF ATTENTION – THE HUMAN-CENTRIC ORGANISATION

In order to promote innovation and customer-centricity, more and more companies are aligning their processes and structures more closely with the rapidly changing requirements of their customers, partners and employees. Especially in the development of digital products such as commerce platforms or other digital experiences, the early integration of functional and non-functional requirements is just as important as the close cooperation of different



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departments such as marketing, sales, distribution or operations (logistics, production, etc.). Important measures therefore include the dissolution of traditional departmental boundaries and the establishment of dedicated product teams. Such product teams are responsible for the development and operations of a digital product and, above all, for the corresponding data (data mesh approach) and can thus react much more flexibly to changing requirements through close coordination.

However, acting in a consistently customer-centric and innovative way also means knowing both the requests and requirements of customers and their feedback on the services they use. Building a customer experience that is perceived as high quality along the entire customer value chain (customer journey) is a central element of customer centricity. To achieve this, however, companies need information about what affects customers in their everyday lives and how they use a product or service. The same applies to employees. Therefore, it is becoming increasingly important to systematically collect feedback information on how users evaluate a product, a process or an entire process chain, a specific touchpoint or a service, and where they see a need for improvement. This feedback information is enormously important for the development teams due to the increasingly frequent emergence of product organisations and in order to constantly improve the functionalities and to promote genuine co-creation and thus user-centricity.

EXPERIENCE IS HIGHLY PROCESS- AND TECHNOLOGY-DRIVEN

Omnichannel strategies and an integrated end-to-end process chain also play a hugely important role in building what is perceived as a high-quality digital experience. As a result of the increasing explosion of channels in marketing, sales and customer service, it is essential that customers can seamlessly switch between multiple channels (app, portal, website, store, etc.), use multiple channels for purchases or service requests (click & collect, ship from store, etc.) and access status information in real time (e.g. track & trace in logistics, performance of machinery and equipment, availability of goods). Short response times on all customer channels – for example to quotation requests, damage reports or other service requests – are also part of building a digital experience.

In all these aspects, the central role is played by interlinked and automated, intelligently controlled process chains. This is achieved, among other things, by unfreezing historically grown IT and process silos and networking individual processes into microservices that can be changed and adapted very flexibly.



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LAYING THE FOUNDATIONS FOR DIGITAL EXPERIENCE BASED ON IT MODERNISATION AND CLOUD TRANSFORMATION

However, due to the legacy IT still prevalent in many places (including aging core IT systems), the technological prerequisites are not yet sufficiently fulfilled to meet the requirements for the targeted implementation of a customer-centric strategy. Although new, digital customer interfaces (portals, apps, etc.) can be built quickly, often the existing IT system landscape is overwhelmed by their integration and operation. IT transformation programmes, which are highly complex and have therefore often been insufficiently prioritised or even postponed in recent years due to cost considerations, are consequently an important technological measure in building customer centricity.

To sustain a high process quality in digital services, a number of requirements must be observed:

- Scaling: covering peak loads with infrastructure, flexible adaptation to traffic/accesses
- Regular updates, patches and releases for digital products, which are developed in a very short time and installed without “downtimes”.
- Availability: 24/7 performance, no downtimes, worldwide availability if necessary
- Interoperability/end-to-end capability: services that communicate with each other and continuously exchange data.
- Flexibility: APIs and microservice architecture to dock on new services and undock them when needed.

DATA AND PERSONALISATION ARE OFTEN THE KEY TO CUSTOMER CENTRICITY AND DIGITAL EXPERIENCE

Even with the use of analytics and artificial intelligence (AI), it is difficult to achieve an important goal of customer centricity: the individual customer approach (personalisation) based on customer insights. With the help of digital experience platforms and on the basis of data and a central customer ID, companies can, for example, analyse which products and services customers like in order to address them very individually in customer service.

Personalisation is one of the megatrends in modern marketing, because target group-specific content about the brand and the product is becoming increasingly relevant – both for B2C and B2B. Here, the developments around generative AI will redefine the marketing of the future, among other things because content can now be created much faster and automatically.

Data and digital experience also have an interaction that should not be underestimated: the willingness to share data increases with the quality of the customer experience. If the



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use of a digital service is considered indispensable from the customer's point of view, the willingness to share personal data is high.

The collected customer-related data can in turn be used for personalisation or to improve products or processes based on customer feedback. A whole new dimension and real transformation is offered by the use of AI and virtual reality/metaverse in the area of data-based business models. For example, plant and machine manufacturers are working on how they can provide their customers with data analyses and simulations, for example about the performance of the machines used, the usage behaviour or necessary maintenance steps.

DIGITAL EXPERIENCE SERVICES ARE GAINING GREATLY IN IMPORTANCE

Companies cannot implement these numerous topics on their own and are dependent on the support of external service providers. Many user companies also often lack digital skills and experience or simply do not have enough qualified specialists for all the necessary aspects of the digital transformation.

A new type of service provider in particular is benefiting from the pressure for digitisation described above and the increasing demand for digital services: the providers of digital experience services. They have become increasingly important in recent years.

COMPANIES ARE INCREASINGLY IMPLEMENTING TOPICS IN A CROSS-FUNCTIONAL APPROACH: SERVICE MARKETS ARE BLURRING – DIGITAL EXPERIENCE SERVICES ARE BECOMING MORE IMPORTANT

A key driver for the rise of providers of digital experience services is that the old-fashioned classification into individual categories such as IT service provider, creative agency, management consultant or system integrator is increasingly unappealing in tenders from the customer's point of view. Companies that can act as full-service providers are becoming important strategic partners for client companies under pressure to implement the digital transformation. This has already been shown by several past Lünendonk® Surveys, such as the Business Innovation & Transformation Survey series from 2002-2017.

The Lünendonk® survey series The Market for Digital Experience Services in Germany also observes a high level of agreement every year among the companies surveyed regarding the relevance of a full-service portfolio as an important selection criterion in tenders. This current survey also confirms the increasing importance of end-to-end services and responsibility for implementation from a single source.



INTRODUCTION: THE MARKET SEGMENT DIGITAL EXPERIENCE SERVICES (DXS)

The Market for Digital Experience Services in Germany

A major consequence of these developments is that a clear demarcation of the markets for management consulting, IT consulting and digital agencies is becoming even more difficult, as the boundaries between the different services are becoming increasingly blurred. In relation to the implementation of digitisation strategies with customer-centric content, Lünendonk refers to the intersection of these three markets as “digital experience services”.

Thus, not only consulting and IT service providers, but also digital agencies with a historically high affinity to digital technologies in fields such as e-commerce, digital content or UX have begun to build up consulting and systems integration expertise to meet the demand for integrated digital solutions.

Lünendonk defines management and IT consultancies as well as 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 Services (DXS) providers.

SELECTED ACQUISITIONS IN THE DIGITAL EXPERIENCE SERVICES MARKET

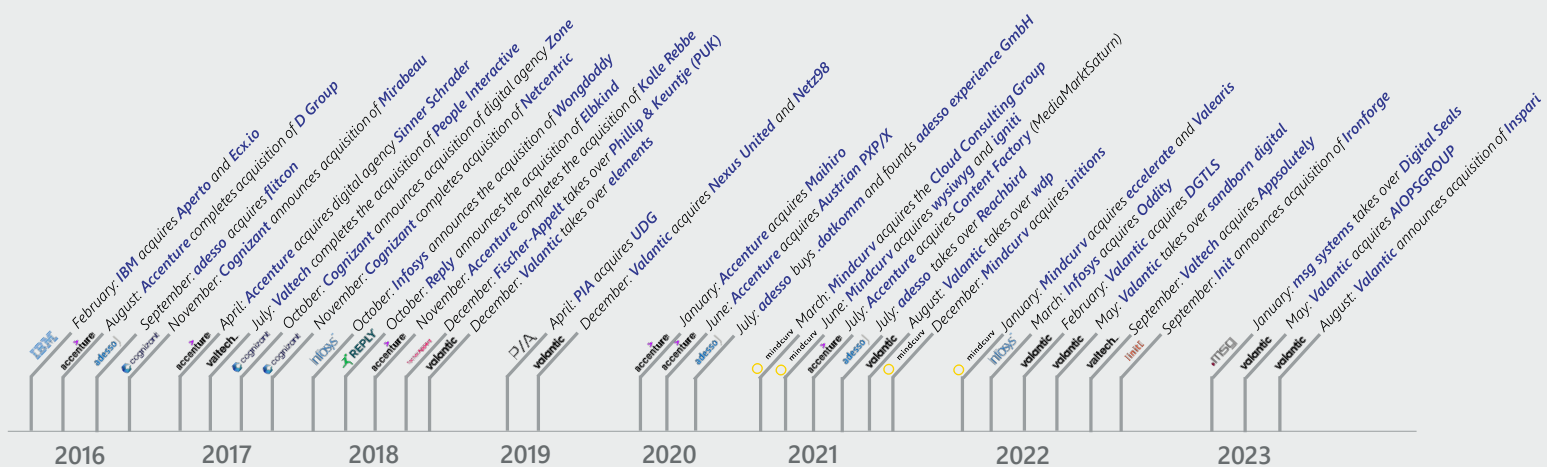


Fig. 3: Selected acquisitions in the DXS market

This development can be observed especially with regard to topics concerning the development of digital platforms for the implementation of customer-centric strategies (e-commerce, content, digital marketing or IoT) – also because more and more client companies are recognising that cross-functional planning and control is necessary for the implementation of their digital strategies and to increase user-centricity, and therefore that they need corresponding service partners who pursue an integrated approach. Long-term partnerships with digital experience service providers and the selection of preferred partners are consequently becoming increasingly important.



The Market for Digital Experience Services in Germany

DIGITAL TECHNOLOGIES AND DATA INSIGHTS ARE INCREASINGLY THE BASIS FOR CUSTOMER EXPERIENCE AND DIGITAL BUSINESS MODELS.

According to the evaluation of various Lünendonk® Surveys, a full-service portfolio in the area of digital experience services is composed of distinctive competences and a high ability to deliver, especially with regard to the following topics:

- Consulting (processes, technologies, customers)
- Innovation development
- Building a Human-Centric Organisation
- Design and creativity
- Software development (embedded systems)
- UX design and testing
- Data Analytics and Artificial Intelligence
- Ability to take responsibility for and manage complete projects
- Transformation strength (system integration, change management)

THE BOUNDARIES BETWEEN THE MARKETS OF MANAGEMENT CONSULTING, IT SERVICES AND DIGITAL AGENCIES ARE DISSOLVING IN THE DEVELOPMENT AND IMPLEMENTATION OF DIGITISATION STRATEGIES

DIGITAL EXPERIENCE SERVICES - AN INTERDISCIPLINARY SERVICE APPROACH

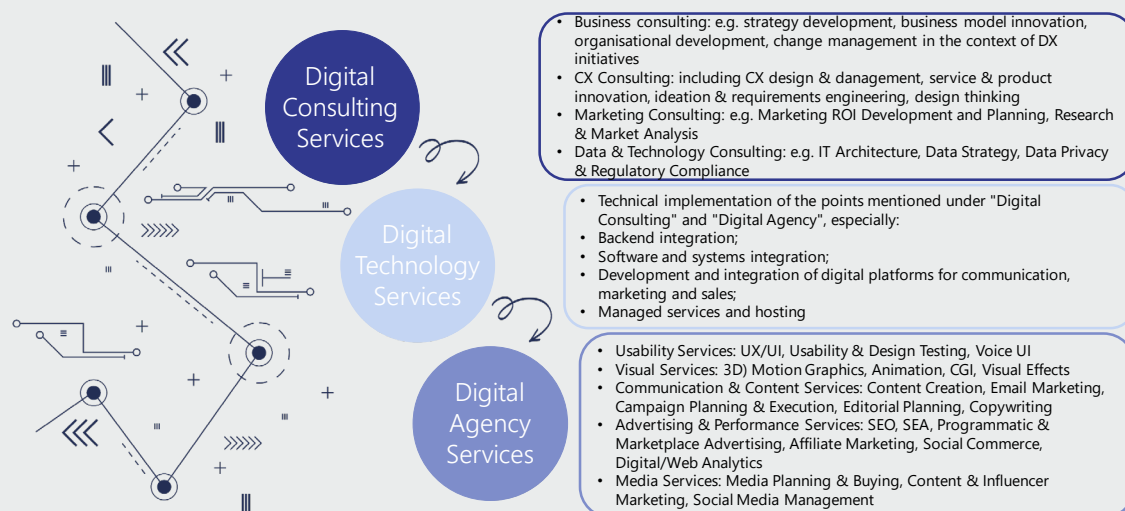


Fig. 4: Portfolio of DXS providers



Part I: Perspective of DXS service providers

List of participants

All companies that were admitted to the survey are listed below in alphabetical order. The basic prerequisites for participation were answering the questionnaire sent by Lünendonk and meeting the general participation criteria. Companies that submitted a questionnaire but could not meet the participation criteria are not listed.



LIST OF PARTICIPANTS

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LIST OF PARTICIPANTS LEADING PROVIDERS OF DIGITAL EXPERIENCE SERVICES IN GERMANY (1/2)

Company	Headquarter	Revenue 2022 in Germany in € million
]init[AG für digitale Kommunikation	Berlin	169.6
Accenture GmbH *) 1)	Kronberg	2,900.0
Adesso SE	Dortmund	729.0
Capgemini Deutschland GmbH *) 1)	Berlin	2,050.0
Cognizant Technology Solutions GmbH *)	Frankfurt am Main	400.0
Deloitte Deutschland GmbH Wirtschaftsprüfungsgesellschaft 2)	Munich	1,110.0
Deutsche Telekom MMS GmbH	Dresden	222.0
Digitas Pixelpark GmbH 3)	Hamburg	79.4
Diva-e Digital Value Experience GmbH	Munich	94.8
DotSource GmbH	Jena	34.4
Exxeta AG	Karlsruhe	110.7
Futurice GmbH	Berlin	17.8
IBM Deutschland GmbH *) 1)	Hamburg	1,850.0
Intive Group GmbH 4)	Munich	76.8
Merkle Germany GmbH	Frankfurt am Main	58.2
Mindcurv GmbH 5)	Essen	58.7
msg systems AG	Ismaning	902.6

LIST OF PARTICIPANTS

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LIST OF PARTICIPANTS LEADING PROVIDERS OF DIGITAL EXPERIENCE SERVICES IN GERMANY (2/2)

Company	Headquarter	Revenue 2022 in Germany in € million
Nexum AG	Cologne	27.6
Plan.Net Germany GmbH & Co. KG 3)	Munich	211.6
Port-neo Group GmbH	Stuttgart	14.5
PwC GmbH 2)	Frankfurt am Main	940.0
Randstad Digital Germany AG	Munich	101.5
Reply Deutschland SE	Gütersloh	370.0
Syzygy AG	Bad Homburg	54.6
Team neusta GmbH	Bremen	132.6
Valantic GmbH 5)	Munich	280.0
Valtech GmbH	Düsseldorf	108.5
Wipro Limited *)	Frankfurt am Main	535.0

Footnotes:

- *) Revenue figures and portfolio shares are estimated.
- 1) Revenue also include revenue from management consulting.
- 2) Advisory revenue only.
- 3) Revenue represents fee revenue.
- 4) Data refer to Intive GmbH and Intive automotive GmbH.
- 5) Incl. acquisitions.

Revenue structure

The leading providers of Digital Experience Services (DXS) have their roots in the management consulting, IT services and digital agency services markets. Their portfolios accordingly have different emphases. This section illustrates how the revenues are distributed among the three sub-segments Digital Consulting, Digital Agency Services and Digital Technology Services.

Overall, digital experience services account for an average of 78.8 per cent (2021: 74.7%) of the total revenue of all survey participants. The increase is foremost due to the fact that the management and IT consultancies included in this survey were able to further expand their revenues with digital experience services, which in turn reflects the high demand for digital experience services in recent years. However, it also shows that the service providers surveyed are successful with their portfolio orientation towards an end-to-end offering.

17 of the service providers evaluated in this survey can be considered so-called “native” DXS providers, as they generate a predominant part (more than 75%) of their revenue from digital experience services. For these 17 service providers, which have their roots almost entirely in the digital agency market, the digital experience revenue share is naturally higher, at an average of 98.1%. These providers are presented in a separate sub-ranking (see the section “Sub-ranking of companies with digital experience services as a core area”). By way of comparison, those service providers that come from the IT services market and therefore have a significantly broader range of services and topics achieved an average of 42.6 per cent of their revenues from DX services in 2022 – also a significant share.

DIGITAL TECHNOLOGY SERVICES LARGEST SERVICE ELEMENT – ALSO FOR DIGITAL AGENCIES

Since some of the leading DXS providers under consideration have historically come from the IT consulting segment and digital technologies are to an ever greater extent the basis for customer centricity and digital experience, technology services also represent the largest sub-segment with an average of 36.5 per cent (2021: 34.5%) of total revenue. The high relevance of technology as a central enabler of digital experience is now also reflected in the fact that for the group of “native” DXS providers, revenues from technology services now make up the largest area. On average, the digital agencies surveyed generate 43.7 per cent of their revenue from digital technology services. Examples of digital technology services include app and software development as well as the integration of digital platforms for marketing, sales or communication purposes – such as customer experience platforms.



REVENUE STRUCTURE

The Market for Digital Experience Services in Germany

Digital agencies achieved significantly lower revenues from digital agency services in 2022, at 28.4 per cent. It is thus very clear that software development and system integration services, but also managed services and hosting, are becoming increasingly important for traditional digital agencies or are requested by their clients and expected as a portfolio component. However, it is also becoming apparent that creative and design services are quite difficult to separate from IT implementation topics and are demanded as an end-to-end service. The business of digital agencies and IT consultancies are consequently moving closer together.

FIRSTLY, THE LOWER REVENUES FROM DIGITAL AGENCY SERVICES

Digital agency services account for an average of 21.1 per cent (2021: 20.9%) of the total revenue of all service providers surveyed. This includes topics such as the creation and design of digital customer touchpoints, the development of omnichannel strategies, marketing automation and content creation. Digital agency services are now the smallest segment. The service providers surveyed were able to significantly increase their revenues from digital consulting to 21.2 per cent (2021: 19.3%). This includes topics such as CX Consulting, Marketing Consulting or Data & Technology Consulting. In fact, the 2022 market survey showed that the client companies surveyed invest primarily where existing customer-related processes need to be readjusted and they have a high demand for external support. Thus, CX strategy includes CX design, ideation & requirements engineering or design thinking, whereas business consulting is about strategy consulting, organisational consulting and business model innovation. At the same time, Lünendonk has observed that digital agencies have strengthened their consulting expertise in recent years, in addition to IT services.

ANNUAL COMPARISON: TECHNOLOGY AND CONSULTING SERVICES HAVE GAINED IN IMPORTANCE, AGENCY SERVICES STAGNATE

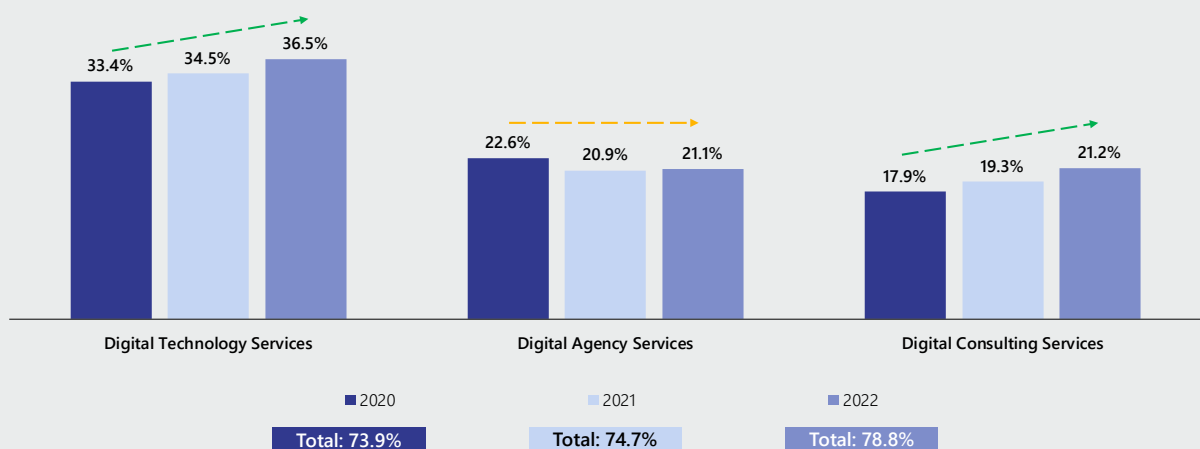


Fig. 5: Question: What percentage of your total sales in Germany did your company generate in each of the following three categories? All participants; n = 21 (2020); n = 23 (2021); n = 26 (2022)

HALF OF THE EMPLOYEES WORK FOR DIGITAL TECHNOLOGY SERVICES

The digital technology services sector not only accounts for the largest share of revenue, but also employs the most people. 47.6 per cent of the employees at the DXS service providers surveyed in 2022 can be assigned to Digital Technology Services. And this area is expected to grow further: the service providers surveyed plan to increase the number of employees by an average of 6 per cent in 2024.

The surveyed service providers employ an average of 28.9 per cent of their staff in what is now the second largest area, digital consulting services. The high potential in consulting is also reflected in the planned increases in staff numbers: the service providers want to increase their consulting units by an average of 4.7 per cent in 2024. Agency services will thus be the smallest area in the future, as the planned personnel increases are comparatively low at an average of 2.7 per cent. The current changes in the market become very clear when taking a closer look at the human resources plans: for the development of digital experience and customer centricity, classic agency services are still important, but differentiation is increasingly taking place through the quality of customer interaction and customer service and through the integrated digital brand experience along the entire customer journey. This is achieved, among other things, through a unified view of a customer relationship, the interlinking of marketing, sales and service as well as a modern, interface-open and flexible technology platform in the sense of a composable architecture. Examples include digital and cross-media campaigns, hyper-personalisation or the control of omni-channel experiences in e-commerce.

The trend of digital technologies becoming the enabler for marketing and sales strategies and influencing the user experience is also reflected in the 16 digital agencies surveyed, i.e. service providers with more than 75 per cent DXS revenue. On average, 46.5 per cent of their employees work in Digital Technology Services and only 27.8 per cent in Digital Agency Services. The digital agencies surveyed are planning the strongest increase in staffing in Digital Consulting Services (by an average of 11.4%) and in Digital Technology Services (by an average of 9.9%). Nevertheless, Digital Agency Services remain important: the number of employees is to be increased by an average of 8.8 per cent.



REVENUE STRUCTURE

The Market for Digital Experience Services in Germany

THE NUMBER OF EMPLOYEES IS EXPECTED TO INCREASE THE MOST IN THE TECHNOLOGY SECTOR

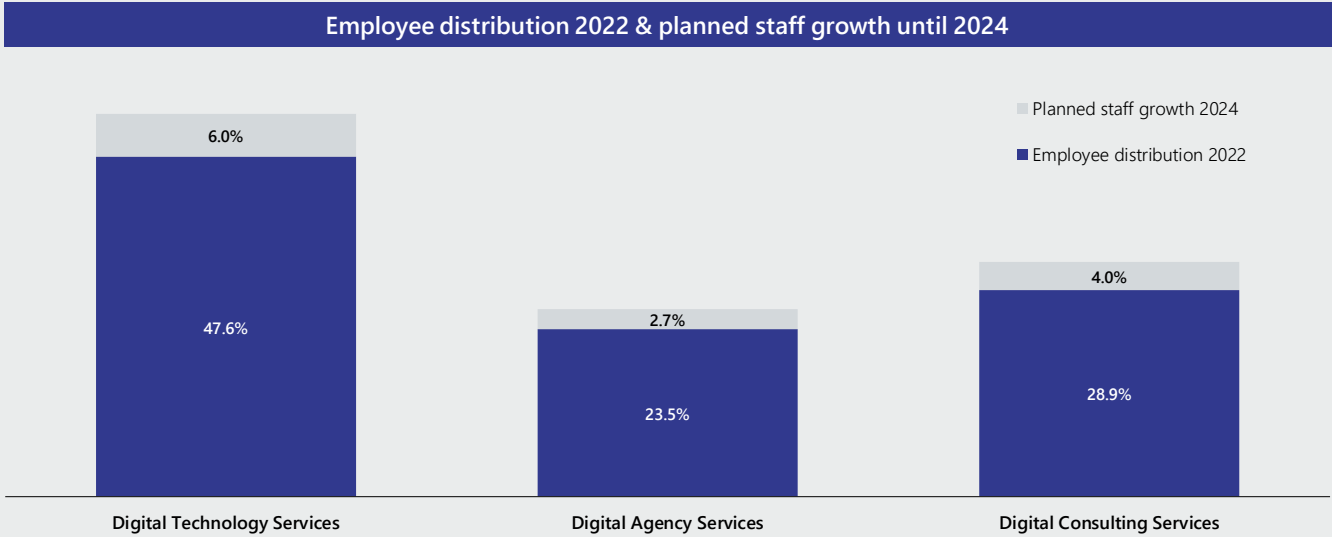


Fig. 6: Question 1: Employee distribution in 2022 among the three DXS areas; All participants; Average values; n = 26;
Question 2: By what percentage does your company plan to increase/decrease the number of employees in the following DX areas in Germany in 2024?
All participants; Average values; n = 23



Nearshore and Offshore Delivery

NEARSHORE AND OFFSHORE LOCATIONS AS A RESPONSE TO THE SKILLS SHORTAGE

An observation of the digital and IT market over the last few years shows that recruiting and project staffing are the biggest challenges for business development and that the difficulties in attracting new skilled workers have a slowing effect on the digital transformation. Due to the increasing demand for digital experience services – especially in areas such as UX design and software development – it is becoming more difficult to find sufficient skilled personnel to staff projects. The establishment of nearshore and offshore locations is therefore a high priority for service providers, on the one hand to cushion the shortage of skilled staff somewhat and, on the other hand, to be able to meet the rapidly increasing demand at all. This development is also reflected in the analysis of the DX service providers.

On average, 24.6 per cent of delivery resources in terms of total capacity were provided by digital experience service providers in nearshore and offshore regions in 2022. This is a significant increase compared to 2021, when only an average of 17.3 per cent of services was delivered outside Germany. The largest share is accounted for by nearshore regions (13.8%) and is to be further expanded to an average of 18.4 per cent in the future. Offshore delivery, on the other hand, is somewhat less common with an average share of 10.8 per cent of the DX services provided and is only expected to increase marginally in 2023.

NEAR- AND OFFSHORE CAPACITIES ARE BEING EXPANDED IN THE DX AREA

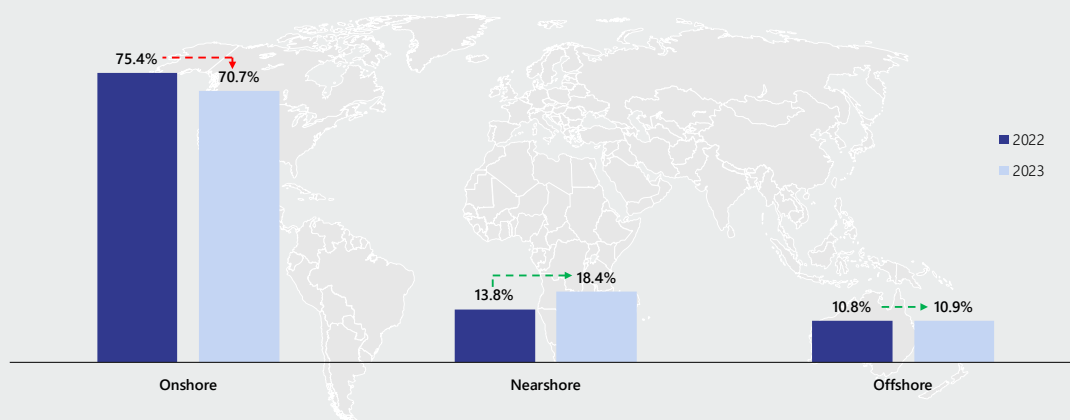


Fig. 7: Question: What is the average nearshore and offshore share in digital experience projects for customers located in Germany? All participants; Average values; n = 18

Key competitors in the DXS market

As in previous years, a few service providers dominate the market segment for digital experience services. However, a number of other service providers are catching up quickly – both in terms of revenue development and in terms of visibility and perception on the market. This insight is provided by the Lünendonk® List in the following section. But before the service providers are classified according to their revenue, market strength and portfolio breadth, the competitive environment will be examined. While the Lünendonk® Lists traditionally provide information about the leading service providers in Germany in terms of revenue, the answers to the question about the service providers most frequently named as competitors allow interesting conclusions to be drawn about the relevance, market strength and presence of some service providers from the perspective of their competitors.

Therefore, within the scope of the survey, the service providers were asked to name the four service providers that they as a company perceive as the biggest competitors in the Digital Experience Services segment, irrespective of number-based factors. It is interesting to compare whether those service providers that occupy the top ranks in the Lünendonk® List are also those that are actually often perceived as competitors in the market.

The analysis of the competitors perceived as strongest shows that consulting and IT service providers have developed into important providers of digital experience services in recent years and define and dominate this market alongside the classic full-service digital agencies.

As in the previous two years, Accenture was named most frequently as one of the four most important competitors with 69 per cent. Deloitte was named second-most often, with 6 percentage points more than in the previous year. Serviceplan and its digital consultancy Plan.Net Group follow with a significant jump in the frequency of competitor mentions to 38 per cent, displacing Reply and Capgemini. In the previous year, Serviceplan and the Plan.Net Group were named by 22 per cent.

While Reply is seen as one of their top four competitors by 35 per cent of service providers surveyed this year (2022: 30%), slightly fewer of the service providers surveyed now named Capgemini as one of their top four competitors, at 31 per cent (2022: 37%).



KEY COMPETITORS IN THE DXS MARKET

The Market for Digital Experience Services in Germany

THE COMPETITIVE FIELD IN THE AREA OF DIGITAL EXPERIENCE SERVICES IS GAINING IN DYNAMICS

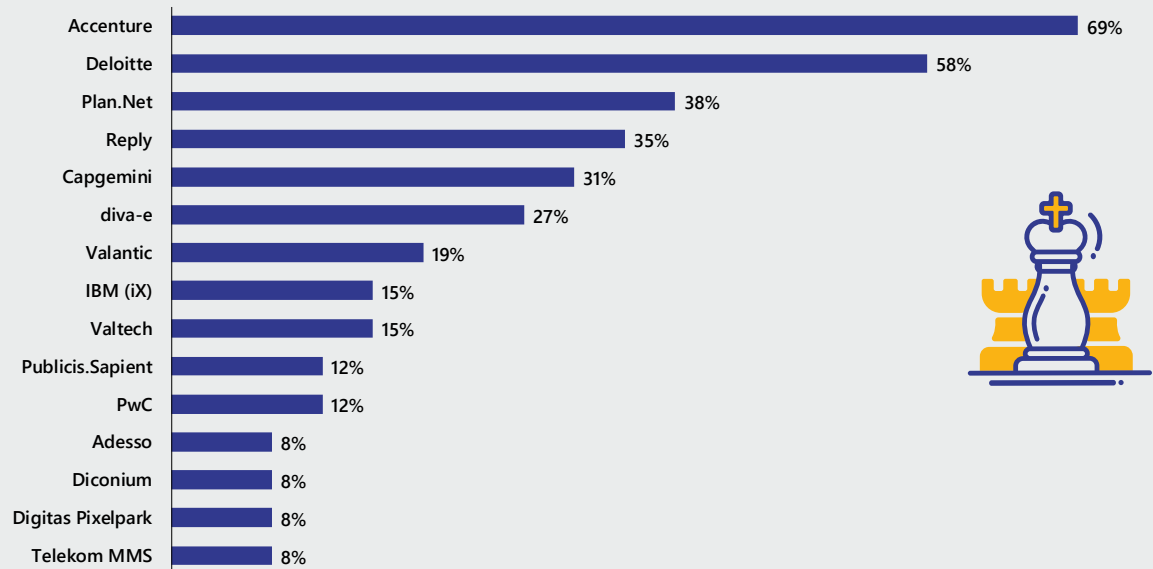


Fig. 8: Question: Which companies are your four most important competitors as a full-service provider of digital experience services? All participants; Average values; n = 26

Also gaining in relevance from the perspective of their competitors were digital agency Diva-e with 27 per cent of mentions (2022:22%), Valantic with 19 per cent (2022: 11%) and Valtech, which now received 15 per cent of mentions as one of the top four competitors, up from 7 per cent in 2022.

Lünendonk® List 2023

"Leading providers for Digital Experience Services in Germany"

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 development of the market as a result 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 (including amongst others msg systems and Cognizant Technology Solutions). At the same time, however, companies that have lost relevance in the DXS segment compared to the previous year are no longer included in the ranking.

The Lünendonk® List of the leading providers of digital experience services has been published since 2020 in response to:

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

A ranking by DXS segment revenues was not made by Lünendonk, as the exact segment revenues, especially of 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 differentiating them from other services. A precise presentation of revenues with digital experience services and comparability would therefore not be given. Instead, in the course of the Survey a sub-ranking is carried out of the service providers that generate at least 75 per cent of their revenues from digital experience services and therefore operate almost exclusively in this segment.

In this year's ranking, there has been some movement due to some entries and exits. It is therefore important to note that some service providers have a lower ranking than in the previous year not because of their revenue development, but because there are new entrants in the ranking that have shifted the ranking.



The Market for Digital Experience Services in Germany

LÜNENDONK® LIST 2023: LEADING PROVIDERS OF DIGITAL EXPERIENCE SERVICES IN GERMANY (1/2)

Rank (Change compared to previous year)	Company	Revenue 2022 in Germany in € million	Digital Experience Service Portfolio – Share of revenues in...		
			Digital Consulting	Digital Agency	Digital Technology
1	● Accenture GmbH, Kronberg *) 1)	2,900.0	●●	●●	●●●
2	● Capgemini Deutschland GmbH, Berlin *) 1)	2,050.0	●●	●	●●●
3	● IBM Deutschland GmbH, Ehningen *) 1)	1,850.0	●●	●●	●●●
4	▲ Deloitte GmbH, Munich (only advisory revenue) 2)	1,110.0	●●	●	●●●
5	● PwC GmbH, Frankfurt am Main (only advisory revenue) 2)	940.0	●●●	●	●●
6	new msg systems AG, Ismaning	902.6	●●	●●	●●●
7	● Adesso SE, Dortmund	729.0	●●	●●	●●●
8	● Wipro Limited, Frankfurt am Main *)	535.0	●●	●	●●●
9	new Cognizant Technology Solutions GmbH, Frankfurt am Main *)	400.0	●	●	●●●
10	▲ Reply Deutschland SE, Gütersloh	370.0	●●	●●	●●●
11	▲ Valantic GmbH, Munich 3)	280.0	●●	●	●●●
12	▲ Deutsche Telekom MMS GmbH, Dresden	222.0	●●	●●	●●●
13	● Plan.Net Germany GmbH & Co. KG, Munich 4)	211.6	●●	●●●	●●
14	● Diconium GmbH, Stuttgart	193.0	●●	●	●●●
15	▲]init[AG für digitale Kommunikation, Berlin	169.6	●●●	●●	●●●
16	● Team neusta GmbH, Bremen	132.6	●●	●●	●●●

The Market for Digital Experience Services in Germany

LÜNENDONK® LIST 2023: LEADING PROVIDERS OF DIGITAL EXPERIENCE SERVICES IN GERMANY (2/2)

Rank (Change compared to previous year)	Company	Revenue 2022 in Germany in € million	Digital Experience Service Portfolio – Share of revenues in...		
			Digital Consulting	Digital Agency	Digital Technology
17	● Valtech GmbH, Düsseldorf	108.5	●●	●●	●●●
18	● Exxeta AG, Karlsruhe	104.3	●●	●	●●●
19	↗ Randstad Digital Germany AG, Munich	101.5	●●	●	●●●
20	↗ Diva-e Digital Value Excellence GmbH, Munich	94.8	●●	●●	●●●
21	↗ Digitas Pixelpark GmbH, Hamburg 4)	79.4	●●	●●●	●●●
22	● Intive Group GmbH, Munich 5)	76.8	●●	●●	●●●
23	↗ Mindcurv GmbH, Essen 3)	58.7	●●	●	●●●
24	new Merkle Germany GmbH, Frankfurt am Main 4)	58.2	●●●	●	●●●
25	↗ Syzygy AG, Bad Homburg	54.6	●●	●●	●●

Criteria for inclusion in the Lünendonk® List:

Only companies that generate at least 60 per cent of their revenue from services (e.g. management and IT consulting, digital agency services) are included. Significant revenue must be generated in each of three segments: Digital Consulting Services, Digital Agency Services and Digital Technology Services. 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) Advisory revenue only.
- 3) Incl. acquisitions.
- 4) Revenue represents fee revenue.
- 5) 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

ACCENTURE CONTINUES TO LEAD

A quite exciting observation, which was already addressed in the previous section, is the comparison between the perception of the competitive environment and the ranking based on domestic turnover. This year, Accenture again leads the field in the Lünendonk® List with an estimated revenue of 2.9 billion euros in Germany. In addition to Accenture, three other companies achieved total revenue of over 1 billion euros in 2022.

Accenture Song is Accenture's digital unit. Accenture Song combines, amongst others, the acquired digital agencies Kolle Rebbe, SinnerSchrader and Mackevision. Overall, 2023 has been a successful year for Accenture Song. The company was able to successfully contest a major pitch for the management of BMW Mini's global communication channels. Furthermore, Accenture Song supported the car manufacturer smart Europe in the market launch of its e-brands and in the development and operationalisation of a direct-to-consumer business model.



The Market for Digital Experience Services in Germany

RANKS 2 AND 3 REMAIN UNCHANGED

With an estimated total German revenue of 2.05 billion euros, Capgemini is just ahead of IBM Germany with a revenue estimated by Lünendonk at 1.85 billion euros. As with Capgemini, IBM Germany's revenue figures include the proportionate revenues earned from management consulting. Both companies have their own digital agencies.

Capgemini Invent, a consulting unit founded in 2018, is of great importance for digital experience services at Capgemini. It supports and advises companies regarding digital innovation, digital experience, design and transformation. Around 10,000 employees work in 40 creative studios and more than 60 locations worldwide, assembling diverse disciplines. Part of Capgemini Invent are Cambridge Consultants and the agencies frog, Purpose and Synapse. The acquired agencies agencies Idean, Fahrenheit 212 and June21 were merged into frog at the end of 2021. But the high IT implementation strength of the entire Capgemini Group, especially in the area of software development and system integration, is also a core of the DXS portfolio.

With IBM iX, IBM has a leading digital agency in Germany combining consultancy, digital agency, design studio and tech company. The digital agencies Aperto and Exx.io, which were acquired a few years ago, run under the name IBM iX. About 1,200 people work for IBM iX in Germany, Austria and Switzerland. Worldwide, the digital agency is represented in over 50 locations.

BIG FOUR IN 4TH AND 5TH PLACE

Deloitte and PwC, two auditing and tax consulting firms that are also among the world's largest consulting firms and digital agencies, follow in fourth and fifth place. In 2022, Deloitte generated 29.5 billion euros worldwide with management consulting, PwC 19.7 billion euros. As the highly regarded Ad-Age ranking shows, Deloitte is one of the leading international digital agencies with a revenue of around 10 billion US dollars (as is Accenture Song with 16 billion US dollars and IBM iX with 6.8 billion US dollars) and has a strong presence in the German market.

To achieve 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 its own brand for digital business, as does PwC with PwC Digital Services. Like Deloitte, PwC has also acquired several digital and innovation businesses in the most recent years. Deloitte's advisory revenue in Germany amounts to 1.11 billion euros, PwC follows with 940 million euros.



The Market for Digital Experience Services in Germany

NEWCOMER IN 6TH PLACE

New to the Lünendonk® List of leading providers of digital experience services is msg systems, which achieved total revenue of 902.6 million euros in Germany in 2022. msg systems is represented worldwide with over 10,000 employees in 32 countries. The company's range of services traditionally includes business and IT consulting as well as the development of standard software and individual solutions for a variety of industries. In recent years, the company has expanded its Digital Services division and invested primarily in topics such as customer centricity, experience management and digital customer interfaces and marketplaces.

RANKS 7 TO 10: ADESSO AND WIPRO MAINTAIN THEIR POSITIONS, COGNIZANT IS NEW IN THE RANKING

Adesso takes 7th place. Adesso announced a 33 per cent increase in revenue for 2022 and is continuing its international expansion by opening a "SmartShore Delivery Centre" in India. Among other things, this is intended to strengthen the global delivery capability and expand the attractiveness as an international digitisation partner.

As in the previous year, Adesso is followed by the Indian IT service provider Wipro, which holds a leading international position in the market for digital experience services under its own brand, Wipro Digital. This also includes the acquired digital agencies Designit and Rational Interaction.

Apart from msg systems, Cognizant is also a newcomer to the survey and comes in at 9th place. In the Digital Experience segment, the company is active, for example, in a virtual workplace to optimise employee experiences, but content and marketing services as well as omnichannel commerce are also part of its product portfolio. In the past, Cognizant has acquired a number of digital agencies, including Zone, Mirabeau and Netcentric.

Reply follows in 10th place, having increased its revenue in Germany by 24 per cent in 2022. In the digital agency ranking published by the German Association for the Digital Economy (Bundesverband der Digitalwirtschaft, BVDW), Reply finds itself in second place in terms of revenue from digital experience services, making it one of the leading internet agencies in Germany. Reply manages several agencies under the Digital Experience segment, including Like Reply and Triplesense Reply, which ensures the provision of a broad range of services.

RANKS 11 TO 20: CONSTANCY DOMINATES THE MIDFIELD

Valantic is ranked 11th in this year's list of leading mid-size IT consulting and systems integration companies. With a 53 per cent increase in revenue generated by both organic and inorganic growth, the company is one of the fastest growing companies in the DXS



The Market for Digital Experience Services in Germany

ranking. In August 2023, the Munich-based company announced the acquisition of the Danish digital agency Inspari with more than 180 employees and is expanding its expertise in artificial intelligence and data engineering in particular through the Microsoft data and AI specialist. Previously, Valantic had already strengthened its positioning in the Salesforce and retail market by acquiring the AIOPSGROUP.

As part of a strategic realignment, T-Systems Multimedia Solutions is moving to Deutsche Telekom this year, which is why T-Systems MMS is now listed as Deutsche Telekom MMS in the Lünendonk ranking. The company's strategic focus on driving digitisation in Germany remains, and Telekom MMS can therefore occupy 12th place this year.

With an increase in revenue of around 40 per cent, the Serviceplan subsidiary the Plan.Net Group ranked 13th, as in the previous year. In total, the company generated 211.6 million euros in Germany in 2022. In addition, the Plan.Net Group takes over the top position in the digital agency ranking published by the German Association for the Digital Economy this year. The rapid growth is due to the considerable expansion of the business in the fields of digital transformation, consulting and technology, driven not least by the by 'The Marcom Engine', the agency model tailored to the BMW Group.

init grew by more than 11 per cent last year, but the company dropped three places in the ranking, from 12th to 15th. The digital agency's focus is primarily on business with public authorities and public administrations. Polidia, Agendo and Ironforge, which has been acquired in September 2022, are specialised subsidiaries of the agency.

Team neusta was able to increase its revenue by almost 18 per cent last year – including through acquisitions. Through its participation in the full-service agency Inscript and the agency Octagen, the company expanded its competences in Web-based developments and supplemented its portfolio with the area of e-commerce. Team neusta, which employs over 1,600 people in Germany and Switzerland, is ranked 16th again this year.

Team neusta is followed by the digital agency Valtech in 17th place with an increase in revenue of around 9 per cent. Valtech has greatly expanded its presence in the automotive sector in the previous years and only recently, in July 2023, expanded into India with Valtech Mobility. Valtech Mobility is a joint venture set up in 2018 by the digital agency and VW Group to jointly develop digital products (apps, embedded systems) in the field of vehicle development. Furthermore, Valtech also works in the area of customer experience for other automotive OEMs such as Mercedes. In addition to the automotive sector, Valtech works for many well-known B2C and B2B companies, developing and implementing technology-based experiences.



Rounding out the midfield is the newly formed Randstad Digital in 19th place. In Randstad Digital, the Randstad Holding combines the two companies Ausy Technologies and Randstad Technologies into a new global technology company. With the rebranding, the company is expanding its international reach. The portfolio focuses such as customer experience, cloud computing and data & analytics remain.

DYNAMIC FIELD OF PURSUERS

Last year's two newcomers Intive and Mindcurv in 22nd and 23rd place were able to maintain their positions in this year's ranking or even improve them by one place. Merkle, this year's newcomer to the Lünendonk® List in 24th place, is part of the dentsu group and combines the six brands Merkle, Carat, dentsu X, iProspect, Isobar and dentsumcgarrybowen. The company's main focus is on customer experience transformation. Therefore, the 1,800 employees predominantly operate in digital transformation consulting and customer experience management. The ranking is completed by the Syzygy Group in 25th place, despite a growth in revenue of around 14 per cent in Germany.

FischerAppelt is no longer included in the ranking as the company no longer meets the criteria.



Lünendonk® Portfolio 2023 "Leading providers for Digital Experience Services in Germany"

In addition to the Lünendonk® List, the Lünendonk® Portfolio offers 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 (see Figure 10).

Figure 9 shows the criteria Lünendonk 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. 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 recognise at all as providers of digital experience services (according to the criteria in Figure 9).

METHODOLOGY OF THE LÜNENDONK® PORTFOLIO

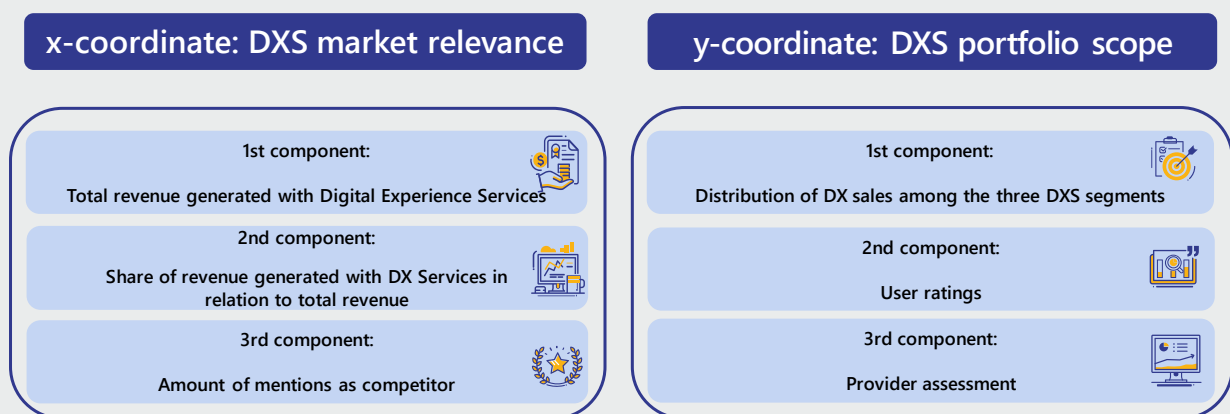


Fig. 9: Methodology of the Lünendonk Portfolio

The Market for Digital Experience Services in Germany

LÜNENDONK® PORTFOLIO 2023

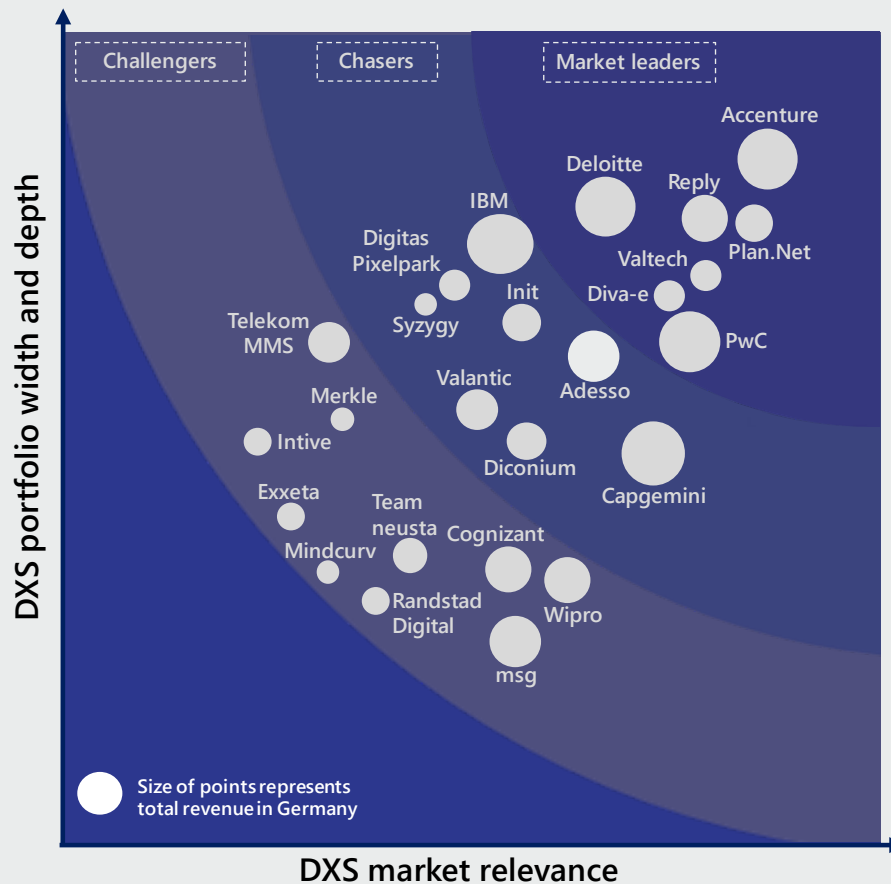


Fig. 10: Lünendonk® Portfolio 2023 "Leading providers of Digital Experience Services in Germany"

To understand the rankings, it should be noted that all the service providers listed in the Lünendonk® Portfolio have a broad range of digital experience services. They are therefore generally capable of fulfilling certain tasks related to customer centricity, experience, digital marketing or digital platforms.

However, they differ in their thematic depth and coverage of digital experience services as well as in their ability to implement projects end-to-end. Some service providers cover the entire value chain of customer-centric topics (sales, marketing, product development, after sales, logistics), while others are full-service providers in individual fields (e.g. digital marketing, e-commerce platforms) or industries (public, retail, automotive). Other service providers, on the other hand, offer a comprehensive DXS portfolio but, compared to others, do



The Market for Digital Experience Services in Germany

not yet have the necessary depth in their range of services, while some still show potential in terms of market strength.

THE MARKET LEADERS

As the leading company in the Lünendonk® List, in the competition nominations and in the client evaluations, Accenture continues to hold the leading position in the Lünendonk® Portfolio. With the acquisitions of Kolle Rebbe, SinnerSchrader, PXP/X, D-Group or the US creative agency Droga5, Accenture has tremendously expanded its portfolio in digital experience services and integrated the individual acquisitions into its Accenture Song division. Both internationally according to the Ad Age ranking and according to Lünendonk estimates in Germany, Accenture Song is the largest digital agency with revenue growth in line with the market. However, the market developments of the last few years also show that some service providers are getting closer to Accenture and the lead is getting smaller.

The three digital agencies Reply, the Plan.Net Group, Diva-e and Valtech have gained market strength, mainly due to high revenue growth, a further expansion of the DXS portfolio and positive customer ratings. The Plan.Net Group in particular has grown enormously with an increase in revenue of around 47 per cent. But Diva-e and Valtech were also able to grow by around 10 per cent in 2022, while Reply was able to increase its turnover in the DXS segment by around 19 per cent (see BVDW ranking 2023). However, Diva-e in particular made a significant leap, in part because the company has greatly expanded an extremely comprehensive DXS portfolio and, above all, its commerce and technology expertise, and therefore was able to win a whole series of new customers with companies such as ZF Friedrichshafen.

In relation to the development of this group of three, Deloitte and PwC have lost some of their market relevance, but remain among the market leaders. Both consultancies have very strong competencies in the areas of digital consulting and digital technology services and are among the largest digital agencies worldwide.

THE FOLLOWERS

IBM is positioned with a lower market relevance compared to the DXS providers just mentioned, appearing in the DXS market with the brand IBM iX. Two service providers with their roots in the digital agency market, Syzygy and Digitas Pixelpark, have moved much closer to the DXS market leaders. Like Digitas Pixelpark, the Syzygy Group is one of those service providers that offer digital experience services exclusively as a core service and also have a high level of expertise in the fields of strategy consulting, brand experience and digital experience. In addition to the core brand Syzygy, which among other things is the digital lead agency of Lufthansa, the Syzygy Group also includes the enterprise technology specialist Syzygy Techsolutions, the performance marketing and media specialist Syzygy



The Market for Digital Experience Services in Germany

Performance, the VR specialist Syzygy Xrealities, the strategy and business design consultancy different and the design studio Ars Thanea. Syzygy is also the digital lead agency for the Miles&More bonus platform, as well as for BSH household appliances. Digitas Pixelpark is also a very broadly positioned provider of digital experiences and has won a whole series of digital budgets in recent years – at the end of 2022, for example, the company became Ferrero's global digital lead agency for the Raffaello and Rocher brands.

Valantic has made the leap from challenger to follower this year. One of the main reasons for this is the investment in the expansion of the DXS portfolio, both through acquisitions and through targeted recruiting, which has now grown to over 1,000 consultants. Valantic has invested particularly in the area of digital commerce and combines this new expertise with its traditional strength in supply chain management. In addition, the company now has a high level of expertise in the area of data & analytics as well as in business and management consulting – among other things through the acquisitions of the digital strategy consultancy mm1 and the "data & analytics" consultancy Sieger Consulting. Valantic is also one of the leading IT service providers in Germany in the field of software development.

THE CHALLENGERS

Deutsche Telekom MMS and Wipro have a comparably low market relevance among the leading providers in Germany for DXS – and they are therefore classified by Lünendonk as challengers, even though both companies were able to improve compared to 2022. The three new companies in this Lünendonk® Survey, Cognizant, Merkle and msg systems, still have relatively low market strength compared to most of the other service providers and potential in expanding their DXS portfolio.

Randstad Digital is a new brand in the portfolio, but as a re-branding of Ausy Technologies it is not a new company. In summer 2023, the Randstad Group merged its subsidiaries Ausy and Randstad Technologies and renamed them Randstad Digital. The company is a leader in the German market, particularly in the area of custom software development, and is continuously expanding its expertise in the fields of data & analytics and digital experience services.



Sub-ranking of companies 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 view their core business as digital experience services, Lünendonk also examined which service providers earn at least 75 per cent of their revenues from digital experience services in a sub-ranking this year.

These 17 service providers were included in the following sub-ranking – also measured by their total revenue in Germany. This ranking is not intended to make a value judgement on which service providers are more or less suitable for customer-centric projects. Rather, it is intended to show which DXS providers have focused 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 per cent of their revenues from DXS services.

First place in this sub-ranking is held by Deutsche Telekom MMS. Plan.Net Group, Diconium and init, which come in the following places, also generated very high shares of sales from DXS services.

Newly entrants to the sub-ranking are Exxeta, Merkle, DotSource, Nexum and Port-neo.



SUB-RANKING OF COMPANIES WITH DIGITAL EXPERIENCE SERVICES AS CORE BUSINESS FIELD

The Market for Digital Experience Services in Germany

LÜNENDONK® SUB-RANKING 2023: NATIVE DXS PROVIDERS IN GERMANY

Rank	Company, Headquarter	Total revenue 2022 in Germany in € million
1	Deutsche Telekom MMS GmbH, Dresden	222.0
2	Plan.Net Germany GmbH & Co. KG, Munich 1)	211.6
3	Diconium GmbH, Stuttgart	193.0
4	]init[AG für digitale Kommunikation, Berlin	169.6
5	Team neusta GmbH, Bremen	132.6
6	Valtech GmbH, Düsseldorf	108.5
7	Exxeta AG, Karlsruhe	104.3
8	Diva-e Digital Value Excellence GmbH, Munich	94.8
9	Digitas Pixelpark GmbH, Hamburg 1)	79.4
10	Intive Group GmbH, Munich 2)	76.8
11	Mindcurv GmbH, Essen 3)	58.7
12	Merkle Germany GmbH, Frankfurt am Main 1)	58.2
13	Syzygy AG, Bad Homburg	54.6
14	DotSource GmbH, Jena	34.4
15	Nexum AG, Cologne	27.6
16	Futurice GmbH, Berlin	17.8
17	Port-neo Group GmbH, Stuttgart	14.5

The Market for Digital Experience Services in Germany

Criteria for participation:

Companies that generate at least 75 percent of their revenue with digital experience services and a significant share of revenue in all three DX segments are included in the sub-ranking.

Footnotes:

- *) Revenue figures and portfolio shares are estimated.
- 1) Revenue represents fee revenue.
- 2) Data refer to Intive GmbH and Intive automotive GmbH.
- 3) Incl. acquisitions.



Revenue development and forecasts

Advancing digitisation and ongoing transformation pressures are leading more and more companies to address the digitisation of their business models. The expansion of competitive advantages, triggered by changing customer requirements, is also contributing to rising spending on digital and IT projects and driving demand for external service providers.

However, rising fees also influence the development of revenue. Especially against the backdrop of the continuing shortage of skilled workers and inflation, companies see themselves forced to increase their prices.

In fact, the entire consulting and IT services market benefited from higher demand and rising fees, and the digital agency market also developed very positively in 2022. For example, the management consulting market surveyed annually by Lünendonk grew by an average of 18.5 per cent, while IT consultancies came in at a median growth of 14.7 per cent. The German Association for the Digital Economy BVDW also assessed two-digit growth rates of digital agencies in some cases.

Specifically, Lünendonk believes that the following developments had a positive impact on the growth of digital experience services in 2022, in addition to general inflation-related price increases:

- At many companies, catching-up effects occurred in process digitisation as a result of projects that had been postponed from 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.
- To increase employer attractiveness and as part of employer branding, companies are focusing on user experience and user orientation in software development in the fight against the shortage of skilled workers.
- The need for digital and IT professionals due to the catch-up effects that have now arisen in the digital transformation is higher than ever before. Since very many of the required skills are not available in the companies, there is an increasing reliance on managed service providers. This is also reflected in the growth in revenue of IT service companies.

The providers of digital experience services analysed in this survey could increase their revenues by 18.3 per cent on average in 2022. This continues the growth trend, as the segment recorded a somewhat small increase in revenue of only 15.6 per cent in the previous



The Market for Digital Experience Services in Germany

year. Interestingly, however, those service providers that generate more than 75 per cent of their revenues from digital experience services grew significantly more strongly and were able to increase by an average of 20 per cent. This development could already be observed in the previous year and is a clear confirmation of strongly increased investments by companies in areas such as e-commerce and digital marketing and the digital transformation as a whole.

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

Despite continuing economic uncertainties due to recession and inflation, the companies surveyed share a positive view of the future. This is expressed in the optimistic forecasts made on the occasion of the current catch-up effects in the digital transformation and the increasing focus on customer centricity in product and software development. The fact that the digital and IT market can generate growth even in challenging times was already evident during the coronavirus pandemic, when DXS providers recorded a 7 per cent increase in revenue.

While the service providers surveyed recorded average revenue growth of 20.5 per cent with DXS themes in 2022, they expect slower growth of 12.5 per cent for 2023 due to the economic situation. For 2024 they are more optimistic and expect an average growth of 14.7 per cent.

REVENUES FROM DIGITAL EXPERIENCE SERVICES ARE PREDICTED TO GROW STRONGLY WITHIN THE NEXT FEW YEARS

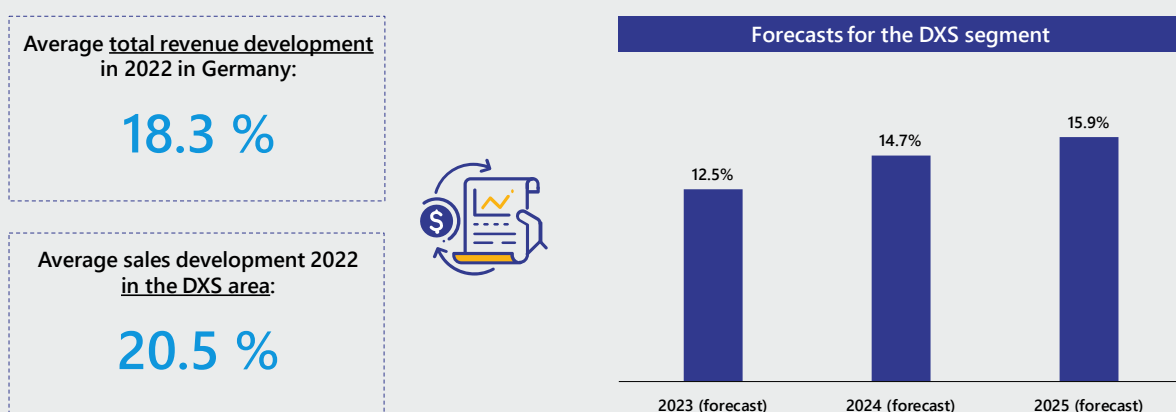


Fig. 11: Question 1: What was your total revenue in Germany in 2021 and 2022? All participants; Average value; n = 26;
Question 2: How did your company's revenue in the "Digital Experience Services" segment in Germany develop from 2021 to 2022? All participants; Average value; n = 23;
Question 3: How do you expect the revenue of your company in the segment "Digital Experience Services" to develop in Germany? All participants; Average values n = 21

The Market for Digital Experience Services in Germany

AREAS IN DEMAND IN 2023

A look at the current financial year 2023 shows that the surveyed service providers have particularly strong demand in some areas. The biggest consistency in terms of demand (100%) is found in the development and implementation of platforms and applications. Here, 89 per cent of service providers already observed a high demand on the part of customers in the previous year. Another clear consensus was found with regard to the demand for data and technology consulting. Thus, 88 per cent of the survey participants report a very high to high relevance for their company. Other important demand topics in the current year 2023, according to the respondents, are CX Consulting with 85 per cent and Business Consulting with 81 per cent agreement. However, both consulting services were more in demand in the previous year.

STRONG DEMAND FOR TECHNOLOGY AND CONSULTING SERVICES

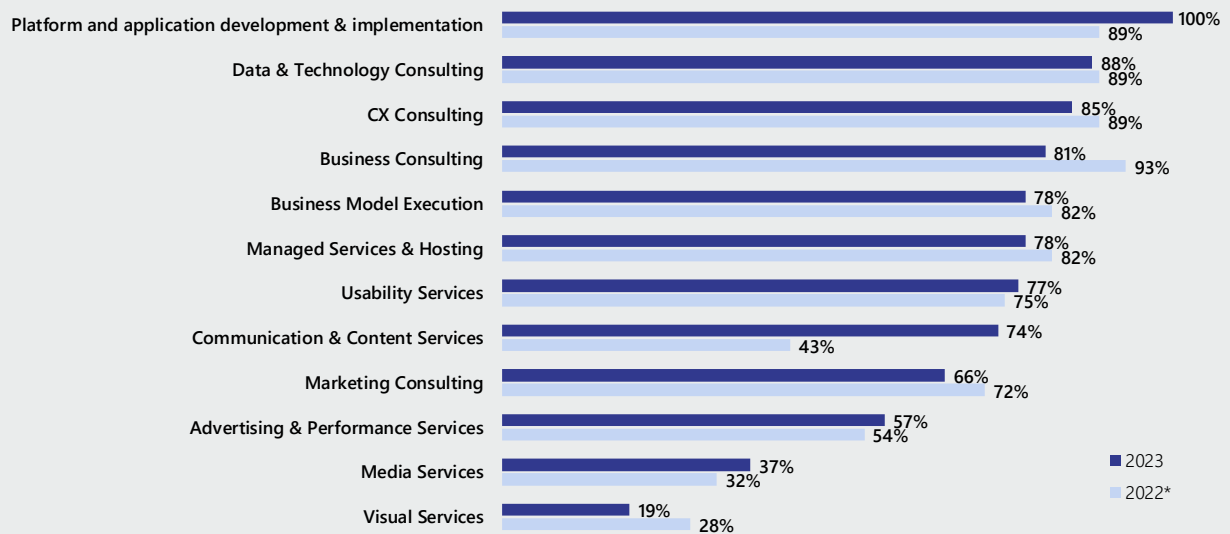


Fig. 12: Question: Which topics influence the demand for your services? Scale from 1 = "no relevance" to 4 = "very high relevance"; Values relate to "high relevance" and "very high relevance"; All participants; n = 26; *) Data from previous year's survey

The operation of Web portals and platforms has lost some relevance. Only 78 per cent of respondents still consider managed services and hosting to be relevant for their company, compared to 82 per cent in the previous year. The same result can be seen in the topic of business model execution; a slight decline is also noticeable here. The demand for usability services, which focus on user orientation, continues to be perceived as stable by the providers, with a loss of 2 percentage points to 75 per cent. The survey participants also hardly felt any noticeable changes in the Marketing Consulting segment with 66 per cent and in Advertising & Performance Services with 57 per cent.

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Media services and visual services continue to be niche topics among the survey participants – but this is mainly due to the fact that these topics are special disciplines that are only offered by some of the service providers surveyed, usually those with a digital agency background. Interestingly, however, the share of revenue from visual services in 2023 is in strong decline compared to 2022. By contrast, communication & content services are gaining significantly in importance, which is a direct consequence of a strong increase in digital marketing and sales campaigns as well as digital commerce. While only 43 per cent considered this area relevant in the previous year, 74 per cent now see the future of marketing in communication & content services.

Finally, with regard to the distinction between IT and DXS natives, the demand on the part of individual subject areas is particularly striking. For example, clients predominantly request pure consulting services from IT natives. The same can be observed for the design and introduction of new digital business models. Interestingly, services that were previously not in high demand, such as visual or advertising & performance services, are also increasingly in demand among IT natives.

GROUP COMPARISON OF DEMAND TOPICS

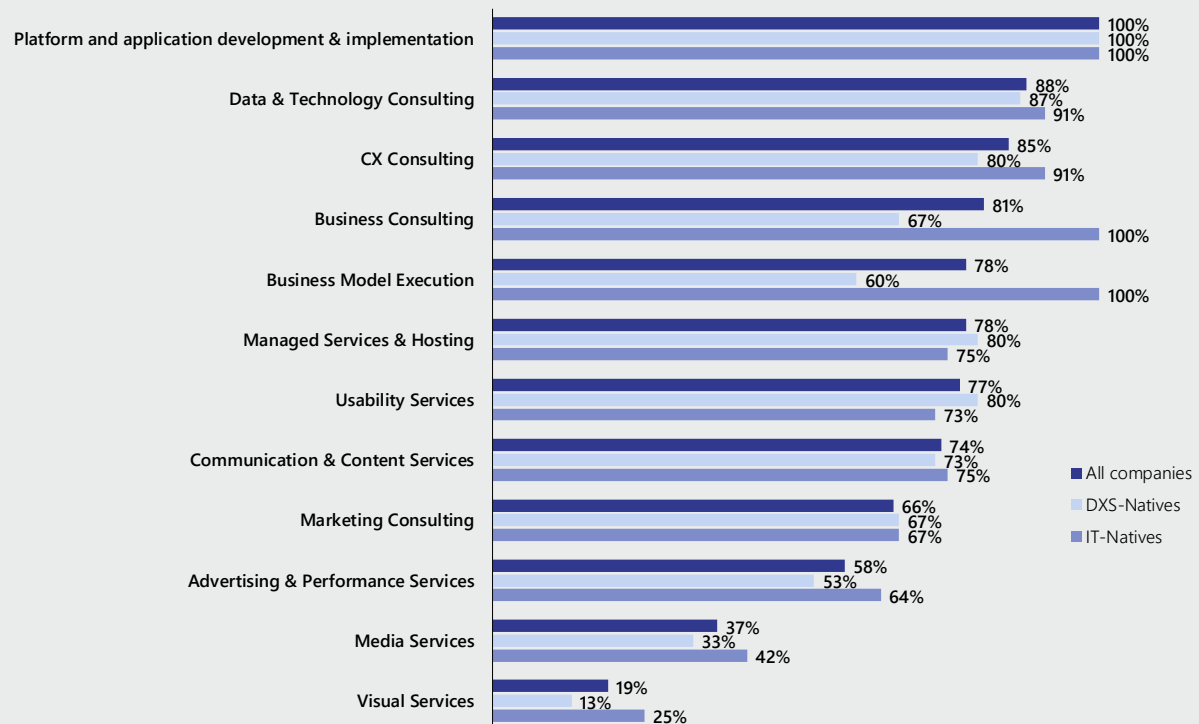


Fig. 13: Question: Which topics influence the demand for your services? Scale from 1 = "no relevance" to 4 = "very high relevance"; Values relate to "high relevance" und "very high relevance"; All participants; n = 26 (All companies); n = 15 (DXS-Natives); n = 11 (IT-Natives)

Customer industries and work areas of DXS providers

The analysis of the customer industries shows that DXS services are primarily in demand by the manufacturing industry, the trade sector, the automotive industry and the consumer goods sector. It is noteworthy that the two sectors of industry and consumer goods in particular have increased their demand, each by 14 percentage points, to 89 per cent and 79 per cent respectively. In the retail sector there is still a high demand for digital services, as the pressure to “shift to online” continues to accelerate. Forced by the pressure to transform, many traditional retailers must expand their portfolios to include e-commerce and digital offerings in order to be able to compete in the market against pure online retailers.

The current sector breakdown can be roughly divided into three groups: the four sectors just cited in the lead, followed by a relatively balanced midfield between 57 and 61 per cent and trailed by the two sectors with the lowest demand, the public sector (50%) and the chemical and pharmaceutical industry (46%).

ANNUAL COMPARISON:

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

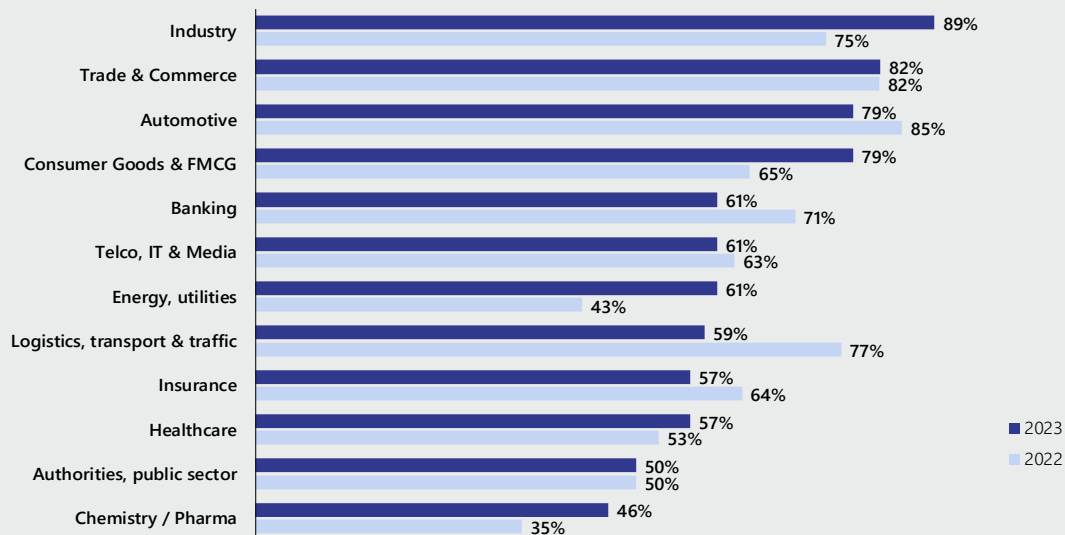


Fig. 14: Question: In which of the following industries is your company active with digital experience services? Scale from 1 = "not at all" to 4 = "very strongly"; Values relate to "strong" und "very strongly"; All participants; n = 26

The Market for Digital Experience Services in Germany

Banking, telecommunications and media as well as energy each account for 61 per cent of the service providers. It is surprising that the demand on the part of the energy sector has increased immensely from 43 per cent in the previous year. This can be attributed primarily to the energy crisis and the associated energy transition. While price used to be the decisive competitive criteria, energy suppliers now have to use other methods to create customer loyalty. Many providers are focusing on customer experience and the individualisation of products and prices.

In contrast to the strong increase in demand from energy suppliers, demand from the logistics, transport and traffic sector declined noticeably. In 2021, 78 per cent of service providers were still active in this sector, in 2022 it was only 59 per cent. The particularly high demand from the logistics sector in 2021 can mainly be attributed to the effects of the coronavirus pandemic. With the collapse of global transport chains, supply shortage and the introduction of country-specific entry regulations, the logistics sector had to make some investments in digitisation in order to be able to ensure the supply situation.

The insurance industry and the healthcare sector each accounted for 57 per cent of the companies surveyed. The insurance industry in particular is expected to see increasing demand for digital services in the coming years. Until now, customers have had few alternatives when choosing an insurance policy due to the small number of providers. However, due to an ever-expanding market, insurance companies will have to optimise their customer experience and create individual touchpoints in order to secure their position. The same dynamics can be observed in the healthcare sector.

Only a few of the companies surveyed report high demand from the public sector or the chemical and pharmaceutical industries. In the latter sector, this is mainly due to the specific requirements that most service providers cannot meet. The situation is similar in the healthcare sector. There, the selection process is subject to public procurement law, which is not only extremely complex but also time-consuming. For most service providers, this field of activity is less attractive due to the cost and risk trade-offs.

Finally, the following observation is extremely interesting: it is precisely those sectors that have been characterised by greater bureaucratic effort and specific requirements that are predominantly served by IT natives.



The Market for Digital Experience Services in Germany

Thus, 75 per cent of the IT natives consider the healthcare sector to be a relevant sales market and as many as 83 per cent consider banks and insurance companies to be relevant. This shows a clear difference to the DXS natives. In order to be able to increasingly use digital experience services at all, the industries mentioned must achieve a certain standard of digitisation, which is why the demand for IT natives currently predominates.

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

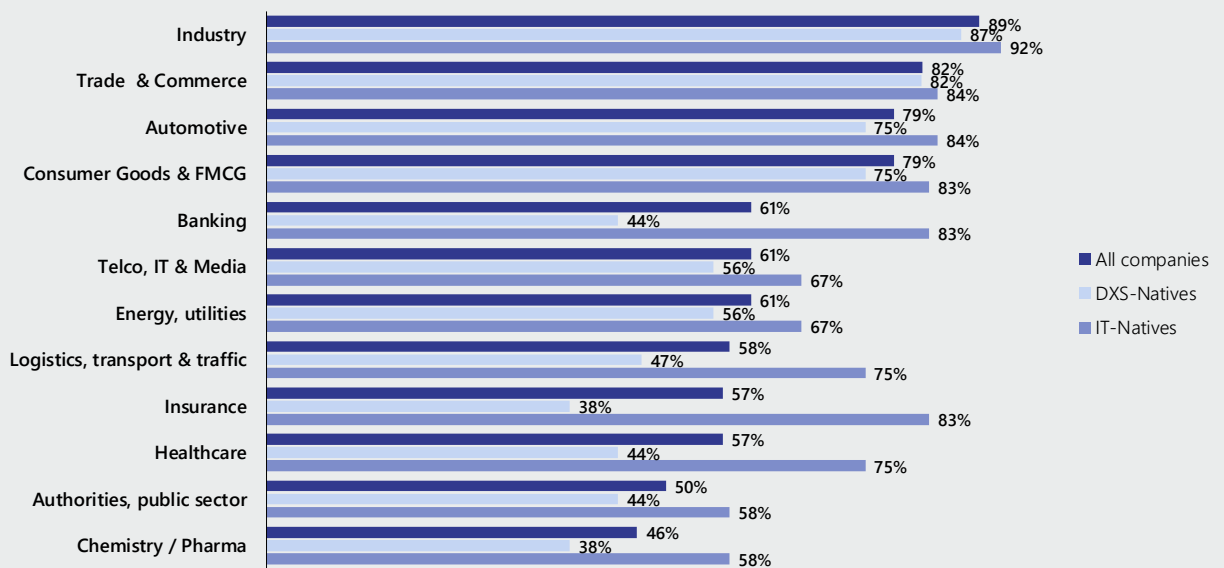


Fig. 15: Question: In which of the following industries is your company active with digital experience services? Scale from 1 = "not at all" to 4 = "very strongly"; Values relate to "strong" und "very strongly"; All participants; n = 27 (All companies); n = 16 (DXS-Natives); n = 12 (IT-Natives)

ACTIVITY FIELDS OF DXS PROVIDERS

DXS providers continue to be used by customers predominantly in the areas of marketing, sales and IT, with marketing especially emerging as a clear trend. While only 81 per cent of providers reported receiving project enquiries in this area in 2021, the figure for 2022 is already 93 per cent. This is hardly surprising, as marketing is an area in direct physical contact with the customers and must therefore optimally align its touchpoints to the individual needs and wishes. The goal is to provide customers with easy access to products and services and to use the various communication and distribution channels. A slight decline was perceived in the areas of sales and IT. Surprisingly, the number of enquiries from the operations side has decreased significantly compared to the previous year. The same phenomenon can be observed in the customer care segment. Due to the frequent mentions in the previous year, the HR area was included in the evaluation for the first time. Project enquiries come predominantly from the respective departments



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PROJECT REQUESTS: STRONG DEMAND FROM SPECIALIST DEPARTMENTS

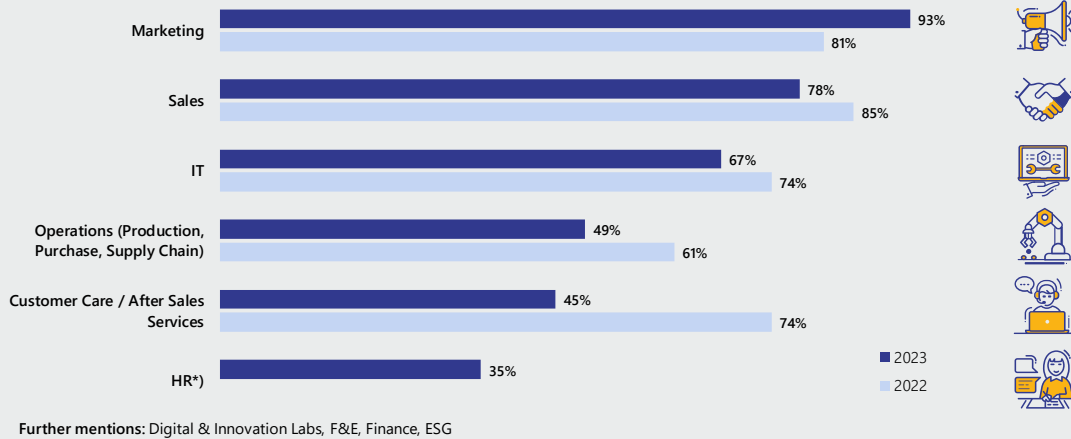


Fig. 16: Questions: From which areas do you receive project inquiries from customers? Scale from 1 = "never" to 4 = and "very often"; Values relate to "often" and "very often"; All participants; Frequency correlation; n = 26; *) has not been surveyed in the previous year

It is striking that despite the progress in agile transformation, the majority of project requests are still generated by departments and management. The IT departments are named second-most frequently. It is hardly surprising that IT natives receive more project enquiries from IT departments and DXS natives are increasingly called on by cross-functional teams. However, DXS providers are least requested by specialised digital experience areas. Since the design of customer journeys and the increasing relevance of customer centricity require cross-departmental cooperation, an overall increase in demand from cross-functional teams can be observed.

PROJECT ENQUIRIES COME PREDOMINANTLY FROM THE RESPECTIVE DEPARTMENTS

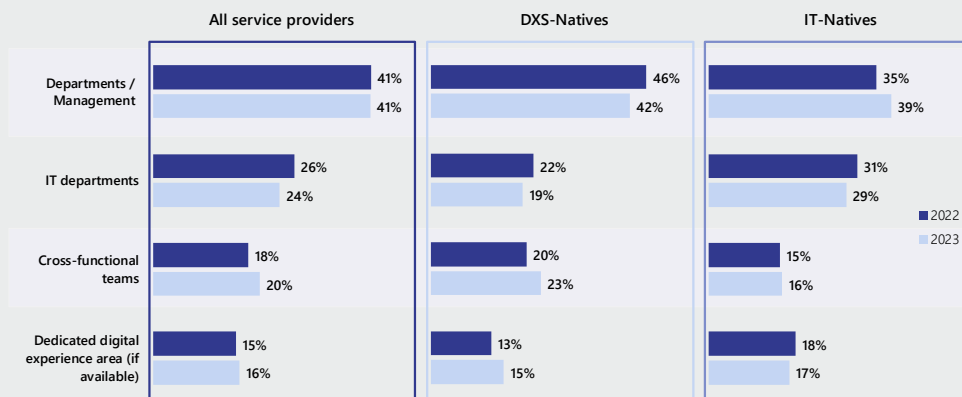


Fig. 17: Question: From which areas do you receive project enquiries for DX projects? All participants; Average values; n = 25 (2022), n = 23 (2023); DXS-Natives: n = 13; IT-Natives: n = 12 (2022); n = 10 (2023)

Technology trends

The rapid advance of digitisation is driving the development of new technology trends. Companies must decide how they want to take up and establish these trends, taking into account cost and risk factors. There is a tendency for all technology trends to become increasingly relevant in the upcoming years. Therefore, the 29 survey participants were asked to give their assessments for the current year 2023, but also to make initial forecasts for 2025. While the companies are visibly optimistic about some topics, there is still a certain amount of reticence about newer trends. The individual topics are examined in more detail below.

TIGHTER CUSTOMER RELATION THROUGH DEVOPS

DXS service providers are also noticing that the development and operation of digital products with a high level of customer focus require a fundamental change in organisation and internal collaboration. It is therefore hardly surprising that the topic of DevOps is already considered to be most relevant today, but also in the future. 93 per cent of the companies surveyed see great optimisation potential in dissolving their previous organisational structures and transferring single product responsibility to BizDevOps teams. This is also confirmed by the Lünendonk® Survey 2023 “Cloud, Data & Software”, according to which more than half of the companies were already pioneers and stated that they had new software solutions developed by cross-functional teams.

Customer data platforms are considered equally relevant. With the help of such platforms, a consistent customer database can be created, which in turn serves to optimise and individualise offers and services and thus influences the design of customer journeys.

Data & Analytics platforms are also among the top trends. Data is indispensable – it serves as a source for decision-making, promotes the development of business processes and is the basis for optimising and exploiting competitive advantages. But in order to gain insights from data and make them usable, a high level of data quality must be ensured to guarantee correct interpretation and classification. This is precisely where “data & analytics” platforms and tools come into play, and this will not change in the coming years – quite the opposite: 96 per cent of the companies surveyed forecast a very high relevance.

FLEXIBLE AND SCALABLE SOFTWARE FROM THE CLOUD

In the course of the digital transformation, software is often being developed and provided in the cloud as a cloud-native product. Already, 85 per cent of the surveyed DXS providers consider this approach to software development to be an extremely relevant part of their



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product portfolio. For 2025, as many as 96 per cent of the companies share this view and forecast increasing demand on the part of their customers. Cloud-native enables greater scalability and resilience of applications and generates competitive advantages in the form of increased efficiency, cost reduction and availability.

Microservices are also used for flexibility and scalability in software development. Microservices enable the independent development of individual components of a software or application through a unique architecture. This allows scaling advantages to be exploited and development time to be shortened. Therefore, 93 per cent of companies already consider this trend relevant.

METaverse, VR/AR AND IOT ARE AMONG THE EMERGING TRENDS

The topics that will gain the most relevance are VR/AR, metaverse and IoT, which are all connected to each other. Generative AI is rated as very relevant in the coming years by all surveyed DXS service providers. This is hardly surprising, as this technology offers great application potential in feedback collection and personalisation of products. In addition, standardisable tasks can be carried out with a significant productivity and cost advantage. The relevance of AR and VR is expected to increase by 33 percentage points in the future. While AR refers to augmented reality, VR is a purely immersive representation of reality. These technologies are not only used in the entertainment industry, but are also of great interest to industry. For example, factories can be built virtually and lead time can be optimised, taking into account retooling and maintenance. The Internet of Things enables the networking of physical and virtual objects. Therefore, the DXS providers predict an increasing relevance of 23 percentage points here as well.

AUTOMATED PROCESS CHAINS

As companies confront the skills shortage, technologies such as RPA, automation and robotics are also experiencing an upswing. These trends help companies perform standardisable tasks while freeing up employees to pursue other activities. In summary, companies benefit from time savings, cost savings and a decreasing error rate. This effect can be strengthened through the use of machine learning (ML). ML in combination with algorithms helps to automate entire process chains and thus has a lasting effect on the customer experience. This positive effect is also perceived by the survey participants, which is why, for example, the relevance of RPA is expected to increase by 12 percentage points.

The final category is blockchain and crypto applications, which have so far been classified as the least relevant by the survey participants, but are perceived as increasingly relevant. Blockchains can be used for the secure storage of data and information. Supply chain management, finance and public administration are typical fields of application, as the



TECHNOLOGY TRENDS

The Market for Digital Experience Services in Germany

technology is mainly used in digital transactions. Knowing that the mentioned sectors still have some catching up to do in terms of digitisation, the companies forecast an increasing relevance of 30 per cent.

In the second part of this survey, the current and future relevance of these technologies will be analysed from the perspective of the user companies. In the process, some differences in the assessment will emerge.

TECHNOLOGY TRENDS: GENAI, IIOT AND VR ARE GAINING STRONGLY IN IMPORTANCE

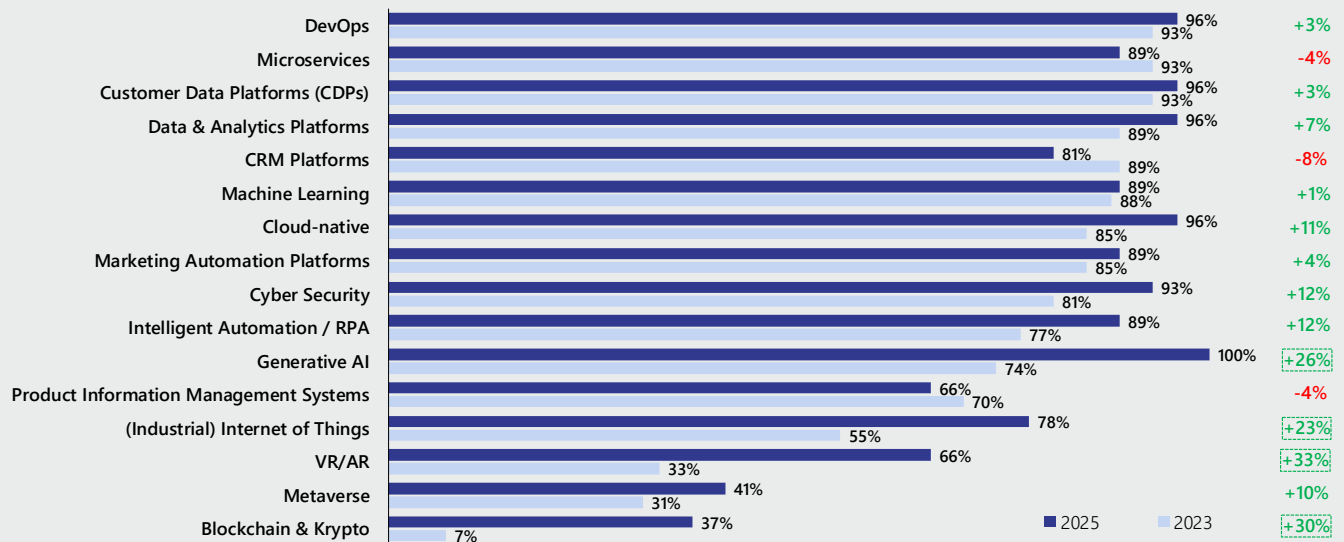


Fig. 18: Question: How do you rate the relevance of the following technologies from your customers' perspective in the implementation of customer-centric strategies? - 2023 & 2025; Scale from 1 = "no relevance" to 4 = "very high relevance"; Values relate to "very high relevance" and "high relevance"; All participants; n = 27



Generative AI – A revolution in the digital experience?

Generative AI is a tool that is mainly used to automate repetitive activities and for creative tasks. Based on machine learning and using algorithms, an AI-based system can process collected data sets. The knowledge gained from this can in turn be used for forecasting or for generating new content. Popular fields of application are answering questions, writing texts and generating images and graphics. So far, however, this technology trend still has some limitations, which is why a quarter of the companies surveyed are still cautious about it. Concerns are expressed in particular about data protection guidelines and made-up alleged data and facts.

As part of the survey, DXS providers were asked what they thought the benefits of generative AI were and which potentials they considered significant for their company.

GENERATIVE AI WILL NOT REPLACE DXS SERVICE PROVIDERS, BUT WILL AFFECT THEIR WORK

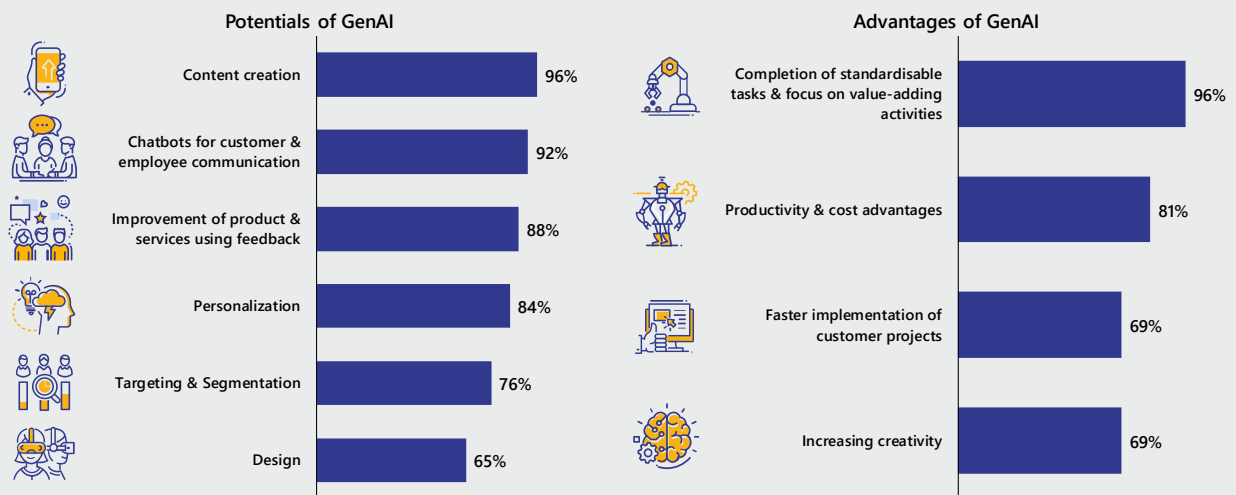


Fig. 19: Question 1: In which use cases do you see potential for Generative AI in your customer projects? Scale from 1 = "no potential" to 4 = "very high potential"; Values relate to "very high potential" and "high potential"; All participants; n = 25; Question 2: What advantages do you expect for your company from the use of Generative AI? Scale from 1 = "not at all" to 4 = "very strongly"; values relate to "rather strongly" and "very strongly"; All participants; n = 26

The areas of application in marketing and product development are particularly diverse. With regard to content creation, generative AI can help automate and accelerate manual processes. This view is shared by 96 per cent of the survey participants. In addition, the generation of new, individual image and text material can strengthen the focus on customer centricity (84%).



Generative AI will probably also revolutionise customer service in the future. 92 per cent see great potential in chatbots for customer and employee communication. Many companies are already using AI-based chatbots to manage customer enquiries regarding service, delivery and complaints. The recorded communication with customers serves as a data basis for collecting and analysing feedback (88%). Here, AI algorithms facilitate the evaluation and clustering of feedback, which is taken into account in the next production cycle. But the Deep Learning-based tool can also be used for targeting and segmentation, according to two-thirds of the respondents.

Across all value-adding areas of the business, generative AI supports the execution of standardisable tasks, freeing up employees for other activities. Because of this positive effect countering the shortage of skilled labour, 96% see this as an immense advantage for their company. Overall, immense productivity and cost advantages (81%) are achieved. This in turn also promotes faster implementation of customer projects (69%). Ultimately, generative AI forces creativity in the company, which has an effect on the products in particular.





Part II: Perspective of user companies

Status quo in customer centricity and digital experience

Investments in digitisation reached a new high in 2022. The main driver was the increased spending by companies and public authorities on the digital transformation. At the same time, however, there is a shortage of digital and IT experts, which slows down the implementation of planned projects, but also leads to a higher demand for external services. Thus, in 2022, the consulting and IT services market in Germany developed significantly better than the economic performance. The market for IT consulting and system integration grew by around 15 per cent in 2022, for the leading management consultancies even by 18.5 per cent on average.

The reason for this development in demand is the digital transformation, which is now being massively driven forward by both companies and the public sector. In addition to the modernisation of legacy IT landscapes into modern, flexible, scalable and interface-open IT, this also includes the development of a data-driven, customer-centric organisation. However, the success of the digital transformation and explicitly of customer centricity is increasingly dependent on digital technologies and the success of their adaptation. Since physical channels are increasingly being replaced by digital touchpoints due to changing customer requirements, and the perfect interaction of all contact channels is crucial in managing the customer journey, digital technologies play a decisive role in the implementation of the digital transformation at the interface to customers or suppliers, but also for employees. Digital experience – and this is definitely a significant change – increasingly



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depends on the successful adaptation of digital technologies, which is why IT is also migrating into departments such as marketing and sales.

DEMANDS ON THE DIGITAL EXPERIENCE HAVE CHANGED RADICALLY

In recent years, the way customers perceive brands and (want to) interact with them has fundamentally changed. But their demands on products, customer service and customer touchpoints are now also quite different than they were a few years ago. Since in the digital world – increasingly also in the B2B sector – the best product or the best service is often only a mouse click away, an experience that is perceived as high-quality by the customer is considered an important prerequisite for future growth. Digital experience is a fundamental part of corporate success! A new type of digital experience is not only created by the quality of the individual touchpoints, but by the sum of the customer experience along the entire customer journey – i.e. by the interaction of customer advice, sales, customer service and marketing as well as the integrated management of a customer relationship and the entire customer journey.

But how do the companies surveyed rate the quality of their own digital experience?

THE RACE FOR THE BEST DIGITAL EXPERIENCE IS ON

Compared to the previous year's studies, more and more respondents see their companies as better positioned in terms of the digital experience compared to the competition. Whereas in 2021 only 9 per cent of the survey participants saw their companies as being ahead of the competition, in 2023 13 per cent rated the quality of their digital experience as higher than that of their competitors.

Only 2 per cent of all companies still rate their digital experience as lagging behind, which marks significant progress compared to 2021 and is a reflection of the investments made in customer centricity and digital experience over the past two years.

Companies with a B2B business model even see themselves slightly more often ahead in terms of their digital experience (16%), while companies with a balanced B2B and B2C-oriented business model and thus very heterogeneous customer groups see themselves more often still lagging behind (7%), which may be related to the higher complexity in developing customer-centric strategies. Looking at the individual sectors studied, companies from the fashion industry see themselves significantly more often behind (50%) and chemical companies significantly more often ahead (30%).



DIGITAL MATURITY ON THE RISE: INVESTMENTS OF THE PAST YEARS SHOW RESULTS

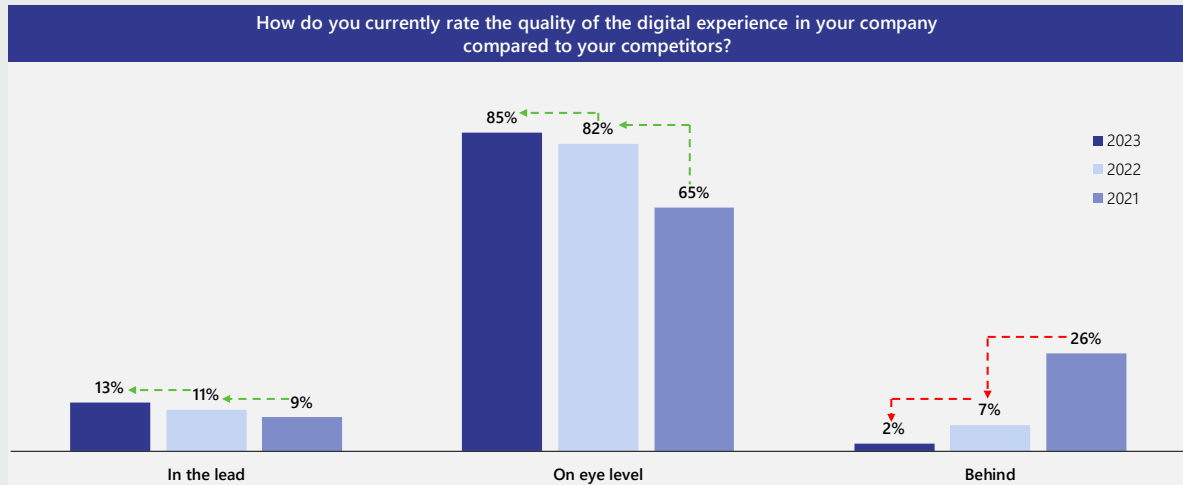


Fig. 20: Question: How do you currently rate the quality of the digital experience along the customer journeys in your company compared to your competitors? All participants; n = 143 (2023); n = 122 (2022); n = 104 (2021)

DESPITE HIGHER DIGITAL EXPERIENCE MATURITY: COMPANIES ARE STILL WORRIED ABOUT COMPETITORS WITH HIGHER DIGITAL MATURITY

Digital technologies – along with organisation and culture – are an important lever for achieving customer centricity. The past has shown that new business areas and new customer groups can be developed through the use of digital technologies, both in the design of frontends and through process quality. The sum of front-end design (UX), process quality (end-to-end process chains), degree of customer centricity and integrated control of the customer journey is a digital experience perceived by the customer.

However, one in two companies surveyed (51%) is still concerned about losing customers to competitors that are better positioned with easy and integrated access to digital offerings along the customer journey. The pressure to invest more in digital experience and customer centricity is also evident in the fact that 48% of companies see competitors who have been able to build significant competitive advantages through the use of digital technologies as a threat. The main issue here is process quality, which also has a direct impact on the customer experience – for example, through business processes that are interlinked to form process chains. The use of technologies such as automation, robotics, cloud-native applications, APIs, microservices or data analytics can, for example, improve the speed of response to enquiries. But process stability and availability are also very important factors for customer satisfaction in digital business models.



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Due to technology trends such as generative AI or the industrial metaverse, 38 per cent of the companies surveyed feel threatened by competitors that can develop disruptive business models faster and bring them to market. This concern is about the same in the B2B and B2C sectors. Comparing the different sectors, only in the consumer goods companies surveyed is the concern about disruption greater (48%) than the sector average.

DX LEADERS HAVE COMPETITIVE ADVANTAGES AND ARE THEREFORE A THREAT

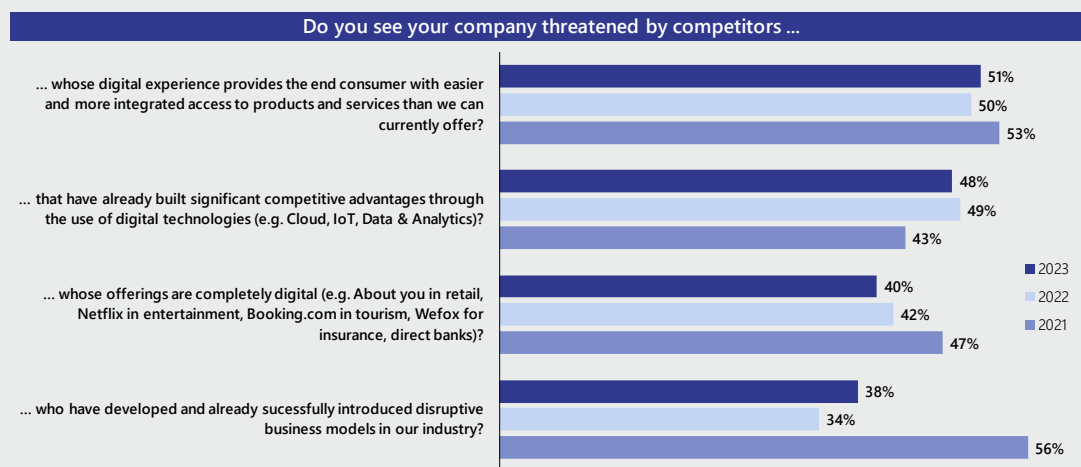


Fig. 21: Question: Do you see your company threatened by competitors ...; Scale from 1 = "no threat" to 4 = "very big threat"; Values relate to "very big threat" and "rather a threat"; All participants; n = 146 (2023); n = 125 (2022); n = 106 (2021)

COMPANIES ARE INCREASINGLY ADAPTING THEIR BUSINESS MODELS TO DIGITISATION

The technological and social developments of recent years have led, among other things, to an increasing number of companies understanding that they need to transfer their traditional business models more strongly into the digital world. 64 per cent of the companies surveyed want to rebuild their business models in the next few years in an evolutionary way by looking for options for greater digitisation. This means that the core of the business models will remain, but will be expanded to include new, digital business models.

In contrast, 24 per cent of the companies are taking a more radical approach in the form of developing completely new and disruptive business models (e.g. operating a digital eco-system): they are radically converting their business models to digital business models. The B2C companies surveyed in particular rely more frequently on this strategy (29%). Primarily companies in the automotive, banking, retail and media sectors are planning new business models particularly frequently. Many of them are concerned about an even greater loss of the customer interface in the future, for example if competitors succeed in responding to the changed requirements of customers along the customer journey with better digital offers.



DATA – THE FUEL OF DIGITAL TRANSFORMATION

Regardless of the intensity, in the development of digital business models and customer-centric strategies, a better, more individualised customer approach as well as process changes are necessary and measures are increasingly taken on the basis of data and predictive models. Methods in the field of AI play an important role in this regard – for example, for the intelligent automation of business processes or for customer segmentation and individual customer approach (hyper-personalisation). However, since very many companies still have major difficulties in bringing together their existing mountains of data, evaluating them and drawing insights and benefits from them, data management is becoming very important. 80 per cent of companies have therefore also geared their strategy towards consistently focusing on data use and thus transforming themselves into a data-driven company.

INCREASING CUSTOMER CENTRICITY: THE CUSTOMER JOURNEY WILL BE ORCHESTRATED END-TO-END IN THE FUTURE

At the same time, 68 per cent of the companies focus their transformation strategies on the seamless integration of all customer channels and touchpoints into an integrated customer journey. This is essential insofar as the digital experience depends above all on a consistent brand presence across all channels. For example, it is of central importance that customers can switch seamlessly between several channels (app, internet, store), use several channels for the purchase (click & collect, ship from store, etc.) or call up status information in real time across all touchpoints (e.g. track & trace in logistics, performance of machines and systems, availability of goods). In addition, digital offers must be so good in terms of their user experience that the people who use them are willing to share their data, which in turn results in enormous opportunities for process improvements and individualised customer approaches through the use of AI or algorithms.



DATA ANALYTICS SHOULD STRENGTHEN THE CUSTOMER RELATIONSHIP

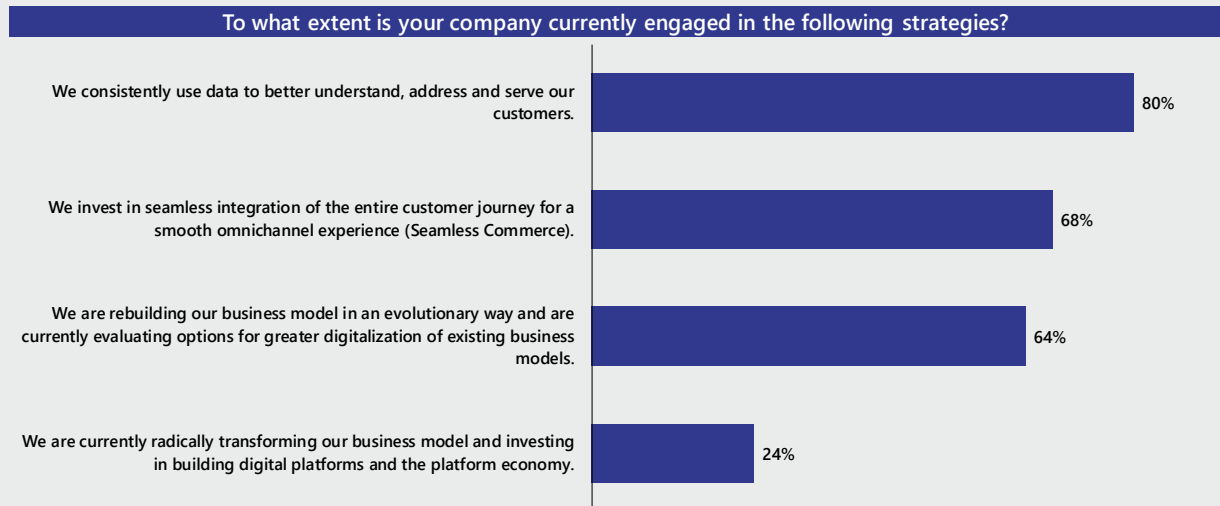


Fig. 22: Question: To what extent is your company currently engaged in the following strategies? Scale from 1 = "not at all" to 4 = "very strongly"; Values relate to "very strongly" and "strongly"; All participants; n = 144



Progress in the transformation: Investments pay off

The progress made in improving the digital experience and customer centricity is also reflected in the progress made in individual areas that promote customer centricity and digital experience in a large proportion of the companies. In fact, the comparison with the previous 2022 survey shows that the companies surveyed have improved in almost all areas of digital transformation.

DATA & ANALYTICS: B2C COMPANIES ARE FAR AHEAD, B2B COMPANIES, ON THE OTHER HAND, ARE STILL AT THE BEGINNING

The progress achieved in the collection of customer data and the corresponding processing into customer insights is particularly positive. However, the survey results also show that the B2C companies surveyed see themselves as being well positioned in data & analytics, whereas the majority of companies with a B2B focus are still in the early stages of deriving measures based on data analyses and data automation.

SOFTWARE DEVELOPMENT AND IT OPERATIONS MOVE CLOSER TOGETHER

To increase the speed of digital product development, more and more companies are dissolving their previously separate organisational structures and giving BizDevOps teams responsibility for a single product. This agile transformation is already somewhat more advanced in the B2C companies surveyed than in the B2B sector, although three quarters of B2B companies are also already advanced. Across all companies surveyed, 78% of the survey participants stated that development and operation of digital products is the responsibility of an interdisciplinary product team (2022: 74%). These product teams have product responsibility, i.e. they alone are responsible for tasks such as design, development, testing and IT operations. The advantages of such agile product teams are not only the flexibility in the development process, but also the speed and the continuous consideration of business and IT requirements.

INTEGRATED MANAGEMENT OF THE CUSTOMER JOURNEY: B2B CATCHES UP

Inspiring customers along their entire customer journey with innovative and digital services is a fundamental competitive advantage that will become even more relevant in the future as technology cycles accelerate. Since a growing number of digital channels are being used and a unique customer experience is should be offered on all channels, the integrated management of the customer journey is particularly important. The technological maturity of



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the IT landscape and the joint responsibility of development and IT operations for a digital product also play a central role. Since the companies surveyed are well advanced both in the modernisation of their IT landscape and in their digital transformation, it is only logical that they have also made progress in the omnichannel experience. Thus, 77 per cent of the respondents see their companies as advanced (2022: 72%). Here, too, B2C companies are clearly further ahead (81%), but seven out of ten respondents from the B2B sector also consider their companies to be advanced. One can conclude from these findings that digitisation programmes are increasingly planned and implemented cross-functionally rather than in individual functional silos.

COMPANIES RELY ON DEVOPS TEAMS AS WELL AS FLEXIBLE AND SCALABLE IT SYSTEMS TO OPERATE AND DEVELOP DX SERVICES

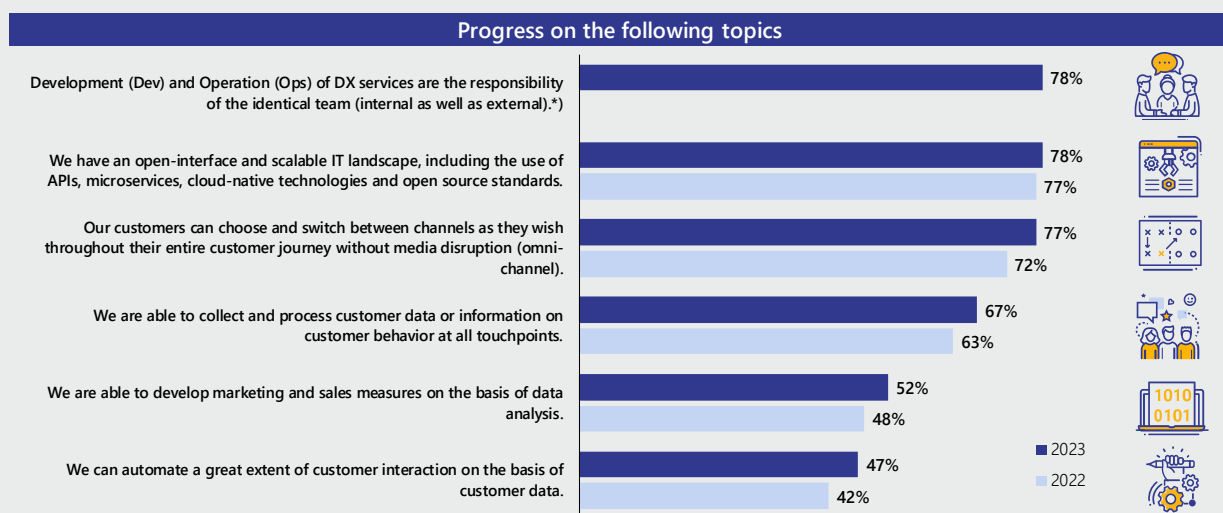


Fig. 23: Question: How do you see your company positioned with regard to the following topics? Scale from 1 = "at the very beginning" to 4 = "far advanced"; Values relate to "rather advanced" and "far advanced"; All participants; n = 143 (2023), n = 122 (2022)

*) has not been surveyed in the previous year

Challenges in the digital transformation and digital experience

In addition to the progress made in recent years with regard to customer centricity and digital experience, the question about challenges offers interesting insights into future measures. Compared to the previous year's survey, the challenges have become somewhat fewer – which can be seen in the higher DX maturity level – but more than 60 per cent of the companies surveyed still have a whole range of challenges to resolve.

IT SKILLS SHORTAGE REMAINS TOP CHALLENGE

The lack of digital talent is one of the dominant issues in business and administration, because companies are facing more and more tasks in the course of the digital transformation and the pressure to implement digitisation and transformation is increasing. For years, there has been a lack of specialists in digital disciplines – especially in the areas of software development, cloud architecture, data & analytics and the adaptation of disruptive technologies such as AR/VR/metaverse, generative AI and many more. Consequently, 75 per cent of the survey participants see the shortage of skilled workers as one of their greatest challenges. In the previous year's survey, the figure was 81 per cent, which indicates a slight easing – albeit at a high level. According to Lünendonk, the larger and better-known employer brands are much more successful in finding digital experts on the labour market than smaller, medium-sized companies.

However, rising digital and IT investments along with a tight IT labour market will further worsen the problems of staffing digital and IT projects with qualified specialists for many companies and public administrations (keyword: implementation of the Online Access Act [OZG]). In fact, the Lünendonk® Survey "The Market for IT Services in Germany" shows that 91 per cent of the CIOs and IT managers surveyed reported a shortage of digital and IT specialists. It follows that 62 per cent of companies expect a slowdown in the digital transformation because they have to prioritise their digitalisation programmes and thus postpone some projects.

TECHNOLOGIES EVOLVE FASTER THAN COMPANIES CAN ADAPT

For 71 per cent of the companies surveyed, the adaptation of new, digital technologies and the high speed of digital transformation is a challenge, which in turn is closely related to the lack of digital and IT experts. In fact, different studies by Lünendonk show that the digital technologies used do not yet fully lead to a high benefit. On the one hand, this is due to the lack of skilled workers, but on the other hand, it is also due to a complex change process in



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the companies themselves. For example, the speed of digitisation and the associated pressure to change and adapt are also a major challenge for 64 per cent of companies.

Thus, using digital technologies to build customer centricity is not just about implementing them and using them in individual areas such as marketing, sales and customer service; rather, it is about breaking down these silos and networking them into fully integrated overall systems (end-to-end). But it is precisely this goal that is associated with very strong organisational and cultural changes and thus with the need for a high degree of willingness to change among employees and managers. Organisational and cultural transformation is a much more decisive factor than pure technology implementation.

Similarly, the respondents see shorter innovation and technology cycles as a major hurdle. Digital technologies promote innovation, but at the same time their life cycle is shortening due to ever faster technological leaps. As a consequence, the development time until market launch (time-to-market) must be constantly shortened. Sixty-five per cent of those surveyed see this area of tension as challenging.

SUSTAINABILITY BECOMING AN IMPORTANT ELEMENT IN THE DEVELOPMENT OF DIGITAL PRODUCTS

An increasing number of companies are investing massively in their digital transformation and are therefore using significantly more IT resources. However, the carbon footprint of IT is increasing greatly as a result. With the legal regulations regarding the reporting of sustainability goals, the pressure to implement sustainability aspects in the business models of the future with increasing digitisation has grown. Consequently, for 68 per cent of the companies surveyed, sustainable by design is one of the greatest challenges of digital transformation. This aspect is highly relevant for all companies and organisations from a regulatory point of view as well as for employer branding and social responsibility reasons. However, for some sectors, such as the automotive and process industry or manufacturing, the IT footprint is particularly important, as they already have an enormously high energy consumption and will digitise their value chains very strongly in the future through the transformation to the digital factory and Industry 4.0 strategies. Thus, solutions are being sought to reconcile climate goals and digitisation. Industry is already using the digital twin and data and analytics to make energy consumption in operational technology transparent and to continuously optimise it.

CONTROL OF CAMPAIGNS ACROSS THE ENTIRE CUSTOMER JOURNEY

The development of cross-channel digital experience routes along all customer touchpoints is a major challenge for 45 per cent (2022: 50%) of the companies surveyed, the development and implementation of cross-media content strategies for 58 per cent (2022: 61%).



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This pertains, for example, to the trend to play out campaigns completely digitally, across several channels and very much tailored to individual customers (groups) and to manage the customer journey in an integrated approach.

CUSTOMER DATA IS COLLECTED, BUT USUALLY NOT SYSTEMATICALLY UTILISED

For 63% of the companies participating in the survey, collecting data at all customer interfaces and monetising it also remains a major challenge. The proportion of companies that see major challenges in the area of data & analytics has also decreased slightly compared to the previous year's survey (2022: 65%). According to the Lünendonk® Survey "Cloud, Data & Software", only one in four companies (25%) collect feedback relevant to the company at all customer touchpoints and only one in three companies (29%) enable their customers to offer direct feedback on all products and services used.

The Lünendonk® Survey also shows that although 61 per cent of companies integrate user feedback into their product development processes when processing the collected customer feedback, the mere integration of customer or user feedback is not yet a sustainable customer-centric methodology and there is still a lot of potential in the systematic and targeted use of feedback data in (agile) product and software development. Only 37 per cent of companies integrate user research and usability tests into their development processes. This result is also confirmed by this Lünendonk® Survey: 59 per cent view the integration of customer feedback into product development as a major challenge.

The more the customer journey is digitised or digital and physical channels are linked, the more important it becomes to collect both qualitative and quantitative feedback and to combine the collected information with UX KPIs, including behavioural data (bounce rate, rage click, error rate for forms). Another aspect is that with the increases in agile development of digital products by cross-functional teams, more and more product organisations with responsibility for development and operation throughout the entire life cycle are emerging. In the DevOps process, these are dependent on user feedback, which is fed back to the development teams directly after data collection in order to further improve the functionalities.



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

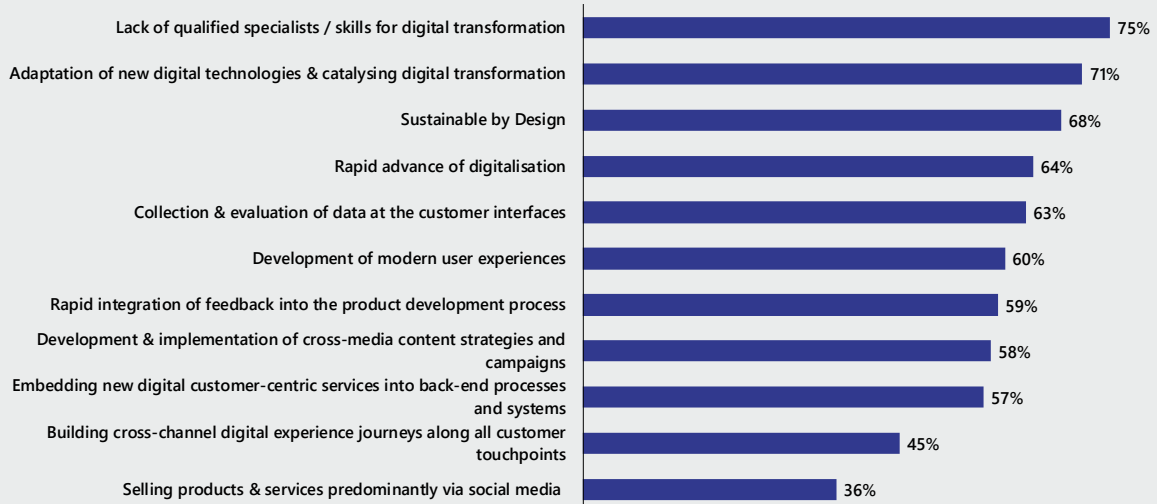


Fig. 24: Question: How do you rate the following factors as a challenge for your company in the next two years? Scale from 1 = "no challenge" to 4 = "very big challenge"; Values relate to "big challenge" and "very big challenge"; All participants; n = 144



End-to-end management of the customer journey

An important prerequisite for a successful transformation towards a customer-centric company is that digitisation programmes are no longer planned and implemented in individual functional silos, as is traditionally the case, but across functions. This means that in the future, more and more frequently, areas such as marketing, sales or customer service will no longer be responsible only for their part of a customer relationship or a digital product (e.g. Web shop); this responsibility will be transferred to a dedicated product team. In 40 per cent of the companies surveyed, there are already corresponding product teams acting like product organisations, assuming end-to-end responsibility in order to manage the customer journey. Such product teams are responsible for the development and operations of a digital product, can react much more flexibly to changing requirements through close coordination and are also responsible for the orchestration of all associated services. Another 35 per cent are planning to break down silos and set up corresponding product teams in the future.

Those companies that already work in a product organisation integrate business and IT requirements into the (further) development of products from the very beginning, in line with the DevOps approach (40%). Another 42% plan to integrate functional and non-functional requirements at an early stage of product development. As speed and quality of customer centricity are increasingly important in the development of digital products and digital business models, the ability of an integrated business and IT organisation will be much more crucial in the future than it has been so far to increase innovation and build differentiation factors through high digital excellence. In addition, dedicated product teams are better able to apply regular updates, patches and releases for digital products or to integrate new functionalities without process disruptions.

While traditional silos still exist in one in two companies (50%), 28% of companies are already establishing product teams for digital experience and customer centricity issues and giving them responsibility for expertise, design and IT implementation.



EVERY SECOND COMPANY ASSIGNS THE RESPONSIBILITY FOR DX PROJECTS TO INDIVIDUAL DEPARTMENTS

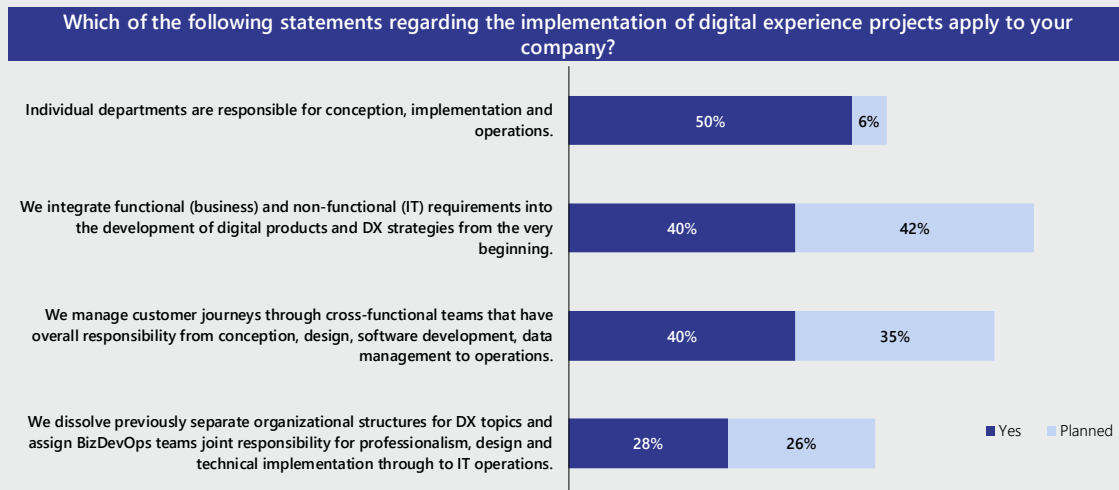


Fig. 25: Question: Which of the following statements regarding the implementation of digital experience projects apply to your company? All participants; n = 140

BUDGETS FOR DIGITAL EXPERIENCE ARE OFTEN ALREADY ALLOCATED CENTRALLY, BUT DX PROJECTS ARE PREDOMINANTLY DEVELOPED AND IMPLEMENTED IN THE INDIVIDUAL FUNCTIONAL SILOS

In 46 per cent of the companies, the budgets for the development and implementation of the digital experience strategy are in one central area. This already indicates a company-wide planning of digitisation strategies with integration of all relevant departments and thus an integrated, structured approach to building customer centricity. In contrast, the budgets for managing the customer journey still lie in the individual departments in 64 per cent of the companies surveyed.

In the companies where the budgets for the development and implementation of the DX strategy and for the management of the customer journey are managed centrally, they are predominantly in a dedicated DX department (57%) or in the Chief Digital or Chief Transformation Office (52%). However, in 36% of the companies surveyed, the budgets also lie with the executive board, which indicates a high level of importance.

However, the owners of the central budgets are not always the ones who have project responsibility. For example, only 35 per cent of the companies surveyed have a central area for the development and implementation of the DX strategy, although 46 per cent have a central budget for this. This means that in 65 per cent of the companies, the DX strategy is still the responsibility of individual departments and business units – which in turn runs



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counter to an integrated DX strategy. However, it is precisely this cross-functional planning and control that is a central element of successful digital strategies, since digital products must cover the entire customer journey and thus also different functional areas. But 38 per cent of the companies are planning to dissolve this silo orientation in the future and create a central area for the DX strategy. With regard to an integrated control and orchestration of the customer journey, however, there are clear differences between the B2C and B2B companies surveyed. For example, one in four companies from the B2B sector stated that an end-to-end approach to digital experience projects has not yet been applied (B2C: 9%).

However, when it comes to the integration and control of the individual services around the customer journey following the development of the DX strategy, 53 per cent of the companies definitely have a central area that coordinates the corresponding tasks for the orchestration of the services. This is still very often IT. For example, 75 per cent of the survey participants stated that the selection and commissioning of service providers to support DX projects is done via IT purchasing. After all, 29 per cent of the companies already have a separate Digital Experience Services product group in their purchasing department.

BUDGET RESPONSIBILITY LIES PREDOMINANTLY IN THE INDIVIDUAL DEPARTMENTS AND BUSINESS UNITS

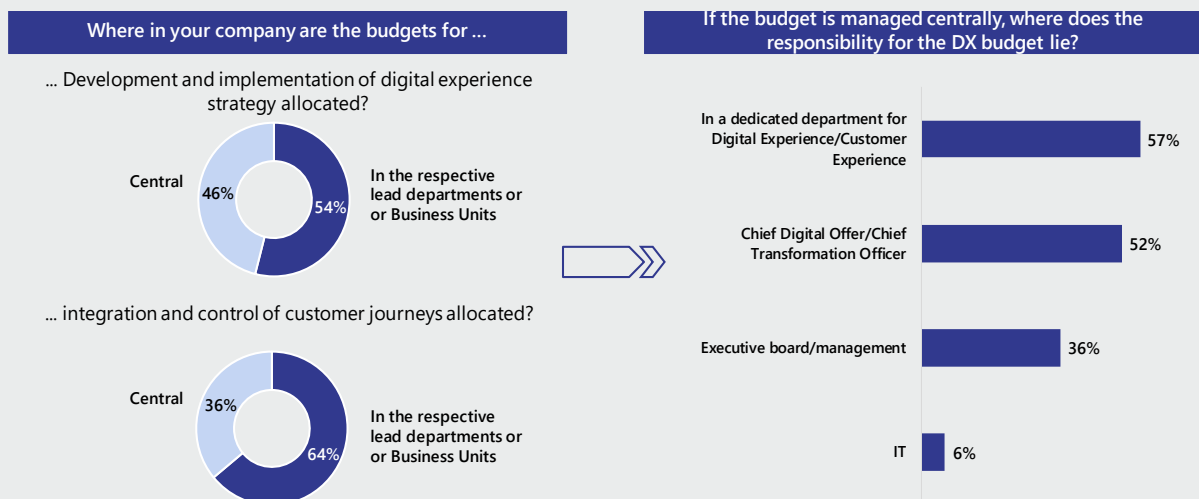


Fig. 26: Question 1: Where in your company are the budgets for... ? All participants; Frequency correlation; n = 145
Question 2: If central, where does responsibility for the DX budget lie? All participants; Multiple answers; n = 69

PURCHASING OF SERVICE PROVIDERS FOR DX PROJECTS IS MAINLY DONE BY IT PURCHASING

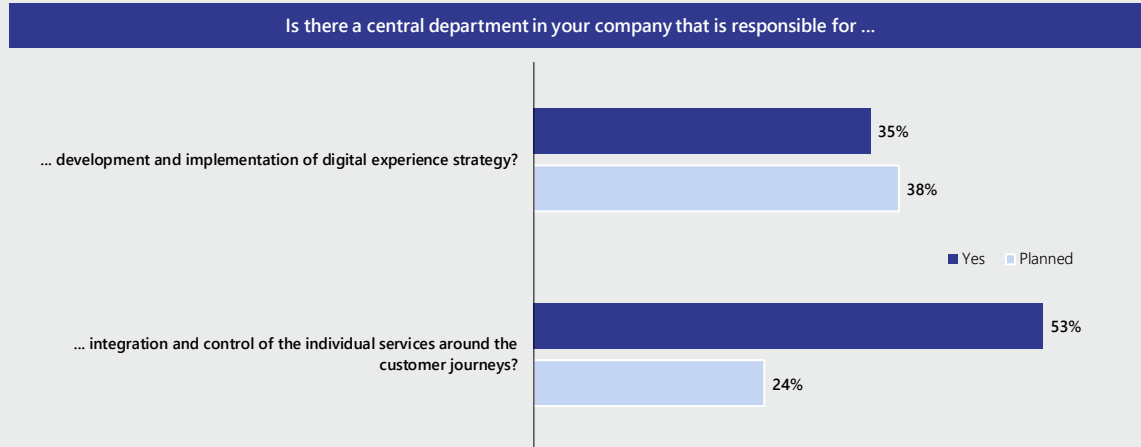


Fig. 27: Question: Is there a central department in your company that is responsible for ... ? All participants; n = 147



Technology trends 2023 versus 2025

Digital technologies encourage the development of innovative products and business models. They also force the design of new process chains and the employee experience.

Lünendonk therefore asked which technology topics will be particularly relevant in 2023 and how the relevance is expected to develop by 2025. Nowadays there is only a single opinion about the relevance of technologies building customer centricity and increasing the digital experience: digital technologies such as cloud, data analytics, open source, augmented reality or artificial intelligence, for example, make it possible to create a completely new experience and brand perception at the customer interfaces through new types of touchpoints, more automation and end-to-end processes, and thus new differentiation factors. But they are also the prerequisite for being able to systematically collect and specifically evaluate existing data in the company, for example on the purchasing and usage behaviour of customers or on customer feedback. Technologies such as cloud-native (platform as a service), DevOps, low code or CI/CD also play an important role regarding software development.

TECHNOLOGY TRENDS: DATA & ANALYTICS PLATFORMS, IIOT AND AI ARE GAINING STRONGLY IN IMPORTANCE

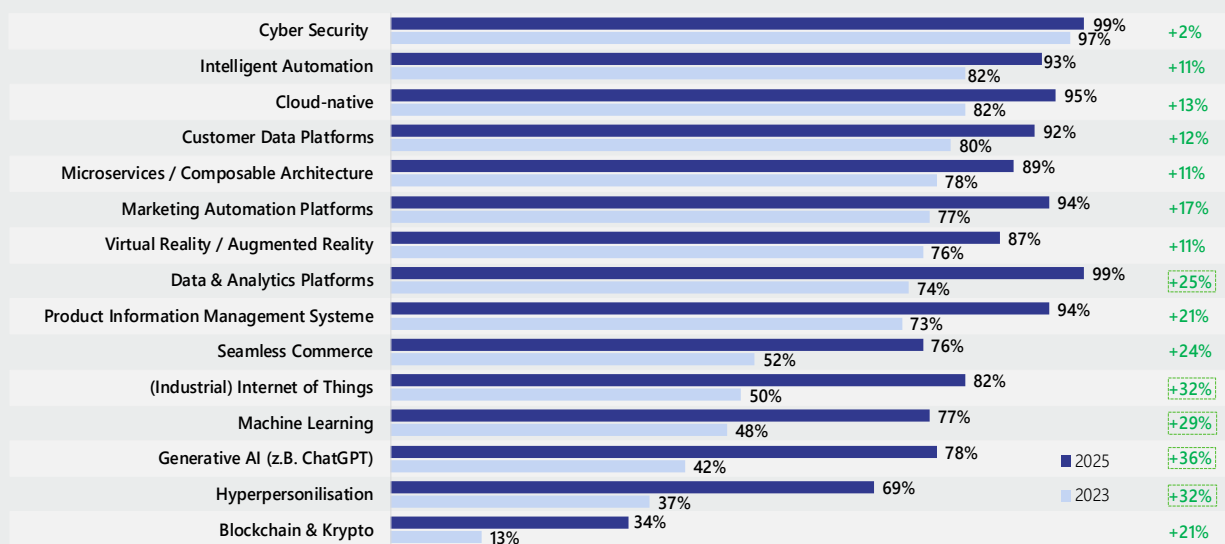


Fig. 28: Question: How do you rate the relevance of the following technologies in relation to your company? - 2025; Scale from 1 = "no relevance" to 4 = "very high relevance"; Values relate to "very high relevance" and "high relevance"; All participants; n = 142 (2023); n = 135 (2025)

GENERATIVE AI – JUST THE BEGINNING

2023 marked an important technological milestone with the market launch of generative AI, more precisely the autonomous generation of content such as texts, videos, images or graphics. This takes companies a big step further in the intelligent automation of entire business processes. The relevance of generative AI for their own company is already rated as high by 42 per cent of the DX managers surveyed. Looking ahead to 2025, even 75 per cent predict a high relevance – the largest increase of all the technologies surveyed. Indeed, the potential of generative AI is disruptive and the areas of application are diverse. Another major advantage is the ease of use of Chat GPT in particular. But Aleph Alpha, a German AI start-up, is also gaining acceptance, especially in the enterprise context, as it should be easier for users to understand where the AI is getting its information from – which is an important requirement, especially for ethical and compliance reasons.

Due to the market maturity of generative AI solutions, Lünendonk asked the survey participants about the application potentials and advantages. 84 per cent see a clear advantage in the completion of standardisable tasks and in the possibility to focus on value-adding activities in times of demographic change and a tight labour market. Seven out of ten respondents also look forward to productivity benefits, faster implementation of projects (67%) and an increase in employee productivity (61%). Potential areas of application are seen above all in chatbots for communication with customers and among employees (74%), in the improvement of products through the faster processing of collected customer feedback (68%) and in the creation of content (60%) and in the creation of content (60%).

JUST LIKE THE SERVICE PROVIDERS, CUSTOMERS ALSO SEE GREAT POTENTIAL IN GENERATIVE AI

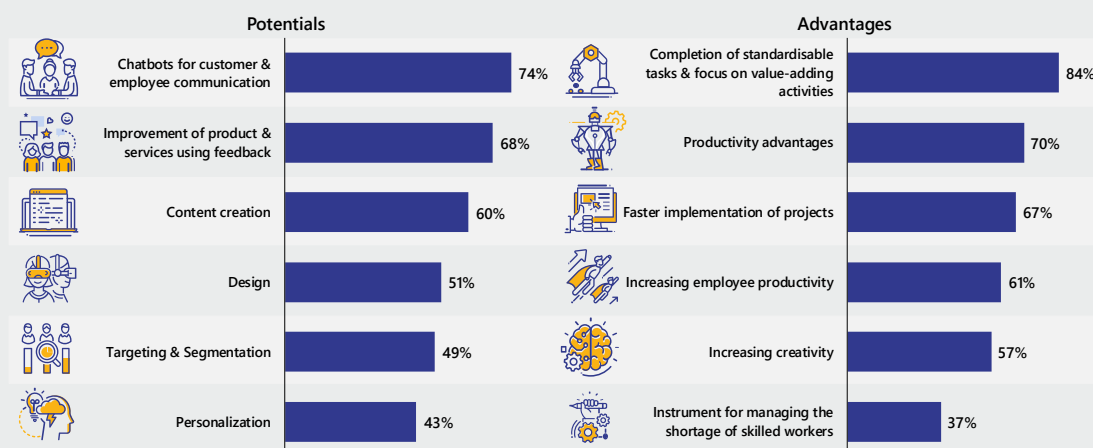


Fig. 29: Question 1: In which use cases do you see potential for Generative AI in your company? Scale from 1 = "not at all" to 4 = "very strongly"; Values relate to "rather strongly" and "very strongly"; All participants; n = 146; Question 2: What advantages do you expect for your company from the use of Generative AI? Scale from 1 = "not at all" to 4 = "very strongly"; Values relate to "rather strongly" and "very strongly"; All participants; n = 145

PROCESS AUTOMATION IS THE NEXT STEP TOWARDS DIGITAL TRANSFORMATION

The potential of generative AI opens up new possibilities in the intelligent automation of business processes and entire process chains. Above all, the establishment of end-to-end process chains and their automated and data-based control is an important prerequisite for the successful implementation of customer-centric and digital strategies. For 82 per cent of respondents, intelligent automation is already highly relevant today (2023). Looking ahead to 2025, 93 per cent see a high relevance.

Other relevant technologies for intelligent automation and the intelligent enterprise are machine learning (ML) and “data & analytics” platforms. With the rapidly increasing maturity of AI solutions, Machine Learning in particular is gaining in importance: 77 per cent of respondents see it as highly relevant in 2025 (2023: 48%).

Data & analytics platforms are already very relevant. These applications represent an “intermediate layer” between the place the data is generated and the use of the data. Data & analytics platforms are intended to transform data into usable information, which enables better decisions to be made, customers to be addressed more personally and individually, and companies to develop into a data-driven organisation overall. Consequently, almost all participants in the survey (99%) expect data and analytics platforms to play an important role for their company in 2025 – an increase of 12 percentage points.

The companies surveyed also forecast a strong increase in the importance of customer data platforms. This data-based software creates permanent and consistent records of customer data. A customer data platform enables a 360-degree view of every single customer. It is therefore also called Single Customer View and is an increasingly important basis for carrying out and analysing marketing activities. Already today, 82 per cent of the respondents see a high relevance in customer data platforms – by 2025, they will already be an important technology in marketing and sales for 92 per cent. In the previous year’s survey, 76 per cent rated the relevance of customer data platforms as high.

As customer data platforms become more mature, marketing automation, i.e. the automated playout of content and campaigns, becomes much more feasible. Consequently, the relevance of marketing automation increases in parallel to that of the customer data platform (2023: 78%, 2025: 94%). In the previous year’s survey, the values were similarly high.

As with generative AI, the survey participants see enormous potential for the future in hyper-personalisation. 69 per cent of respondents rate its relevance as high – which corresponds to an increase of 32 percentage points (2023: 37%).



Hyperpersonalisation is considered the supreme discipline of customer centricity because, among other things, the use of AI processes enables a context- and real-time-driven form of addressing customers and content and campaigns can be played out in a target group-specific manner and even for individual customers. The basis for this is data, which is refined into customer insights with the help of data & analytics.

COMPOSABLE BUSINESS LEADING THE WAY TO THE DIGITAL PLATFORM ECONOMY

However, this requires technology platforms to become much more agile, flexible and open to external services in order to support the new, platform-based business processes. Therefore the approach of the Composable Enterprise is gaining strongly in importance. From a technological point of view, the composable enterprise consists of packaged business capabilities, i.e. the corporate IT is composed of individual software components, each of which covers a business function, so that the best system or the best application is used for the respective task (best of breed).

This modularisation stands in contrast to the previous monolithic approaches and rigid technology architectures in the sense of best of suite. Consequently, the advantage of a modular architecture is that the individual software components can be exchanged and adapted more easily if necessary and new services can be added very quickly – a central requirement of the platform economy. This modular approach can also support the product-oriented business and IT organisation that is currently emerging, for example, by allowing new updates, patches and releases to be applied more quickly, as this is done automatically – sometimes without the users noticing. In this way, new services such as Click & Collect or Track & Trace can be implemented in the shortest possible time and the customer experience can be improved. Composable enterprises therefore rely on a MACH architecture (Microservices, API first, Cloud-based, Headless) to link the individual systems and create intelligent end-to-end process chains to orchestrate the services.

NETWORKED IOT WORLDS

According to the survey participants, the networking of physical and virtual products, the (Industrial) Internet of Things, will also have become much more important by 2025, but this will also mean that significantly more data will have to be collected and processed. The greater relevance of data and analytics technologies for the survey participants underlines this requirement.

By linking and communicating devices, machines or vehicles, for example, processes can be made more efficient and more automated. At the same time, new business models are possible. Products are therefore increasingly equipped with sensors and actuators and



contain software. This is underlined by an increase of 32 percentage points for this thesis. As expected, the companies surveyed from the individual industrial sectors and from the telecommunications sector in particular expect the relevance of (I)IoT to increase strongly.

METaverse – THE NEXT BIG THING?

The metaverse is the next level of the Internet; it creates virtual 3D environments that link virtual experiences, real-time 3D content and other related media. These virtual 3D environments can be used by means of augmented/virtual reality (AR/VR) or classic end devices such as PC or smartphone. Designed as Web3-Internet, users can immerse themselves in virtual worlds, use avatars as digital representatives of themselves and exchange virtual objects with the help of new technologies. Industrial companies in particular are working intensively on the industrial metaverse as the next stage of digital product development and the digital mapping of production facilities and factories.

Like generative AI, the metaverse is still hype at the moment, but a whole series of companies are already developing concrete applications.

For example, the metaverse enables merchants to create their own virtual shopping worlds and build new loyalty programmes to offer customers the opportunity to earn and buy digital collectible tokens (Non-Fungible Tokens, NFTs) that unlock access to new, fascinating worlds of experience.

Product manufacturers, in turn, can use the metaverse to create new possibilities for storytelling and sales. They can authentically integrate their brands into the virtual world of the metaverse and thus address young or very digitally affine target groups in particular. By distributing products, they can tap into new sources of revenue.

But there is also enormous potential in industry – for example through the Digital Twin. Products can first be developed and tested in a virtual world, thus saving on production costs. Likewise, machines and systems can be maintained more efficiently in virtual environments, or updates and releases can be installed. Virtual worlds can also help with the remote maintenance of bridges, offshore wind farms and other facilities that are difficult to access.



DESPITE THE GENAI HYPE, THE METAVERSE HAS NOT LOST ITS RELEVANCE

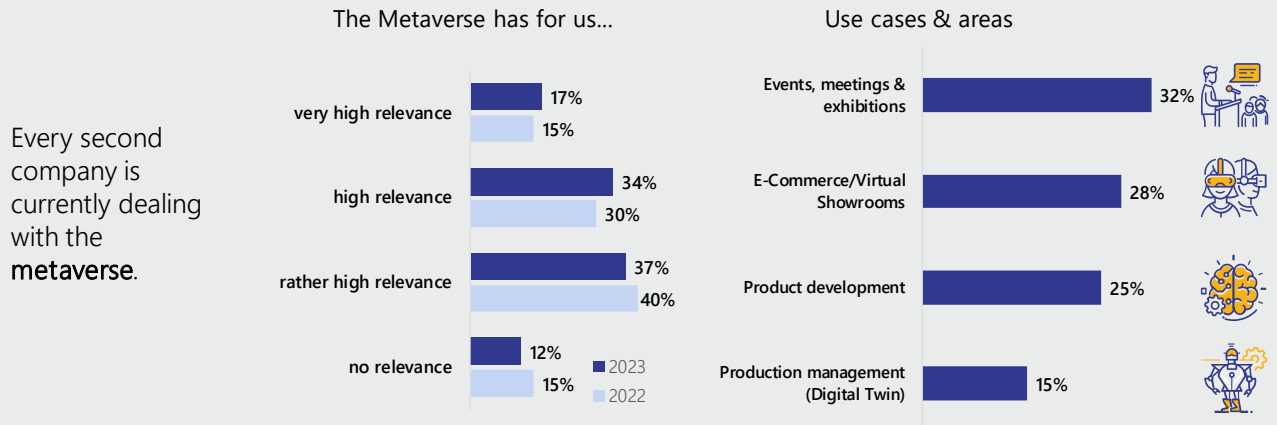


Fig. 30: Question 1: The metaverse is one of the biggest hype topics this year. Does your company deal with this topic? Scale from 1 = "no relevance" to 4 = "very high relevance"; All participants; n = 147 (2023); n = 124 (2022); Question 2: In which areas can you imagine use cases for your company? All participants; Multiple answers; n = 144

RELEVANCE OF THE METAVERSE DEPENDS ON THE SECTOR

What exactly the metaverse will look like in the medium and long term and which use cases will prevail remains to be seen. For 51 per cent (2022: 45%) of the companies participating in the survey, the metaverse is highly relevant. However, industrial companies in particular deal with the metaverse significantly more often than companies from other sectors.



Investments in Digital Experience

Although many companies are making great strides to become more customer-centric and to inspire and retain customers with digital offerings, most are not yet at the end of their journey. For example, the question about the assessment of the competitive environment showed that a large proportion of the companies surveyed are very concerned that their business models are threatened by disruption, or that competitors who are faster and better at digital transformation are gaining market share. Investments in customer centricity, digital experience and technology platforms are therefore still high on the agenda. Lünendonk therefore wanted to know which topics the large SMEs and corporations surveyed will be investing in over the coming years.

DIGITAL PLATFORMS ARE ON THE RISE

The strongest investments will be made in the development and implementation of digital platforms – in other words, in the establishment of platform-based business models. 94 per cent of the companies surveyed plan to invest heavily in this area. In the survey from 2022, 93 per cent said they would invest in this area. The fact that almost all of the companies surveyed are investing in digital platforms underlines their strategic plans to digitise their business models significantly more in the future (see the section “Status quo in customer centricity and digital experience”). For example, more and more companies are adding digital platforms such as digital marketplaces, e-commerce or IoT platforms to their existing business model.

However, such platform-based business models require certain technological prerequisites. If, in the future, more and more transactions are carried out both among companies and with end customers on the basis of platform-based business models, the digital offers of the platform operators as well as the platform participants must be so good in terms of their user experience that the users are willing to share their data, which in turn results in enormous opportunities for process improvements and individualised customer approaches through the use of AI or algorithms. Last but not least, personalisation and targeting also play a central role in achieving cross-selling and upselling effects: for example, digital marketplaces rely on the fact that the people in their target group are identified as individuals at all points of interaction, for instance via a central customer ID that is connected to all CRM systems and with which a customer can log in at all digital touchpoints. Openness of interfaces is a basic principle of digital platform ecosystems, for example, in order to integrate additional digital services from third-party providers into one's own offering via APIs or,



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conversely, to connect one's own products to other platforms or to create end-to-end processes across system boundaries and continuously exchange data.

This is where digital experience platforms increasingly come into play. Leading providers include Adobe, Sitecore and Magnolia. These are technology platforms that combine a set of individual technologies to create, manage, deliver and optimise contextual digital experiences. This integration does not necessarily have to be in a single suite. Multiple technologies can also be networked through microservices and APIs to create an end-to-end process chain. 63 per cent of the companies surveyed will invest in digital experience platforms in the next two years.

Since digital experience platforms achieve their added value primarily from the use of customer data, the consolidation and standardisation of data from different sources is a central requirement in order to unfold the full benefit. The strongly increasing relevance of technologies around data & analytics and especially customer data platforms confirms the trend towards digital experience platforms. In this context, 78 per cent of the companies want to focus their investments on the further development of their Data & Technology strategy in the next two years in order to create the process-related and technological prerequisites.

DIGITAL PRODUCTS AND NEW BUSINESS MODELS ARE DRIVING DIGITAL MARKETING

Analogous to the high investments in the digital platform economy and a higher maturity in the use of digital experience platforms, the requirements for marketing and sales are changing. Customers now use digital channels to a large extent and consequently want to be addressed with digital content. 84 per cent of companies will therefore invest in their marketing strategy and related digital activities in 2024 and 2025. This includes data-driven marketing strategies, market research analysis or the development of conversions and leads with an efficient ROI.

In this context, the share of companies that will invest in media production has increased significantly compared to the previous year (2022). This involves digital media formats such as videos and other digital formats in order to play out content with more emotion and in a more channel- and target group-specific manner. According to the survey, the highest increase in investments will be in media production: in 2022, for example, only 58 per cent of companies said they would invest significantly in this area. It is interesting that nine out of ten B2B companies surveyed also plan high investments in this field, with a similarly high proportion of companies from the industrial sector.



INVESTMENTS IN DIGITAL EXPERIENCE

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In contrast, the proportion of companies investing in advertising and performance is declining compared to the previous year. Whereas in 2022 81 per cent were still planning high investments for 2023, the figure for 2024 and 2025 is only 60 per cent, although the proportion among the retail companies surveyed remains high at 70 per cent.

COMPANIES INVEST IN THE DEVELOPMENT & IMPLEMENTATION OF DIGITAL SOLUTIONS AND MARTECH

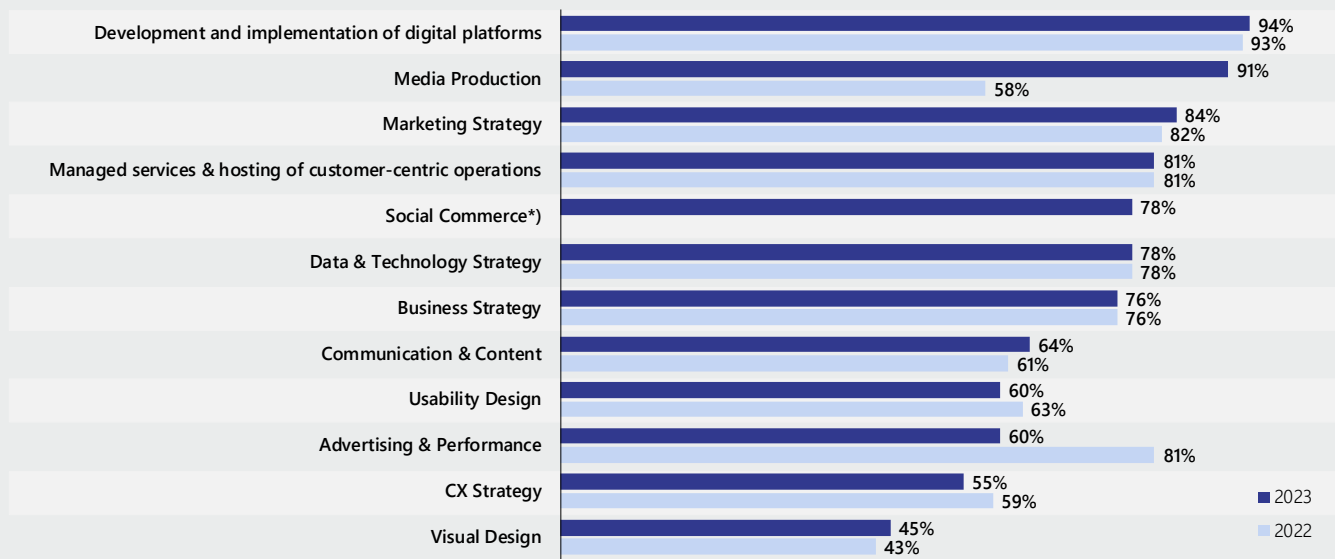


Fig. 31: Question: In which of the following areas of digital transformation is your company investing in the next two years? Scale from 1 = "no investment" to 4 = "very strong investment"; Values relate to "strong investment" and "very strong investment"; All participants; n = 143 (2023); n = 124 (2022)
*) has not been surveyed in the previous year



Cooperation with DXS service providers

As in the previous years' studies, a high level of sector and target group expertise is the most important requirement for external service providers for almost all survey participants. The proportion has even increased slightly compared to 2022. Thus, 96 per cent see sector and target group competence as important (2022: 94%). A high level of competence in customer-centric methods and approaches is important to 94 per cent of respondents in the selection process. In 2022, it was important to slightly fewer respondents at 92 per cent.

Strong design and creativity expertise in the development of digital solutions or products is another core requirement for external service providers for 9 out of 10 respondents (2022: 88%).

It also remains very relevant for 94 per cent of respondents that service providers have a high level of IT integration competence. This is now a basic requirement, as all digital solutions must either be designed in relation to the existing business and IT architecture or connected to other applications and integrated into the IT back-end systems.

A HIGH LEVEL OF INDUSTRY AND IT EXPERTISE AS WELL AS CUSTOMER-CENTRIC WORK IS ESSENTIAL WHEN CHOOSING A SERVICE PROVIDER

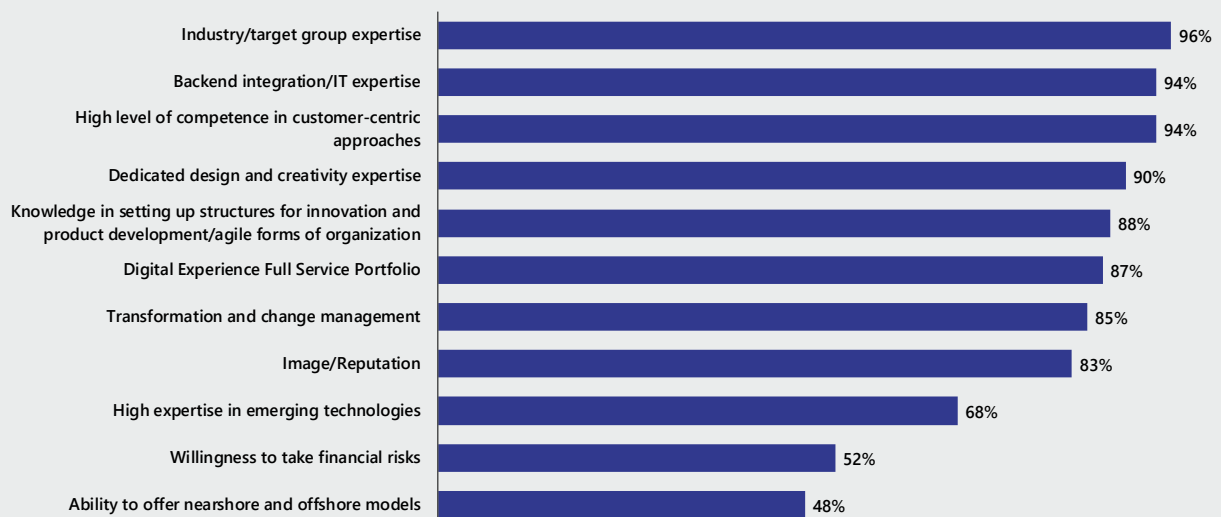


Fig. 32: Question: In your view, what are important characteristics for choosing a service provider for digital transformation projects? Scale from 1 = "not at all important" to 4 = "very important"; Values relate to "very important" and "rather important"; All participants; n = 144



When selecting service providers, a clear majority of the companies surveyed (87%) consider it important that they are able to plan and implement projects in the area of digital experience end-to-end. This also includes the orchestration of individual services into an integrated management of the customer journey. A full-service portfolio consisting of consulting, design, creativity and IT transformation services is therefore highly relevant. One third of the companies surveyed assign responsibility for the individual services for managing the customer journey to their respective service partner.

THE NEED TO INTEGRATE STRATEGY, CREATION, DESIGN, MEDIA PRODUCTION AND IT OPERATIONS IS RECOGNISED BUT LESS OFTEN IMPLEMENTED

In order to amaze our customers with a digital experience along the entire customer journey, the disciplines of strategy, creation, design, media production, system integration and platform operation must be considered fully integrated?

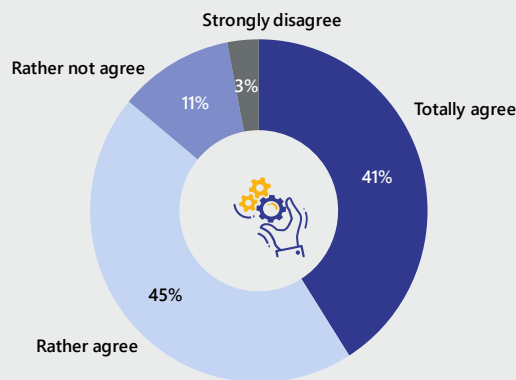


Fig. 33: Question: How would you rate the following statement: In order to amaze our customers with a digital experience along the entire customer journey, the disciplines of strategy, creation, design, media production, system integration and platform operation must be considered in a fully integrated manner? Scale from 1 = "strongly disagree" to 4 = "strongly agree"; All participants; n = 147



Conclusion and outlook

COMPANIES ARE MAKING PROGRESS IN CUSTOMER CENTRICITY AND DIGITAL EXPERIENCE, BUT THERE IS STILL A LOT TO DO

The results of this survey show that companies in the German-speaking region are continuously developing in their digital transformation and are improving in terms of customer centricity and digital experience. Only 2 per cent of the companies surveyed see themselves lagging behind in the quality of the digital experience in their company compared to their competitors. In 2021, it was still 26 per cent.

Nevertheless, there is still a lot to do. Most companies are still a long way from offering their customers a consistent brand experience and a uniformly high digital experience on all channels and at all points of interaction (customer service, logistics, etc.). The proportion of companies that see themselves as ahead of their competitors in terms of digital experience has risen only marginally to 13 per cent (2021: 9%). 85 per cent therefore see themselves as being on an equal footing. However, digital transformation is about being significantly more innovative and adaptable than the competition, which is why the companies surveyed continue to invest in customer centricity, digital experience and new technologies.

SILO THINKING CONTINUES TO DISSOLVE

The survey also shows progress with regard to the culture of innovation and transformation, even though there is still work to be done here. An important prerequisite for a successful transformation to a customer-centric company is that digitisation programmes are no longer planned and implemented in individual functional silos, as is traditionally the case, but across functions. As many as 40 per cent of companies integrate functional (business) and non-functional (IT) requirements from the outset when developing digital products and CX strategies. Likewise, 40 per cent of the companies have corresponding product teams working as a product organisation that assumes end-to-end responsibility for managing the customer journey. Such product teams are responsible for the development and operations of a digital product, can react much more flexibly to changing requirements through close coordination and are also responsible for the orchestration of all associated services. A large number of other companies are planning to set up corresponding product teams.

MAJOR CHALLENGES REMAIN WITH DATA-BASED MEASURES

Strategies and campaigns are increasingly developed on the basis of data and predictive models. Methods in the field of AI play an important role in this context – for example, in the intelligent automation of business processes or in customer segmentation and individual



CONCLUSION AND OUTLOOK

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customer targeting (hyper-personalisation). 80 per cent of the companies have therefore also geared their strategy towards consistently relying on the use of data and thus transforming themselves into a data-driven company.

Compared to previous years, the survey shows significant progress in the collection of customer data and the corresponding processing into customer insights. However, the survey results also show that the B2C companies surveyed see themselves as being well positioned in data and analytics, whereas the majority of companies with a B2B focus are still in the early stages of deriving measures based on data analyses and data automation. This is matched by the fact that for 63 per cent of the companies collecting data at all customer interfaces and monetising it remains a major challenge. The companies surveyed are also not yet very advanced in the systematic use of customer feedback: 59 per cent see the integration of customer feedback into product development as a major challenge.

GENERATIVE AI HAS ENORMOUS DISRUPTIVE POTENTIAL

The survey participants rate the relevance of generative AI in relation to their own company as very high. In fact, the potential of generative AI has a disruptive character and the areas of application are diverse. 84 per cent of the respondents see a clear advantage in the completion of standardisable tasks and the possibility to focus on value-adding activities in the context of demographic change and a tight labour market. Seven out of ten respondents also see productivity benefits, faster implementation of projects (67%) and an increase in employee productivity (61%). Potential areas of application are seen above all in chatbots for communication with customers and among employees (74%), in the improvement of products through the faster processing of collected customer feedback (68%) and in the creation of content (60%).

INVESTMENTS REFLECT TRANSFORMATION PRESSURES

In addition to generative AI, the survey participants expect the strongest impulses for their companies in the technology fields of data & analytics, machine learning, hyper-personalisation and IoT. However, in order to make meaningful use of these technologies, companies must continue to invest in the modernisation of their process and IT landscapes as well as in organisational and cultural realignment.

Looking at the strongest investments, almost all companies (94%) will invest in the development and implementation of digital platforms – i.e. in building platform-based business models – in 2024 and 2025. 84 per cent of companies will therefore strengthen their marketing strategy and related digital campaigns in 2024 and 2025. This includes data-driven marketing strategies, market research analysis or the development of conversions and leads with an efficient ROI. In this context, the share of companies that will invest in media production and



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communication & content has increased significantly compared to the previous year (2022). In addition to digital media formats such as videos, this also involves other digital formats in order to play out content with more emotion and in a more channel- and target group-specific manner.



Postscript

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

- Adesso
- Diva-e
- Plan.Net Group
- Reply
- Syzygy Group
- Valantic

Special thanks are also due to all participating businesses and the analysis teams of Lünendonk & Hossenfelder GmbH. Thank you very much for your 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 dialogue with experts from academia, 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!



Lünendonk interviews Reply



Reply has been one of the leading IT and technology consultancies in Germany for many years and achieves a significant share of its revenue in the area of digital experience. Thereby, Reply interprets trends and makes them usable for the transformation needs of companies. In an interview with Lünendonk, Dr. Thomas Hartmann, Executive Board of Reply Germany, and Dr. Oliver Bohl, Managing Director of Triplesense Reply, talk about current digital topics, the trend topic AI and the current challenges in the digital industry.



Dr. Oliver Bohl
Managing Director
Triplesense Reply GmbH



Dr. Thomas Hartmann
Executive Board
Reply Deutschland SE

LÜNENDONK: Reply has been one of the leading IT and technology consultancies in Germany for many years and achieves a significant share of its revenue in the digital experience sector. What is the secret of your success?

THOMAS HARTMANN: Reply interprets trends and makes them usable for the transformation needs of companies. In doing so, we rely on creativity, data-based insights and innovative technologies. I still consider this combination to be special in the market. Facing the fact that we are experiencing an increasingly tighter interlocking between automation, artificial intelligence, digital interfaces and networked objects, Reply is positioning itself as a partner that supports companies in creating new, digital business models and optimising processes, products and services.

LÜNENDONK: AI in general and generative AI in particular, data analytics, Web3, cyber security, voice, social, retail media – the list of trends in the market for digital experience services is long. Which digital topics are currently most relevant for Reply?

THOMAS HARTMANN: Our customers are strongly demanding AI applications – especially generative AI solutions – in the areas of data-driven marketing and personalisation as well as cloud-native digital experience solutions. Recently these business areas have grown significantly. Due to the fact that the design of personalised customer experiences no longer works without the use of AI, investments in new technologies and AI-supported

"Our customers are strongly demanding AI applications – especially generative AI solutions – in the areas of data-driven marketing and personalisation as well as cloud-native digital experience solutions."

Thomas Hartmann
Reply Deutschland SE



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business models are currently the focus of our customers. AI can be used to automate processes, target data and develop contemporary customer experiences.

The demand for cloud-native applications also continues to increase. Cloud-native technologies enable companies to develop scalable applications in dynamic environments as well as public, private and hybrid clouds. Implementation in the cloud leads to short project runtimes and lower project costs

OLIVER BOHL: I fully agree with Thomas: the hot topics today, as well as in the coming years, are all about AI and the question of how everyday life can be optimised by AI. People expect simplicity and quality, and users' expectations of services and products are rising accordingly. For companies in every industry, this means the next stage of digital transformation is imminent. It is necessary to establish both high-performance and secure system worlds and processes and to create motivating framework conditions with corresponding policies – and to build up the necessary skills. Identifying possible use cases for AI across all business processes is currently a noticeable priority for our customers.

Across industries, the transactional, performance-oriented focus is gaining in importance. Social networks, for example, with their own fulfilment centres, are penetrating more strongly into processes formerly reserved for retailers. "Commerce everywhere" is now a reality, social commerce and commerce in phygital spaces are in vogue.

Approaches like Sustainable UX are on the rise – in terms of technical realisations and strategy. A constant enhancement and convenience as the sole driving force are outdated. Instead, the company's orientation must be designed sustainably in all its processes. The successes of a twin transformation – the digital and the sustainability transformation – force this orientation and lead to a success-critical duality of both pursuits.

LÜNENDONK: According to the Lünendonk® Survey, customer experience and customer centricity are becoming a central success component of digital business models. What are the reasons for this and what do companies need to do in order to achieve and maintain optimal CX?

OLIVER BOHL: Individually customised communication, services and products are an absolute must for consumers today. True customer centricity is therefore essential. Through individual dialogue with users and targeted analytical measures, companies can optimise customer experiences, gain customer insights and further develop their services and products.

"Across industries, the transactional, performance-oriented focus is gaining in importance."



Oliver Bohl
Triplesense Reply GmbH



The Market for Digital Experience Services in Germany

The importance of a customised CX is evident in retail: today's consumers are informed and demanding. They want an individual shopping experience. Their smartphone accompanies them during product research, the exchange with suppliers or in social media, right up to the purchase. Consequently, the evolution of retail towards a seamless CX touches various aspects. It is about technology, about trends and innovations and about change. The most important element is people and their needs. Simplifying digital life is the overriding goal. Additional efforts and breaks in shopping should be minimised. This requires supporting services, not just individual solutions, but an interplay of approaches such as AI, AR & VR, data & analytics and IoT. We must therefore come up with a user-centred approach. The use of AI in particular is crucial to address people individually, to make precise analyses and predictions and to react agilely to market movements.

LÜNENDONK: In addition to the technological perspective – for example through the introduction of new technologies – companies also have to change organisationally, processually and culturally. What does that mean in concrete terms?

THOMAS HARTMANN: With regard to organisational change, companies should live a culture of customer centricity, which is often accompanied by a realignment of the corporate structure – in which interdisciplinary teams are established, for example.

Two key factors play an important role in processual change. First, it is important to analyse the customer journey to understand all touchpoints and interactions of the customer with the company. Based on this, processes can be optimised to ensure a seamless, consistent experience. Users expect consistent information everywhere – on the Web, in the app, in the metaverse or via voice assistant. Secondly, agility and adaptability are important. Companies need to be flexible in their processes to respond to changing customer needs and market conditions. Headless architectures can be used for experiences that are relevant at all times. In order to cause a cultural change, customer centricity should be an integral part of the corporate culture – from the management level down to the trainee and intern. This can be achieved, for example, through training, an open feedback culture or incentive systems that reward those who contribute to better CX.

LÜNENDONK: The metaverse hype seems to be fading in the public discussion; instead, everyone is talking about generative AI. What role does AI play in Reply's customer work and how is generative AI currently being used?

THOMAS HARTMANN: Many companies are currently investing in AI-based technologies and Web3. Web3 and AI projects are correspondingly important, and the trend is

"Companies need to be flexible in their processes to respond to changing customer needs and market conditions."

Thomas Hartmann
Reply Deutschland SE



The Market for Digital Experience Services in Germany

continuing to rise. We have therefore expanded our core offering in the areas of AI, robotics and connected mobility to include new components such as digital assistants.

With the hyper-realistic avatar "Rose", we have developed a first digital human being. In her appearance, facial expressions and considerable conversational ability, "Rose" resembles a real human being. The answers she gives are not prefabricated, but vary depending on how her human conversation partners act. The knowledge required for this is based on ChatGPT, among other things, and can be expanded with additional information on certain topics. "Rose" responds in real time and patiently answers all questions. Digital Humans are used for digital service requests in Web shops, in retail or at airports.

OLIVER BOHL: At Reply, we use AI in our day-to-day creative and corporate work and thus also for client work. By this I mean AI tools like ChatGPT, Copy.ai or Komo.ai, to name a few. In this context, I find tools like Attention Insight, which predict the typical gaze of users based on a screen, exciting.

There is no question: AI is changing our working world. We will experience a massive increase in efficiency. What people spend hours or days on today, AI does in seconds and frees up space for other activities. At the same time, the evolutionary steps in AI are enormous. I would like to see a positive view of this ground-breaking, revolutionary technology. Politics should create balanced, smart regulations that are open to innovative technologies and set ethical standards for the use of AI.

LÜNENDONK: The past few years have been and still are marked by multiple crises. The digital industry is also feeling those effects. What are the biggest challenges facing the digital industry at the moment and how is Reply meeting them?

THOMAS HARTMANN: For me, the skills shortage is the dominating challenge. The demand for digital specialists exceeds the supply. Operating on innovative technologies and strong growth topics, Reply invests intensively in the training and further education of employees in order to successfully implement customer projects. Consequently, we are constantly on the lookout for talents who can shape the future together with us. Formats such as hackathons, code and creative challenges or collaborations with universities to train skills and network worldwide help us in this.

"What people spend hours or days on today, AI does in seconds and frees up space for other activities."

Oliver Bohl

TripleSense Reply GmbH



COMPANY PROFILE

Reply Deutschland SE



Reply specialises in the design and implementation of solutions based on new communication channels and digital media. As a network of highly specialised companies, Reply defines and develops business models enabled by the new models of AI, big data, cloud computing, digital media and the internet of things. Reply delivers consulting, system integration and digital services to organisations across the telecom and media; industry and services; banking and insurance; and public sectors.

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 and Generative AI, 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.

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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. Reply is ranked second in the German BVDW Internet Agency Ranking 2023.



COMPANY PROFILE

The Market for Digital Experience Services in Germany

COMPANY PROFILE

Lünendonk & Hossenfelder GmbH

L Ü N E N D O N K ”

Lünendonk & Hossenfelder, based in Mindelheim (Bavaria), has been analysing the European business-to-business (B2B) services markets since 1983. Their market researchers focus on the digital & IT and business consulting sectors, the audit, tax & advisory market and on real estate services and the staffing industry (temporary staffing, IT workforce).

The company's portfolio includes surveys, publications and benchmarks as well as consulting on trends, pricing, positioning and contracting procedures. The large data pool at Lünendonk's disposal enables the firm to provide unique insights for action. The market research and consulting company has been publishing the Lünendonk® Lists and Surveys, regarded as market barometers, for decades now.



With years of experience, deep understanding, a brilliant network and a passion for people and market research, Lünendonk and its consultants are sought-after among service providers, their customers and indeed journalists for their expertise. Each year, Lünendonk partners with a jury from the media to honour deserving companies and entrepreneurs with the Lünendonk B2B Service Awards.

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