

PAC RADAR

Artificial Intelligence | Germany | 2020

AI-related Services in Germany 2020 (Overall Results)

SITSI | Vendor Analysis | PAC INNOVATION RADAR

Leading providers of AI-related consulting,
systems integration, and operation services

– Positioning of DXC Technology –

Lead analysts:
Joachim Hackmann,
Karsten Leclerque, Elena Ndrepepa

teknowlogy | PAC, September 2020

teknowlogy | PAC

RADAR
IT SUPPLIER ASSESSMENT FROM PAC

TABLE OF CONTENTS

Objective of the PAC RADAR	3
RADAR license	4
Introduction	5
The trends in detail	7
Scope & definition	10
PAC RADAR evaluation method	13
Provider selection & participation	13
Considered providers by segment	14
The concept	15
Evaluation criteria	16
General PAC research method.....	17
Positioning within the PAC INNOVATION RADAR.....	17
PAC INNOVATION RADAR “AI-related Services in Germany 2020 (overall results)”	18
Review of top-seeded provider DXC Technology	19
About teknowlogy Group	20
About the PAC RADAR	21

TABLE OF FIGURES

Fig. 1: PAC INNOVATION RADAR graph (exemplary presentation).....	3
Fig. 2: The market for AI-related services vs. the market for SAP-related services in Germany	5
Fig. 3: Definition of AI-related services	10
Fig. 4: Overview of the eight PAC INNOVATION RADAR reports on AI-related services	11
Fig. 5: PAC INNOVATION RADAR – evaluation method	15
Fig. 6: Description of the PAC methodology	17
Fig. 7: Classification of providers in the PAC INNOVATION RADAR graph (example).....	17
Fig. 8: PAC INNOVATION RADAR AI-related Services in Germany 2020 (Overall Results).....	18

DOCUMENT INFORMATION

Author: Joachim Hackmann (jhackmann@teknowlogy.com)
 Co-authors: Karsten Leclerque, Elena Ndrepepa
 Publication: September 2020
 Last update: n/a

Scope ID: Artificial Intelligence, BI & Analytics | Germany | 2020
 Portfolio ID: SITSI | Vendor Analysis | PAC RADAR
 Related reports: This document is part of a series of eight RADAR reports.



OBJECTIVE OF THE PAC RADAR

The PAC RADAR by teknowlogy | PAC is an effective tool for the holistic evaluation and visual positioning of software and ICT service providers on local markets. Numerous ICT and business decision-makers in user companies of all industries and company sizes rely on the PAC RADAR when selecting their partners and developing their sourcing strategies.

With the help of predefined criteria, teknowlogy | PAC evaluates and compares providers' strategies, development, and market position in addition to performance and competencies within specific market segments.

Each PAC INNOVATION RADAR focuses on a certain IT services segment. Up to 30 leading providers are evaluated per segment. Participation in the PAC INNOVATION RADAR is free of charge.

All providers are evaluated using teknowlogy | PAC's proven methodology, which is based on personal face-to-face interviews.

teknowlogy | PAC reserves to also evaluate and position those providers in the PAC INNOVATION RADAR that do not participate in the self-disclosure process.

After the evaluation of the predefined criteria, each supplier's position is plotted in the PAC INNOVATION RADAR. The criteria are classified by clusters and can all be attributed to the "Competence" and "Market Strength" main clusters.

Within the PAC INNOVATION RADAR the following applies: The closer a company is to the center, the closer they are to meeting customers' requirements.



Fig. 1: PAC INNOVATION RADAR graph (exemplary presentation)



RADAR LICENSE

PAC INNOVATION RADAR “AI-related Services in Germany 2020 (Overall Results)”

PAC RADAR report license – unlimited reprint rights

Within the framework of the license with unlimited reprint rights the customer receives a PAC RADAR short report and a PAC RADAR graphic. Their usage and distribution to external parties is expressly permitted, without any limitations. The customer is entitled to use the contents of this PAC RADAR short report as well as the PAC RADAR graphic, either completely or partially (e.g. individual text sections or graphics), for all marketing and communications purposes.

In any usage and distribution, all contents of the PAC RADAR short report and the PAC RADAR graphic must always be marked with the “PAC” source reference. However, the contents must not be manipulated or deployed in such a way that changes the context.

The usage rights defined within the license with unlimited reprint rights refer to the PAC RADAR short report and the PAC RADAR graphic, however, under no circumstances include the usage of the contents of the full version of the PAC RADAR report.

In addition, the PAC RADAR copyright terms and conditions apply (see “About the PAC RADAR” on the last page of this document).



INTRODUCTION

AI in Germany: high expectations, strong growth, and currently a small market

Of all digitization topics, artificial intelligence is certainly the most highly charged, with high expectations. Companies from all industries without exception are at least evaluating the potential of AI in terms of possible business process automation or improvement of customer service. Many companies are already using AI-based solutions. Visible results are the chatbots using semantic text analysis that are already in use in many companies. AI solutions that are less immediately recognizable can be found in back-end processes, where, for example, insurance companies automatically evaluate damage patterns, analyze risks on the basis of AI, and enhance decision-support systems with neural capabilities.

The high expectations are also reflected by PAC | teknowlogy's market growth forecast. For AI-related services in Germany alone, we expect average annual growth of almost 30% in the years 2020 to 2024. It is currently unclear to what extent the coronavirus crisis will impact this growth scenario. Our qualitative analysis paints a mixed picture. Wherever AI can help automate processes and achieve greater process efficiency with little effort, companies stick to their chosen path and carry out AI projects as planned. Wherever AI projects are intended as a long-term investment, for example in customer services, they are being reconsidered given the general economic uncertainty at present. However, the picture is not really that clear-cut – for example, strongly customer-oriented and digitally sophisticated industries (such as online trade, consumer goods) tend to continue planned AI projects in the CX environment unchanged. In addition, there are also AI projects of strategic importance underway in many companies, which do not promise short-term ROI, but are considered as necessary and differentiating from the competition. These projects will be continued without interruption. An example here are projects for autonomous driving.

However, the high growth rate should not distract from the fact that the overall market is still comparatively small. For 2019, we estimate the total volume of AI-related services (including management consulting, application services, and infrastructure services) at just under EUR 700 million. This may seem high at first glance, but it is put into perspective when compared with the market for SAP services, for example. According to analysis by PAC | teknowlogy, German user companies spent a total of more than EUR 8.3 billion on SAP services. The SAP market includes services for consulting and system integration (C&SI), application management, and hosting services. It is thus 12 times the size of the AI-related services market.

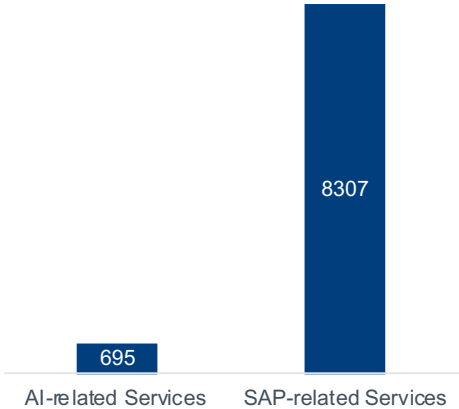


Fig. 2: The market for AI-related services vs. the market for SAP-related services in Germany

Why we have created a provider benchmark for a relatively small market

Given the small size of the market for AI-related services, the question arises of why we have created a PAC INNOVATION RADAR for this market segment.

Size alone is no indicator of a market's importance and attractiveness. It is high growth (see above) that makes it attractive for service providers. Even more important from user companies' perspective is the fact that AI is a relatively new topic and still lacks in transparency. Current projects that are launched with the help of AI technologies often are of strategic significance and deeply disrupt core business processes. It is therefore important for user companies to make an informed decision when selecting a provider, even if the projects are still limited in scope at this stage (compared to SAP transformation projects, for example). With these PAC INNOVATION RADARs on AI-related services, we want to give user companies a tool for decision-making and support them in the preselection process, taking into account type of project (consulting, systems integration, operation), company size, and use case (HCM, CX, IoT, SCM, etc.).



THE TRENDS IN DETAIL

The main results of this overall RADAR at a glance

For the provider evaluation of this PAC INNOVATION RADAR “AI-related Services in Germany”, we have analyzed a variety of criteria, such as the current status in terms of knowledge, experience, and capacities of skilled AI experts in Germany, and a focus on specific AI segments, frameworks, platforms, or libraries. In addition, we have considered criteria that are not directly related to AI, but which are nevertheless of great importance to users who are faced with selecting a provider, such as a focus on large customers or medium-sized businesses, or strengths and experience in business processes such as personnel administration, sales/service/marketing, or production/IoT (see chapter “Evaluation criteria”).

In this report, we present what we consider to be the main results obtained from the evaluation of all criteria. It therefore provides an overall view of the current business with AI-related services in Germany, across all business processes. In terms of the results, this view tends to favor large providers in Germany, as they can provide greater coverage of business processes in their portfolios for AI-related services. To get a more detailed view of individual business processes, we have compiled another seven PAC INNOVATION RADAR reports on AI-related services in Germany. The results of these RADARs prove that there are also many smaller providers and specialists with very good, focused offerings.

These are the main results of this overall RADAR at a glance:

The number of AI experts is relatively small

One criterion in our survey was the availability of local experts with special AI know-how (programming, consulting, etc.). The results reflect the early stage of development. In general, the share of employees with extensive AI know-how to be deployed in customer projects is in the single-digit percentage range of the total workforce. However, it is important to emphasize that it is quite rare for all available AI experts to be deployed exclusively in AI projects. Being an AI expert currently does not mean that you work full-time on AI projects.

Most providers invest significantly in education and training

It is also apparent that service providers are investing in this rapidly developing market segment. All the providers surveyed invest in the AI-related training of their employees. Some rely on support services such as regular webcasts, online training, and virtual workgroups. Others have installed structured classroom training, either in internal training academies or with external partners. Much of the training is also driven by certification programs offered by the major hyperscalers. This allows employees to become familiar with the functionalities and implementation capacities of cloud-based AI services while, at the same time, their employer can refer to certified employees as a sales argument in customer communications.

Hyperscaler AI services play a central role in simple AI implementations

Hyperscalers play an important role in the AI projects of almost all the providers surveyed. Among the preferred platforms are Amazon Web Services (AWS) and Microsoft Azure, but Google Cloud Platform, Salesforce, and IBM are also major partners in some projects. Hyperscalers offer access to essential AI capacities and libraries in order to be able to quickly implement standard functions, for example speech and image recognition. Nevertheless, many providers also have their own assets in their portfolio in order to be able to meet special customer requirements or implement projects quickly. Some service providers with strong AI know-how have also established focused teams that can design, develop, program, and operate customized solutions beyond the AI libraries.

Most providers pursue a clear AI strategy

Just like the user companies, service providers also see great (business) potential in artificial intelligence. The seriousness with which this goal is being pursued is usually also reflected by how firmly the AI topic is anchored in the corporate strategy. If there are clear goals, processes, methods, and a common understanding of the importance of AI, it is easier to conduct even small innovation projects that would otherwise not be accepted because they fall short of the usual project volume. Our evaluation shows different approaches here. Many providers have defined AI as a central element of their business strategy, others run AI projects more tactically.

The business process view – numerous projects in IoT/production

In total, we assessed AI-related projects in the following seven specific business processes:

- HR/HCM
- Sales, service, and marketing
- Logistics and SCM
- Production and IoT
- IT
- Governance, risk, compliance (GRC)
- Financials and procurement

We also had a category called “other business processes”, which contained projects that did not fall into any of the above categories.

When considering all projects, the high degree of AI-related maturity in business processes around production and IoT becomes apparent. This is where most providers have positioned themselves with innovative AI projects, and where most projects have already gone into productive operation. The reason for this is the customer structure in Germany, where there are many manufacturing companies. In addition, digitization in manufacturing has been strongly promoted for years under the term ‘Industry 4.0’. The step towards AI is therefore not a big one, because large databases and data histories already exist.

We have also been able to cover many projects in sales, service, and marketing. Given that customer interface and individual customer support play an increasingly important role in almost all companies, the strong interest here is understandable. On the one hand, many projects in this segment are about customer service automation (e.g. through bot systems), and on the other about better understanding and predicting customer requirements.

In the “other business processes” category, we noticed a large number of projects with public-sector clients (cities, administrations, etc.). These projects covered a wide spectrum, from promoting tourism, through automation, to security and smart initiatives.

We were given relatively few use cases for AI-related services in the financials and procurement segment. A main reason for this might be that the penetration of ERP software is very high in this segment and processes are therefore less individualized. In addition, modern ERP implementations often already include more functions using AI technologies.



SCOPE & DEFINITION

teknowlogy | PAC's definition of AI-related services

teknowlogy | PAC has evaluated providers of **AI-related services in Germany** in different PAC INNOVATION RADAR analyses, each of which emphasizes the implementation of AI use cases – based on common AI fundamentals and frameworks – in **different lines of business**.

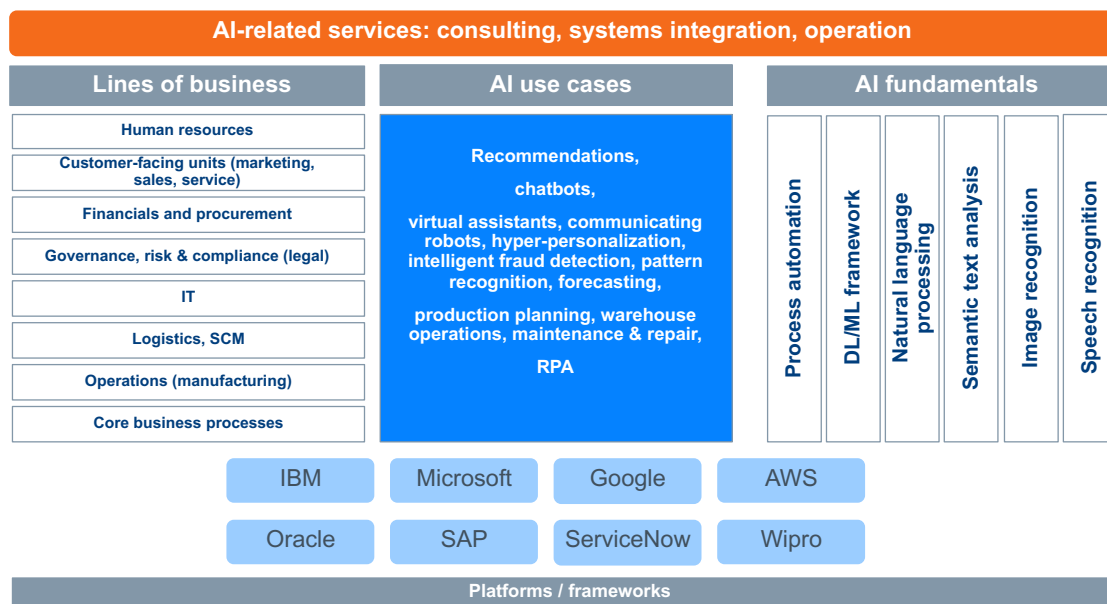


Fig. 3: Definition of AI-related services

AI-related services as considered in this PAC INNOVATION RADAR analysis include:

- **AI-related consulting services** (business consulting/IT consulting; feasibility studies, planning, specification, and design; audit of system infrastructures, selection of technologies and solutions, business process reengineering, and change management)
- **AI solution implementation and integration** (implementation services and integration of AI solutions with the existing software and services infrastructure and with other AI solutions where applicable, software development, testing, training, etc.)
- The assessment takes into account, but does not focus on, the **operation of AI solutions** (hosting/managed services), i.e. services that are needed to implement/deploy **AI-related use cases** in the above-mentioned lines of business.

It is not the AI platforms that have been assessed, but the **ecosystem services** that provide support to corporate clients with the implementation of AI solutions, from the initial development of an AI strategy and the identification of use cases to the implementation, integration, and management of AI solutions.

Segmentation of AI-related services

teknowlogy | PAC has evaluated providers of **AI-related services in Germany** in several PAC INNOVATION RADAR segments, which are dedicated to **specific line-of-business requirements**:



Fig. 4: Overview of the eight PAC INNOVATION RADAR reports on AI-related services

Depending on their specific focus, the providers will be positioned in one or more of the PAC INNOVATION RADAR analyses.

AI-related Services in Germany (overall results): In this PAC INNOVATION RADAR we evaluate the entire range of offers across all vertical and horizontal business processes. The use cases listed below are included in this evaluation, plus processes such as banking (e.g. payments, credit management), insurance (claims management, commissions), public (tax and revenue management), telecom/utilities (billing/metering, network management), retail & wholesale (sales, merchandising), and media (content management, ad management).

AI-related Services for HR/HCM: Human resources (HR) refers to all processes in HR departments, e.g. digital personnel file, leave & attendance management, payroll, etc. HCM goes beyond HR as it covers all employee-related topics, from recruitment (including job application processes and related services) to retirement.

AI-related Services for Sales, Service, Marketing: This area covers the separate segments of sales, service, and marketing, but also addresses integrated approaches with regard to customer experience management (CX) and customer relationship management (CRM).

AI-related Services for Logistics/SCM refers to all the processes related to the flow of goods and services. This includes, e.g., inventory optimization, forecasting and demand planning, warehouse management, transportation management, asset management, etc.

AI-related Services for GRC: Governance refers to binding principles (laws, norms, and standards) and company-specific principles (e.g. transparency, equality, etc.). Risk means enterprise risk management (which includes all

required methods and processes). Compliance refers to the implementation of relevant processes, methods, reporting, and controlling.

AI-related Services for Financials includes corporate back-office processes such as financial/cost/group accounting, controlling, financial risk management, treasury. **Procurement**, or supplier relationship management (SRM), helps companies to better manage the strategic buying process, be it materials, services, or goods.

AI-related Services for Production & IoT refers to all manufacturing processes in industrial companies (discrete manufacturing, process industry, automotive). This includes production planning, production and warehouse operations, quality control processes, and maintenance and repair operations.

AI-related Services for IT comprises all processes for the operation and further development of internal IT. This includes tasks such as security, maintenance, updates, service management, and admin processes.



PAC RADAR EVALUATION METHOD

Provider selection & participation

Which providers are positioned in the PAC INNOVATION RADAR?

Providers are selected and invited according to the following criteria:

- Positioning and business activities in the segment to be analyzed in the specified region;
- “Relevance”: Even providers that do not belong to the top-selling providers in the segment to be analyzed are considered if teknowlogy | PAC classifies them as relevant for potential customers, for instance due to an innovative offering, strong growth, or a compelling vision.

There is no differentiation as to whether the providers are customers of teknowlogy | PAC – neither in the selection of the providers to be positioned, nor in the actual evaluation.

What do providers have to do in order to be considered in a PAC INNOVATION RADAR analysis?

The decision as to which providers are considered in the PAC INNOVATION RADAR analysis is entirely up to teknowlogy | PAC. Providers do not have any direct influence on this decision.

However, in the run-up to a PAC INNOVATION RADAR analysis, providers can make sure in an indirect way that teknowlogy | PAC can adequately evaluate their offerings and positioning – and thus their relevance – e.g. by means of regular analyst briefings, etc.

Why should providers accept the invitation to actively participate?

Whether or not a provider participates in the RADAR process does not actually affect their inclusion and positioning in the PAC INNOVATION RADAR, nor their assessment. However, there are a whole host of benefits associated with active participation:

- Participation ensures that teknowlogy | PAC has access to the largest possible range of specific and up-to-date data as a basis for the assessment;
- Participating providers can set out their specific competencies, strengths, and weaknesses as well as their strategies and visions;
- The review process guarantees the accuracy of the assessed factors;
- The provider gets a neutral, comprehensive, and detailed view of their strengths and weaknesses as compared to the direct competition – related to a specific service in a local market;
- A positioning in the PAC INNOVATION RADAR gives the provider prominence amongst a broad readership as one of the leading operators in the segment under consideration.

Considered providers by segment

AI-related Services for HR/HCM	AI-related Services for Sales/Service/Marketing	AI-related Services for Logistics/SCM	AI-related Services for GRC
<ul style="list-style-type: none"> Accenture Atos Capgemini Datagroup Deloitte IBM NTT DATA Sopra Steria 	<ul style="list-style-type: none"> Accenture adesso Alexander Thamm Arvato Systems Capgemini CGI Datagroup Deloitte DXC IBM Lufthansa Industry Solutions Materna NTT DATA pmOne Reply Sopra Steria TCS 	<ul style="list-style-type: none"> Alexander Thamm All for One Arvato Systems Atos Capgemini Datagroup Deloitte DXC IBM Lufthansa Industry Solutions Materna NTT DATA pmOne Reply Sopra Steria TCS T-Systems 	<ul style="list-style-type: none"> Accenture adesso Alexander Thamm Arvato Systems Atos Deloitte DXC IBM Sopra Steria TCS

AI-related Services for Financials/Procurement	AI-related Services for Production & IoT	AI-related Services for IT
<ul style="list-style-type: none"> Accenture Alexander Thamm Datagroup Deloitte DXC IBM pmOne Sopra Steria 	<ul style="list-style-type: none"> Accenture adesso Alexander Thamm All for One Arvato Systems Atos Capgemini CGI Datagroup Deloitte DXC Fujitsu IBM Lufthansa Industry Solutions NTT DATA pmOne Reply Sopra Steria TCS T-Systems 	<ul style="list-style-type: none"> Accenture Arvato Systems Atos Capgemini CGI Datagroup Deloitte DXC Fujitsu IBM Materna NTT DATA Sopra Steria TCS T-Systems

The concept

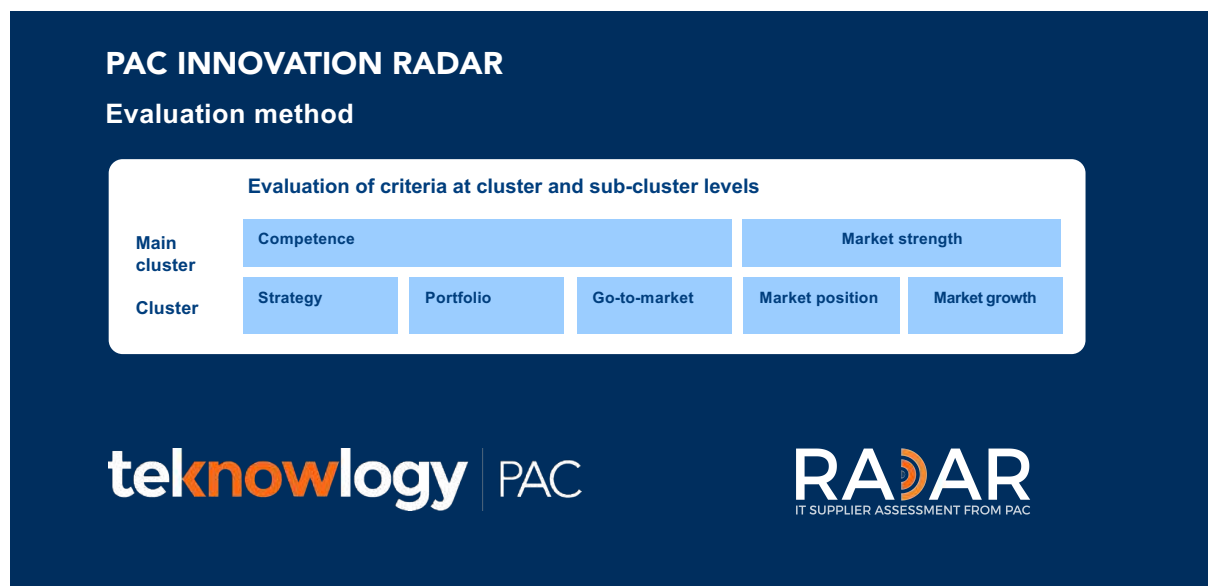


Fig. 5: PAC INNOVATION RADAR – evaluation method

teknowlogy | PAC uses **predefined criteria** to assess and compare the providers within given service segments.

The assessment is based on the report-card score within the peer group of the positioned providers.

This is based on:

- Dedicated face-to-face interviews with the providers about resources, distribution, delivery, portfolio, contract drafting, pricing, customer structure, client references, investments, partnerships, certifications, etc.;
- The analysis of existing teknowlogy | PAC databases;
- Secondary research;
- If applicable, a poll among customers by teknowlogy | PAC.

The provider data is verified by teknowlogy | PAC and any omissions are rectified based on estimates.

If the provider does not participate, the assessment is performed using the proven teknowlogy | PAC methodology, in particular based on:

- Information obtained from face-to-face interviews with the provider's representatives, analyst briefings, etc.;
- An assessment of company presentations, company reports, etc.;
- An assessment of teknowlogy | PAC databases;
- An assessment of earlier PAC (INNOVATION) RADARs in which the provider participated;
- A poll among the provider's customers (as required) on their experiences and satisfaction.

Evaluation criteria

The **general evaluation** is based on the following criteria:

Competence	Market Strength
<ul style="list-style-type: none"> • Availability of own AI technologies • Certifications for common AI platforms & solutions • Homogeneous coverage of common AI platforms • Coverage of AI fundamentals (e.g. video/speech/ image recognition, semantic text analysis) • Investment in assets (IP, tools, solutions, methods, M&As, etc.) • Overall expertise in business process modernization (cross-sector) • Investment in AI skills (incl. training, certifications, M&As, hiring, etc.) • Dedicated organizational structures for AI-related services • Realized AI use cases at strategy level / C-level • Convincing AI strategy in the view of teknowlogy PAC • Homogeneous coverage of common RPA platforms 	<ul style="list-style-type: none"> • Significance of operations in AI-related services • Focus on large accounts • International presence in AI-related services • Availability of local AI resources • Significance of consulting and systems integration in AI-related services • Awareness among peers • Significance of business consulting in AI-related services • Focus on medium-sized and small accounts

AI-related services in Germany (overall results):

Competence	Market Strength
<ul style="list-style-type: none"> • Overall evaluation of AI-related services for sales/service/marketing processes • Overall evaluation of AI-related services for financials/procurement processes • Overall evaluation of AI-related services for GRC processes • Overall evaluation of AI-related services for logistics/SCM processes • Overall evaluation of AI-related services for IT processes • Overall evaluation of AI-related services for production & IoT processes • Overall evaluation of AI-related services for HR/HCM processes 	<ul style="list-style-type: none"> • Overall breadth of AI use cases covered (processes, sectors, etc.)

General PAC research method

The following overview describes teknowlogy | PAC’s research method for market analysis and key differentiation features.

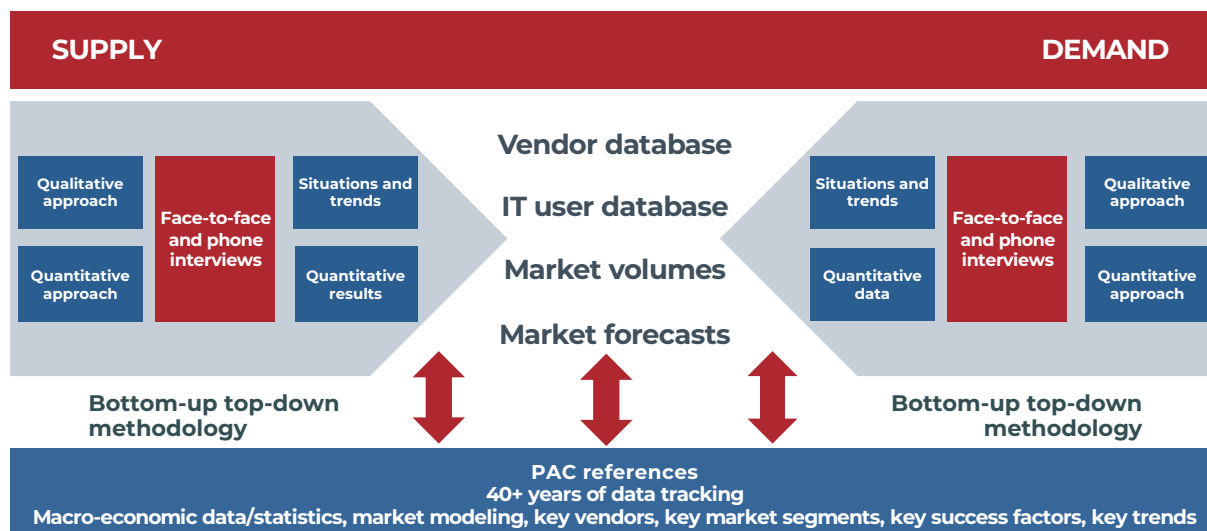


Fig. 6: Description of the PAC methodology

Local research and face-to-face communication are two core elements of teknowlogy | PAC’s methodology. In our market studies, we can draw on more than 40 years of experience in Europe.

Positioning within the PAC INNOVATION RADAR

Based on the scores in competence and market strength, the overall score is calculated (calculation: competence score plus market strength score, divided by two). From the resulting overall score, each provider receives their characteristic positioning within the PAC INNOVATION RADAR. Here, the following applies: The closer a provider is to the upper right corner, the closer they are to meeting customers’ requirements for that segment.

The classification of providers is based on the overall score:

“Best in Class”	1.0 – 1.9
“Excellent”	2.0 – 2.9
“Strong”	3.0 – 3.9
“Solid”	4.0 – 4.9



Fig. 7: Classification of providers in the PAC INNOVATION RADAR graph (example)



PAC INNOVATION RADAR "AI-RELATED SERVICES IN GERMANY 2020 (OVERALL RESULTS)"



Fig. 8: PAC INNOVATION RADAR AI-related Services in Germany 2020 (Overall Results)



REVIEW OF TOP-SEEDED PROVIDER DXC TECHNOLOGY

DXC Technology

PAC INNOVATION RADAR AI-related Services
in Germany 2020 (Overall Results) **Best in Class**

Cluster	Average	DXC
Relative Market Strength	2.34	1.84
Competence	2.37	2.00
Total Score	2.36	1.94

Criteria rated as significantly ABOVE AVERAGE (more than 0.75)

- Significance of operations in AI-related services
- Overall evaluation of AI-related services for IT processes
- Homogeneous coverage of common RPA platforms
- International presence in AI-related services
- Certifications for common AI platforms & solutions

Criteria rated as significantly UNDER AVERAGE (more than 0.75)

- Breadth of use cases in financials/procurement processes (portfolio view)
- Implemented reference projects in GRC processes
- Implemented reference projects in sales/service/marketing processes



ABOUT TEKNOLOGY GROUP

teknowlogy Group is the leading independent European research and consulting firm in the fields of digital transformation, software, and IT services. It brings together the expertise of two research and advisory firms, each with a strong history and local presence in the fragmented markets of Europe: [CXP](#) and [PAC \(Pierre Audoin Consultants\)](#).

We are a content-based company with strong consulting DNA. We are the preferred partner for European user companies to define IT strategy, govern teams and projects, and de-risk technology choices that drive successful business transformation.

We have a second-to-none understanding of market trends and IT users' expectations. We help software vendors and IT services companies better shape, execute and promote their own strategy in coherence with market needs and in anticipation of tomorrow's expectations.

Capitalizing on more than 40 years of experience, we are active worldwide with a network of 150 experts.

For more information, please visit www.teknowlogy.com and follow us on [Twitter](#) or [LinkedIn](#).



ABOUT THE PAC RADAR

The PAC RADAR is protected by Pierre Audoin Consultants (PAC) GmbH's copyright.

The PAC RADAR is a graphical representation and written analysis of the positioning of various IT providers within a defined market segment at a specific point in time. The positioning and characterization of selected companies within the PAC RADAR is conducted on the basis of an analytical assessment of criteria which PAC previously defined for this analysis.

The selection, positioning, and characterization of companies within the PAC RADAR is not subject to any vested interests whatsoever. PAC does not support any providers that are represented in the PAC RADAR, and does not give any recommendations to technology users. The PAC RADAR represents a result from market research only and must not be taken as a recommendation for action.

The contents of the PAC RADAR have been created with utmost diligence and care. However, PAC cannot be held responsible for any errors or omissions.

PAC excludes all express or implied claims, also if derived from warranties with respect to the PAC RADAR report, including any implied warranties of merchantability or fitness for a particular purpose.

The PAC RADAR may only be used for a license fee and with the consent of PAC. Moreover, the use and publication of the contents and the results of the PAC RADAR are subject to the "Terms & Conditions for the Usage of Pierre Audoin Consultants' SITSI® License".

Copyright Pierre Audoin Consultants (PAC) GmbH 2020. All rights reserved.