C&SI Services in the Automotive Industry I Germany I 2014

Leading Providers of Consulting & System Integration (C&SI) Services to the Automotive Industry in Germany 2014

SITSI I Vendor Analysis I PAC RADAR











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Objective of This Report

Market analysis and strategy consulting firm Pierre Audoin Consultants (PAC) has designed the PAC RADAR as a new concept for the holistic evaluation and visual positioning of the leading IT providers in a particular services segment of a local market. With the help of pre-defined criteria, PAC evaluates and compares providers' revenue scope, development and market share in addition to performance and competencies within the specified market segment.

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Introduction

This PAC RADAR on C&SI services in the automotive industry in Germany in 2014 sees PAC evaluating IT providers from a vertical perspective for the first time. To date PAC's PAC RADARs have only looked at and positioned IT providers from the perspective of horizontal IT services (e.g. for BI services, SAP hosting services, or workplace management & transformation services).

Companies from the automotive sector are confronted by pressures in terms of costs and innovative potential in the face of global competition. In order to ensure lasting commercial success at the same time, the efficiency of all company processes must be optimized. As a consequence, this requires IT providers to support the companies of the automotive industry by deploying suitable IT solutions. Above all, demand for consultancy and implementation in the field of new technologies has increased, for example in the area of cloud, big data, or mobility.

Further, customer requirements in terms of diversity of models, quality, service, and support have also risen. Additionally – alongside the increased complexity of the products due to the increased significance of electronic and software components in cars – the growing significance of the networked vehicle is putting new demands on IT providers, for example in the M2M area or embedded software development.

Alongside sound IT expertise, comprehensive sector-specific expertise about business processes is key for IT service providers to be able to optimally support the companies of the automotive industry.

The company-specific requirements that the automotive industry places on IT providers are varied and manifold, and accordingly there is a wide range of IT providers that operate for the companies of the German automotive industry and provide them with support relating to consultancy and system integration services.

In this PAC RADAR on C&SI services in the automotive industry in Germany in 2014, PAC has evaluated the IT providers using a wide range of criteria that PAC deems relevant for the market of consultancy and system integration services in the German automotive industry.

The main intention of evaluating the providers using over 70 individual criteria is to establish initial indicators about the offering and subject focus of the individual players. As the requirements of the individual users may vary widely, the various provider profiles produced by the wide range of evaluations correspondingly suit the varying needs of individual users.

Consulting & System Integration in the German Automotive Industry – Definition

The automotive industry comprises the **automotive OEMs**, the **automotive suppliers** and the **automotive dealers**. The PAC RADAR on automotive consulting & system integration (C&SI) covers the following industry specific services:

1. Infrastructure-related project services

In terms of technology, infrastructure-related services relate to infrastructure software & platforms: operating systems, N2SM, security, middleware; Hardware products and IT equipment. Infrastructure-related services comprise consulting services and system integration (SI) services

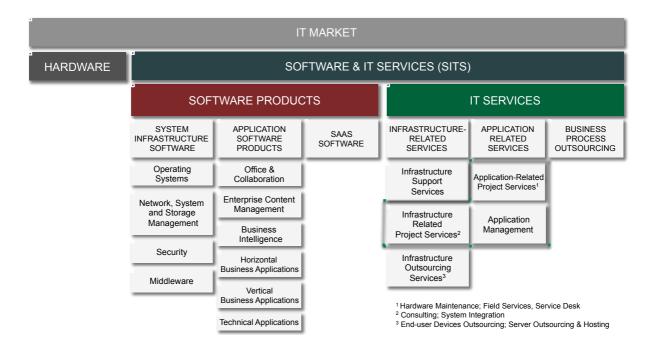
2. Application-related project services

In terms of technology, application-related services relate to application software (custom development or packaged software); any application: office/ collaboration/ ECM, BI, horizontal business applications, vertical business applications, technical applications. Application-related services comprise consulting services system integration (SI) services

3. Application management

Application management according to PAC is characterized by:

- The maintenance and enhancement of existing applications (custom development and/or customized software products), sometimes even their initial development;
- Long-term (multi-year) contracts with a commitment to fulfilling pre-defined service level agreements (SLAs) on a fixed-price basis; Often, specialized IT staff is transferred.



Methodology of the PAC RADAR

Introduction to the methodology

The PAC RADAR is a tool for the holistic evaluation of IT providers. PAC publishes two to four PAC RADAR reports per year, each on a different topic. Each PAC RADAR is targeted towards a particular IT services area in which up to 15 leading providers in a local market are evaluated.

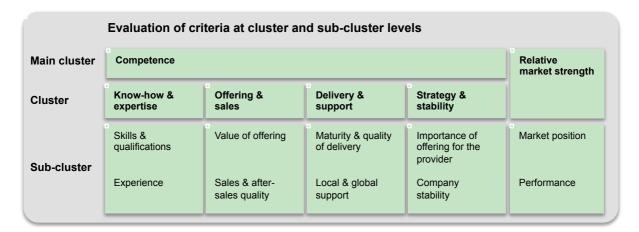
With the help of approximately 50 pre-defined criteria, PAC evaluates and compares the leading providers' revenue scope, development and market share in addition to performance and competencies within the market segment.

The criteria are classified by clusters (or categories) and can each be mapped to the "Competence" and "Relative Market Strength" main clusters as well as the underlying sub-clusters (see figure). From the criteria's evaluation, an overall score as well as partial scores per clusters and sub-clusters are derived.

From the weighted evaluation of all criteria and the resulting overall score, each provider receives their characteristic positioning in the PAC RADAR. Within the PAC RADAR, the following applies:

The better a provider's competence and relative market strength are assessed, the closer they are positioned to the center.

The closer a provider is to the center, the closer they are to meeting customers' requirements.



Clusters and sub-clusters of the PAC RADAR by which providers are evaluated

SAMPLE CRITERIA FOR "CONSULTING & SYSTEMINTEGRATION IN THE GERMAN AUTOMOTIVE INDUSTRY 2014"

Cluster 1 "Know-how & experience": knowledge/qualification

- Number of consultants with industry-specific know-how worldwide, Europe, Germany
- Competence center: scope & breadth of topic coverage for automotive C&SI
- Degree of resource coverage allocation of consultants with industry-specific know-how to the most important functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)
- Certifications (e.g. for quality and security)
- Technology partnerships: scope (in general) and industry-specific relevance
- Degree of resource coverage allocation of industry-specific consultants to relevant C&SI services

Cluster 1 "Know-how & experience": experience

- · History in the automotive industry worldwide, Europe, Germany
- Ability to execute large and complex projects
- · Experience in application-related projects
- Experience in infrastructure-related projects
- Experience in testing projects
- · Experience in business process-related consulting projects
- Experience in IT consulting projects
- Experience in individual software development projects
- Experience in embedded SW development and engineering services
- Experience in connectivity/infotainment/M2M projects

Cluster 2 "Offerings & sales": value of the portfolio

- Degree of portfolio coverage completeness of portfolio for the automotive industry by relevant C&SI services
- Degree of portfolio coverage completeness of C&SI portfolio for the different functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)
- Degree of C&SI portfolio maturity scope of "service products"
- Scope of standardized proprietary solutions (e.g. add-ons for SAP or solutions based on own IP)
- Degree of resource coverage allocation of consultants with industry-specific know-how to the most important functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)

Cluster 2 "Offerings & sales": sales- and after-sales quality

- Industry-specific sales power (in relation to total sales)
- "Cultural fit" with OEMs, based on project experience with OEMs
- Offering and scope of different price models
- Flexibility and readiness to take risks regarding price models
- Reference customer assessment: total rating of bidding phase (incl. pro-active approach)
- · Reference customer assessment: total rating of general quality of account management
- Corporate transparency

Cluster 3 "Delivery & support": maturity and quality of delivery

- Number of industry-specific consultants in product-centric functional areas (e.g. product development, production/assembly)
- Number of industry-specific consultants in customer-centric functional areas (e.g. sales, marketing, after-sales, service)
- Number of consultants for topics such as connectivity, M2M, or telematics
- · Number of consultants for horizontal topics, such as HR, finance, or cloud, analytics, mobility etc.
- Experience mix and distribution of industry-specific consultants
- Longevity of customer relationship
- Reference customer assessment: total rating of service provision
- Reference customer assessment: total rating of pro-active approach and innovative strength in service provision
- Reference customer assessment: total rating of methods & tools used; project management competence

Cluster 3 "Delivery & support": local and global support

- Ability to deliver globally to customers in the automotive industry
- Willingness to operate a dedicated, customer-specific delivery center

Cluster 4 "Strategy & stability": importance of the offering for the provider

- Organizational entrenchment of automotive C&SI in the company
- Investments in research & development (incl. joint developments with universities or cooperation with associations & organizations, such as GENIVI, AUTOSAR etc.)
- Investments in the training and further education of own staff (methodology, process and industry-specific training)
- Focus on automotive C&SI services (share in German IT services revenues)

Cluster 4 "Strategy & stability": company stability

- Balance of customer mix in target customer segment (OEMs, tier-1/tier-2 suppliers, dealers)
- Balance of customer mix (large accounts vs. SMBs)
- Dependence on large accounts
- Corporate stability

Cluster 5 "Relative market strength": market position

- · Strength of automotive references
- Access to business decision-makers
- Automotive C&SI/AM services revenue in Germany
- Focus on Germany with worldwide automotive C&SI/AM services
- Focus on automotive C&SI services (share in German IT services revenue)

Cluster 6 "Relative market strength": performance

- Customer satisfaction (source: PAC research)
- Reference customer assessment: total customer satisfaction
- Growth of automotive ITS Germany
- Growth of automotive C&SI/AM Germany & worldwide

Selection of providers for the PAC RADAR

The providers are selected and invited (to participate) by the following criteria:

- Sales volume in a particular segment in the region analyzed
- "Relevance": Even those providers that are not among the top-selling providers in that
 particular segment are taken into account, if PAC considers them as relevant for potential
 customers, e.g. due to an innovative offering, strong growth, or their focus on a specific
 customer group.

Further criteria include the strategic relevance of the service offerings in the portfolio as a whole, breadth and depth of the portfolio, and a broad customer base in the market segment of the target customer group.

Of the companies approached, eight supplied self-disclosure in the specified time window. The analysis also covered additional providers included in the peer group by virtue of their positioning.

The assessments are based on a comparison within the peer group, that is, these leading providers among themselves.

The following providers were evaluated in the PAC RADAR "Leading Providers of Consulting & System Integration (C&SI) Services to the Automotive Industry in Germany 2014":

- Accenture
- All for One Steeb
- Atos
- BearingPoint
- BTC
- Capgemini
- Cognizant
- CSC
- HP

- IBM
- Infosys
- Materna
- Mieschke Hofmann & Partner (MHP)
- NTT Data
- T-Systems
- Tata Consultancy Services (TCS)
- Tech Mahindra
- Wipro

The providers that submitted self-disclosure – and by doing so also acknowledged that they are seeking to actively present themselves on the German market in terms of Automotive C&SI services – include:

- All for One Steeb
- Atos
- BearingPoint
- BTC
- Cognizant

- Materna
- Mieschke Hofmann & Partner (MHP)
- T-Systems
- Wipro

Evaluation methodology in the PAC RADAR

Each provider is assessed using comprehensive self-disclosure, an evaluation of the provider by its customers, and additional assessments on the basis of PAC's tried-and-tested methodology.

Self-disclosure by the providers

In the self-disclosure, the providers were asked for aspects such as topic-specific experience, skills and resources, portfolio, service provision, sales structures, customer focuses and further relevant topics.

Rating of the providers by their customers

In addition to the self-disclosure, we asked for ratings of four existing Automotive C&SI service customers at German level.

Not all providers submitted four customer ratings for evaluation. With fewer than four customer ratings, missing ratings were regarded as "average", i.e. they scored the ratings "satisfied" or "service provision according to contractual agreement".

Any submitted customer rating therefore particularly offered the opportunity to improve the score compared to the average rating. In case of more than four submitted customer ratings, the four best ratings were considered in the final assessment.

The providers' assessment by their customers was conducted using grades on a scale from 1.0 ("Considerably exceeded agreement" or "Delighted") to 5.0 ("Plainly not adhered to/ fulfilled agreement" or "Very unsatisfied") for the following criteria:

SUBJECTS FOR CUSTOMER EVALUATION (INCL. EXAMPLE CRITERIA)

Quotation phase

- Reaction time, completeness
- Comprehensibility, transparency
- Flexibility/ innovation: pricing structure/ models
- Level of coverage with the requirements

Account management

- Response to change requests
- Availability of account manager
- · Reaction time of account manager
- · Specialist competence of account manager
- General behavior/ communication
- Behavior in the event of escalation/ under stress

Service provision

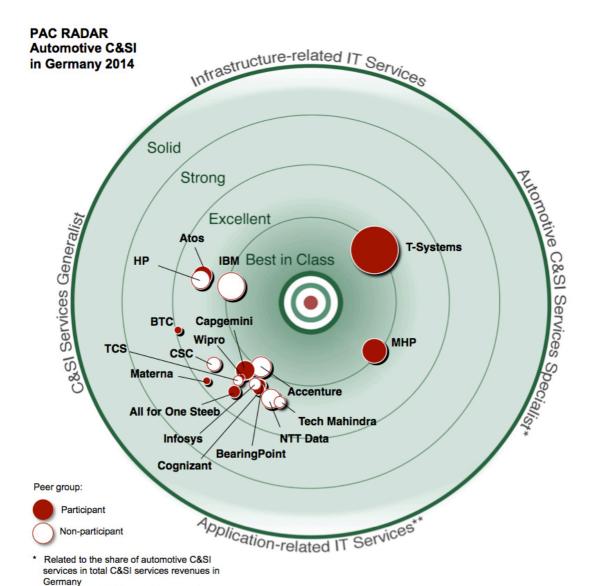
- Budget and deadline compliance
- Realization of requirements
- · Quality of results
- Specialist competence (technology & processes)
- Industry competence
- Teamwork with the customer
- Proactive approach, contributing innovation
- Implemented methods & tools
- Project management competence
- Knowledge transfer
- If applicable: collaboration with offshore resources

Weighting of the criteria

Criteria with stronger weighting from company's self-disclosure and reference customer assessments

- Number of consultants with industry-specific know-how Germany Competence center: scope & breadth of topic coverage for automotive C&SI
- Degree of resource coverage allocation of consultants with industry-specific know-how to the most important functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)
- Degree of resource coverage allocation of industry-specific consultants to relevant C&SI services
- Experience in application-related projects
- Experience in business process-related consulting projects
- Experience in IT consulting projects
- Experience in connectivity/infotainment/M2M projects
- Degree of portfolio coverage completeness of C&SI portfolio for the different functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)
- Degree of resource coverage allocation of consultants with industry-specific know-how to the most important functional areas at companies in the automotive industry (e.g. product development, production/assembly, sales)
- Reference customer assessment: total rating of bidding phase (incl. pro-active approach)
- Reference customer assessment: total rating of service provision
- Reference customer assessment: total rating of pro-active approach and innovative strength in service provision
- Reference customer assessment: total rating of methods & tools used; project management competence

PAC RADAR: Leading Providers of Automotive C&SI Services in Germany 2014



The PAC RADAR for Automotive C&SI Services in Germany 2014

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Related to the share of application- or infrastructure-related IT services in total IT

services in Germany

Positioning within the PAC RADAR

Positioning within the rings

Using the calculated overall grade, each provider receives a characteristic positioning within a PAC RADAR ring. The following applies here: The closer the position is to the center, the closer the provider is to the customer requirements for that segment.

The "customer requirements" at the center represent a cross-section of the market; the position of the provider represents the completeness with which the provider's offerings and competence correspond with the requirements of all potential customers; i.e. purely German clients, international key accounts and SMEs alike.

The providers have been positioned with the 1st ring (inside) to the 4th (outside).

The PAC RADAR rings have the following attributes:

- 1st ring: "Best in Class" (grade between 1 and 1.99)
- 2nd ring: "Excellent" (grade between 2 and 2.99)
- 3rd ring: "Strong" (grade between 3 and 3.99)
- 4th ring: "Solid" (grade between 4 and 4.99)

Positioning along the ring

The positioning of the provider along the ring does not represent an assessment, but rather additional information. It shows the provider's area of focus within the segment under consideration:

- C&SI-Services-Generalist vs. Automotive C&SI-Services-Specialist
 Related to the share of automotive C&SI services in total C&SI services revenues in Germany.
- Application-related IT-Services vs. Infrastructure-related IT-Services
 Related to the share of application- or infrastructure-related IT services in total IT services in Germany.

Size of the circles

The size of the circles corresponds to the market strength of the provider with respect to Automotive C&SI services in Germany.

Review of Top-seeded Provider BearingPoint



PAC RADAR C&SI Services in the Automotive Industry in Germany 2014

Excellent

| PAC RADAR Automotive C&SI Services in Germany 2014 | | Evaluation | | |
|--|--|-------------------------------------|--------------|---------|
| Cluster | | Sub-Cluster | BearingPoint | Average |
| Competence | Cluster 1: Know-how & experience | 1.1. Knowledge/ qualifications | 2.33 | 2.18 |
| | | 1.2. Experience | 1.98 | 2.20 |
| | Cluster 2: Offering & sales | 2.1. Value of portfolio | 2.52 | 2.08 |
| | | 2.2. Sales & after-sales quality | 2.25 | 2.58 |
| | Cluster 3: Delivery & Support | 3.1. Maturity & quality of delivery | 2.30 | 2.62 |
| | | 3.2. Local & global support | 2.63 | 2.43 |
| | Cluster 4: Strategy & stability | 4.1. Significance of offering | 1.97 | 2.17 |
| | | 4.2. Company stability* | 3.05 | 2.50 |
| Relative Market Strength | 5. Market positioning | | 1.94 | 2.30 |
| | 6. Performance | | 1.72 | 2.10 |
| Total score (in consideration of the different weighting of individual criteria, clusters and sub- clusters) | | 2.24 | 2.33 | |

^{*} The "Company stability" criterion does not primarily relate to financial figures. We substantially take into account company revenue and growth of the past years as well as the organizational stability of a company and of the service area under consideration.

CRITERIA RATED ABOVE AVERAGE

- History in the automotive industry worldwide
- History in the automotive industry Europe
- History in the automotive industry Germany
- Experience in business process-related consulting projects
- Reference customer assessment: total rating of general quality of account management
- Corporate transparency
- Reference customer assessment: total rating of methods & tools used; project management competence
- · Access to business decision-makers
- Focus on Germany with worldwide automotive C&SI/AM services
- Growth of automotive C&SI/AM Germany & worldwide

CRITERIA THAT RESULTED IN A DOWNGRADING

- · Experience in testing projects
- Experience in individual software development projects
- Experience in embedded SW development and engineering services
- Industry-specific sales power (in relation to total sales)
- Number of industry-specific consultants in customer-centric functional areas (e.g. sales, marketing, after-sales, service)
- Balance of customer mix (large accounts vs. SMBs)

About Pierre Audoin Consultants (PAC)

From strategy to execution, PAC delivers focused and objective responses to the growth challenges of Information and Communication Technology (ICT) players.

PAC helps ICT vendors to optimize their strategies by providing quantitative and qualitative market analysis as well as operational and strategic consulting. We advise CIOs and financial investors in evaluating ICT vendors and solutions and support their investment decisions. Public institutions and organizations also rely on our key analyses to develop and shape their ICT policies.

Founded in 1976 and headquartered in Paris, France, PAC is part of the CXP Group, the leading European research & advisory firm in the field of software and IT services.

For more information, please visit www.pac-online.com.

About the PAC RADAR

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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.

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