Digital CX & IoT I Europe I 2018
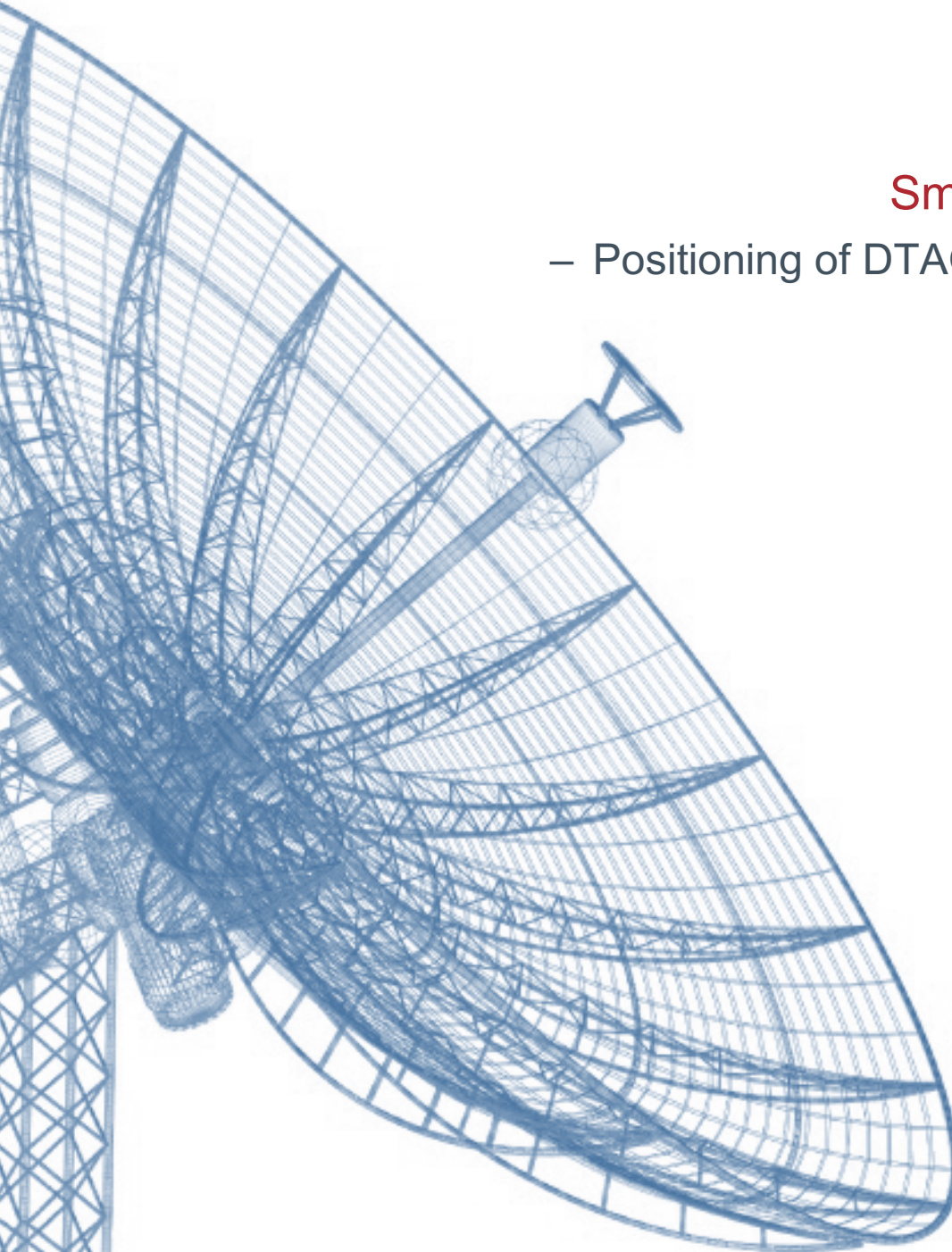
C&SI for IoT Solutions in Europe 2018

SITSI I Vendor Analysis I PAC INNOVATION RADAR

Smart Transport

– Positioning of DTAG/T-Systems –

CXP Group

BARC · le CXP · PAC

RADAR
IT SUPPLIER ASSESSMENT FROM PAC

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OBJECTIVE OF THIS REPORT

The purpose of the PAC RADAR from the market research and strategic consultancy Pierre Audoin Consultants (PAC) is to provide a holistic evaluation and visual positioning of leading IT providers within a defined service segment on a local market. Using predefined criteria, the providers' revenue volumes and development and market share are assessed and compared alongside their performance and specific competences in the relevant market segment.

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INTRODUCTION

When we talk about complex IoT projects, ICT and business decision makers are looking for consulting and systems integration partners with dedicated expertise in specific areas to implement a full IoT solution. PAC provides transparency for buyers to identify the best partner for their complex IoT projects.

We have to consider that C&SI services for IoT solutions serve different use cases. For this reason, PAC uses different RADAR segments, dedicated to specific uses cases, to evaluate the providers of C&SI for IoT solutions in Europe.

SEGMENTATION OF IOT SOLUTIONS

How does PAC segment the provider landscape for IoT solutions?

PAC splits the market into ten "digital contexts". For this report, PAC is going to evaluate the providers of C&SI for IoT solutions in Europe in five different PAC INNOVATION RADARs, which are each dedicated to a specific segment. These segments are:

- Digital factory
- Connected vehicles
- Smart transport
- Smart energy & resources
- Smart retail & CPG

A variety of use cases will be allocated to each of these five contexts, and the market of the PAC INNOVATION RADAR will be viewed from the perspective of these use cases. On the following pages, the different use cases are explained within their respective digital contexts.

How will the providers be matched to the different types of IoT solution?

The providers will be positioned in the PAC INNOVATION RADAR analyses depending on their market relevance and evaluated by: strategy, portfolio breadth, go-to-market, portfolio quality, market positioning, client relationship as well as the focus and the number of references for each context.

Digital factory　　**Connected vehicles**　　**Smart transport**

Smart energy & resources　　**Smart retail & CPG**

IOT CONTEXTS

Smart transport

Smart transport comprises applications that, without embodying intelligence as such, aim to provide innovative services relating to different modes of transport & traffic management and enable various users to be better informed as well as to make safer, more coordinated and "smarter" use of transport networks.

Use cases in the smart transport area

Smart infrastructure & intelligent transport systems (IoT)

Solutions based on connected assets such as video cameras, toll collection points, parking sensors, induction loops, displays, traffic signs as well as cloud-based platforms that integrate the collected data from these assets and provide actionable insights for optimization of the flows of traffic and people, indoor and outdoor.

Smart agents and ticketing machines (CX & IoT)

Speech recognition voice assistants, AI agents and devices capable of providing customer support and intelligent ticketing services to passengers at places such as airports and train stations.

Smart deliveries and freight transport (IoT)

Apart from providing data about the fleet of vehicles used, IoT-enabled solutions can be used for monitoring the condition of the transported assets/goods. Additionally, new ways of delivery can be introduced by means of drones or robots.

Fleet management (IoT)

Fleet management includes the provision of telematics data about commercial vehicles (cars, aircraft, ships, vans, trucks, rail cars) to enable better maintenance, tracking & tracing, fuel and consumption management, vehicle health management as well as driver health and behavior management.

Mobility/Transport as a Service (MaaS) (CX & IoT)

The use of digital and IoT solutions to enable innovative mobility services such as multi-modal ticketing solutions consists of multiple transport means such as public transport, bike, car and truck sharing concepts.

Connected operations (IoT)

Operations of transport companies can be improved by using IoT- and telematics-based solutions such as real-time monitoring and predictive maintenance, which can be applied not only to their fleets but also their premises such as stations, airports and garages.

PAC RADAR EVALUATION METHOD

The traditional RADAR evaluation method

The PAC RADAR is a tool for the holistic evaluation of IT providers. PAC publishes the PAC RADAR two to four times per year for different segments. Every PAC RADAR targets a specific IT services sector. In this PAC RADAR the leading providers in a local market are evaluated.

In the PAC RADAR, the performance, competence and market position of the key providers in a services segment are assessed and compared using approx. 50 pre-defined criteria.
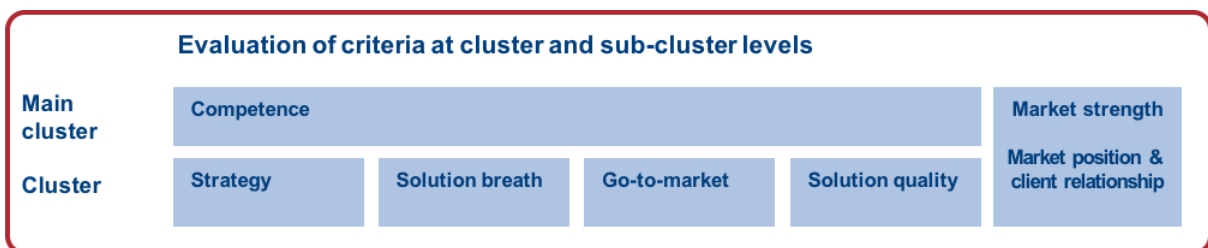
The criteria are classified by clusters (or categories) and can each be mapped to the "Competence" and "Relative Market Strength" main clusters as well as the underlying sub-clusters (see figure). There is an overall rating from the evaluation of the criteria as well as sub-ratings per cluster and sub-cluster.

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

The PAC INNOVATION RADAR evaluation method

Concept and methodology of the PAC INNOVATION RADAR are similar to those of the traditional PAC RADAR. While the traditional PAC RADAR focuses on mature services segments, the PAC INNOVATION RADAR, however, positions providers in rather new and innovative service segments. Thus the focus of the evaluation is rather on the portfolio, vision, investment and capabilities than on existing references, projects and resources.

For the PAC INNOVATION RADAR the following applies: The closer a company is to the top right corner, the closer they are to meeting customers' requirements!

Evaluation of criteria at cluster and sub-cluster levels				
Main cluster	Competence			Market strength
Cluster	Strategy	Solution breath	Go-to-market	Solution quality	Market position & client relationship

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

Selection of providers

Providers are selected and invited according to the following criteria:

- **Size of revenues** 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 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 PAC – neither in the selection of the providers to be positioned, nor in the actual evaluation.

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

The following providers have been positioned in the five PAC INNOVATION RADAR analyses "C&SI for IoT Solutions in Europe 2018":

Providers positioned in the segment of C&SI for IoT solutions for connected vehicles:

- Accenture
- Akka Technologies
- Alten
- Altran
- Assystem Technologies
- Atos
- BearingPoint
- Capgemini
- Cognizant
- Deloitte
- Device Insight
- DTAG/ T-Systems
- DXC
- Harman
- HCL
- IBM
- Infosys
- MHP
- NTT DATA
- Orange Business Services
- TCS
- Tech Mahindra
- Wipro

Providers positioned in the segment of C&SI for IoT solutions for digital factory:

- ABB
- Accenture
- Altran
- Atos
- Axoom
- BearingPoint
- Bosch
- Capgemini
- Cognizant
- Deloitte
- Device Insight
- DTAG/ T-Systems
- DXC
- EY
- Forcam
- Fujitsu
- IBM
- iTAC
- MPDV
- Reply
- Siemens
- Sopra Steria
- Wipro

Providers positioned in the segment of C&SI for IoT solutions for smart energy & resources:

- ABB
- Accenture
- Atos
- BearingPoint
- Capgemini
- CGI
- Cognizant
- Deloitte
- Device Insight
- DXC
- EY
- IBM
- Siemens
- Sopra Steria
- TCS
- Wipro

Providers positioned in the segment of C&SI for IoT solutions for smart retail:

- Accenture
- Atos
- BearingPoint
- Capgemini
- CGI
- Cognizant
- Deloitte
- Fujitsu
- IBM
- Infosys
- Wipro

Providers positioned in the segment of C&SI for IoT solutions for smart transport:

- Accenture
- Atos
- Capgemini
- CGI
- Cognizant
- Device Insight
- DXC
- DTAG/T-Systems
- EY
- Fujitsu
- IBM
- Indra
- Lufthansa IS
- NIIT Technologies
- Orange Business Services
- Siemens
- Sopra Steria
- TCS

Evaluation criteria (most relevant)

Main cluster "Competence"

Sub-cluster "Strategy"
- Strategic focus and activities in this IoT segment
- Strategic partnerships in this IoT segment
- Thought leadership in this IoT segment
- Strategic investments in this IoT segment in the last 24 months

Sub-cluster "Portfolio breadth"
- Standardized services in this IoT segment
- Standardized software in this IoT segment
- Balance of standardized services and software
- Maturity of portfolio in this IoT segment

Sub-cluster "Go-to-market"
- Number of consultants in Europe in this IoT segment
- IoT centers/labs in Europe for developing and testing complex IoT use cases
- Strategic sales partnerships in this IoT segment
- Existing client access and relationship in this IoT segment

### Sub-cluster "Portfolio quality"
- Differentiator in this IoT segment
- Number and quality of client references and lighthouse projects in this IoT segment
- Awards won in this IoT segment in the last 3 years
- Quality of consulting skills in this IoT segment
- Quality of systems integration skills in this IoT segment
- Balance between consulting and systems integration skills in this IoT segment

Main cluster "Market strength"

- IoT C&SI revenue in Europe in this IoT segment
- Market coverage across Europe (presence with local offices)
- Recognized as top provider in this IoT segment
- Financial strength

General PAC research method

The following overview describes PAC's research method for market analysis and key differentiation features.
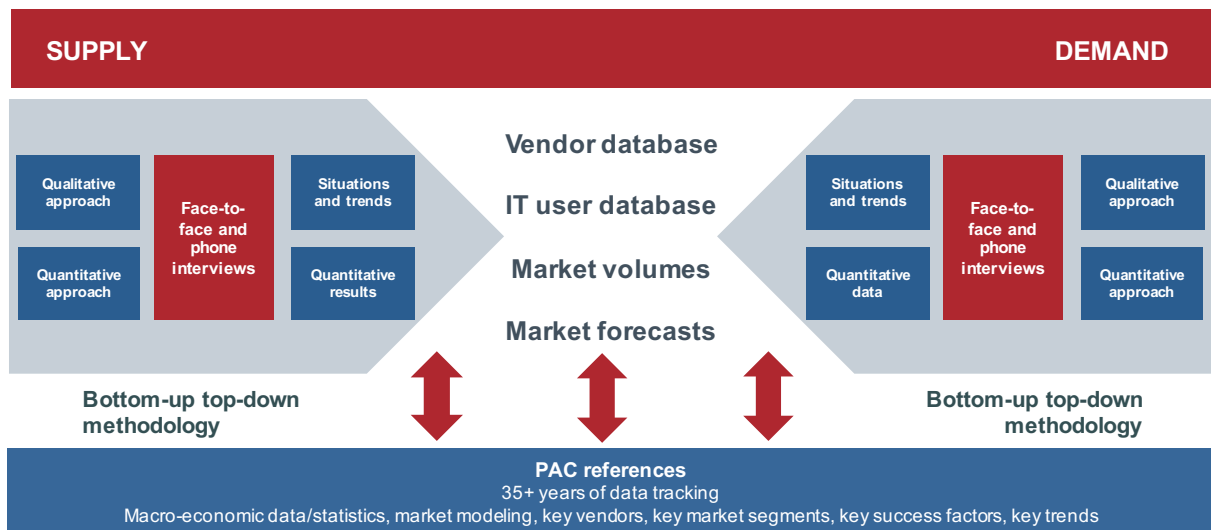
Description of the PAC methodology

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

Positioning within the PAC RADAR

From the resulting overall score, each provider receives their characteristic positioning within a ring of the PAC RADAR. Here, the following applies: The closer the position is to the upper right corner, 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 local clients, international key accounts and SMEs alike.

The providers are positioned within ring 1 (innermost ring) to ring 4 (outermost ring), based on the total grade they achieved. The total grade is the average score of the two main clusters ("competence" & "market strength").

The rings of the PAC RADAR can be classified by the following attributes:

- Ring 1: "Best in Class" (total grade between 1 and 1.99)
- Ring 2: "Excellent" (total grade between 2 and 2.99)
- Ring 3: "Strong" (total grade between 3 and 3.99)
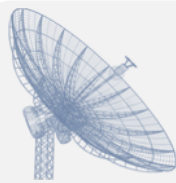- Ring 4: "Solid" (total grade between 4 and 4.99)

PAC RADAR "C&SI FOR IOT SOLUTIONS IN EUROPE 2018" – SMART TRANSPORT

C&SI for IoT Solutions in Europe 2018 – Smart Transport

PAC RADAR C&SI for IoT Solutions in Europe 2018 – Smart Transport

REVIEW OF THE TOP-SEEDED PROVIDER DTAG/T-SYSTEMS

DTAG/T-Systems

PAC RADAR C&SI for IoT Solutions
in Europe 2018 – Smart Transport   Best in Class

Introduction

Deutsche Telekom (DTAG) is one of the leading integrated telecommunications companies with more than 156 million mobile customers, 28.5 million fixed network lines and around 18.5 million broadband lines. T-Systems focuses on ICT solution business and large-scale projects with an international reach, addressing around 400 major national and international customers, as well as public authorities and the healthcare sector. In early 2015, three new operating managing board departments were established: The Digital Division, the IT Division and the TC Division, each with its own business focus and end-to-end responsibility, from development over sales to delivery.

Portfolio

T-Systems is one of the top performers in this RADAR, having an extensive standardized offering around solutions and services designed to enable smart transport initiatives across Europe. Thanks to its telecom roots, T-Systems has in-depth expertise when it comes to connectivity within IoT solutions. Besides, it can refer to a large number of use cases and client references in Europe. Its standardized offering comprises smart logistics, real-time parcel monitoring, condition monitoring and tracking, fleet management as well as smart airport solutions such as BAG2GO. A good example of its capabilities is the fleet management solution T-Systems provided to MAN to help it address challenges in its dispatching as well as cargo tracking process and enhance the efficiency of truck deployment. T-Systems integrated the solution with MAN's existing systems for shipment tracking and enabled MAN to achieve a greater efficiency of its own services for customers. Additionally, T-Systems provides its own IoT starter kit, which allows companies to retrofit their vehicles and assets with IoT capabilities on their own.

PAC's opinion

T-Systems has a strong overall positioning in the European SITS transport vertical, and based on its standardized smart transport offering, PAC believes it generates solid revenues from this business in Europe. T-Systems has developed expertise in areas such as logistics or cargo monitoring, but is also working on smart airport applications, which will definitely be important in the future. T-Systems has a strong presence in Europe, thanks to its T-Mobile operations throughout many European countries, which could turn out as one of its big advantages in gaining market share in smart transport solutions. Areas in which T-Systems is not as strong as some of its competitors concern the presence of digital labs throughout Europe as well as its consulting capabilities.

DTAG/T-Systems
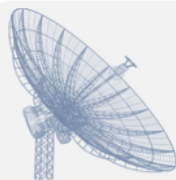
PAC RADAR C&SI for IoT Solutions
in Europe 2018 – Smart Transport   Best in Class

Cluster	DTAG/T-Systems	Average
Competence	2.10	2.39
Market strength	1.63	2.48

CRITERIA RATED AS SIGNIFICANTLY ABOVE AVERAGE (MORE THAN 0.5)

- Strategic focus and activities in this IoT segment
- Strategic investments in this IoT segment in the last 24 months
- Standardized services in this IoT segment
- Balance of standardized services and software
- Existing client access and relationship in this IoT segment
- Differentiator in this IoT segment
- Number and quality of client references and lighthouse projects in this IoT segment
- IoT C&SI revenue in Europe in this IoT segment
- Recognized as top provider in this IoT segment

CRITERIA RATED AS SIGNIFICANTLY UNDER AVERAGE (MORE THAN 0.5)

- IoT centers/labs in Europe for development & test of complex IoT use cases
- Won awards in the last 3 years in this IoT segment

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Founded in 1976, Pierre Audoin Consultants (PAC) is part of CXP Group, the leading independent European research and consulting firm for the software, IT services and digital transformation industry.

CXP Group offers its customers comprehensive support services for the evaluation, selection and optimization of their software solutions and for the evaluation and selection of IT services providers, and accompanies them in optimizing their sourcing and investment strategies. As such, CXP Group supports ICT decision makers in their digital transformation journey.

Further, CXP Group assists software and IT services providers in optimizing their strategies and go-to-market approaches with quantitative and qualitative analyses as well as consulting services. Public organizations and institutions equally base the development of their IT policies on our reports.

Capitalizing on 40 years of experience, based in 8 countries (with 17 offices worldwide) and with 150 employees, CXP Group provides its expertise every year to more than 1,500 ICT decision makers and the operational divisions of large enterprises as well as mid-market companies and their providers. CXP Group consists of three branches: Le CXP, BARC (Business Application Research Center) and Pierre Audoin Consultants (PAC).

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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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