ISG Provider Lens™
Internet of Things (I4.0) Platforms, Services and Solutions 2019

Definition

The Internet of Things has changed a lot in the last twelve months: from pure vision and initial attempts to implementation of concrete scenarios through increasing networking, analysis and automation. In the manufacturing industry, the increasing automation of monitoring systems is now used in a very wide range of applications, from aircraft construction to sports equipment manufacturers. But there are also interesting projects in other sectors such as logistics, building automation and retail.

An increasing number of providers are acting as brokers for IoT-generated data. Companies can evaluate their data, combine it with other data traded on the platform and share it with other companies. They can also define exactly with whom they do not want to share their data, or do not want to share any longer. For example, local authorities can monetize data on the state of air purity or traffic flows in their cities via the platform. In other sectors, the linking of external data is required. An example of this are manufacturers of commercial vehicles who have a very high interest in the processing of weather data.

Such examples show that IoT is making steady progress in the business customer sector. Less visionary, but with real, concrete and realizable cases that actually pay off for many customers. In the fourth edition of the IoT Provider Lens Project for 2019, we will place greater emphasis on the strength of the ecosystem and the implementation of such cases.

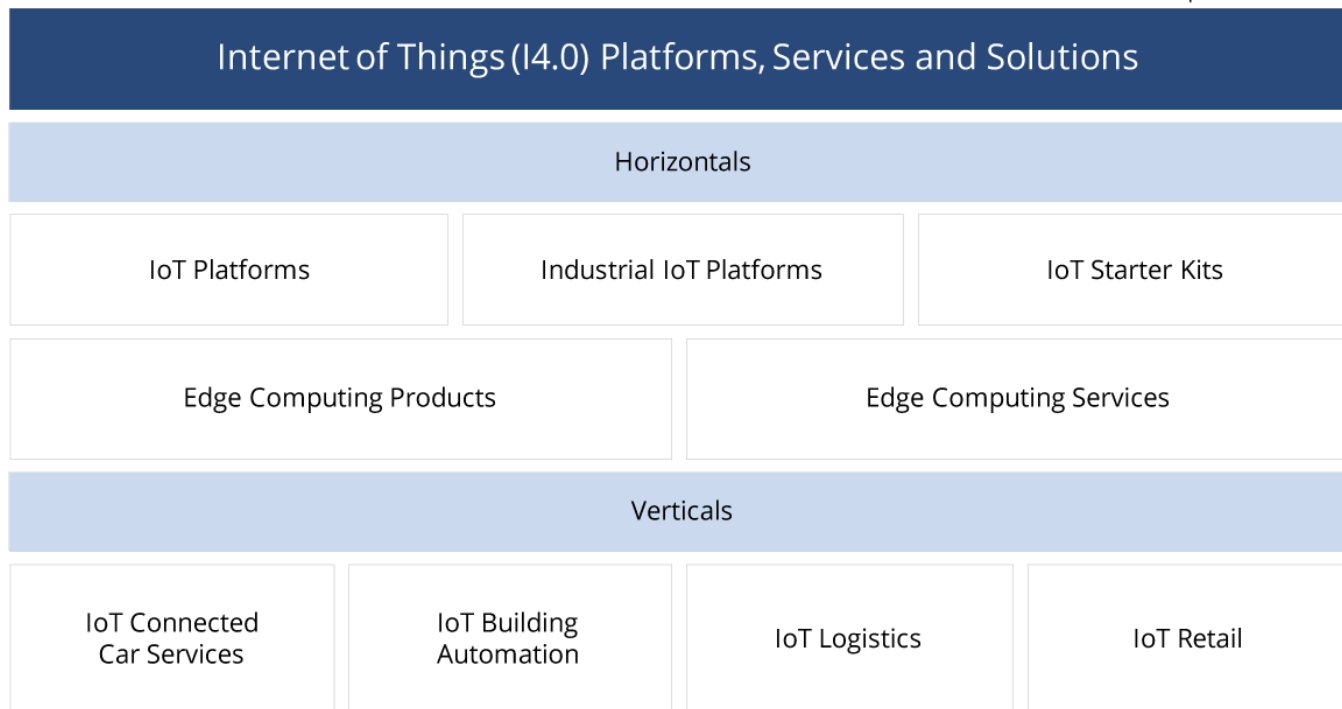The ISG Provider Lens™ study offers IT-decision makers:
- Transparency of strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments
- Focus towards the local German market

Our study serves as an important decision-making basis for positioning, key relationships, and go-to-market considerations. ISG Advisors and enterprise clients also leverage information from these reports in evaluating their current vendor relationships and potential new engagements.

Quadrant Research

As part of the ISG Provider Lens™ Quadrant Study, we are introducing the following 9 quadrants on SAP HANA® Services.

Simplified illustration

Internet of Things (I4.0) Platforms, Services and Solutions		
Horizontals		
IoT Platforms	Industrial IoT Platforms	IoT Starter Kits
Edge Computing Products		Edge Computing Services
Verticals		
IoT Connected Car Services	IoT Building Automation	IoT Logistics	IoT Retail

Source: ISG 2018

IoT Platforms

An IoT platform enables the deployment of applications that monitor, manage, and control connected devices. Key capabilities include remote data collection from connected devices, secure connectivity between devices, sensor management and integration with 3rd party systems. IoT platforms are the key interface for device communications (measure, control, regulate) and handle data management tasks (save, integrate, analyze, visualize device data), device management (security and functional SW updates on devices) as well as process management.

Industrial IoT Platforms

Industrial IoT refers to platforms connecting people, processes, data and things to improve the functionality of cyber-physical systems. In the industrial context, these connections exist mainly to produce physical goods and to optimize and preserve productivity assets such as plants and machinery. Industrial IoT includes solutions and databases from providers with a dedicated focus on processing industrial machine and facility data and on analyzing large, complex and unstructured data volumes (big data analytics). Industrial Analytics integrates raw signals and information about changes in the condition of industrial machines. As of today, analytics for predictive maintenance is the most important use case.

IoT Starter Kits

Notably, midmarket businesses are in search of solutions that provide a fast, easy and practical approach to industrial IoT use cases. Starter kits have been designed as plug and play solutions to ensure an easy market entry at a fixed price. These starter packs may include fixed-price consulting only, well-defined solutions or a combination of consulting, integration, hardware and software.

Edge Computing Products

Edge computing is the relocation of computing power, applications, data and services directly to the logical edge of a network. For the next years, more than twice as much computing power is predicted to be outside the central data center at the "Edge" on distributed end devices. The applications are kept on site to meet short latency times and avoid a possible bottleneck in the public cloud. Areas of application are, for example, IoT or Industry 4.0 (machines, robots), Smart City (intelligent traffic management, street lighting and traffic light control) or Big Data for quickly available information. In this segment focus is in product providers who offer edge computing solutions, ready to use, as a micro data center. The solution can consist of one or more racks, servers, storage, network, the facility such as redundant power supply and air conditioning, fire extinguishing, access protection and monitoring. In addition, the solution can be enhanced by further software and service offerings tailored to the product. These include, for example, professional services for support and the take-over of operative business for the infrastructure components. Edge solutions can differentiate themselves primarily through integrated unified endpoint management software, cyber security products, advanced analytics and device management. High availability must be guaranteed in this environment.

Edge Computing Services

Edge computing is the relocation of computing power, applications, data and services directly to the logical edge of a network. For the next years, more than twice as much computing power is predicted to be outside the central data center at the "Edge" on distributed end devices. The applications are kept on site to meet short latency times and avoid a possible bottleneck in the public cloud. Areas of application are, for example, IoT or Industry 4.0 (machines, robots), Smart City (intelligent traffic management, street lighting and traffic light control) or Big Data for quickly available information. Edge Computing is installed as a prefabricated micro data center near the user's location, for example in a production facility or at a colocation service provider in the vicinity. In this segment, offerings from service providers are considered that support the end customer comprehensively with the integration and optionally also take over the operational business as a service (operating). The goal for the edge transformation is to develop a solution for critical IT infrastructure based on different data center environments.

IoT Connected Car Services

Connected car services include solutions as well as consulting and integration services with a clear focus on the digitalization, automation and connectivity of vehicles. The following use cases are examined:

1. Car-to-car communications systems: Smart predictive safety systems, based on sensor data
2. Other driver support systems: Smart connected driver support systems, based on sensor data to enhance driver safety and experience 3. Connectivity solutions designed to enhance maintenance support and services such as insurance based on driver behavior.

IoT Building Automation

IoT building automation includes solutions as well as consulting and integration services with a clear focus on digitalization, automation and connectivity within the B2B building management context (rather than smart home - B2C). The following use cases are examined:

1. Energy/temperature management
2. Security/safety measurement
3. Condition monitoring
4. In-house tracking of devices

IoT Logistics

IoT logistics includes solutions as well as consulting and integration services with a clear focus on digitalization, automation and connectedness in the logistics sector. The following use cases are examined:

1. Intelligent fleet management
2. Track and Trace
3. Demand-aware warehouse
4. Routing traffic optimization for transported goods

IoT Retail

IoT Retail includes solutions as well as consulting and integration services with a clear focus on digitalization, automation and connectedness in the retail sector. The following use cases are examined:

1. Smart store solutions
2. Demand-aware warehouse
3. Connected customer
4. Predictive maintenance (in-store systems)

Schedule

The research phase is between **July and October 2018** during which survey, evaluation, analysis and validation will take place. Selected results will be presented to the media in **December 2018**.

We will roll out the survey on an online platform called Qualtrics. The invites will be sent with links to fill in the responses and submit.

| Milestones	Beginning	End
Launch	June, 2018	
Survey (questionnaire)	July 23, 2018	August 20, 2018
Sneak previews	November 1, 2018	
Content provisioning	December 6, 2018	
Press release	December 11, 2018	

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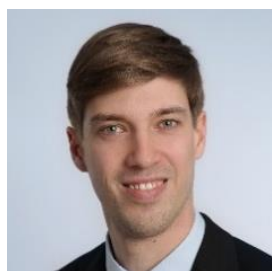
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Do you need any further information?

If you have any questions, please do not hesitate to contact us at isglens@isg-one.com.

About ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including 75 of the top 100 enterprises in the world, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; technology strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.