



DATAEAGLE®

# MACHINE2WEB

FROM TURNING AN IDEA INTO A MARKET-READY PRODUCT







# PORTAL.DATAEAGLE.DE

The world is wireless



# THE DATAEAGLE 7000 SERIES

Cost-efficient and safe with global mobile radio connectivity for a flat rate

The „Internet of things“ always leads to new expectations and developments in the area of maintenance and further on in regards to all surveillance tasks.

Gateways with globally operational SIM cards play an important role in operations control and maintenance of installed machines around the world forming a basis of new business models. Based on concrete user requests the intensively further developed gateway **DATAEAGLE 7000** of the **Schildknecht AG** can transfer signals in adjustable time cycles around the globe from all kinds of data sources such as diagnostic messages of large machines or gauge heights of waters through mobile radio link or Ethernet onto the own portal.

The data is available for the authorized user on demand via identically constructed gateways or directly through enabled ready devices or it can be sent automatically to an established circle of recipients. The devices are available in

IP 20 and IP 65 protection class as well as in an Ex version. As of now this is valid for the devices of the standard series **DATAEAGLE 3000** and **DATAEAGLE 4000**. The data transfer with the **DATAEAGLE 7000** is very secure, since it operates with AES (Advances Encryption Standard) and RSA (Rivest, Shamir und Adleman) cryptographic technique, and a professionally secured server is being used. Since no other explanatory information is given with the transferred measured data, only the authorized recipient is offered a concrete message.

There are two special features related to the new **DATAEAGLE 7000**. The device contains a SIM card which offers global connectivity to all mobile networks with fixed and calculable flat rates. Under the term SPOC (Single Point of Contact) **Schildknecht AG** offers as a system integrator all the required components and services for a integrated solution from a single source, including advising and planning in regards to hardware, software and SIM card.







## PROOF OF CONCEPT

Your shortcut to market readiness – with Schildknecht's Experience and Know-how

Schildknecht AG is a system integrator for M2M solutions and designs individual business models together with its customers – from proof of concept (POC) until market readiness in only a few weeks. Basis for that are the gateways from the product family **DATAEAGLE 7000** providing an integrated SIM card with flat rate.

Applications range from condition monitoring and remote maintenance of machines to water level management and solutions for agriculture. The data can be accessed by several user groups in real-time via the own portal and are encrypted using highest security standards (AES).

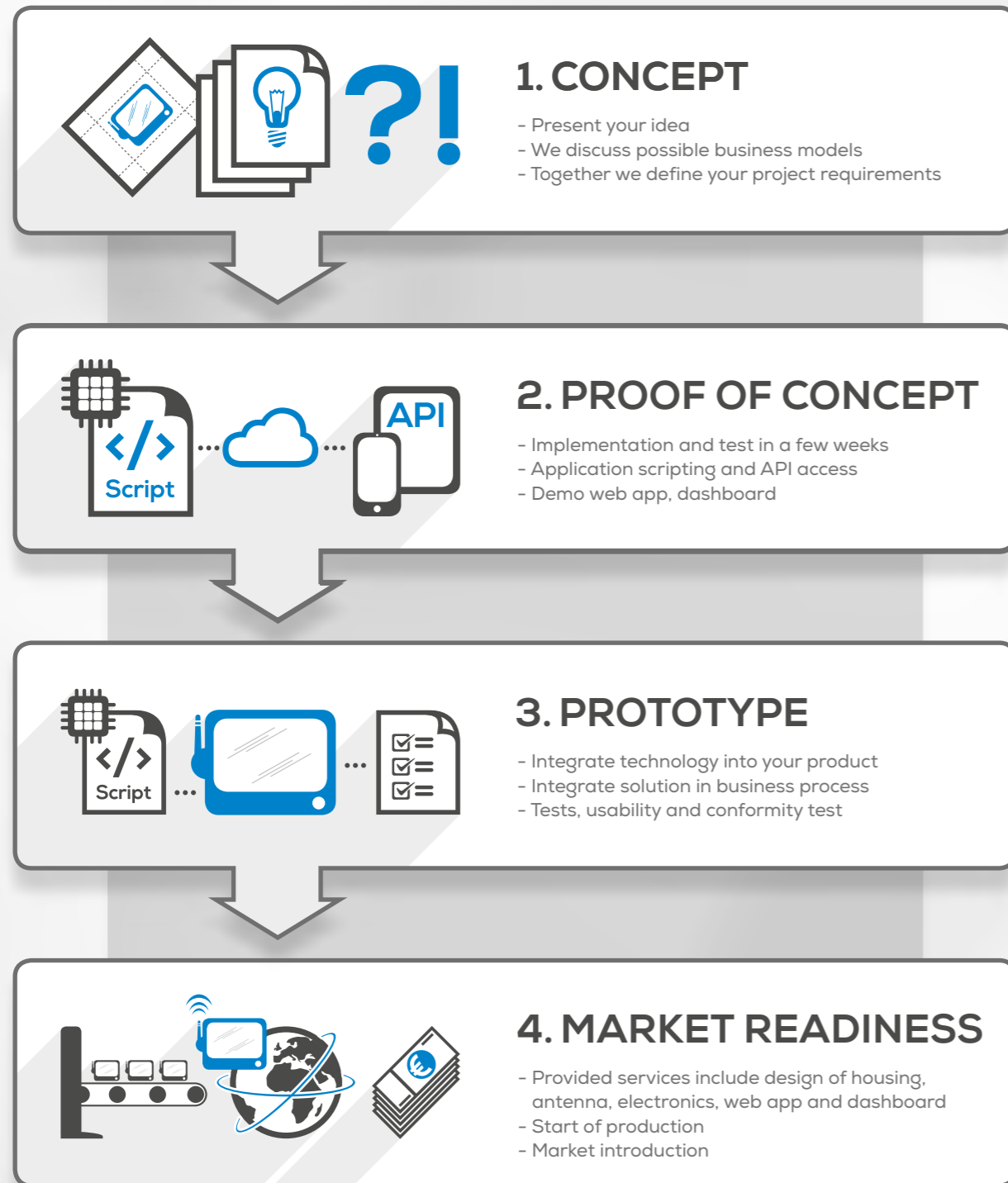


- YOUR PRODUCT
- ANTENNA
- MODUL RAPID M2M
- FRONTEND



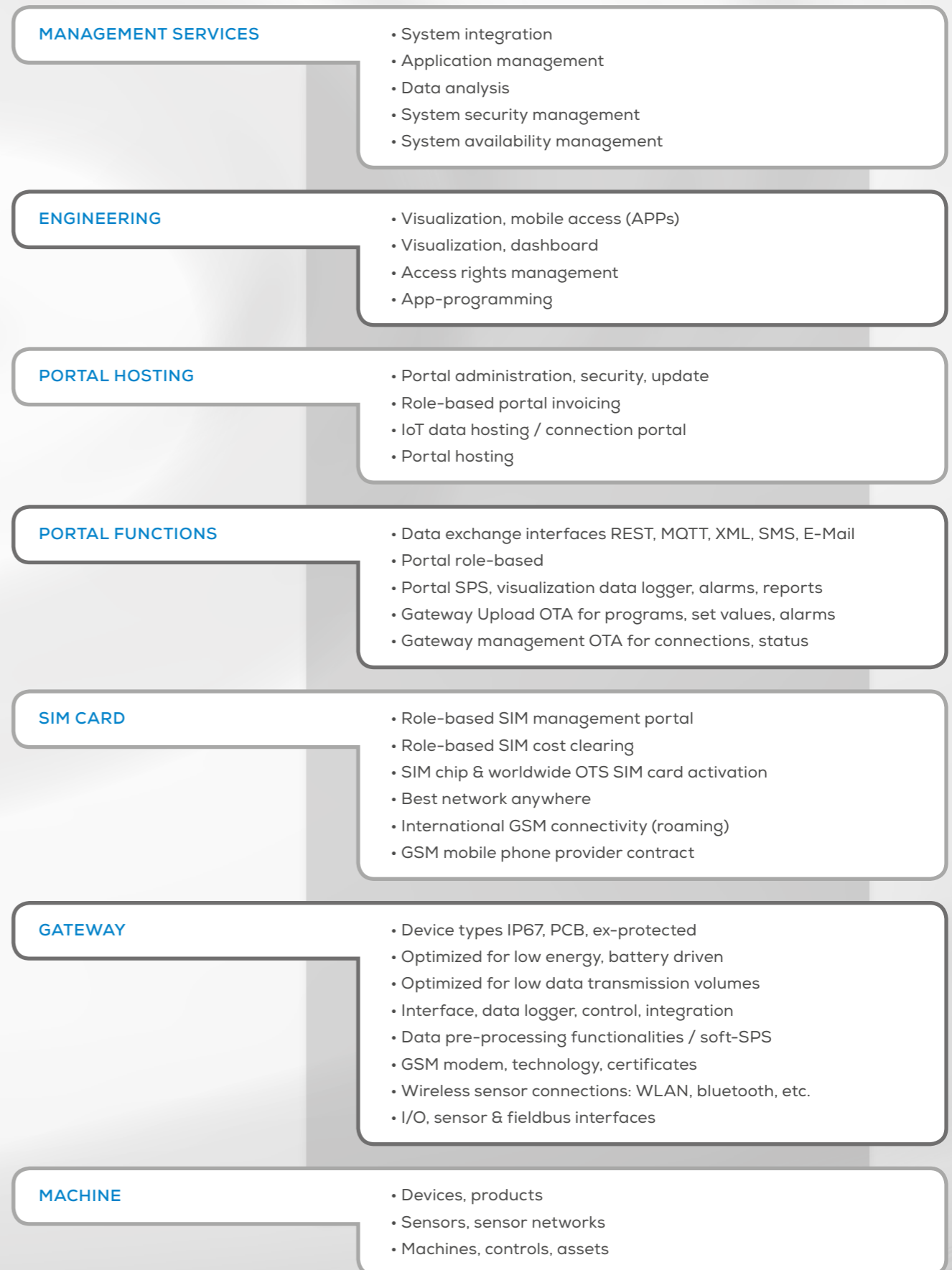
# OUR M2M SOLUTION

Step by step



# Benefits

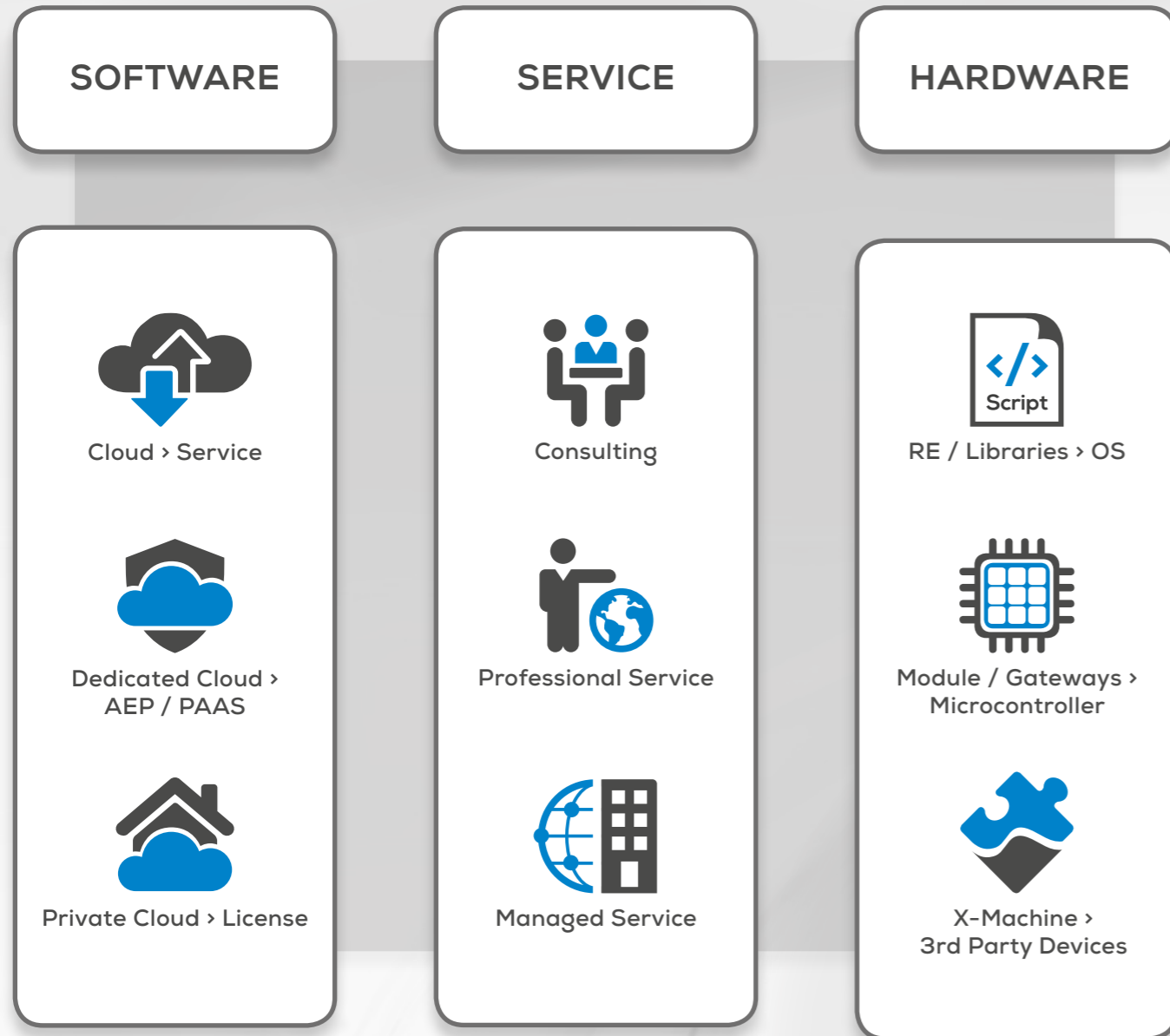
Functionalities and Services





# BUSINESS MODEL

We bring your idea, product or machine into the Web



# M2M PLATFORM AND DATAEAGLE 7000

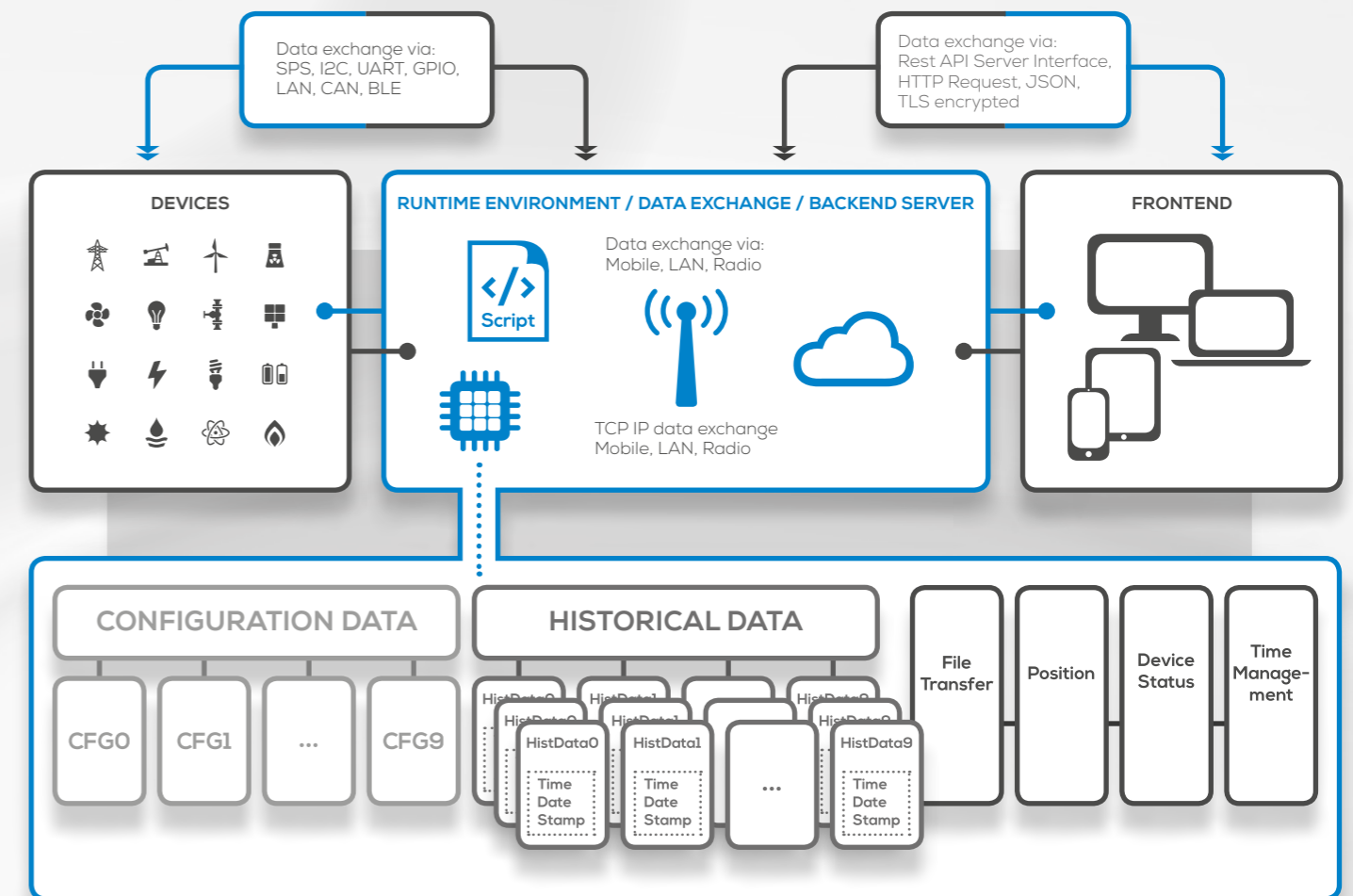
AES encrypted

For the global M2M market billions in turnover are forecasted. Use our connectivity Know How to position your business as a M2M solutions provider in this fast growing market.

from the sectors machining tools, Smart Home, logistics and the general industry. [Schildknecht AG](#) helps using its strong M2M know how. As a system integrator we transform your ideas into to successful M2M solutions.

[Schildknecht AG](#) supports you with tools like a platform to manage SIM cards, applications and users. We supply international usable M2M solutions and generate new revenue streams for our customers

Hardware, Software and international communication including a flat rate presents the base to you to meet the challenges of international M2M solutions.







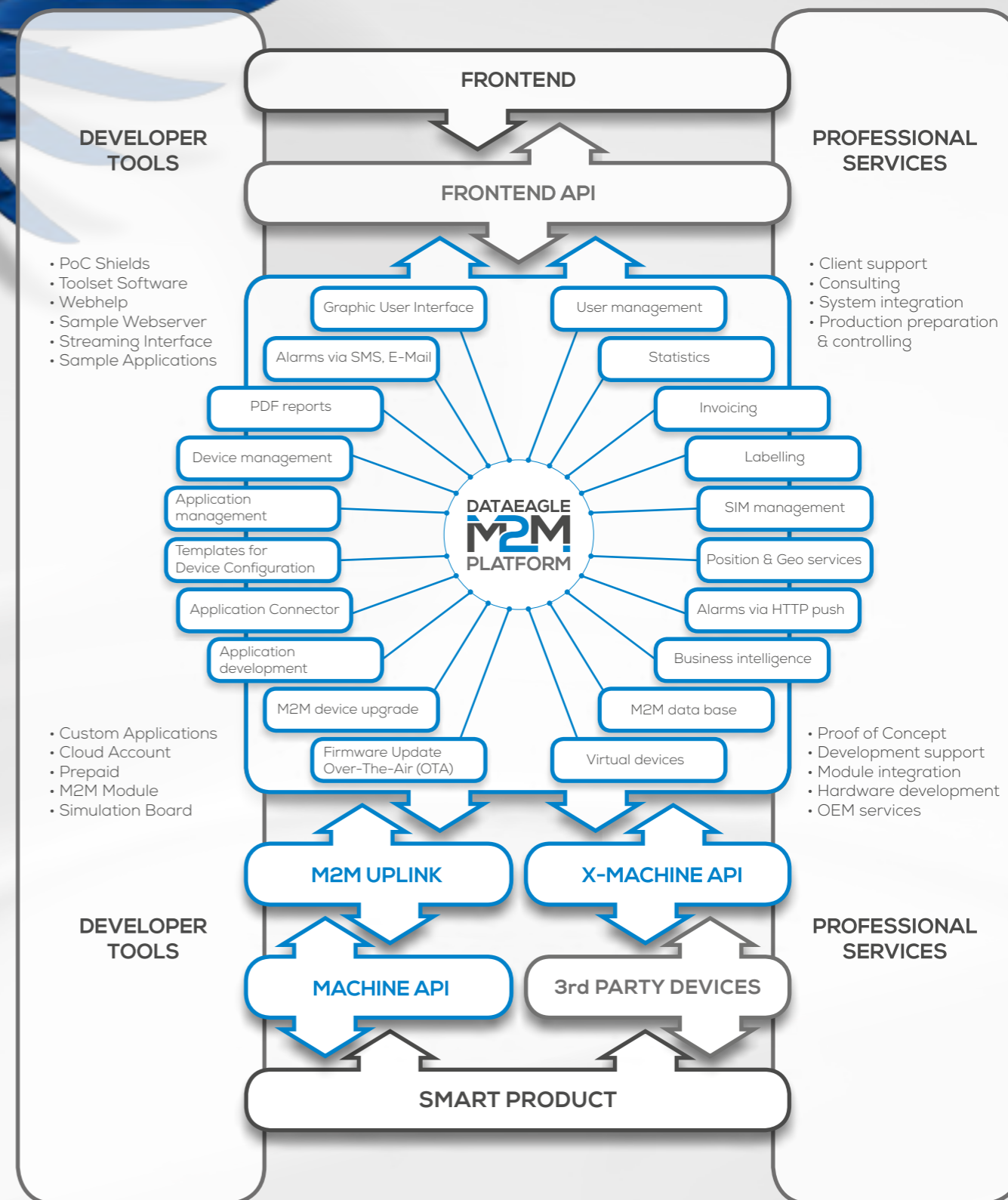
# DATAEAGLE M2M PLATFORM

On point



## THE ADVANTAGES DATAEAGLE 7000 SERIES

- Integration of specifically developed system for internationally deployed M2M applications
- Minimizing of development costs, time expenditure and risk
- Efficient data processing and transmission
- Applications independent from hardware
- Fast development of proof of concept (POC) to provide immediate market entry
- Additional revenue through resale of server licences and services
- Quick entry into M2M business and positioning in a strongly growing market
- Effective acquisitions for small and large B2B customers with minimal costs
- Generating of additional distribution channels and turnovers
- Development of new business models
- Appreciation in value of your services and increase of margins
- Access to M2M expert knowledge of [Schildknecht AG](#)







The Eagle makes things  
**SAFE**



## SECURITY IN DATA TRANSMISSION

Encryption, hacking and the NSA

Already in ancient times, the people used secret codes in order to make important messages unreadable for third persons. Today, highly productive cryptography procedures protect the company data or confidential information exchanged on the internet from unauthorized access. Even though M2M solutions are attractive for the practical use, in regards to adequate availability and data security, they still come across justified scepticism.

The question is always, how to run a communication connection over multiple levels and global distances without failure and to protect it from unauthorized access. Clear identification of the participants, high-resilient network connections and most of all the security of the data processing centre are at the forefront of user demands. The radio module can offer a number of effective contributions towards security and availability, also in regards to storage in the data processing centre: It can limit the function basically just for exchange of variable data. A further transparent access to the machines and systems

through updates or program changes for example can be prohibited. Moreover, each participant must identify himself on a number of levels, which protects the system from unauthorized use: a personal authorization must be done for each access to the module; the same should apply for the access via mobile radio to the cloud storage, for the reading and writing of data as well as by the acceptance of data through the application.

The input data from sensor system and/or PLC may be secured with mechanisms, as they are used in banking through smart phones. Similar is valid for the access to the cloud server with the help of the preset software driver in the device, keeping the access codes secure even if the device is stolen. In addition, the obligatory use of a high-performance data processing centre offers the highest possible protection for the handling of stored data. This is valid for the access control mechanisms as well as for the encryption of data or a possible logging of data queries.

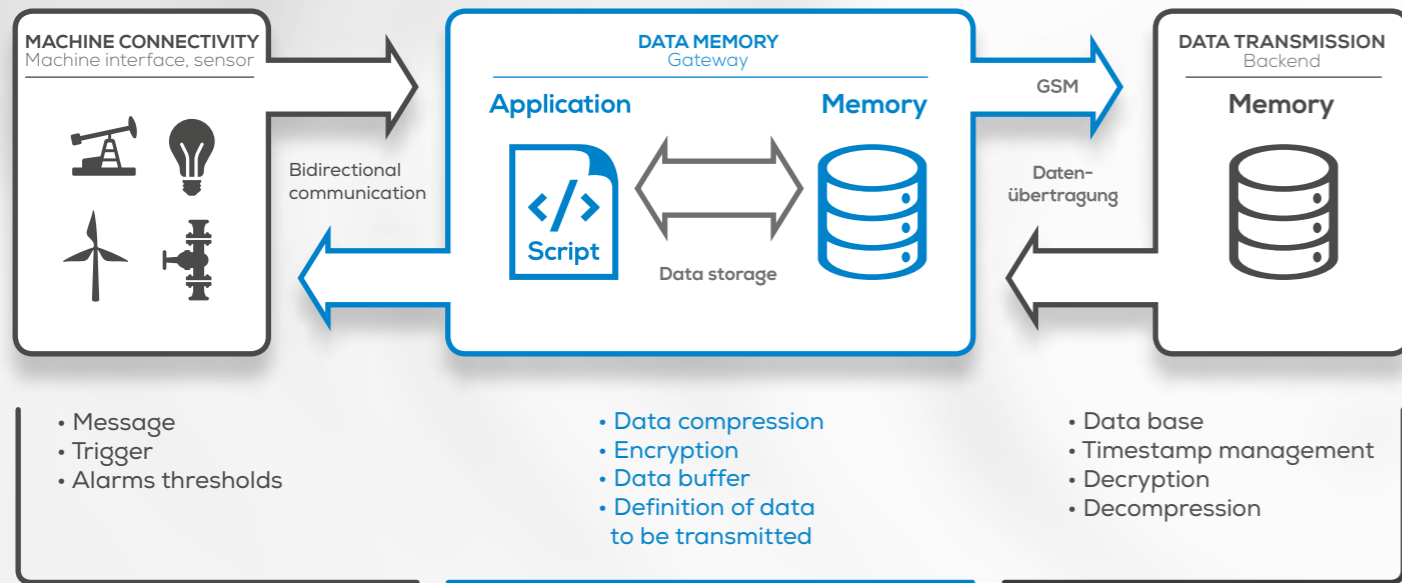






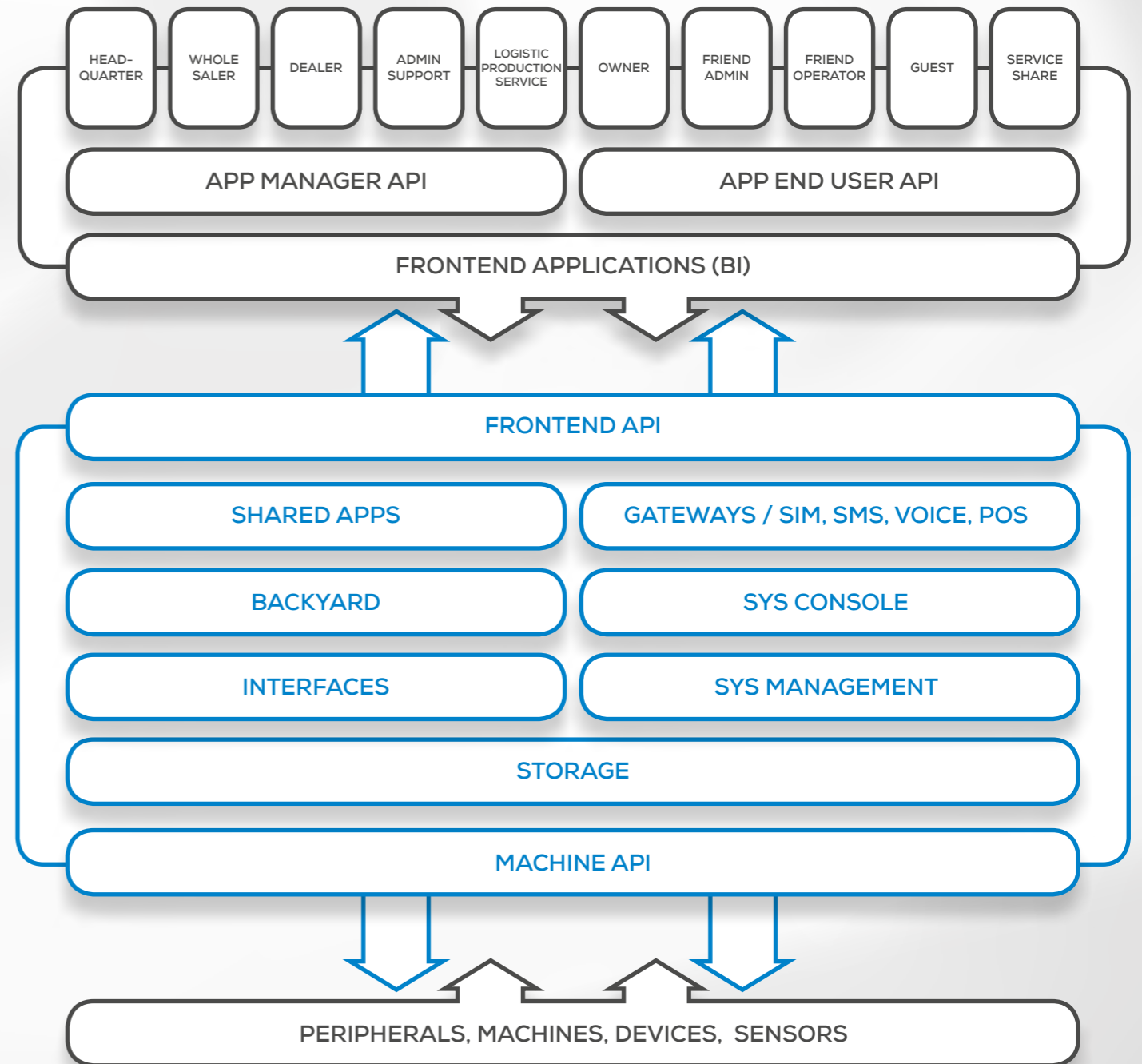
# DATA PROCESSING

Internal data processing



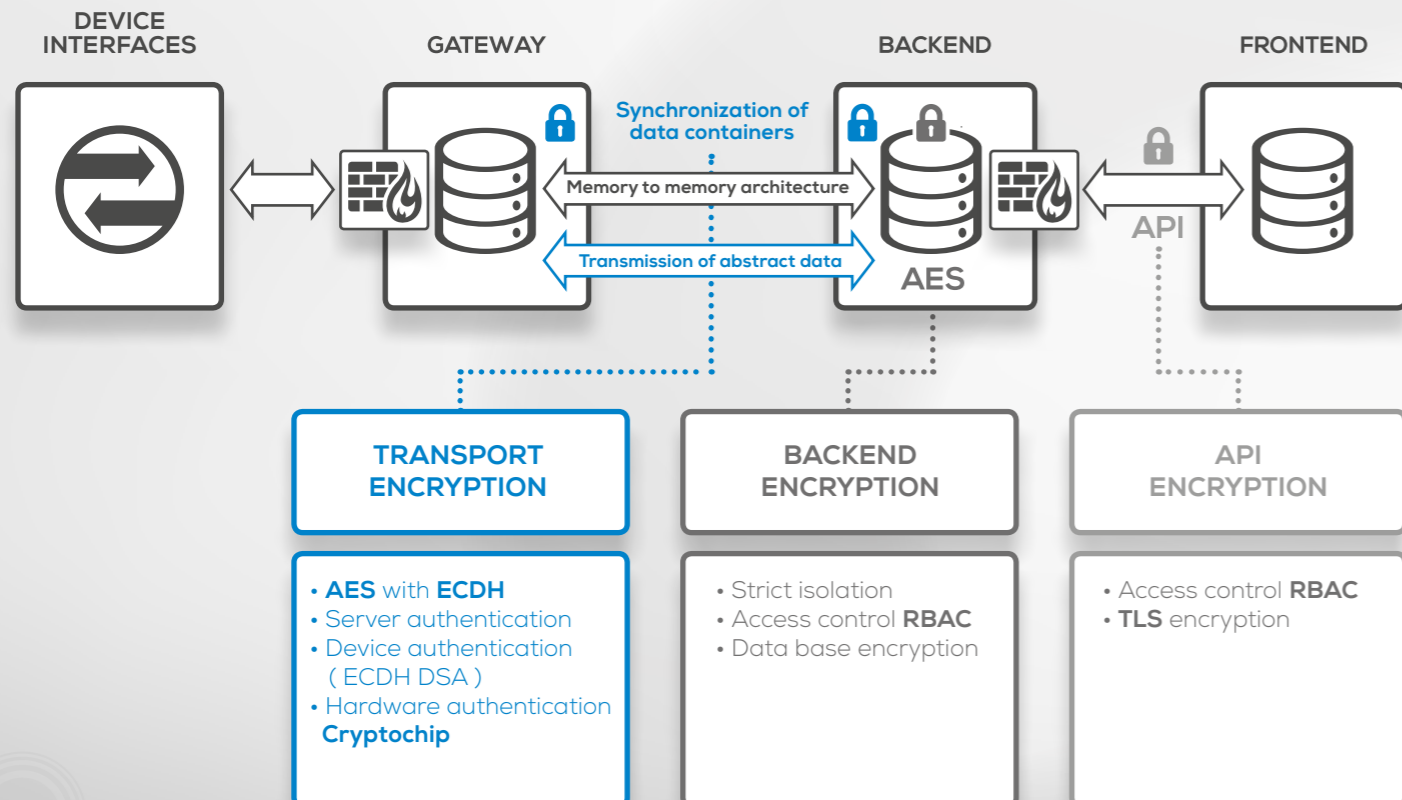
# CUSTOM APPLICATION INTEGRATION

Manage access right simply



# SECURITY FACTS

Encrypted data transmission and storage

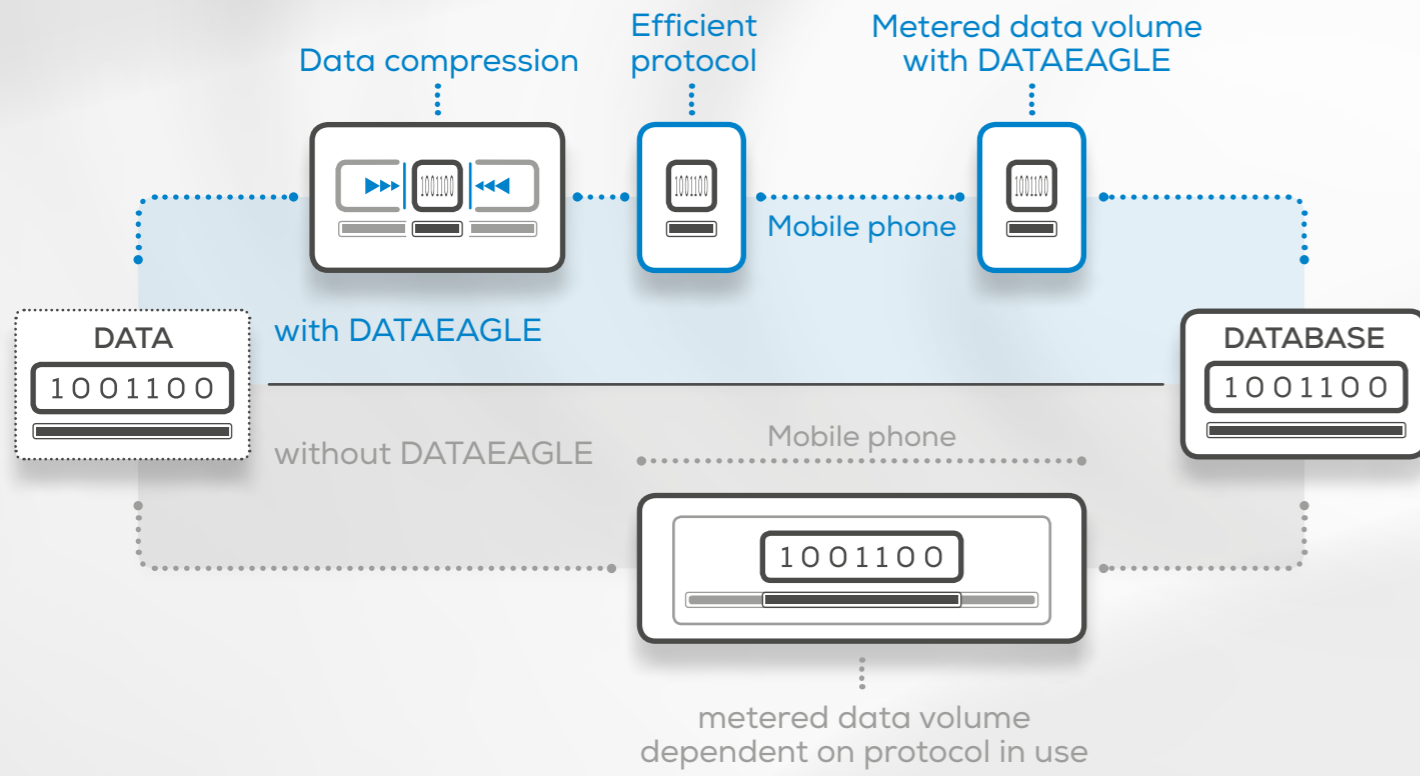






# Data volume

Quicken efficiency







## HIGHLY VERSATILE

Application examples

- Alerting
- Actuator control
- Communication with machine interfaces via RS485 and RS232 connectors
- Data logger
- Direct signal detection of sensors and further processing in the device
- Direct signal reception by sensors
- Flow calculation
- Flow measurement
- Pump control
- Probe measurement transmission
- Pump monitoring
- Remote metering
- Remote meter reading
- System control
- Temperature monitoring



## PROGRESS FOR THE INDUSTRY

DATAEAGLE 7000 reduces the costs up to 300%

Revenues in the range of billions are forecasted for the global M2M market. Use our know-how in regards to connectivity, in order to position yourself as provider of M2M solutions in this intensely growing market.

Schildknecht AG environment supports you with tools such as a platform for the simple management of SIM cards, applications and users. We offer for example to customers from areas such as engineering, Smart Home, logistics or industry

in general internationally deployable M2M solutions and generate revenue streams. Schildknecht AG supports you with the cumulative M2M know-how. As a systems integrator, we create successful M2M solutions out of your ideas.

Hardware, software and international data transmission for a flat rate supports you in overcoming the challenge of international M2M solutions.







**Schildknecht AG**

Haugweg 26

D-71711 Murr

Phone. + 49 7 144 - 89 71 80

Fax + 49 7 144 - 89 71 82 9

[www.schildknecht.ag](http://www.schildknecht.ag)

[office@schildknecht.ag](mailto:office@schildknecht.ag)