

FROM BRIGHT IDEA  
TO SHINING RESULT



AVIIC .....

IoT made simple.

# INTERNET OF THINGS

Connecting anything with everything, the Internet of Things (IoT) offers endless possibilities to bring new opportunities online. There's a reasonable chance that sooner or later your organization will employ IoT solutions to grow or sustain its business. Perhaps you already have some ideas of your own on using IoT to develop new business models, but do not yet know how to move ahead with them.

LET AVIC GUIDE  
YOU FROM IDEAS  
TO WORKING IoT  
SOLUTIONS



## CHARTING THE RIGHT COURSE

From a solid understanding of your business model to bringing your opportunity to life as an IoT solution with technology you can rely on, AVIC masters every aspect of creating successful IoT solutions, with a proven track record of many years and many satisfied customers.



### EN ROUTE TOGETHER

AVIC will accompany you on every step of the way, from thoroughly understanding your business needs, to all-round operation of your IoT solution, allowing you and your business to reach new horizons.

### A SMOOTH IoT JOURNEY

Making use of the unique Avic ready-to-go IoT building blocks, rather than starting from scratch, gives you a head start from which your business will benefit, shortening your time-to-market, while reducing your investment and risks. With AVIC, creating IoT that works is a breeze.

· AVIC · · · · ·



## SOLUTION INCEPTION

Monitor key performance indicators

Cut down expenses

Achieve customer satisfaction

Integrate supply chains

Manage risks

Meet agreed service levels

# Control your assets

Improve quality

Offer customer services

Assess innovation value

Increase asset availability

Deliver superb performance

Comply with legislation

Minimize downtimes

Eliminate errors

24/7

FIND THE  
RIGHT BUSINESS  
DRIVERS FOR YOUR  
IoT SOLUTION

## DISCOVERING THE IoT SUCCESSION FACTORS

The quintessence of launching a successful IoT solution is finding the right balance between the envisioned value proposition and its technological feasibilities. This can only be achieved by bringing a good understanding of market dynamics together with the skills and knowledge of IoT experts such as AVIC.



## IoT THAT WORKS FOR YOU

The key challenge in building a value-creating IoT solution is being able to translate business model requirements to truly distinguishing products and services. Before anything else, determine the right business drivers for employing IoT: whether it is inspired by achieving operational excellence, improving customer intimacy, or establishing product leadership.

How your business and your customers will benefit from new value propositions that use IoT, is one of the major questions to which AVIC will help you find meaningful answers.

You will discover that IoT will touch every aspect of your business.

**AVIC** .....





## PARTNERSHIP BENEFITS

VALUABLE  
EXPERTISE  
WILL LEAD TO  
REWARDING  
PROPOSITIONS

Together with our business partners, we embark on a creative journey to jointly translate commercial objectives into a realistic IoT solution blueprint.



## IoT LEADERSHIP COMBINED WITH MARKET EXPERTISE

The Internet of Things (IoT) is not just about devices, sensors, or connectivity. First and foremost, it is about creating new value propositions by defining new business models that thrive when IoT technology is smartly used.

To be successful in IoT, market segment expertise as well as technological leadership are needed, and they are rarely found in one and the same organization.

Partnerships significantly increase the odds that new business opportunities will lead to a rewarding commercial success

Your knowledge of the markets and customers you serve is vitally important in achieving this goal, for which AVIC offers you the IoT building blocks that will not limit your creativity in any way.

AVIC .....

**IoT WITH AVIC**

CREATE RELIABLE  
SOLUTIONS  
WITHIN BUDGET  
AND ON TIME

AVIC's LegioBox IoT devices and  
Avision IoT Platform are the fast  
track to achieving success with the  
Internet of Things



### **Solid IoT knowledge**

Avic masters every aspect of IoT, from device design to connectivity, and solution creation to operation.

### **Reliable operation**

The LegioBox devices work flawlessly with the Avison IoT Platform, without downtime or interruptions.

### **Proven track record**

Benefit from Avic's many years of experience, with hundreds of satisfied users and an installed base of thousands of IoT devices.

## THE RIGHT COURSE OF ACTION

Combining your market expertise with IoT knowledge and experience is the first step on the way of turning your idea into a working IoT solution.

IoT needs field-installed hardware devices, connectivity, and a software platform that brings everything together, from managing your devices to visualizing information and automating workflows.

AVIC offers a comprehensive portfolio of LegioBox IoT devices that work right out-of-the-box with the Avison IoT Platform.

Basing your IoT solution on such a tightly and elegantly integrated foundation ensures that your IoT solution will work reliably, and can be launched within budget and on time.

**AVIC** .....



## AVISION IoT PLATFORM

BASE YOUR  
IoT SOLUTION  
ON A STEADY  
FOUNDATION

### Visualize your data

Turn data into actionable information that makes sense:

- Interactive user dashboards
- Automatically generated reports
- Audit trails and document management

### Streamline your information

Manage the entire life cycle of your infrastructure, fleet, and facilities:

- Automated workflow processes
- Full-featured device and asset management
- Issue ticketing

### Mobilize your workforce

Anytime, anywhere access to information to steer your business:

- Task management with entry forms
- Role-based user management
- SLA-triggered work scheduling

### Integrate with other software

Integrate with your organization's operational, billing and ERP systems:

- Manual import/export of data
- Business-specific connectors
- API connectivity

## IoT WITHOUT BOUNDARIES

To bring your idea to life as an IoT solution, business expertise must find its way into new products and services. With complete creation flexibility and freedom, AVIC's ground-breaking Avision IoT Platform connects the dots exactly how you have it in mind.

Free of frills and intentionally designed for IoT, the Avision IoT Platform supports every aspect of your IoT solution, from managing the IoT devices and their connectivity, to producing

the insights and running the business processes that will put IoT to work for you.

Because at the end of the day, this is what IoT is all about...







## LEGIOBOX IoT DEVICES

Devices are the workhorse of the Internet of Things. Without devices, there is no IoT. Because every application has its own specific requirements, finding a suitable IoT device can be quite an ordeal. The Avic LegioBox devices very likely will prove to be the perfect fit for your IoT solution.

LET INTELLIGENT  
DEVICES DO THE  
WORK AT THE  
EDGE OF YOUR  
IoT SOLUTION

### Robust design and easy connectivity

AVIC LegioBox IoT devices are designed for operation in harsh environments with ample protection against the roughest conditions. Attaching a sensor has been made as simple as possible with standardized connectors.

### Wide choice of device functions

Whatever functionality your IoT solution demands, the LegioBox IoT devices will meet the requirements. AVIC's smart device design allows virtually any arrangement of functions.

### Seamless integration with Avison

A compelling and unique advantage the LegioBox devices have to offer is the close integration with the Avison IoT Platform, empowering you to define the functional behavior without programming.

## RUGGED, RELIABLE, AND ENERGY-EFFICIENT

To ensure that your IoT solution will work worry-free for many years, AVIC has put all its experience and creativity in its new range of future-proof LegioBox IoT devices: from their compact and robust enclosure to its flexible and clever interface configuration scheme.

The LegioBox device functions are programmed over-the-air, making it straightforward to define and modify its behavior at any time. Based on a strong

legacy, the current LegioBox IoT devices have their roots in the well-established original LegioBox hardware.

Device management, secure communication, data storage and processing have been put to the test in many solutions, giving you the peace of mind that your device will not fail on you.





## IoT REVENUE CREATION

REAP THE  
BENEFITS OF YOUR  
IoT SOLUTION  
FOR MANY YEARS  
TO COME







## IoT WITH A SOLID BOTTOM LINE

Once deployed, the IoT solution must deliver on its promised value.

To maximize the operational result for our business partners, AVIC provides an all-encompassing service for operating and maintaining the IoT solution, as well managing the entire supply chain, so our partners can give full attention to their business and customers.

But perhaps the most valuable contribution we have to offer to the business of our partners is AVIC's recurring revenue sharing model. It ensures that your IoT value proposition will reliably generate income over many years, and that our partnership with you lead to a lasting relationship.

· AVIC · · · · ·

## INDUSTRIAL SUPPLY CHAINS



### CRYOGENIC GAS TANKS

For Praxair, a major supplier of cryogenic gases, Avic monitors over 5,000 storage tanks across Europe. Using the LegioBox NanoGate and SolarGate IoT devices, volume and pressure of the stored liquid gases are measured. Using cellular connectivity the inventory information is neatly presented in Avison. Ensuring timely delivery, and monitoring product integrity, Praxair has complete insight into the supply chain with Avic's IoT technology.

BASICGATE



SOLARGATE



PRESSURE SENSOR



AVISON REPORTING





# WATER MANAGEMENT

## A DUTCH AFFAIR

Based and well-rooted in the water-rich Netherlands, Avic has developed various IoT solutions that deal with all sorts of water management issues: ranging from surface water level monitoring to guarding the integrity of dikes, and sewage system measurements. Properly implementing IoT solutions in these segments requires broad expertise in sensor technology, and dealing with harsh environments. Avic has developed a proven track record in both.

NANOGATE



LEVEL SENSOR



SEWAGE SENSOR



AVISION REPORTING





## HVAC

### AIR CURTAIN SYSTEM

In cooperation with Biddle, a world leader in air curtain systems, Avic has developed the Biddle b-connect, a custom IoT device based on the LegioBox architecture that interfaces with Biddle's b-touch air curtain controller. Through cellular networking, all relevant information is accessible in an Avision IoT application. Together with Avic, Biddle is now able to offer better service to their customers, and deliver a better experience.

B-CONNECT IoT DEVICE



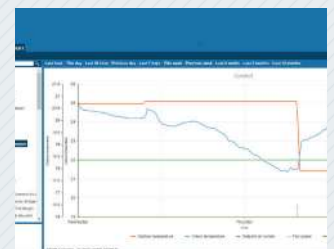
B-TOUCH CONTROLLER



AVISION PORTAL



AVISION REPORTING



## FOOD QUALITY



### HACCP COMPLIANCE

As an example of an out-of-the-box IoT solution, Avic has developed a food quality tracking system for meeting HACCP compliance. Using PicoWise wireless temperature sensors and a NanoGate as wireless gateway, the core temperature of stored foods is accurately determined in real time with advanced and verified algorithms. Automated reporting in Avison makes this a turn-key IoT solution that makes HACCP a simple procedure.

NANOGATE



PICOWISE



AVISION PORTAL



AVISION HACCP APP





# FACILITY MANAGEMENT

## ACCESS GATE SYSTEMS

ABC Security Systems wished to enhance its service offering for maintenance of access gates in order to deliver a better customer experience. A custom IoT device, built to ABC's specifications, has been designed based on the LegioBox architecture. Relevant parameters such as current consumption and ambient temperature, as well as all gate operation are monitored in real time and made accessible in Avison, making ABC's ambition a reality.



CUSTOM IoT DEVICE



GATE CONTROL UNIT



CURRENT SENSOR



AVISION PORTAL





# INFRASTRUCTURE

## RAILWAY MONITORING

Arguably one of the most challenging environments for IoT solutions are railways, if only because external powering is rarely possible. Avic has created many, often highly specialized, solutions for performing railway measurements, ranging from railbar inclination to temperature monitoring of spurs to prevent freezing in winterly weather conditions. Avic's expertise in sensor technology and low-power rugged IoT devices are a great advantage in such projects.

SOLARGATE



PICOWISE



RAILWAY SENSORS



AVISION REPORTING





**REAL-LIFE IoT**

**LET'S GET TO IT!**







## REAL-LIFE IoT

Building an IoT solution that ticks like a clockwork, is a matter of getting started and use your own creativity to put your initial ideas into practice.

From experience with many customers, we can reassure you that once you get moving and start seeing how much IoT can actually do for you, new possibilities will be discovered that lead to novel brilliant ideas.

We encourage you to take a first step, and partner with us to embark on your own journey, creating your unique IoT solution that will offer new rewarding opportunities for many years to come.

AViC .....



IoT made simple.



Molenwal 20a  
5301 AW Zaltbommel  
The Netherlands  
T +31 418 674700  
E [info@avic.nl](mailto:info@avic.nl)  
W [www.avic.nl](http://www.avic.nl)