



COMARCH

Technologies

COMPANY OVERVIEW

Facts & Figures

Krakow, 11.09.2015



Motivator

**Increase awareness of Comarch expertise
in order to find opportunities to build successful collaboration
for H2020 projects**



1 REVENUE
BILLION
PLN (2014)

1993
FOUNDED

POLISH CAPITAL
- HEADQUARTERS
LOCATED IN



KRAKÓW



Publicly traded on Warsaw stock
exchange since

1999



High ranking in IT analyst ratings:

**Analysys Manson, EU Industrial R&D
Investment Scoreboard, Gartner, IDC,
TOP200 IDG, Truffle 100** and others.

THOUSANDS



OF SUCCESSFULLY COMPLETED

PROJECTS

ON **5** CONTINENTS

IN OVER **40** COUNTRIES

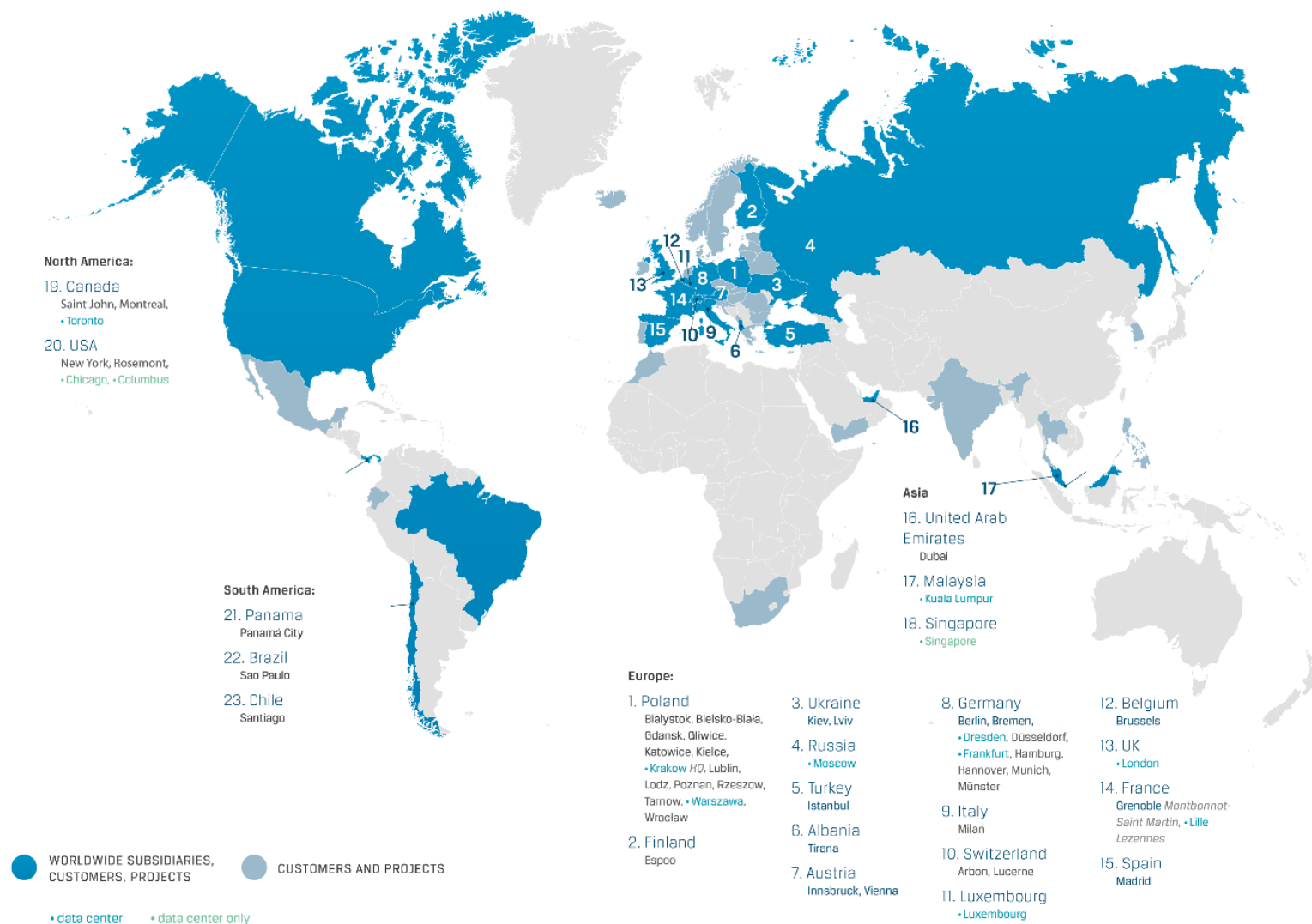


4211

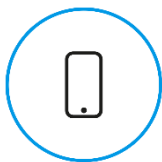
**FIRST-CLASS
PROFESSIONALS**

(PROGRAMMERS, COMPUTER SCIENTISTS AND ECONOMISTS),
GRADUATES FROM THE BEST POLISH AND FOREIGN UNIVERSITIES

- 46 Subsidiaries & associates
- 49 Cities
- 23 Countries
- 4 Continents



Diversified Portfolio of Products & Customers



Telecommunication



Financial Services



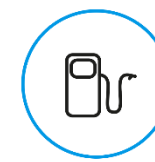
FMCG



Retail



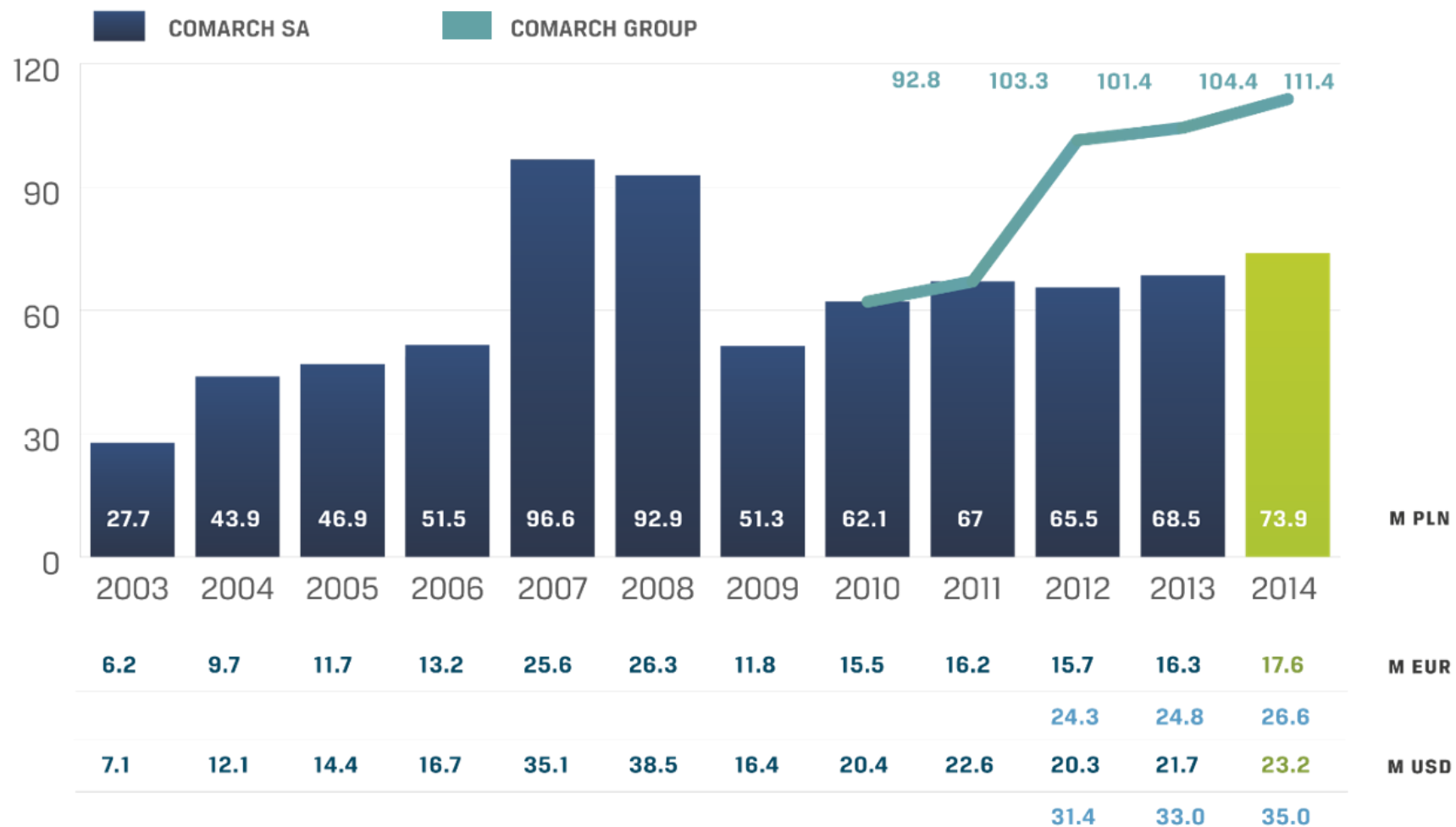
Travel



Oil & Gas









OUR EXPERIENCE

FP7 & H2020 Projects

FP7 3 ongoing projects

- **NI2S3** - http://cordis.europa.eu/project/rcn/92075_en.html
developing security systems based on NEC Information and Integration Services to integrate multi-source information
- **Future ID** www.futureid.eu
creating, developing and stimulating European, cross borders identity solutions (smartcard, smart tokens, biometry)
- **SAWSOC** www.sawsoc.eu
guaranteeing the protection of citizens and assets, and improving the perception of security by citizens

H2020 3 submitted projects

- DS-03-2015 - Critical Infrastructure Protection (**CIISMES**)
- DS-04-2015 - Cyber Security Management (**Fortress**)
- BES-06-2015 - Border and External Security (**CROB2AUT**)





OUR VISION

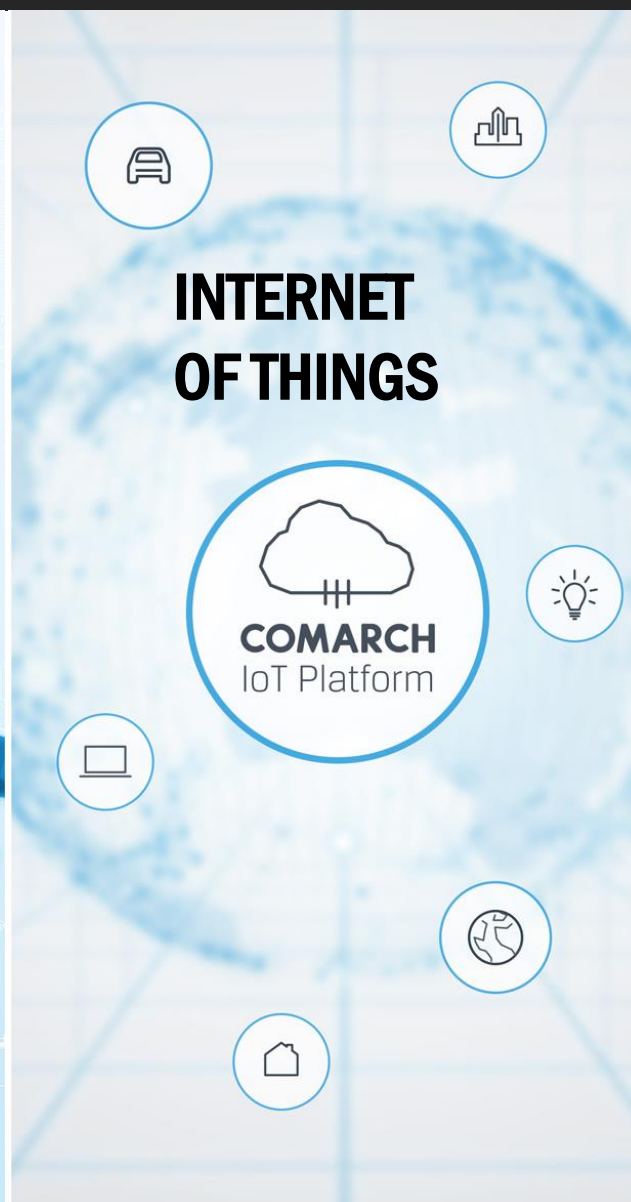
End-to-end Solution for your Business

**Research and innovate
to develop *scalable, secure* and *highly accessible*
building blocks (HW & SW)
for the world of digital economy
in order to build the *Internet of Things***

HARDWARE



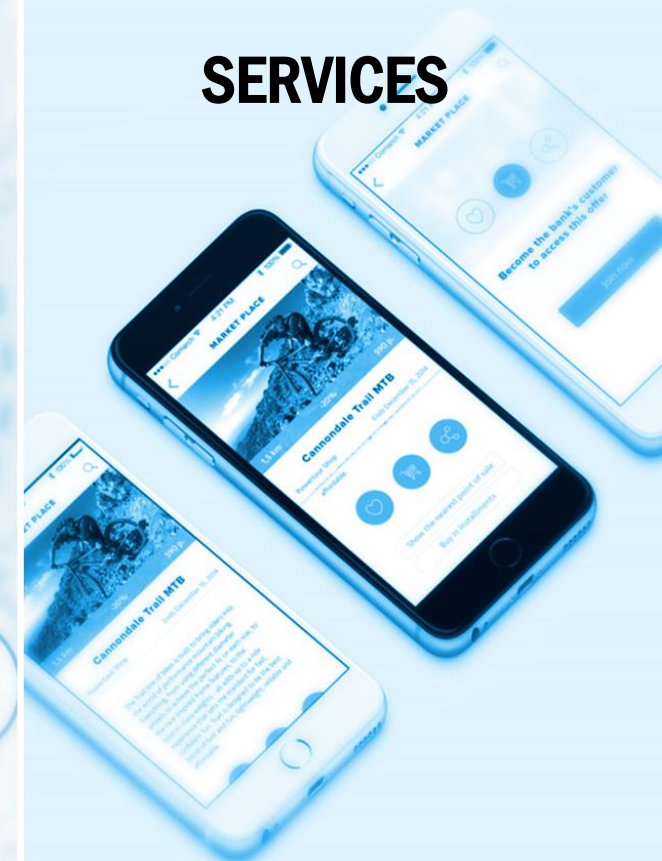
INTERNET OF THINGS

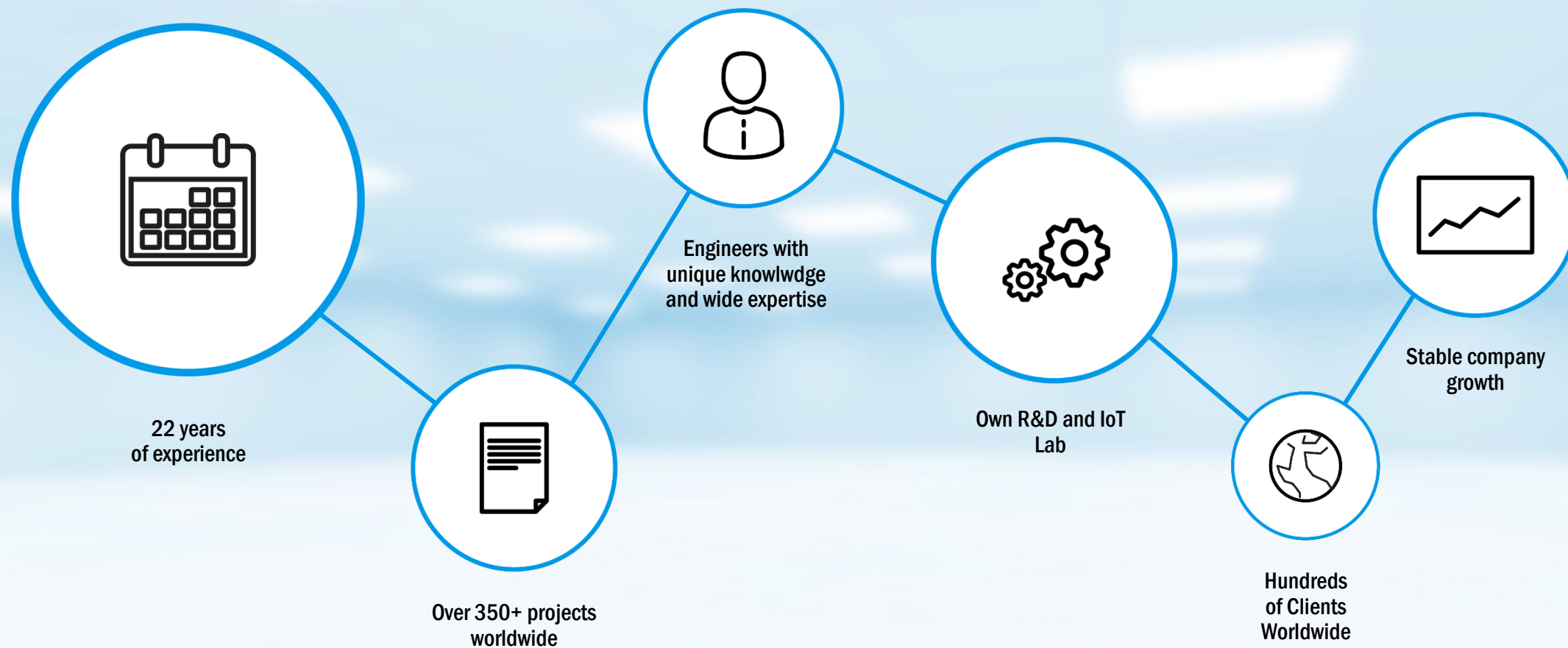


CYBER SECURITY



SERVICES







USER: JESS

CLEANING: ON
LIGHTS: OPTIMAL FOR READING
TV: OFF
SHUTTERS: LIFTED
AIR CONDITIONNING: 22 °C
HUMIDITY: 55%











HARDWARE SMART ELECTRONIC

R&D Center, Design, Prototyping



Internet of Things

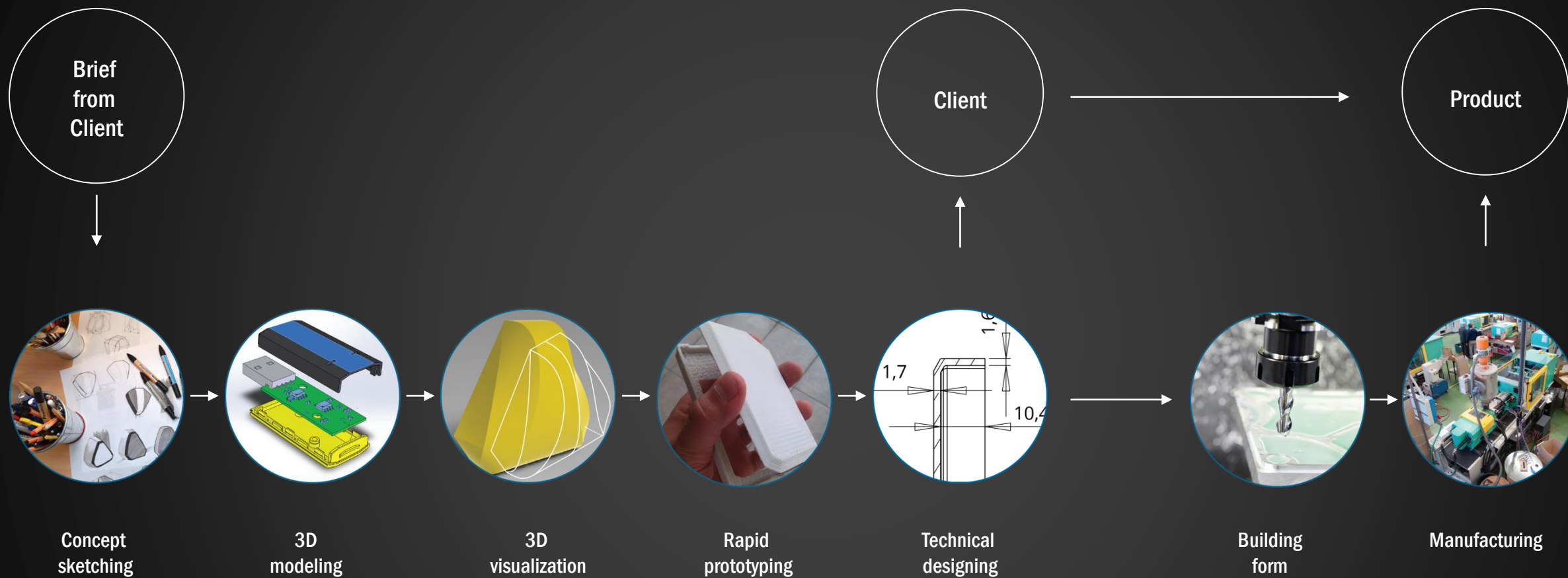


Cyber Security

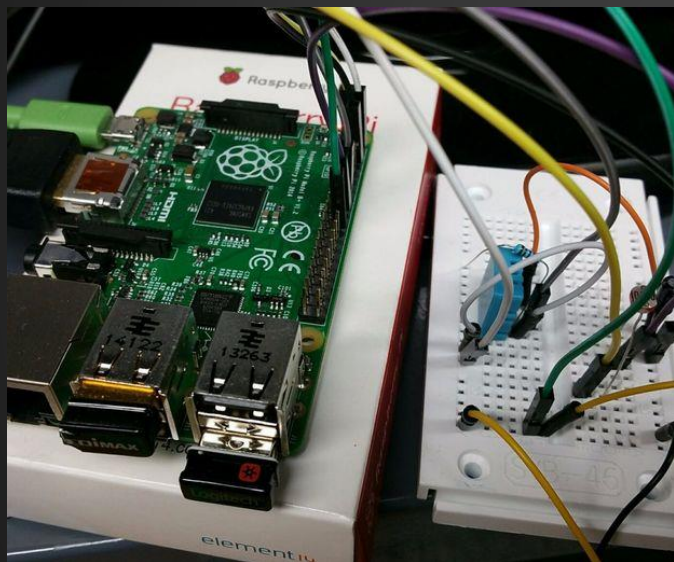


Healthcare





Transforming ideas into commercial products.



\$200 lot prototype

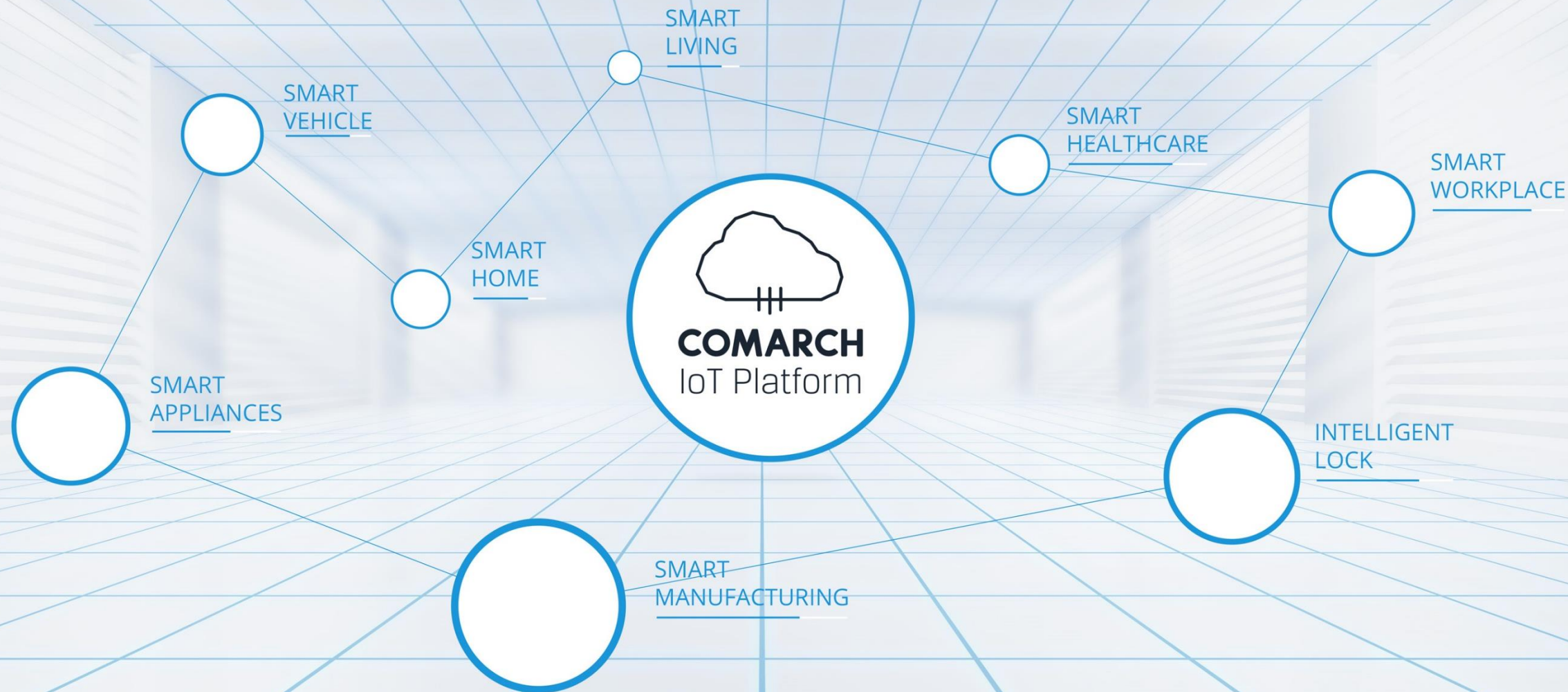


\$20 lot commercial device

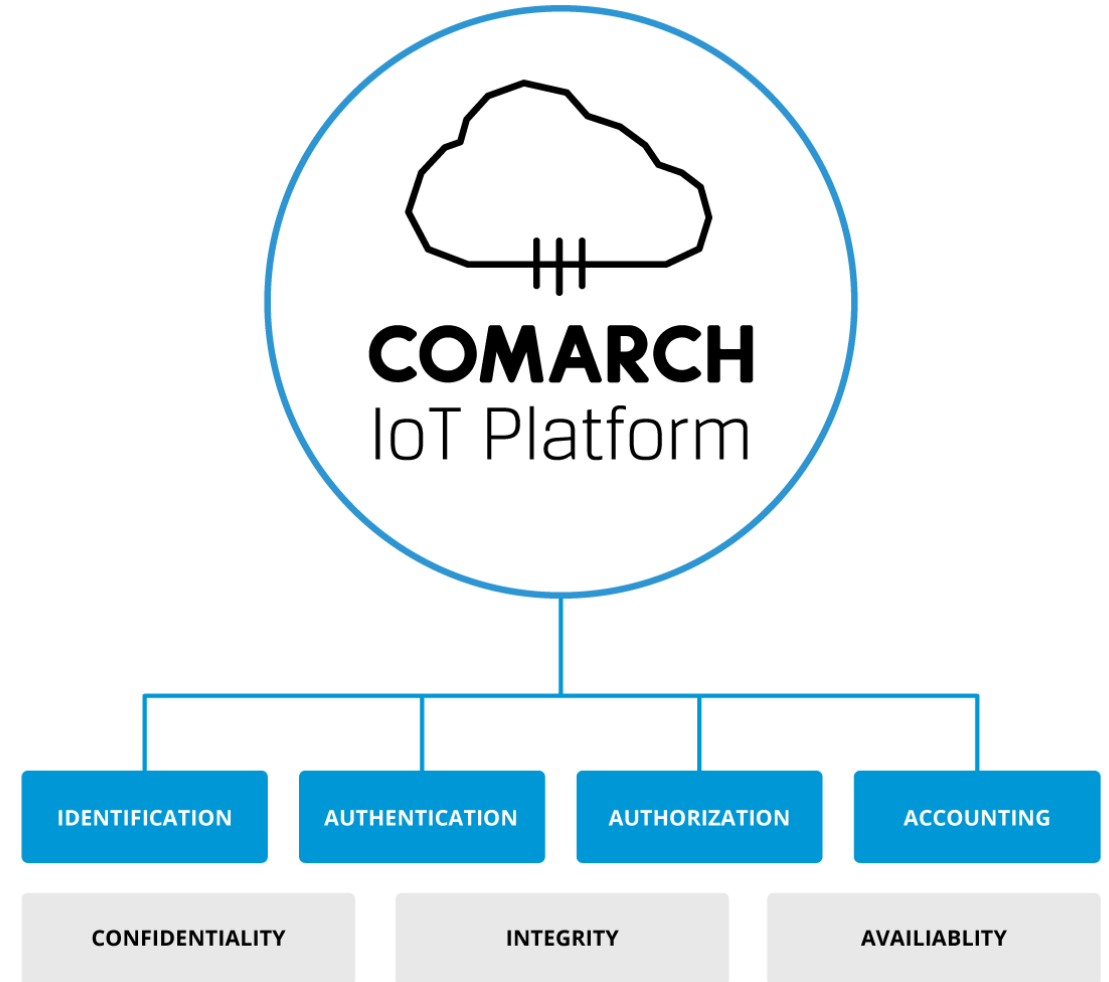


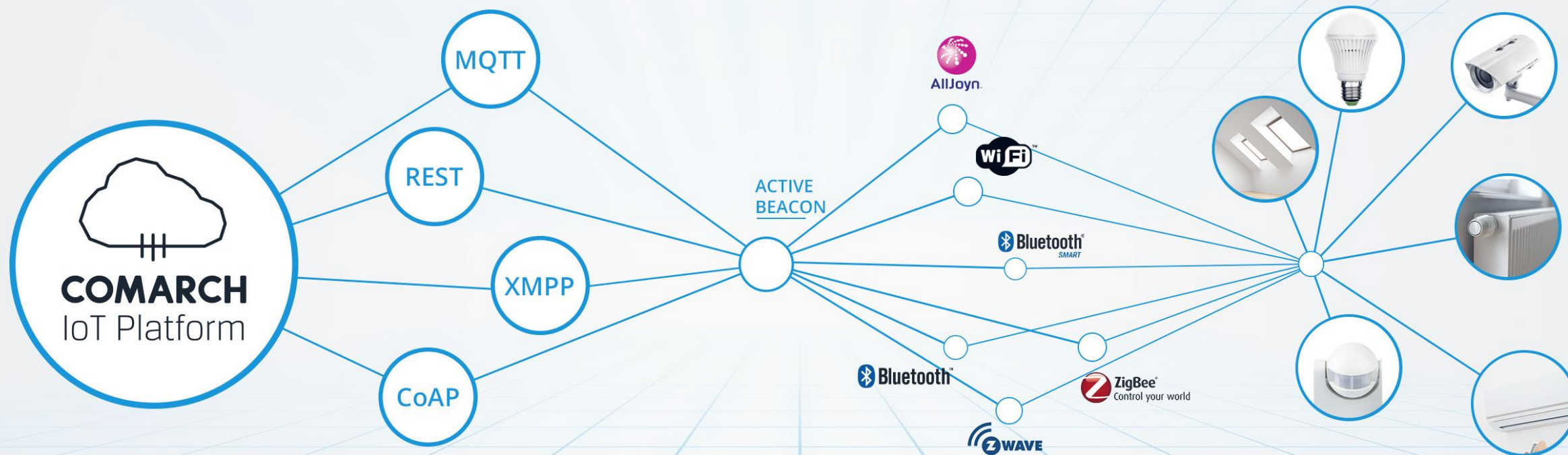
INTERNET OF THINGS

Smart Solution for Smart Business
BigData processing



- Holistic cloud solution for IoT-based business
- Hardware independency
- Interoperable SW&HW development kit
- Compatibility with Comarch Intelligent Chip
- Compatibility with Comarch beacon
- Simplicity of IFTTT (If This Then That) approach
- Support for various communication standards/protocols
- Scalability and flexibility through open APIs
- End-to-end communication and data security
- OTA (Over-The-Air) maintenance







CYBER SECURITY

Safety & Security of Business Operations

Identity & Access Management

- Multiple authentication & authorization methods
- Centralized Identity management & access control
- Easy integration with legacy systems
- Modular architecture adaptable to organization needs
- Single sign-on to applications supported by DRACO

Authentication & Authorization

- Strong methods of user's authentication
- Various methods of transaction authorization
- Advanced Elliptic Curves Cryptography mechanism
- Protection against electronic theft and phishing attacks
- Support for electronic signature

Security Assurance & Consulting

- Monitoring & control of activity on server resources
- Admin access control & simplification
- Separations of roles & duties
- Passwords management
- Compliance with industry standards and best practices

- World class and innovative HW solution
- Provides authentication and authorization in most demanding digital ecosystems
- Prevents from tampering, spoofing, eavesdropping and message forgery
- Offers the strongest security method based on e.g. the Elliptic Curves Cryptography mechanism
- Conscious and interactive transaction data validation
- Full control over the entire R&D process as well as SW&HW design and development

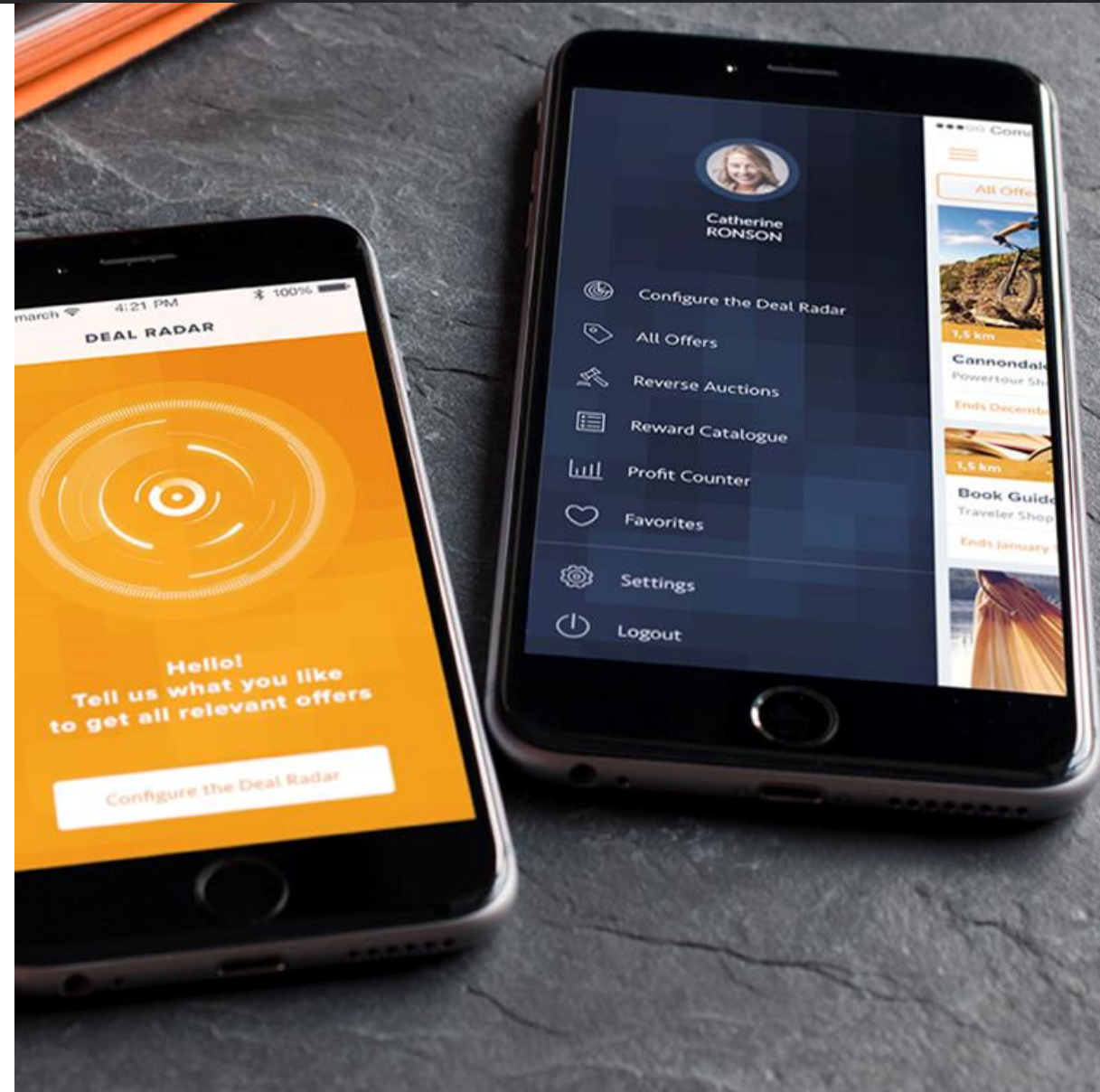




SERVICES **MOBILE APPLICATIONS**

Software Development, Delivery Platforms, Outsourcing

- Support for the entire design and development process for Customers
- Software development of mobile applications and mobile frontends
- Deployment of mobile service delivery platforms for telecom operators and mobile phone manufacturers
- Portfolio of out-of-the-box mobile apps available on Android, iOS, Windows Phone, Blackberry, Tizen, Symbian
- Outsourcing & body leasing of mobile competences



- Loyalty Program Management
- Personal Finance Management
- Mobile Banking
- Mobile Investments
- Mobile Insurance
- Data Gathering
- Conference Content Management
- Online Shopping
- App Market



Windows Phone



symbian

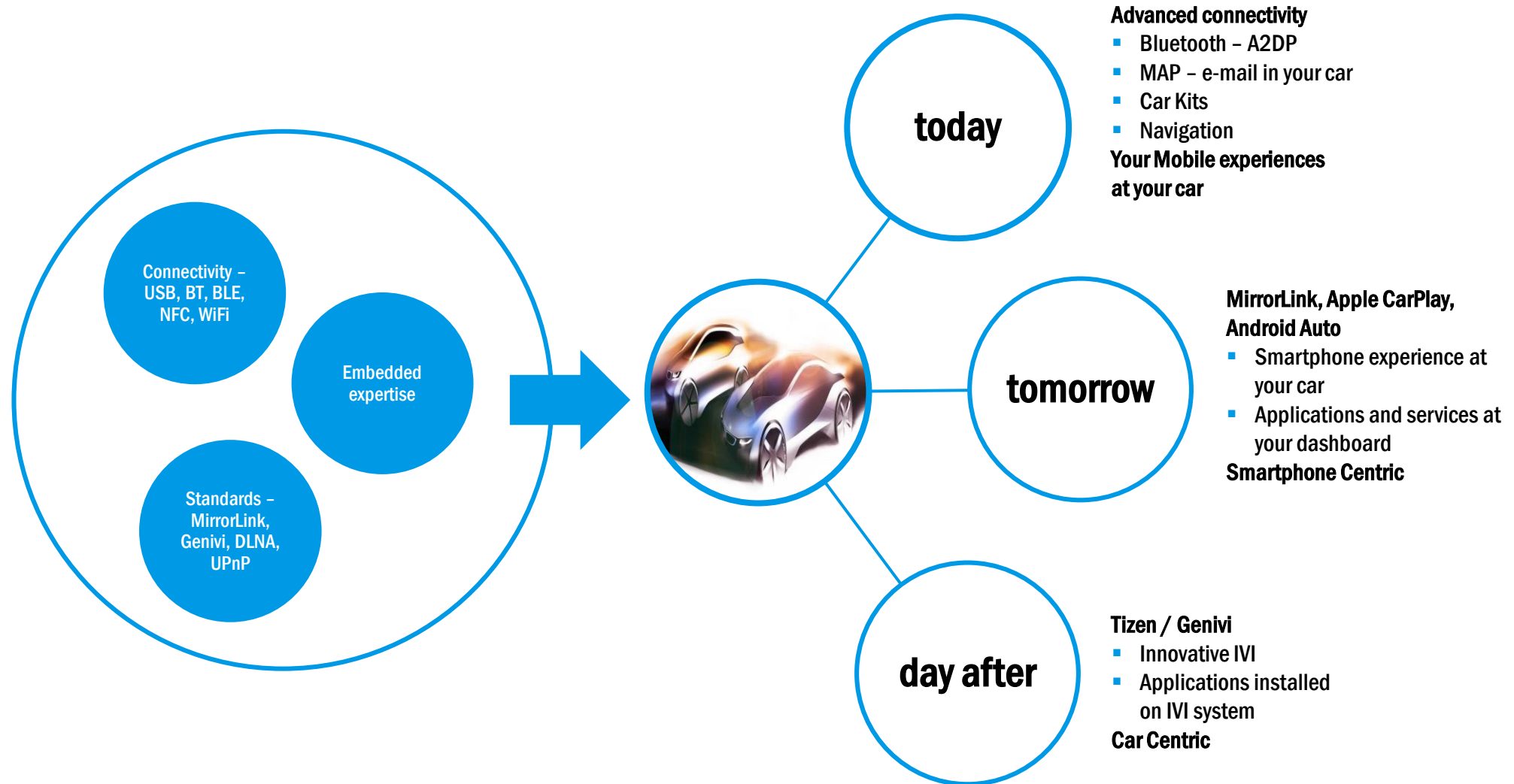
TIZEN™

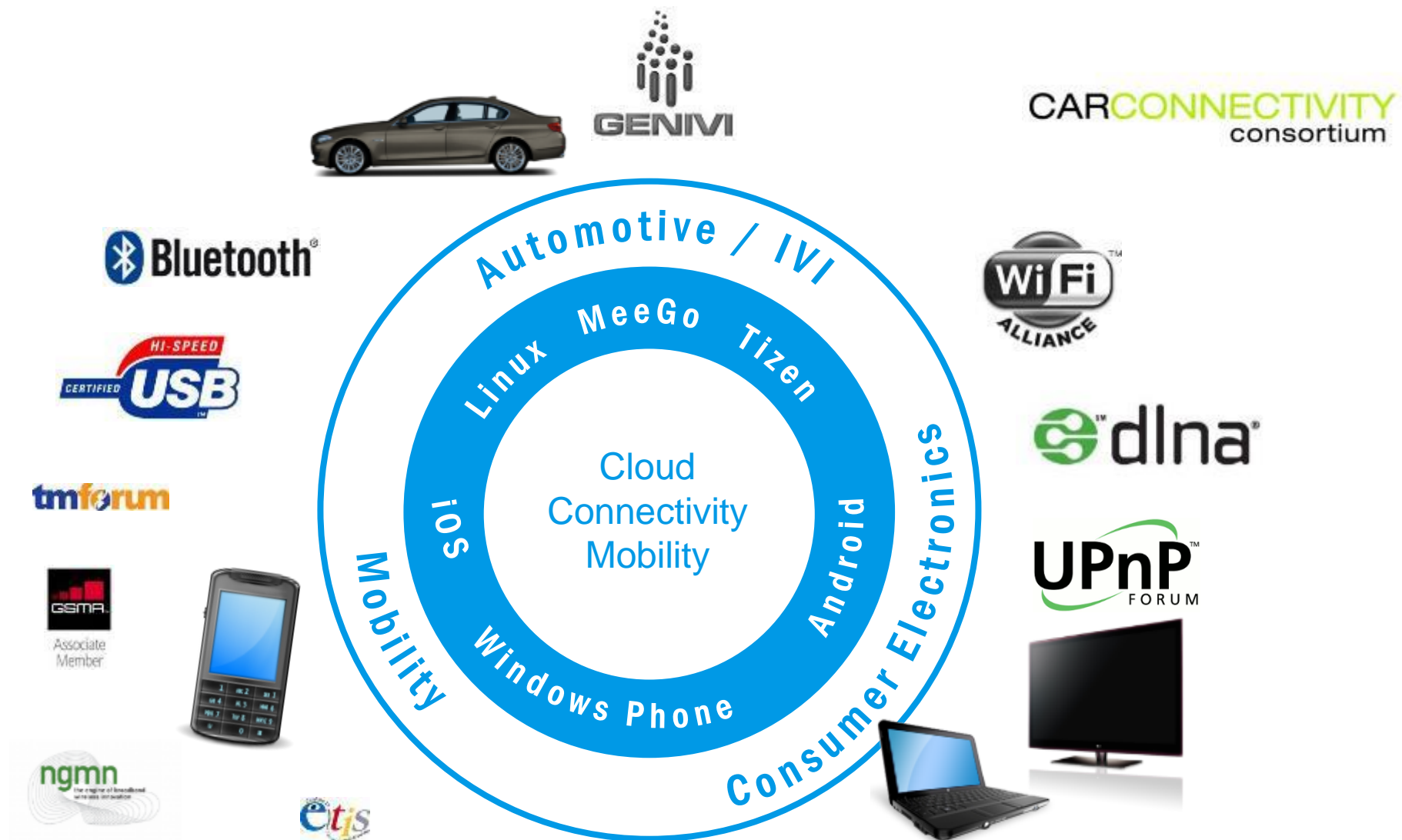




PRODUCTS & SERVICES FOR AUTOMOTIVE

Connectivity, Certification, Quality Assurance







OTHER AREAS OF EXPERTISE

APP Development, Smartphones, Local Connectivity



COMARCH

Technologies

Thank You!

Grzegorz Sowa
CyberSecurity Department Director

+48 608 646 384

Grzegorz.Sowa@comarch.com

Dr Tomasz Grabowski
Senior Project Manager

+48 694 464 885

Tomasz.Grabowski@comarch.com