



Digitalization

IFX Day 2021

virtual format, 5 October 2021



Electrification and Digitalization

Electrification

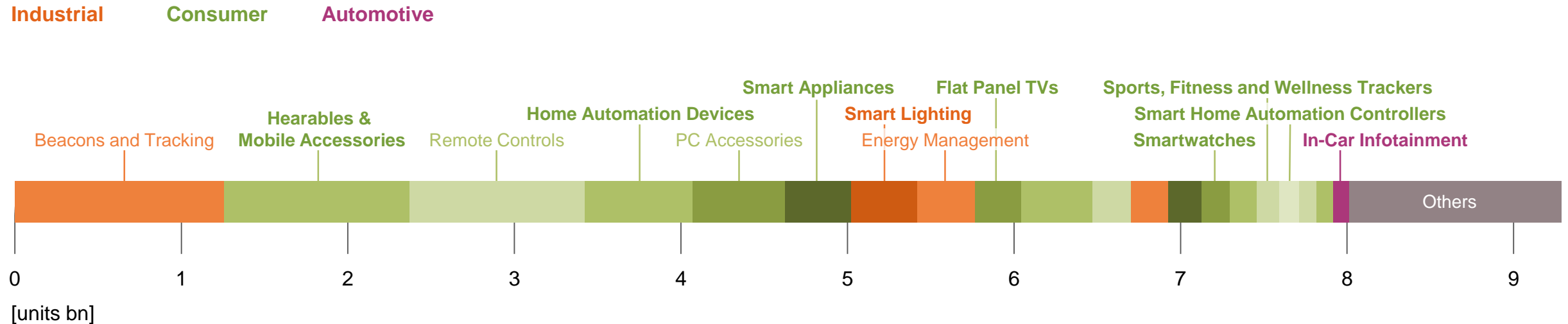
- › CO₂ saving
- › Energy efficiency
- › Cost saving

Digitalization

- › Productivity
- › Comfort
- › New use cases

The high-growth and broad IoT market offers a business opportunity of ~9bn devices

IoT applications: connected devices in billion units shipped in 2026¹



- › From 5.5bn connected devices in CY21 to more than 9.1bn devices shipped in CY26¹, CAGR₂₁₋₂₆ ~11%
- › We address **focus applications** directly with key customers
- › All applications served perfectly via excellent distribution partners with solutions that are easy-to-use and integrate

¹ ABI Research: *Wireless Connectivity Technology Segmentation and Addressable Markets*. July 2021; excluding Chromebooks, desktop PCs, feature phones, media tablets, netbooks, smartphones, white box tablets.

Our strategic P2S approach enhances profitable growth

Executing P2S



Turning **system and market understanding** into **superior solutions**



Maximize **customer value**

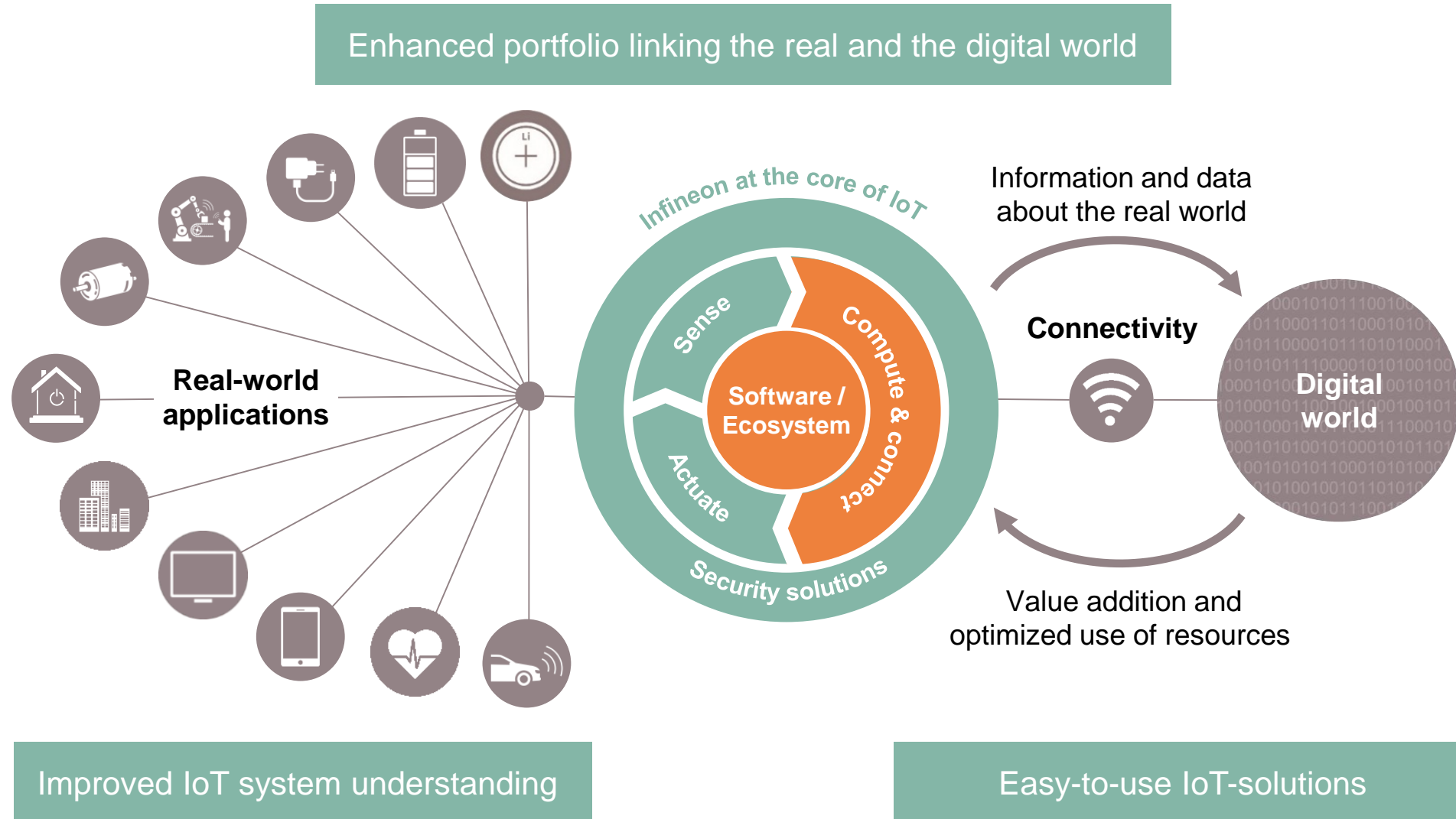
- › Differentiating functionality
- › Better cost/performance ratio
- › Faster time-to-market



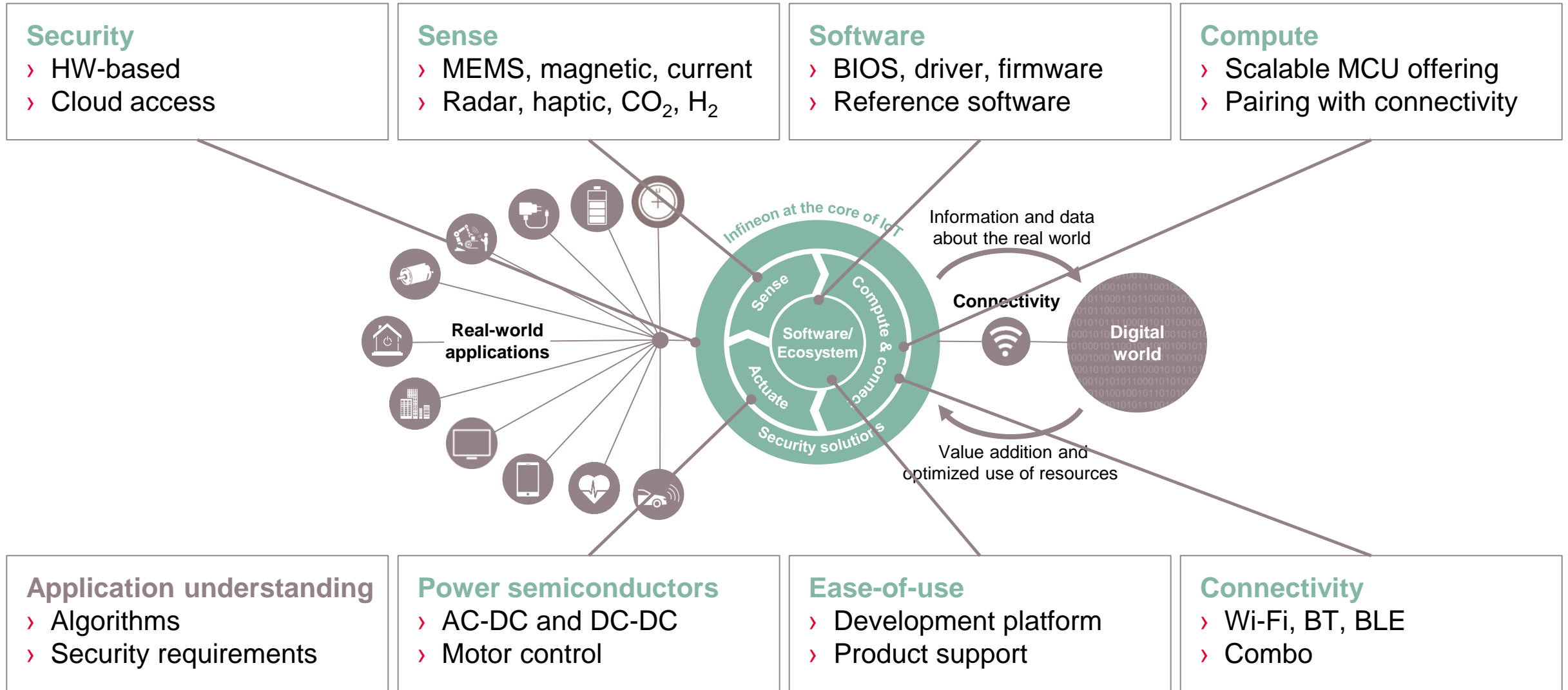
Enhance
profitable growth



With Cypress we created the most comprehensive portfolio to execute our P2S strategy at the core of the IoT space

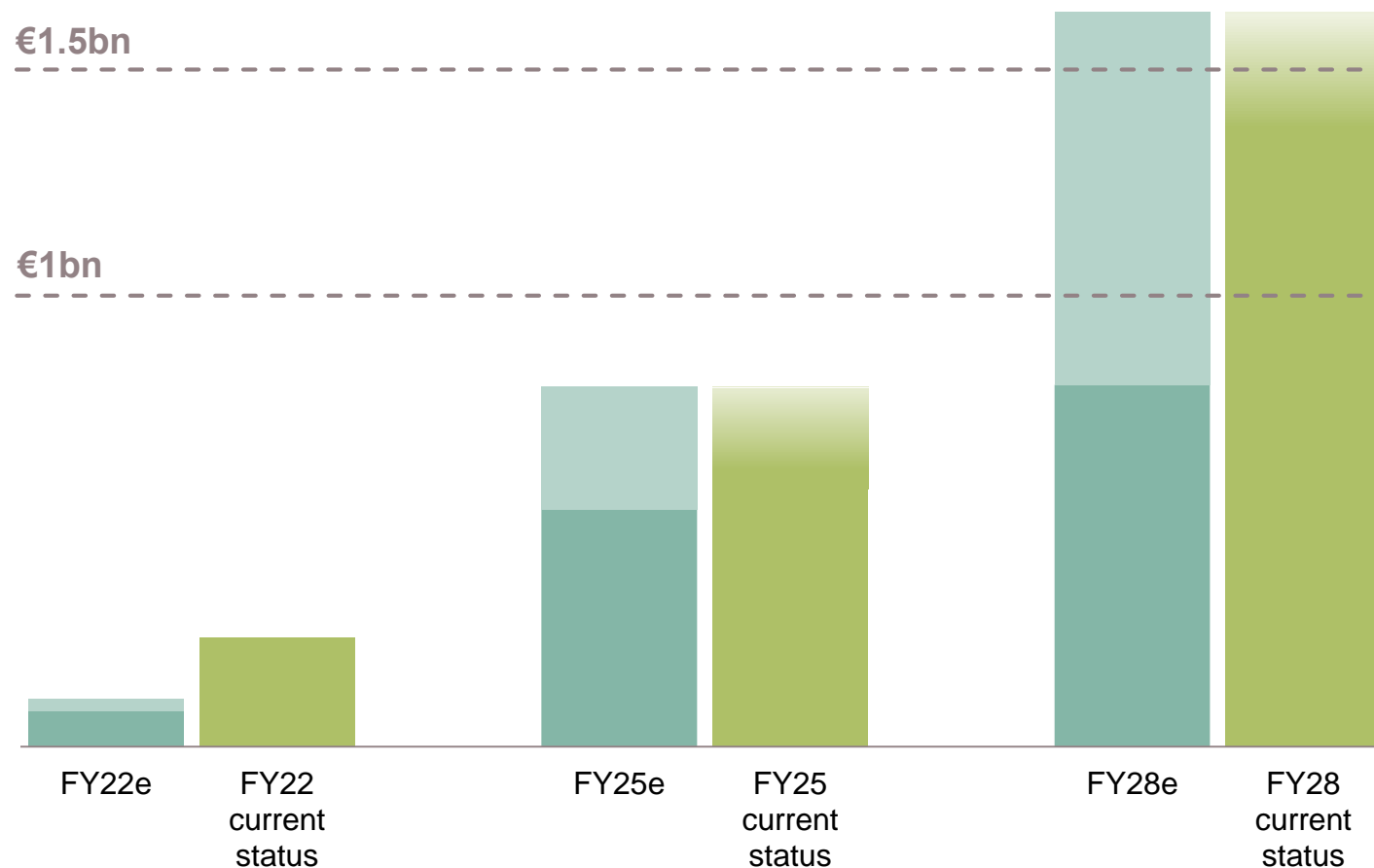


Infiniteon makes IoT happen: through excellence in all system-defining elements we create solutions with superior customer value



Well on track to achieve announced revenue synergies

Planned ramp-up of revenue synergies



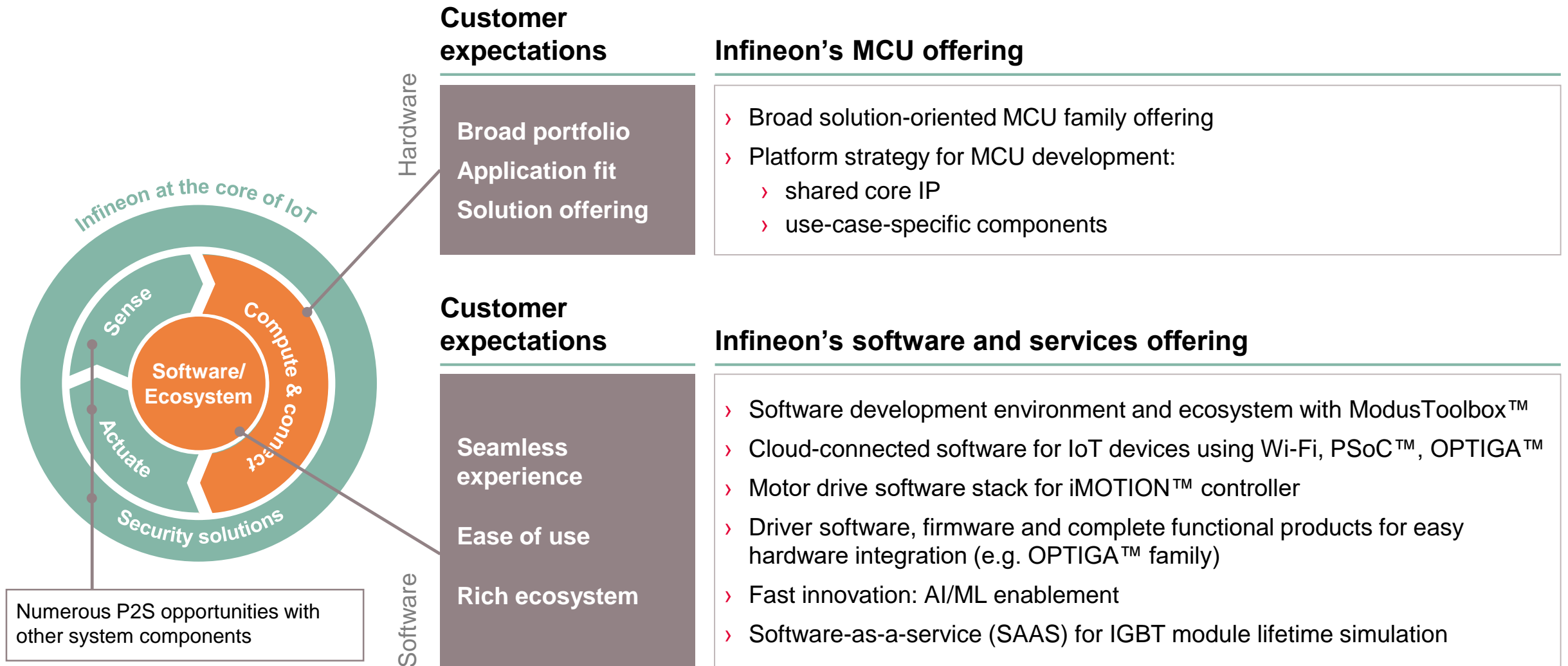
› ~1.5 years after closing, tangible progress on synergy generation is being made in remote PMI, following a proven script for the integration.

› We expect to overachieve our target for revenue synergies for FY22

› We are on a good track to reach our targets for FY25 and FY28.

- P2S for long-term revenue synergies
- Near-term revenue synergies: improved customer access, cross-selling opportunities
- Design wins, open design wins and P2S initiatives

MCU and software are key for the success in IoT as they define the functionality and time-to-market of the device

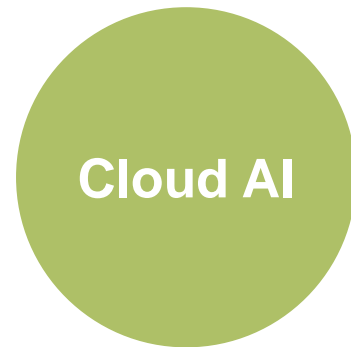


Edge AI is a fast developing market enabled by and calling for many of our core competencies

Edge AI to offer additional growth opportunities as inference workloads move to device level

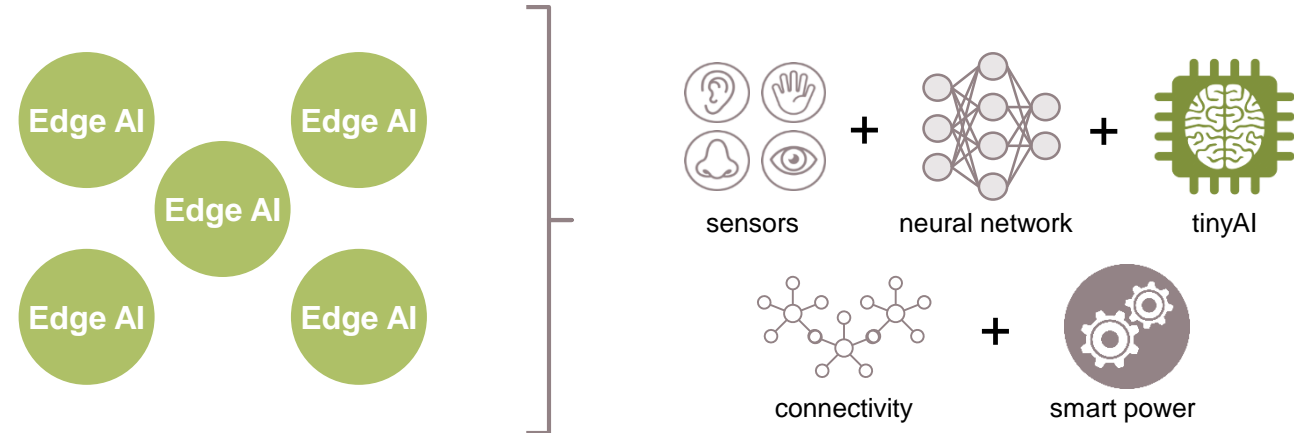
Cloud AI

- › Public and private clouds offer scalability and flexibility
- › Growing performance demand with higher power consumption (ASIC/SoC/FPGA/CPU/GPU)



Edge AI

- › Smart subsystems offer low latency, improved privacy, higher power efficiency
- › Growing solution demand for e.g. image and object recognition, autonomous material handling, predictive maintenance, and human-machine interface



Infineon:

**Power supply (AC-DC)
Power conversion (DC-DC)**

Infineon:

**Smart sensors with AI capabilities
Embedded control including connectivity and edge AI accelerators
Smart power, toolchain/ecosystem, deployment services**

For the Industrial IoT, Edge AI enables predictive maintenance and other use cases – playing right into our core competences

Predictive maintenance is a significant lever for productivity



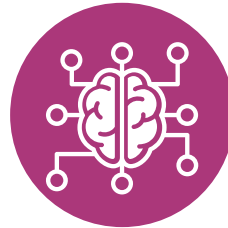
Maintenance prediction for key assets
(avoidance of fixed preventive maintenance cycles)

Advantages






- › Reduced downtime through optimized maintenance
- › Lower maintenance costs
- › Increase transparency on device usage

Edge AI enhances Industrial IoT to enable predictive maintenance, increasing production efficiency and robustness

Edge AI-enabled control and field-level devices



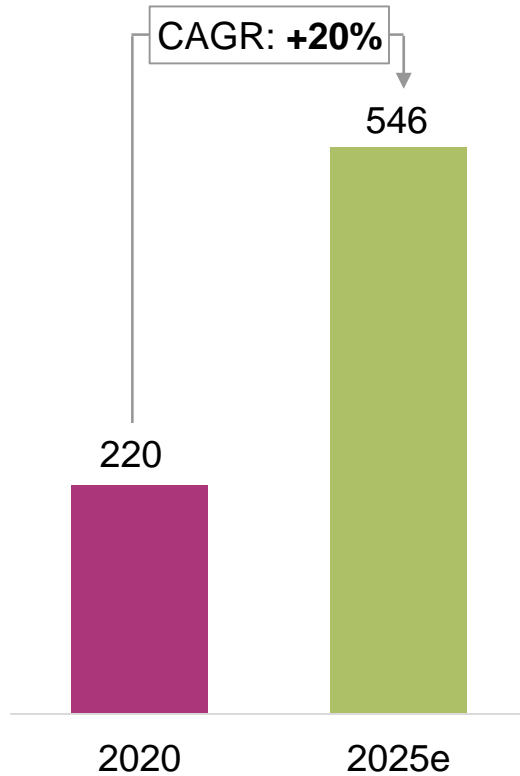
Products and services from Infineon enable safe, secure, power-efficient, dependable implementation

-  **Smart sensors**
Detect and pre-process signals through AI capabilities to recognize potential abnormal operation of equipment
-  **Edge AI processing and control**
Edge AI enabled MCUs to identify at-risk equipment, repair urgency and control adaptation
-  **Smart Actuators**
Receive and implement instructions to reduce potential impacts in production
-  **Security**
Ensure secure communication and protection of critical information
-  **Connectivity**
Enable dependable communication across devices, factory levels, cloud and secure device management









With a broad set of key enabling technologies, Infineon is well positioned to capture growth opportunities

Market: Home Automation Devices¹

[units m]



Leading competencies to provide full system solutions

-  **Application understanding**
-  **Ease-of-use**
-  **Software**
-  **Sense**
-  **Compute**
-  **Actuate**
-  **Security**
-  **Connectivity**



smart door lock



wireless smart camera

Customer ex. for wireless smart cameras and smart door locks



ASSA ABLOY



Google



Kaadas

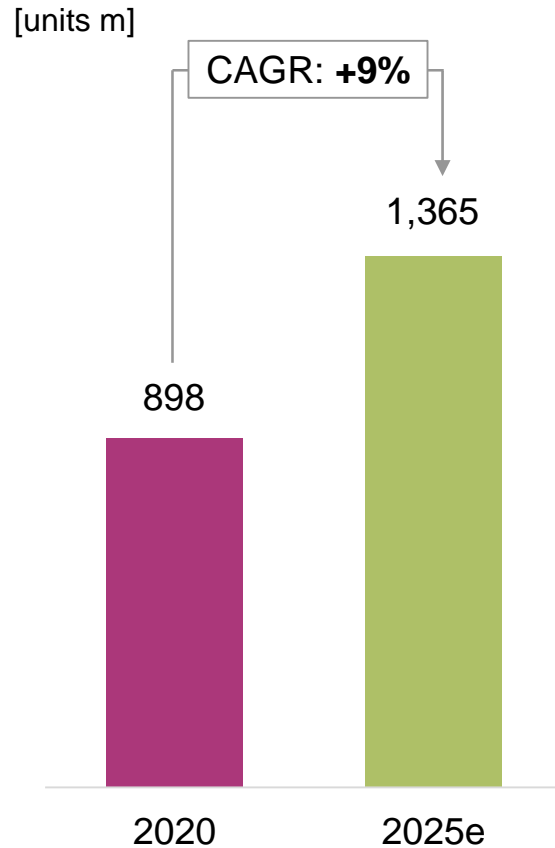


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Infiniteon acts as one-stop-shop with excellent RF, sensor, connectivity, power, memory and security solutions



Market: Smartwatches, Trackers & Hearables¹



Acting as one-stop-shop with comprehensive solutions

-  **Application understanding**
-  **Ease-of-use**
-  **Software**
-  **Sense**
-  **Compute**
-  **Actuate**
-  **Security**
-  **Connectivity**



smartwatch



fitness tracker

Customer examples for smart watches and fitness trackers

GARMIN



huami

POLAR

SAMSUNG

SUUNTO

vivo

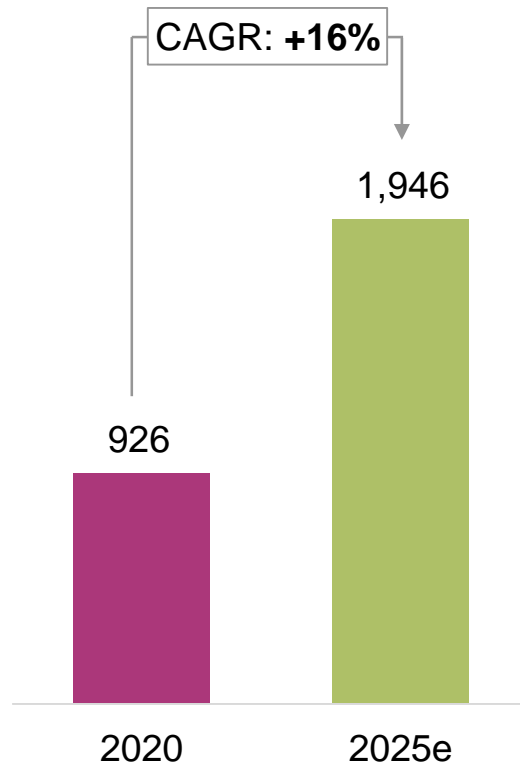
WYZE

¹ ABI Research: *Wireless Connectivity Technology Segmentation and Addressable Markets*. July 2021; excluding Chromebooks, desktop PCs, feature phones, media tablets, netbooks, smartphones, white box tablets.

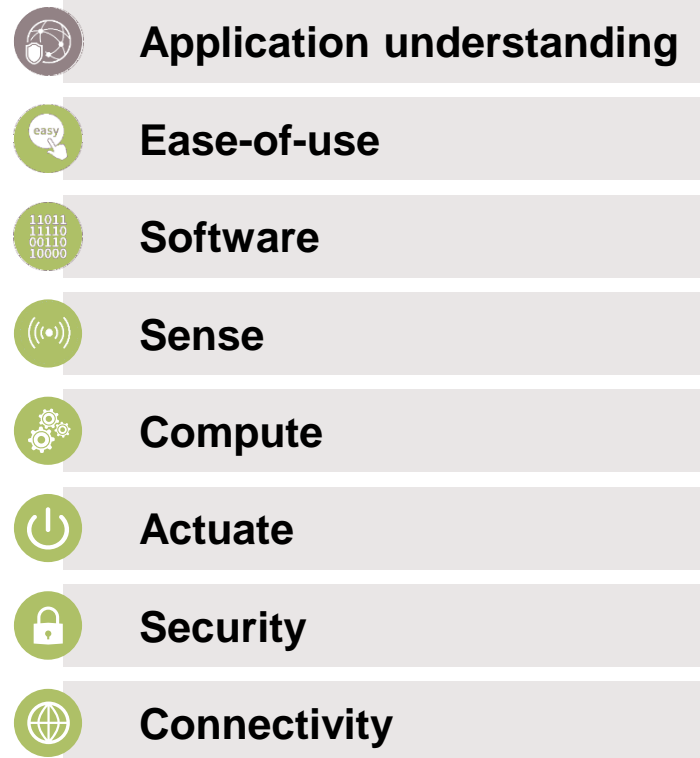
We are driving the smart home opportunity together with market-shaping customers

Market: Smart home^{1,2,3}

[units m]



Combining our portfolio to create new use cases with our customers



Frame TV



smart vacuum cleaner

Customer examples for smart home



¹ ABI Research: *Wireless Connectivity Technology Segmentation and Addressable Markets*. July 2021; excluding Chromebooks, desktop PCs, feature phones, media tablets, netbooks, smartphones, white box tablets.
² ABI Research: *Smart Home Hardware Market*. June 2021.
³ Incl. Smart Appliances, Smart Lighting, Flat Panel TVs, Smart Speakers & Displays, Smoke & Air Quality Sensors, Consumer Robotics, Thermostats and others.

The car of the future is driving digitalization in many aspects and Infineon provides the ingredients



ADAS/AD

- › object recognition
- › advanced spatial sensing
- › MCU (AURIX™, TRAVEO™ 2, PSoC™)
- › radar sensor



software-over-the-air

- › remote OS updates
- › secure feature upgrades
- › NOR flash memory
- › security solution



infotainment and HMI

- › seamless digital entertainment
- › always-on, secure connectivity
- › intuitive user interface (UI)
- › MCU (AURIX™, TRAVEO™ 2, PSoC™)
- › Wi-Fi, Bluetooth, USB Type C
- › touch controller with CapSense™



digital instrument cluster

- › real-time driver information
- › user-specific digital content
- › MCU (AURIX™, TRAVEO™ 2, PSoC™)
- › NOR flash and RAM memory



Car of the future



comfort / premium

- › automatic exterior and interior lighting
- › passenger-specific automatic settings
- › MCU (AURIX™, TRAVEO™ 2, PSoC™)
- › pressure and magnetic sensors
- › LED driver ICs

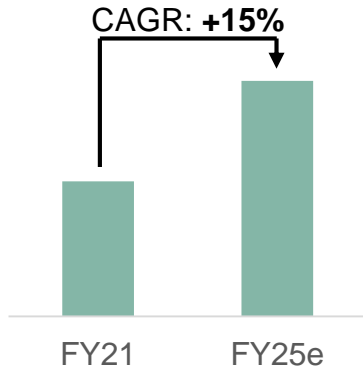
The Infineon AURIX™ MCU family has become the first-choice automotive architecture for high-growth and safety-critical applications



Infineon AURIX™ revenue development over time

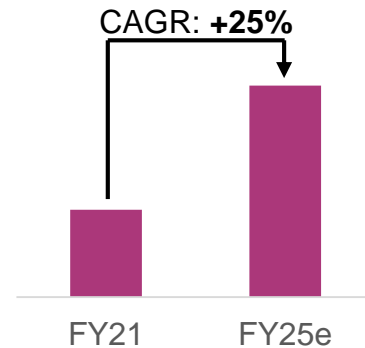
Powertrain

- › ICE engine management
- › ICE transmission
- › xEV motor control



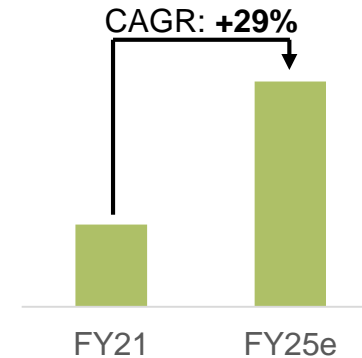
Classical safety

- › power steering
- › braking
- › airbag



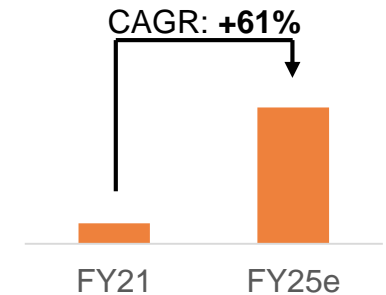
ADAS/AD

- › camera host control
- › sensor fusion host control
- › radar signal pre-processing



Domain and zone control

- › drive domain
- › body & convenience domain
- › zone control



Example of AURIX™ platform design-win



Our platform based approach makes innovative solutions developed with market-shaping customers easy-to-use for solution-oriented customers

“Market-shaping customer”

- › Differentiators via component and product
- › Strong software and integration competence
- › Often need for customized silicon
- › High skillset
- › Example: large automotive tier-1

Innovative solutions are jointly developed with market-shaping customers in an **intimate deeply integrated** process

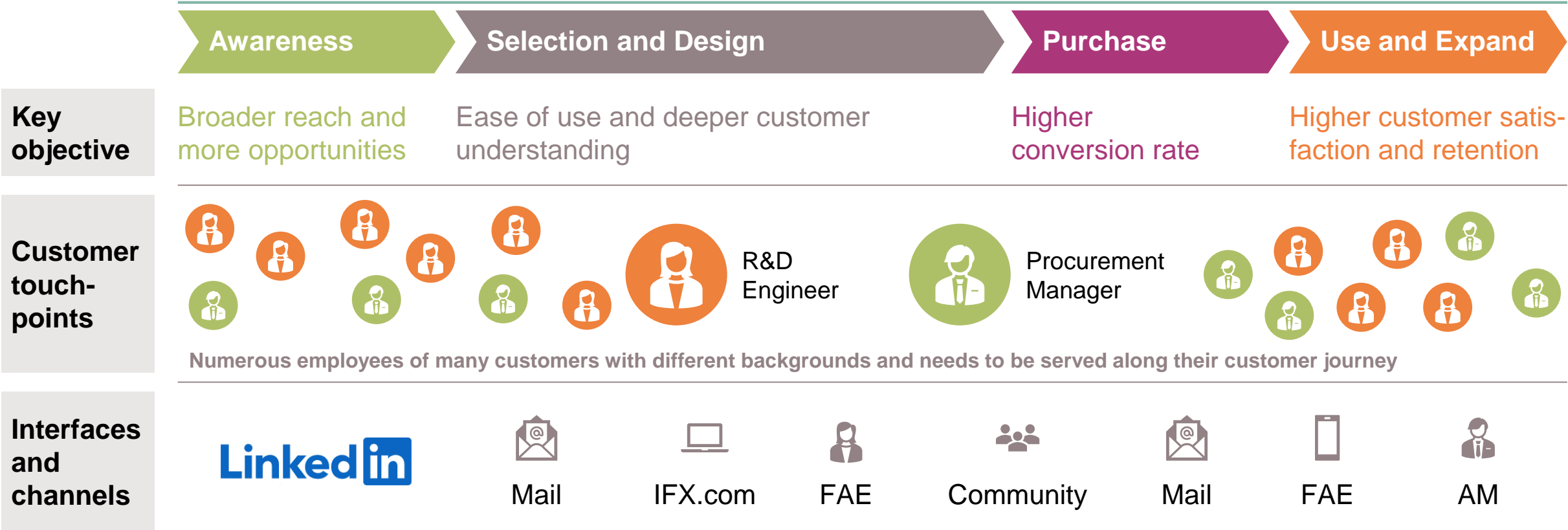
All solutions are **designed upfront** as **adoptable**, scalable and **easy-to-use** ...

... which facilitates their **quick adoption** by the solution-oriented customers and introduction to broad market

“Solution-oriented customer”

- › Limited differentiation at component level; rather at product level
- › Short time-to-market
- › Limited experience
- › High expectation for usability
- › Example: Consumer IoT manufacturers

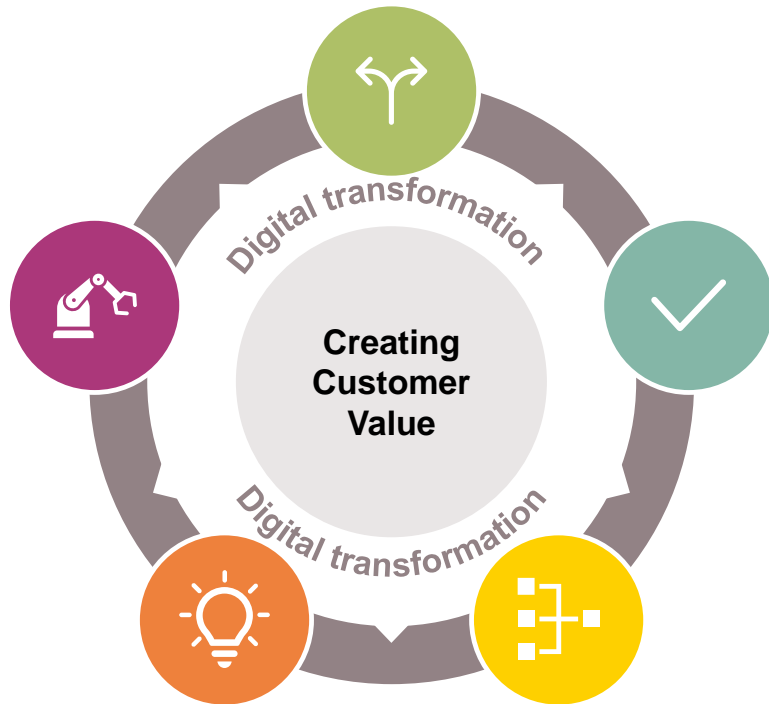
Customer journey – simplified



Broad customer access leads to an increase in marketing and sales efficiency and revenue growth

Digitalization creates substantial customer value and increases speed and efficiency in processes

Digital transformation strengthens our key success factors



Digitalization creates substantial customer value

Digital products and services increase customer value and enable us to **grow faster** than the market

Digital go-to-market to **reach more** customers, identify more sales opportunities and increase conversion rates

Digitalization of end-to-end processes for **higher speed and efficiency**



With Cypress we accelerated our P2S strategy at the core of the IoT space: industrial IoT, smart building, smart home, wearables etc.



The integration of key elements like MCU and software are well on track, synergies are unfolding as planned



Platform approach and digital interface make innovative solutions easy-to-use for many applications and customers



Digital transformation enhances Infineon's key success factors – making us stronger



Part of your life. Part of tomorrow.