

Aareon AG

Investor Seminar

28 May 2019



Today's presenters

Aareal



Hermann J. Merkens
Chief Executive Officer – Aareal Bank Group

 Aareon



Dr. Manfred Aflen
Chief Executive Officer – Aareon AG



Christian M. Schmahl
Chief Financial Officer – Aareon AG



Dr. Imad Abdallah
Chief Digital & Ventures Officer – Aareon AG

Today's agenda

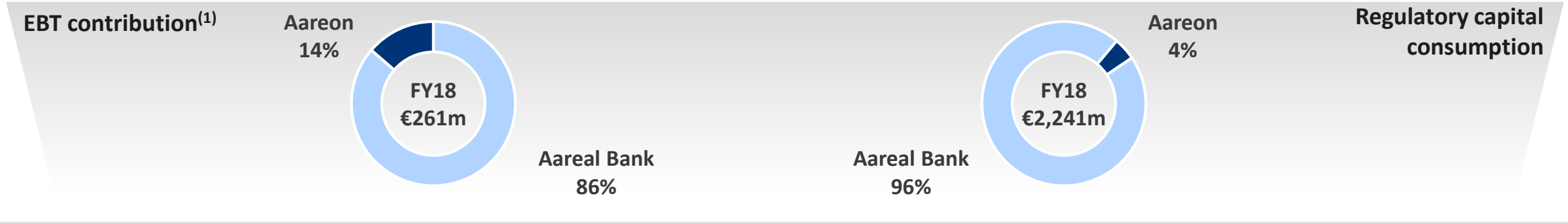
10.30 – 10.45	1	Introduction to Aareal Bank's Consulting / Services business Hermann J. Merkens
10.45 – 11.25	2	We are the leading provider of ERP software and digital solutions to the European Real Estate industry Dr. Manfred Alflen
11.25 – 11.30	3	Well positioned to embark on next chapter of growth Dr. Manfred Alflen
11.30 – 11.40	4	Q&A Presented by Jürgen Junginger
11.40 – 12.10	5	Growth strategy Dr. Imad Abdallah
12.10 – 12.35	6	Financial overview Christian M. Schmahl
12.35 – 13.20	7	Q&A Presented by Jürgen Junginger
13.20 – 13.30	8	Wrap-up and closing remarks Hermann J. Merkens / Dr. Manfred Alflen
from 13.30		Lunch

1 Introduction to Aareal Bank's Consulting / Services business

Hermann J. Merkens

Aareon is Europe's #1 provider of ERP software and digital solutions driving digital transformation of the European Real Estate industry

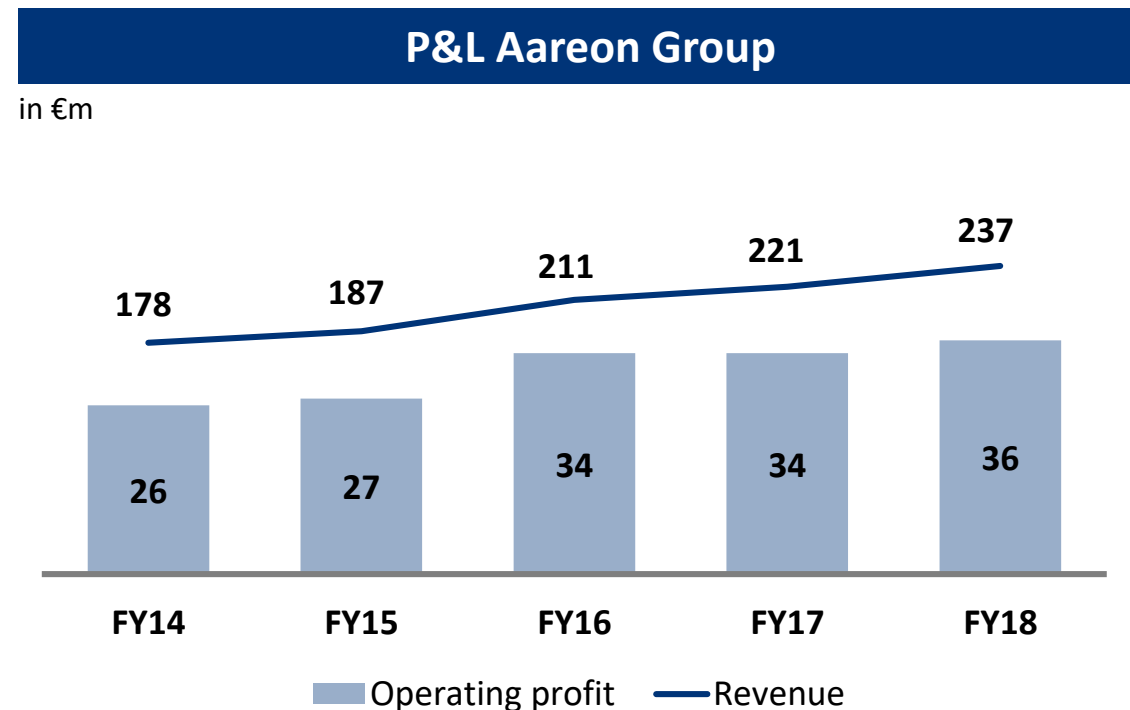
<p>Structured Property Financing</p> <ul style="list-style-type: none"> Real estate financing solutions with international footprint ~€27bn (2018) real estate finance portfolio across different property types 	<p>Consulting / Services</p>	
	<p>Aareon</p> <ul style="list-style-type: none"> #1 provider of ERP software and digital solutions for the real estate industry in Europe Revenues of €237m (2018) Commission income contribution of €197m (2018) 	<p>Aareal Housing industry division</p> <ul style="list-style-type: none"> Banking services for the German Housing and Energy industry #1 provider of integrated payments for the German Housing industry with ~145m transactions p.a. €10.4bn in deposits (average in 2018)



(1) Normalised (adjusted for negative goodwill)

Aareon as key growth driver for Aareal's Consulting / Services segment

P&L C/S segment					
in €m	FY14	FY15	FY16	FY17	FY18
Net interest income	1	(2)	(15)	(10)	(12)
Loss allowance					(1)
▪ <i>thereof Aareon</i>					(1)
Net commission income	162	171	186	200	212
▪ <i>thereof Aareon</i>	157	164	178	189	197
▪ <i>Revenues</i>	178	187	211	221	237
▪ <i>Material costs</i>	21	23	33	33	40
Admin expenses	187	197	204	220	227
▪ <i>thereof Aareon</i>	136	144	148	161	165
Net other op. income	4	5	4	6	4
▪ <i>thereof Aareon</i>	6	6	4	6	3
Operating profit	(20)	(23)	(29)	(23)	(22)
▪ <i>thereof Aareon</i>	26	27	34	34	36



Aareal 2020: Main objectives and drivers going forward – Aareon the key growth driver

Aareal 2020 as of today

- Aareal 2020 was designed already in 2016 to provide for **higher stability, efficiency and flexibility** in an increasingly changing environment
- **We have executed** – hence our business model today has **inherent optionalities** enabling us to **act adequately**

Three areas of particular focus:

CRE

Fine-tuning of our strategic positioning as a result of (i) sluggish growth and transaction volumes, as well as (ii) regulatory changes

Regulatory capital

Anticipation and implementation of regulatory changes – coming from a strong basis – Flashlight on future ECB NPL guidelines and IFRS 9 stage 2 sensitivity

Aareon

General

Strengthening of capital-light / commission income business

Where we are today

European No 1 ERP provider¹⁾; sustainable client base; digital products successfully established

Where we will go

Accelerate growth by pushing the digital business further

How we will achieve

Increased R&D spend for iterative organic development; supported by opportunistic M&A

Today's focus

(1) For the European Real Estate industry

Aareon is focused on delivering sustainable growth

1

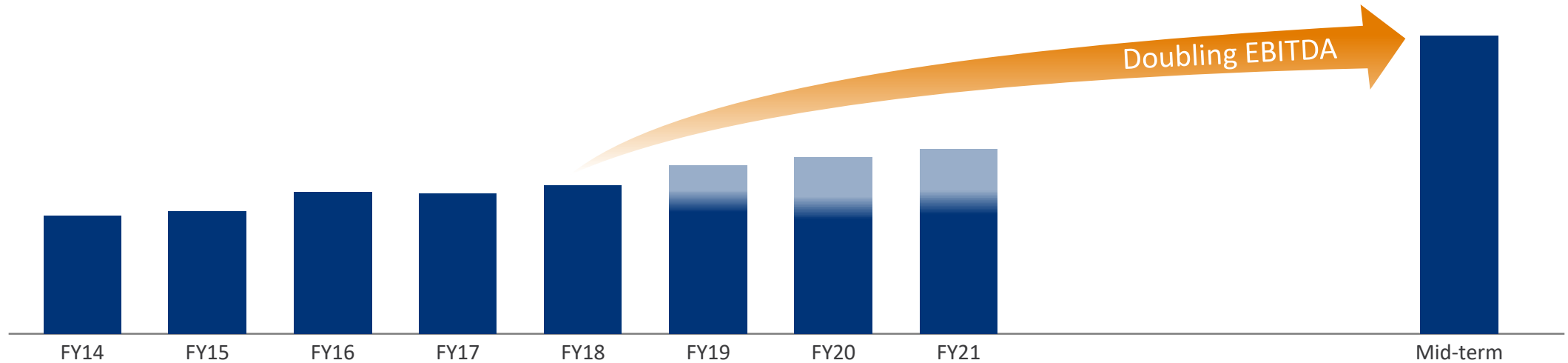
Drive ERP adoption and international expansion
European #1 ERP provider for the European real estate industry

2

Develop digital solutions
Expand portfolio of digital solutions

3

Drive digital solutions business and foster innovation
Continuous innovation and new business models through corporate venture program



Note: Illustrative sizing only

Experienced management team



Dr. Manfred Alflen
Chief Executive Officer

- Responsible for **general oversight of Aareon**
- 17 years with Aareon
- 29 years of experience in IT industry



Christian Schmahl
Chief Financial Officer

- Responsible for **financial oversight of Aareon**
- 7 years with Aareon
- 25 years of experience in fast growing technology companies



Sabine Fischer
Chief Market Officer

- Responsible for the **market facing unit**
- 4 years with Aareon
- 29 years of experience in IT industry



Dr. André Rasquin
Chief Operations Officer

- Responsible for **ERP solutions / outsourcing**
- 12 years with Aareon
- 25 years of experience in real estate IT industry



Dr. Imad Abdallah
Chief Digital & Ventures Officer

- Responsible for **digital solutions and ventures**
- 10 years with Aareon
- 20 years of experience in real estate software development industry

- ✓ Entire organisation is structured to combine the three main areas of market, product / services and geographies to accelerate growth
- ✓ Highly specialised market team with strong connections to customers across Europe
- ✓ ERP product team and digital solutions team work seamless with markets department

2 We are the leading provider of ERP software and digital solutions to the European Real Estate industry

Dr. Manfred Alflen

Make our customers successful: Drive digital transformation of the European Real Estate industry with highly integrated software solutions



Digitise and automate work processes

Enable customers to gain operational efficiencies



Reduce operational costs

Achieve tangible improvements in asset utilisation



Create competitive advantage

Increase customer / tenant satisfaction and enable new business models



Manage securely and at scale

Scalable and highly integrated software trusted in key markets in Europe

Aareon today – the leading ERP software and digital solutions provider to the European Real Estate industry



~3,000

Customers



~10m

Managed units



37

Locations



~1,600

Employees



~650

Software engineers



61

Years of success



€237m

Revenue



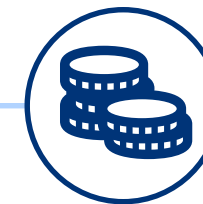
63%

Recurring revenue



€35m

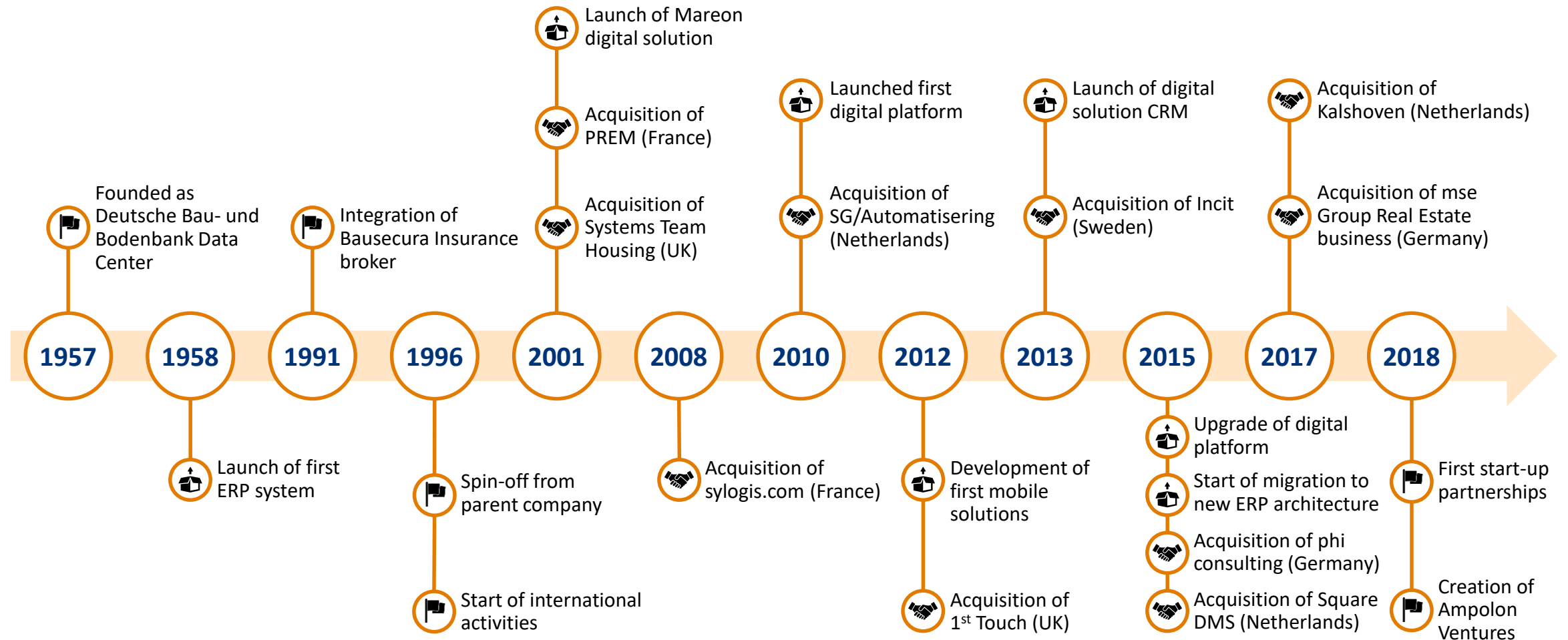
R&D spend



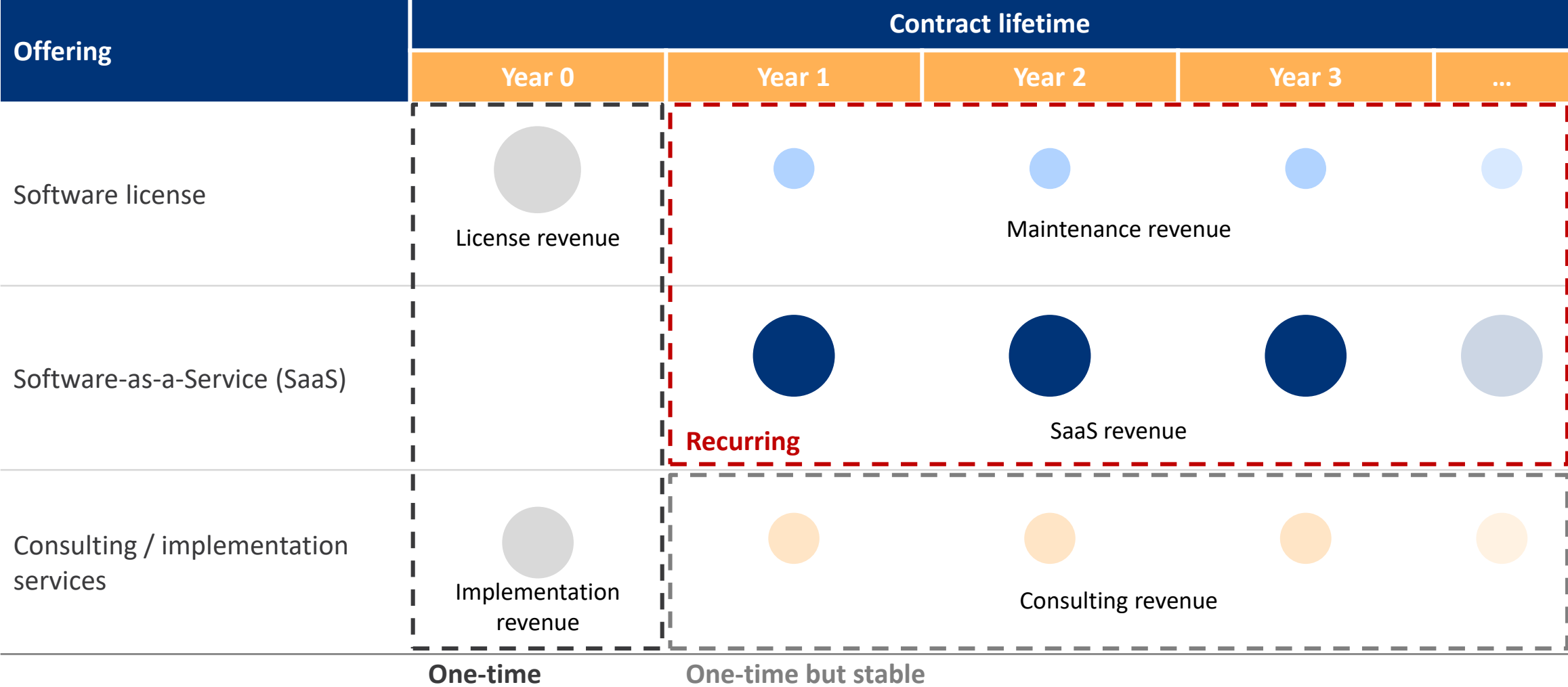
€50m

Adj. EBITDA⁽¹⁾

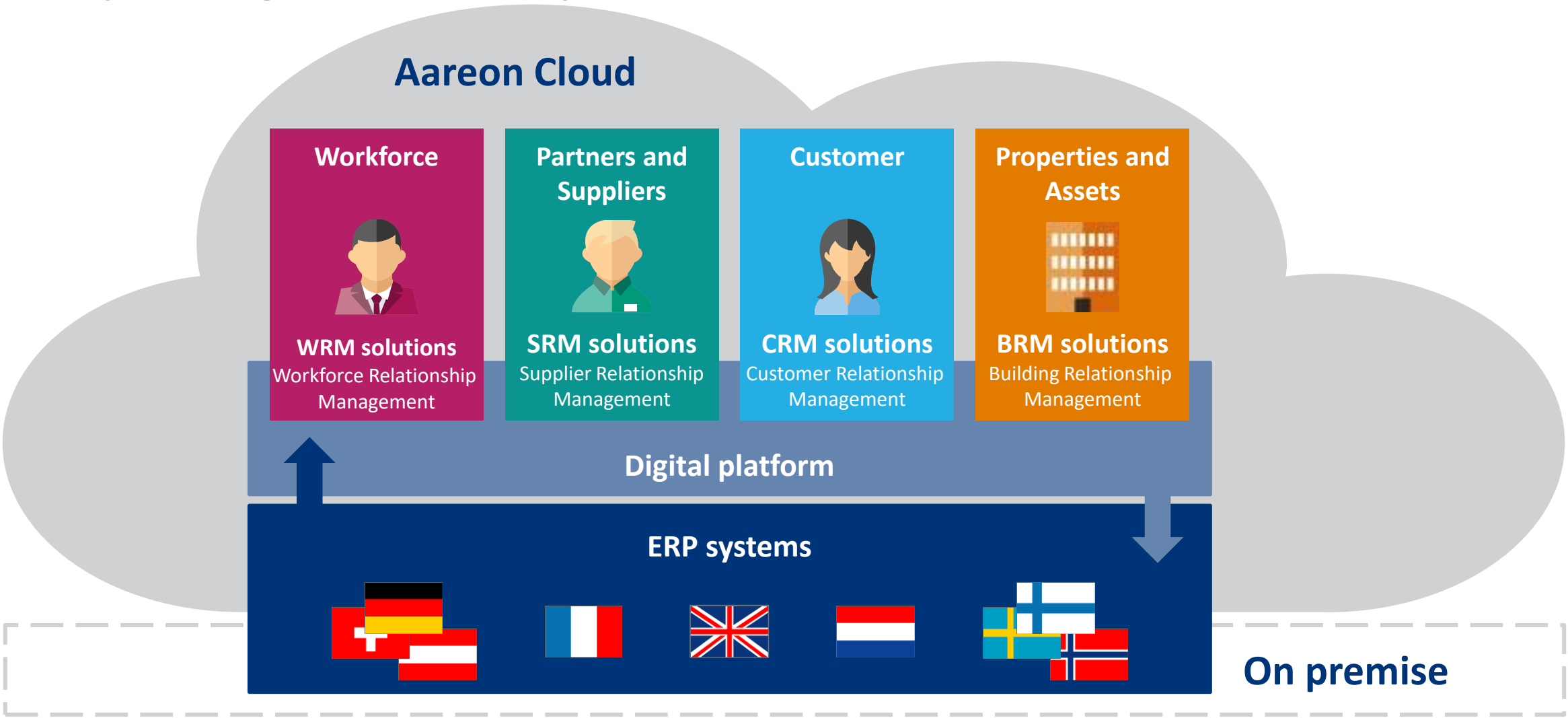
Journey to market leadership



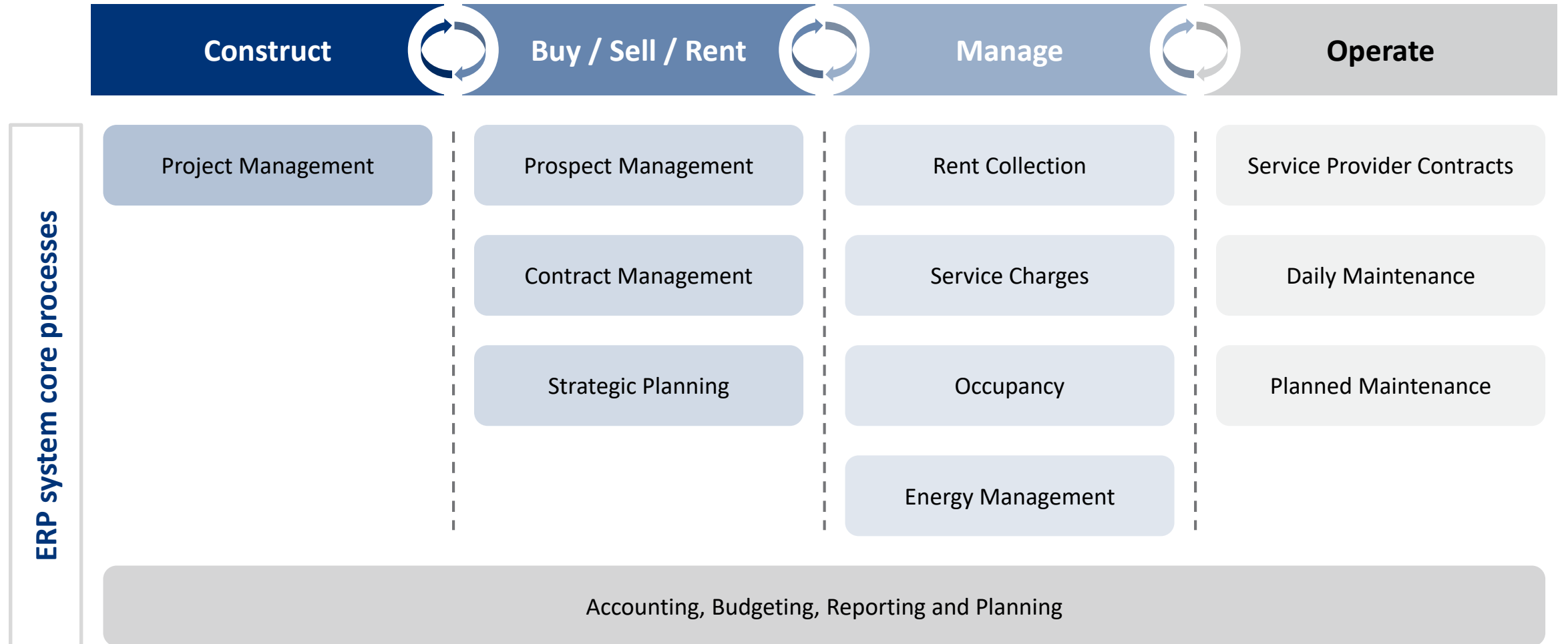
Simplified commercial model – stable and mature



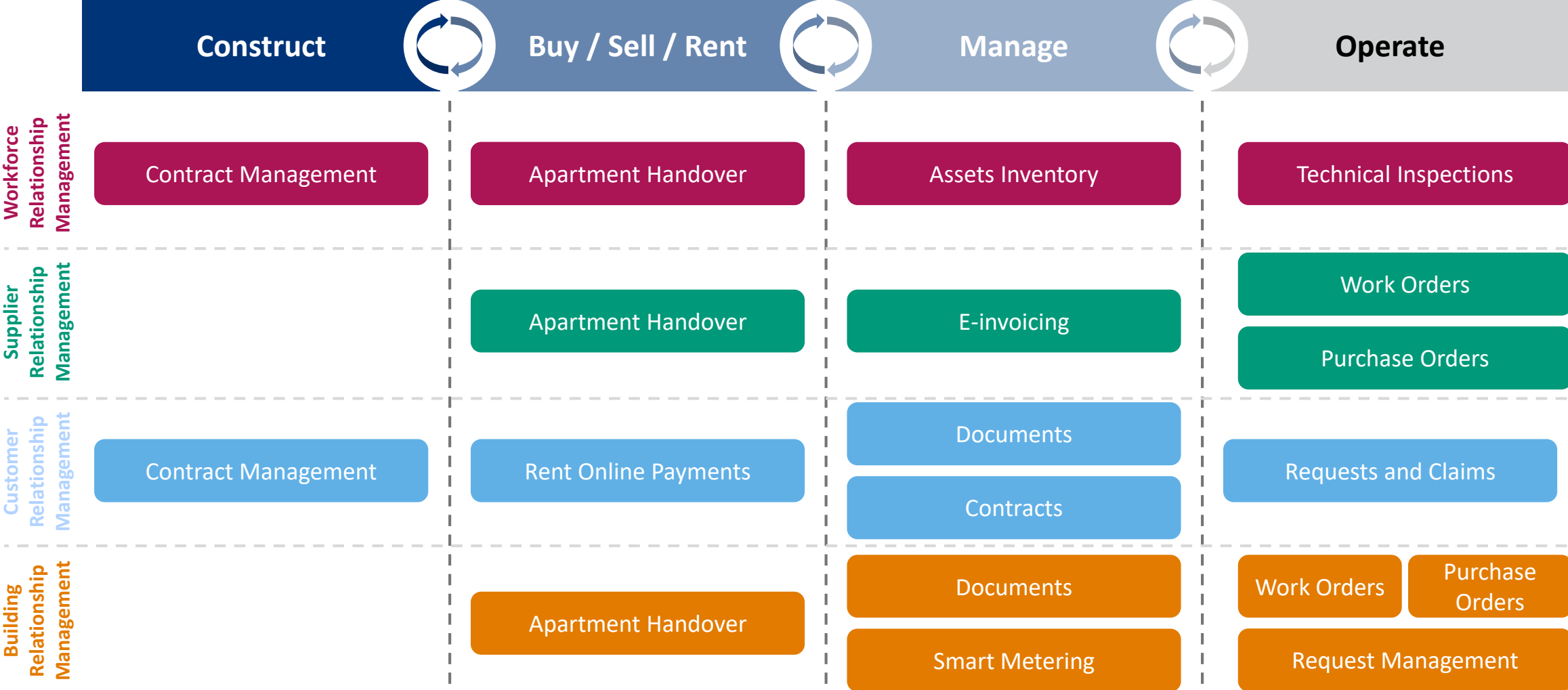
Fully integrated suite of market-specific ERP software and an innovative European digital solutions platform



Aareon ERP software covers all relevant building lifecycle's core processes – back office oriented



Digital solutions addressing stakeholders interactions within real estate ecosystem – front office oriented



Germany – the largest European market as launch pad for international expansion



1957

Market entry



~60%

Market share

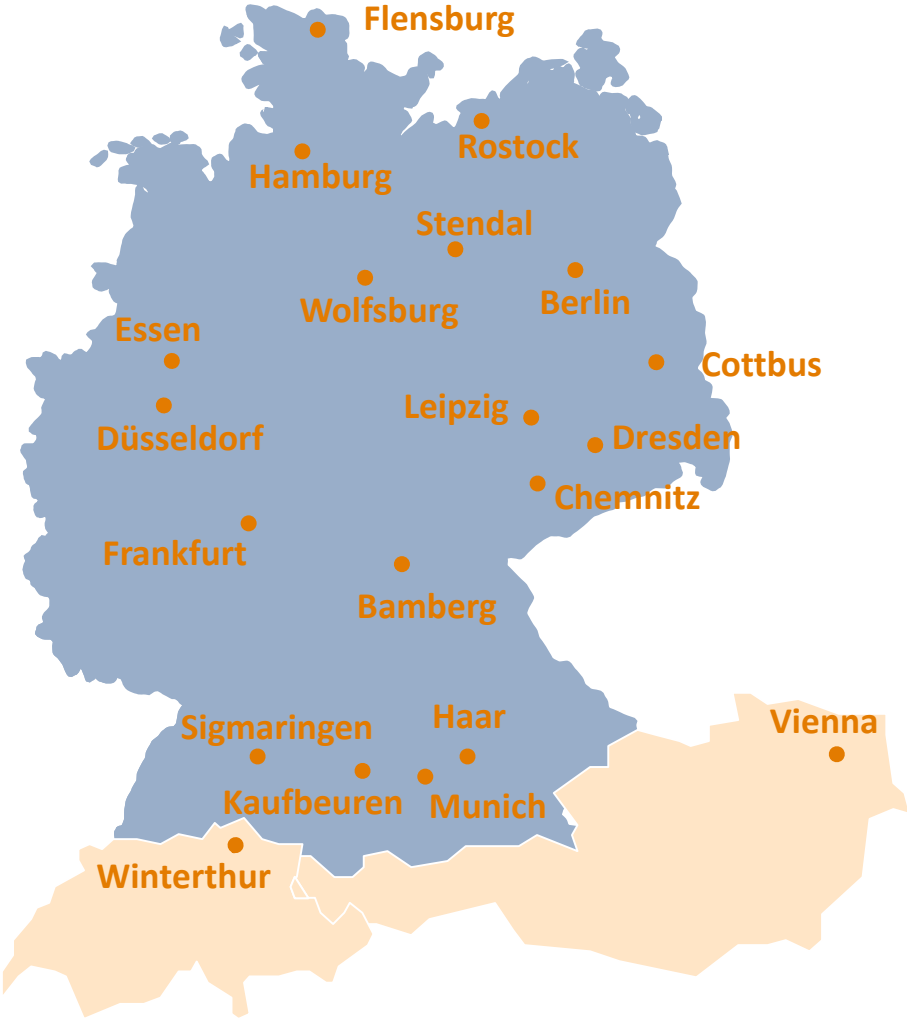


€149m

Revenue

Market trends

- 1 Increasing demand for rental units
- 2 Demographic changes / sustainability
- 3 Increasing demand for digital solutions



Note: Market share based on Aareon’s estimates of total units

Market leading across Europe



United Kingdom

-  **2001** Market entry
-  **~15%** Market share
-  **€14m** Revenue

France

-  **2001** Market entry
-  **~45%** Market share
-  **€28m** Revenue

Nordics

-  **2013** Market entry
-  **~20%** Market share
-  **€9m** Revenue

Netherlands

-  **2010** Market entry
-  **~35%** Market share
-  **€37m** Revenue

Note: Market shares based on Aareon's estimates of total units in respective geographies

Case study: Public tender win thanks to fully integrated product suite

torus



About the customer

- UK housing company
- Created in 2015 after the merger Helena Partnerships and Golden Gates Housing Trust



Customer needs

- Combine various systems companies with specific functions after the merger
- Harmonize disparate systems and introduce specific functionality
- Objective of giving some 80% of customers digital access to services by 2020



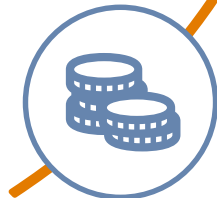
Aareon's solution

- Fully integrated UK ERP system Aareon QL
- Integration of digital solutions (internet portal for tenants, service charge invoicing, etc.)



Customer value

- Flexible IT solutions - basis for future digitalization of the company
- Efficient management of 40,000 units without any undue effort
- Savings of around 60% of annual IT maintenance costs



“The new system provides us with all **customer, asset and financial information** from a **single source** and enables us to **simplify processes and work more efficiently**. It also forms the **basis for the future digitalisation** of our company.” Debbie Trust-Dickinson, Director of ICT & Transformation at Torus

Case study: Helping existing customer Joseph Stiftung to boost efficiency

Joseph Stiftung



About the customer

- German ecclesiastical housing company
- Sustainable business model around housing, construction, consulting and asset management



Customer needs

- Innovative solutions around digital tenant and owner community management
- Automated rent deposit management



Aareon's solution

- Entirely digitised CRM process (e.g. rent process, tenant file management)
- Fully integrated payment processes in the ERP system



Customer value

- Significant increase of throughput in student housing business
- Higher customer satisfaction among target group of digital natives and competitive advantage (innovation leadership)
- Increased efficiency and process cost savings

Case study: Rheinwohnungsbau GmbH – Delivering seamless apartment handover and change of energy provider



Aareon Congress: Our community



#1 European vendor of scale offering breadth and depth of functionality to clients across Europe



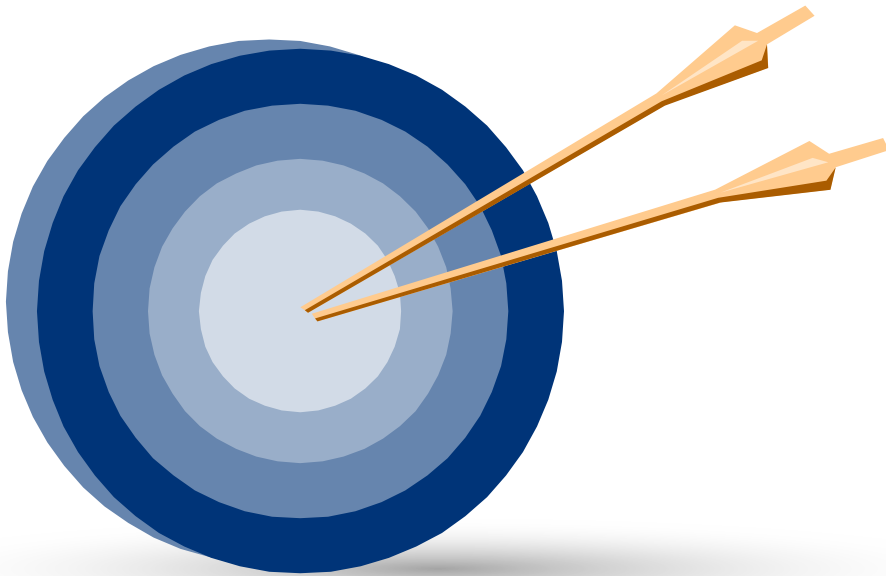
- Real Estate ERP software vendor landscape
- Digital solutions landscape is highly fragmented

Note: Positioning indicative based on Aareon experts' functionality evaluations as well as competitors' Real Estate industry software and services revenue estimates

3 Well positioned to embark on next chapter of growth

Dr. Manfred Alflen

We have laid strong foundations to embark on next chapter of growth



Achieved significant scale of total business



Gained critical mass in digital solutions business



Migrated clients to new future-proof architecture



Maintained strong profitability

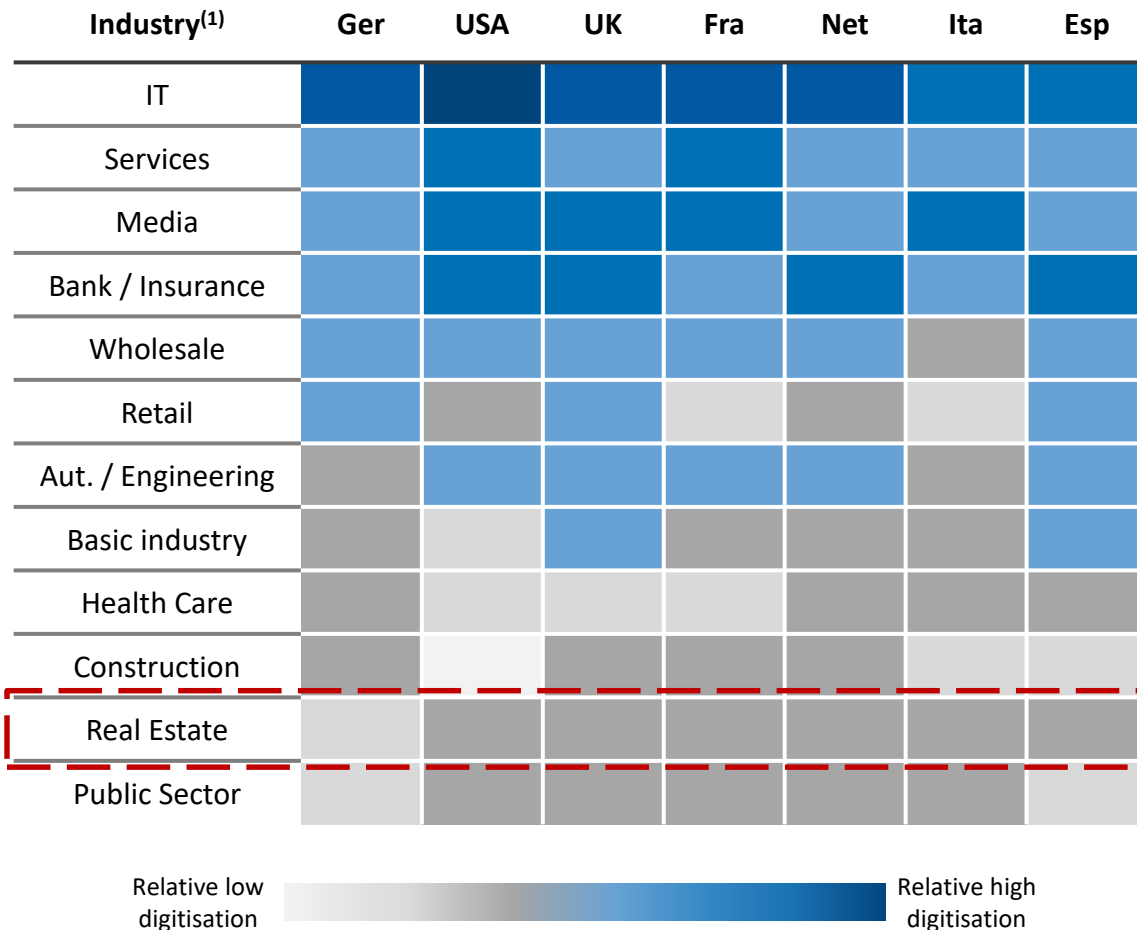


Stayed on course to achieve “Aareal 2020” targets

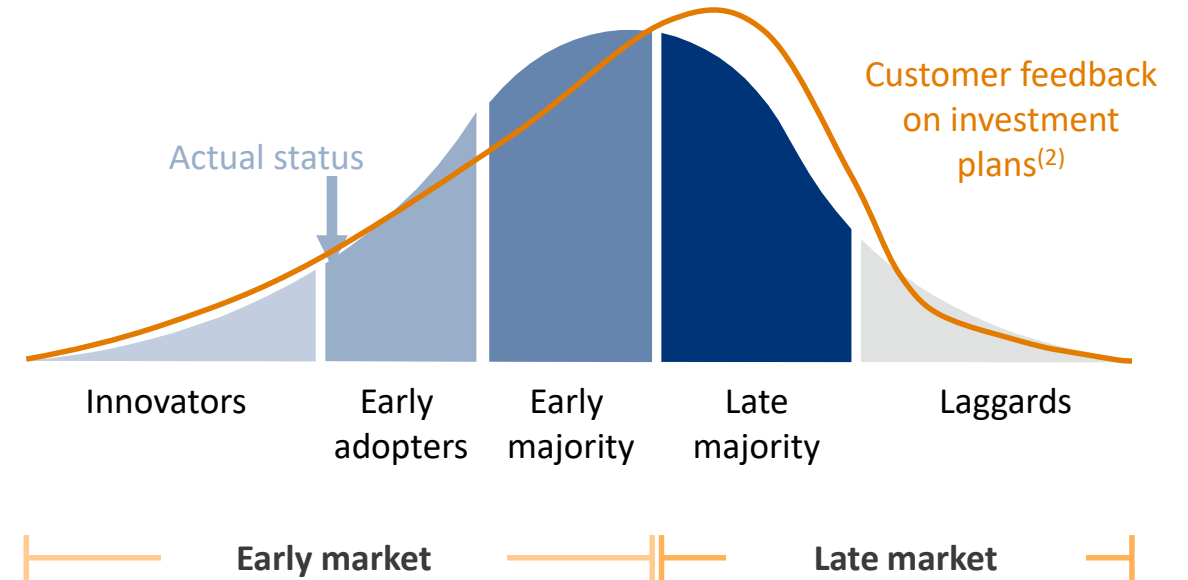


The digitisation of Real Estate market provides significant growth potential

Real Estate at the beginning of digitisation



Real Estate companies confirm investment plans in further digitisation

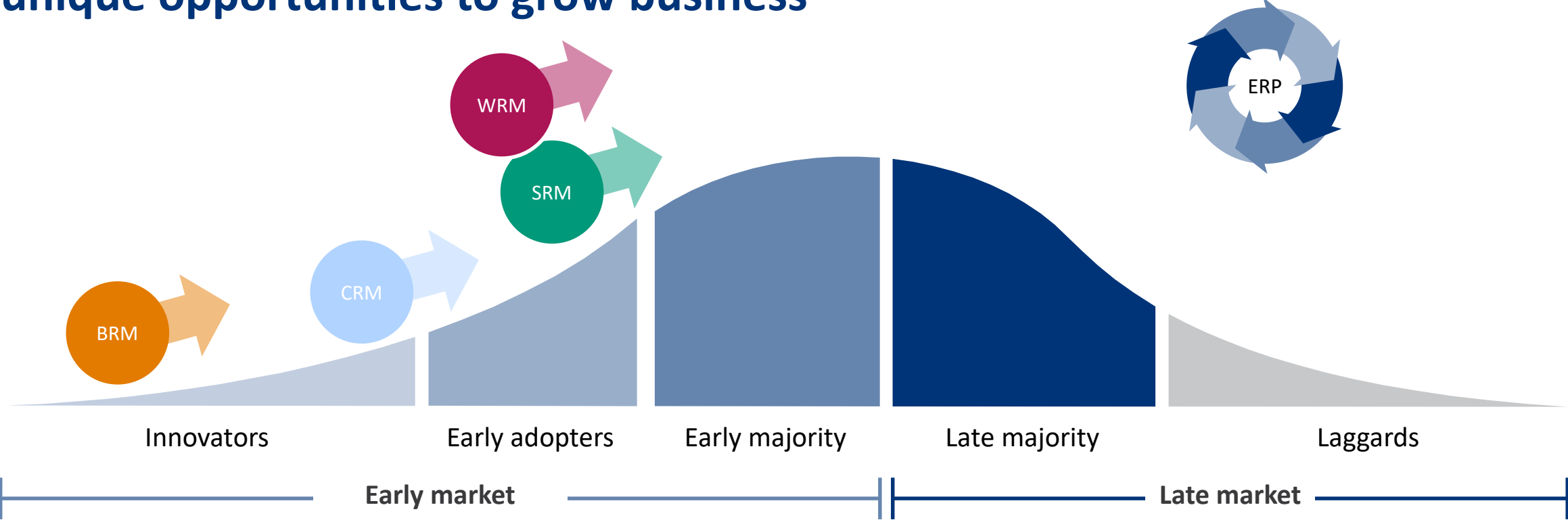


Available technology now enables digitisation at reasonable costs

- ✓ Market is still at the beginning of digitisation process – different markets have different key drivers of digitisation
- ✓ Aareon understands the customers' needs and is able to address them with fully integrated IT solutions
- ✓ Customer commitments are the path to additional revenue growth

Note: (1) Based on MGI industry digitisation index
(2) Based on Aareon customer survey

Strong product offering with leading customer mind share provides for unique opportunities to grow business



Aareon Digital Solutions



€42m
Revenue

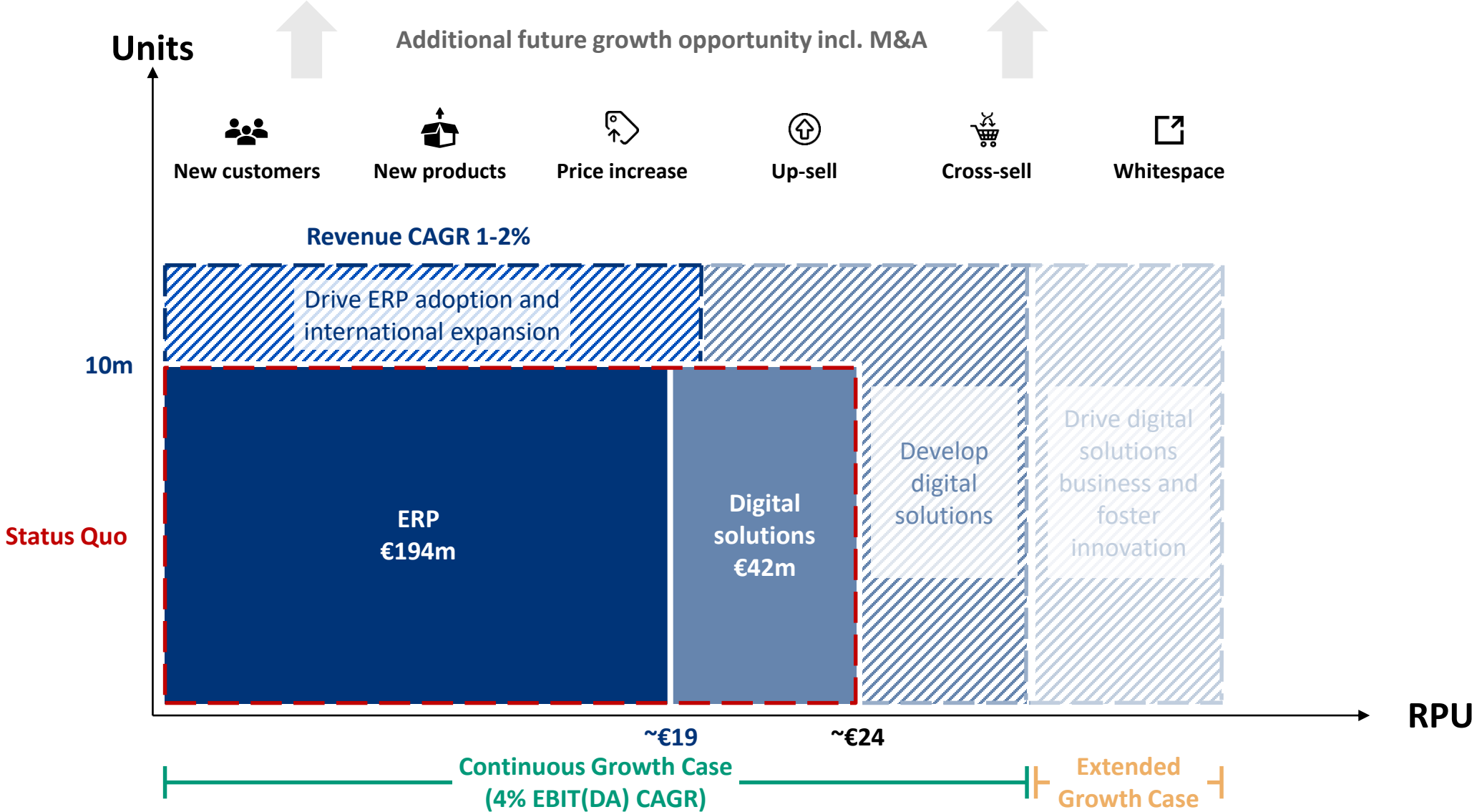
Aareon ERP Solutions



€194m
Revenue

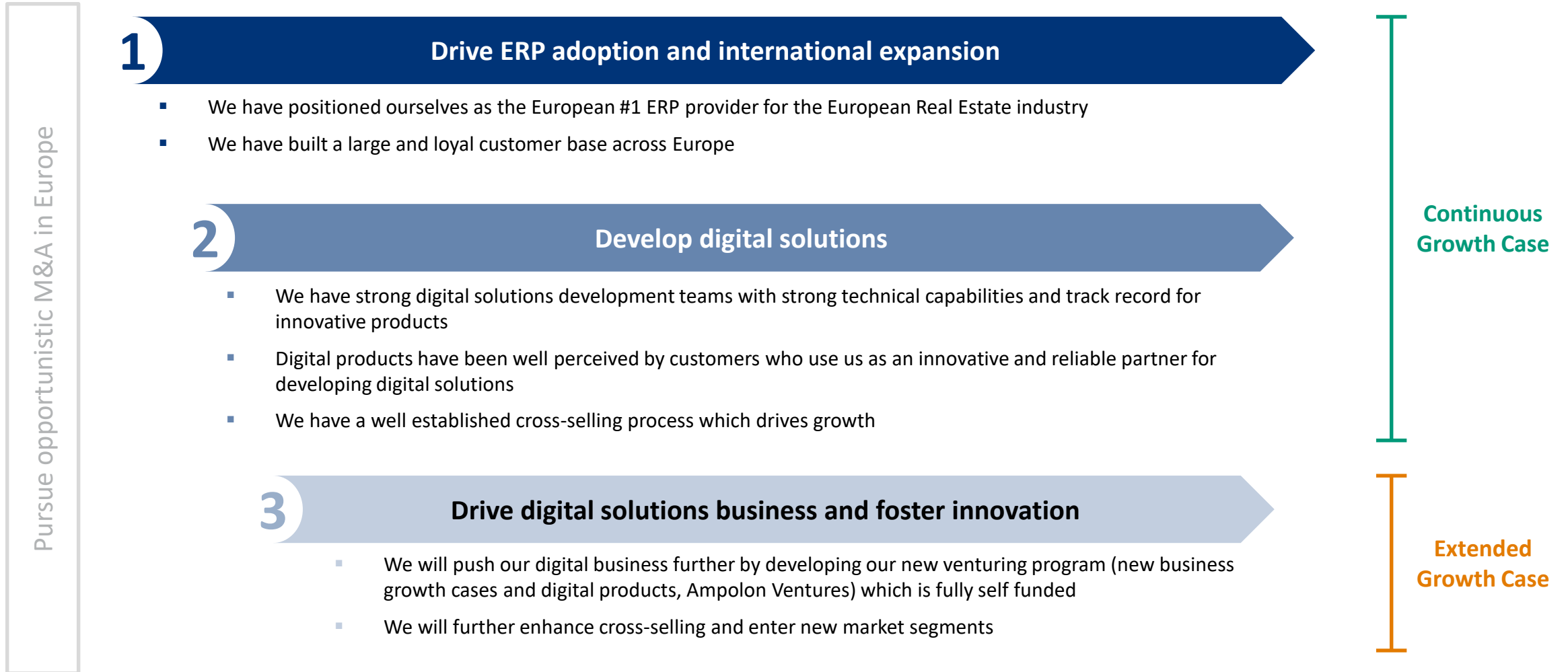
BRM = Building Relationship Management, CRM = Customer Relationship Management, WRM = Workforce Relationship Management, SRM = Supplier Relationship Management

Significant market opportunity for continuous growth



Illustrative sizing only

Optimal time to enter the next phase of the growth strategy and continue the successful path



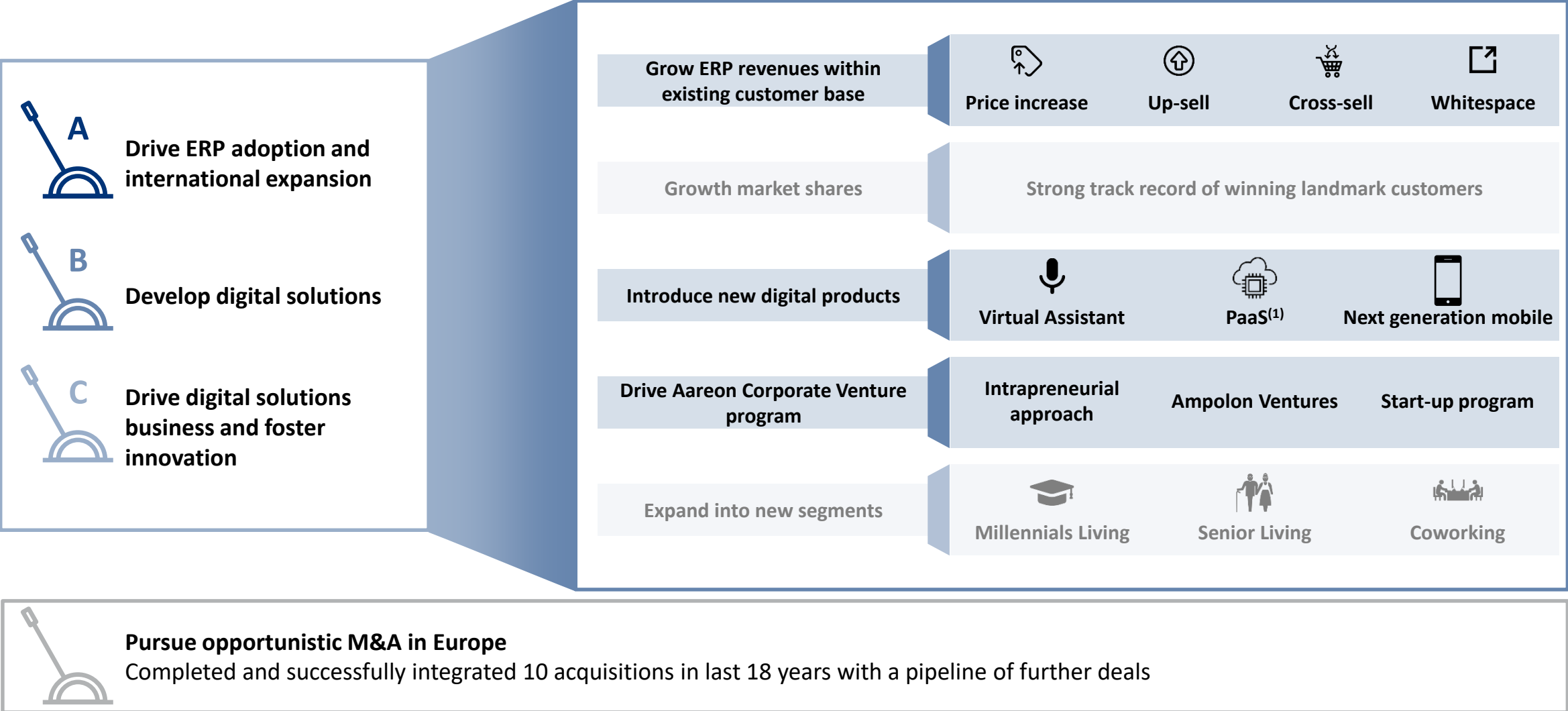
4 Q&A

Presented by Jürgen Junginger

5 Growth strategy

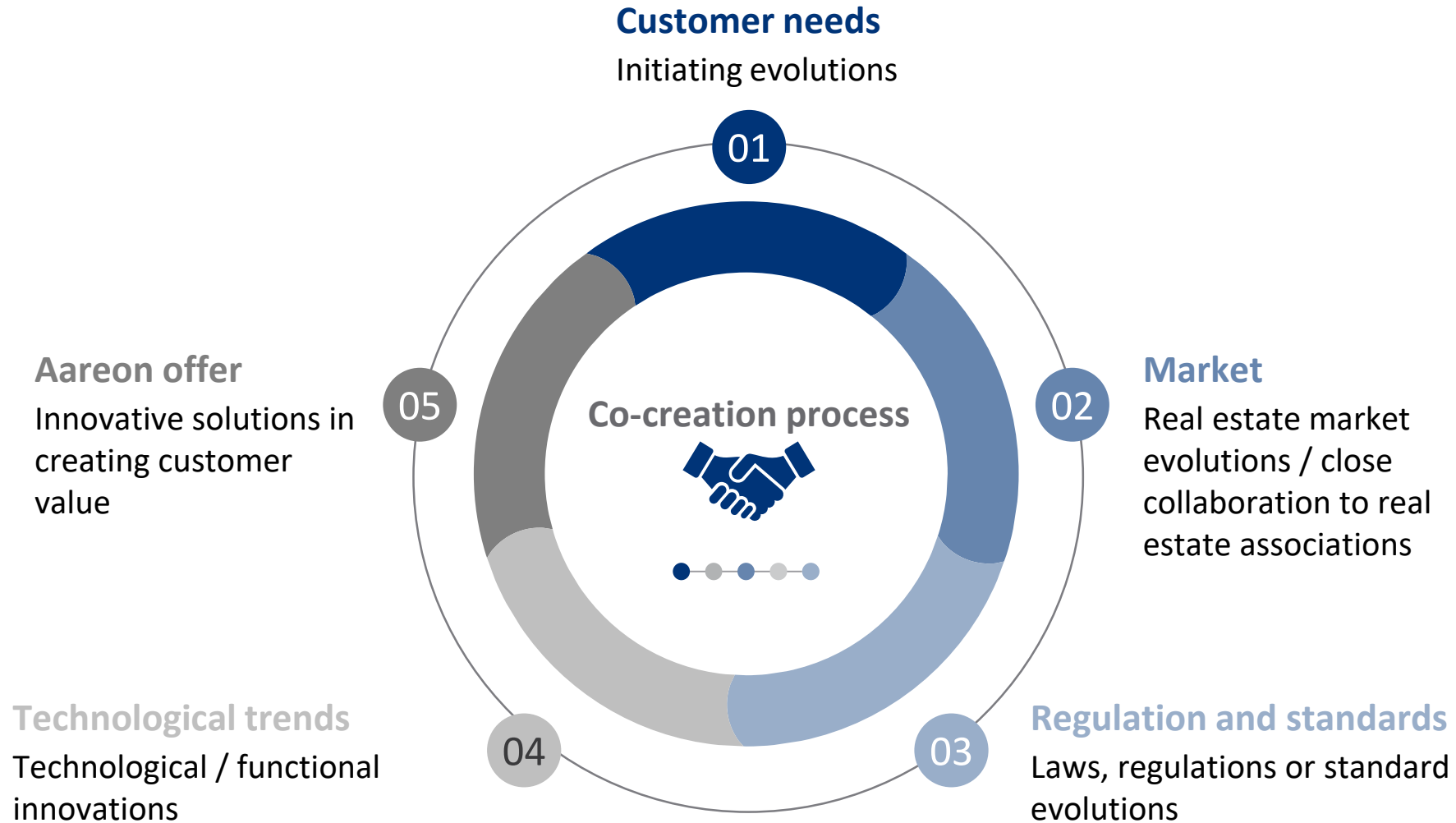
Dr. Imad Abdallah

Compelling growth and value creation strategy based on market specific ERP approach combined with a European digitisation strategy



Note: (1) Platform as a Service

Continuous development of our product suite – an integrated co-creation process with our customers



Case study: design thinking and ERP customer engagement program – delivering intuitive call centre interface for Vivawest Wohnen





ERP customer engagement program

User experience

- Look & feel
- User experience
- New concepts

Compliance

- Certification
- Quality
- Security



Technological enhancements

- Performance / sustainability
- Native cloud capacities
- Data storage
- Methods of delivery

Functional enhancements

- Existing business processes

New modules / functionality

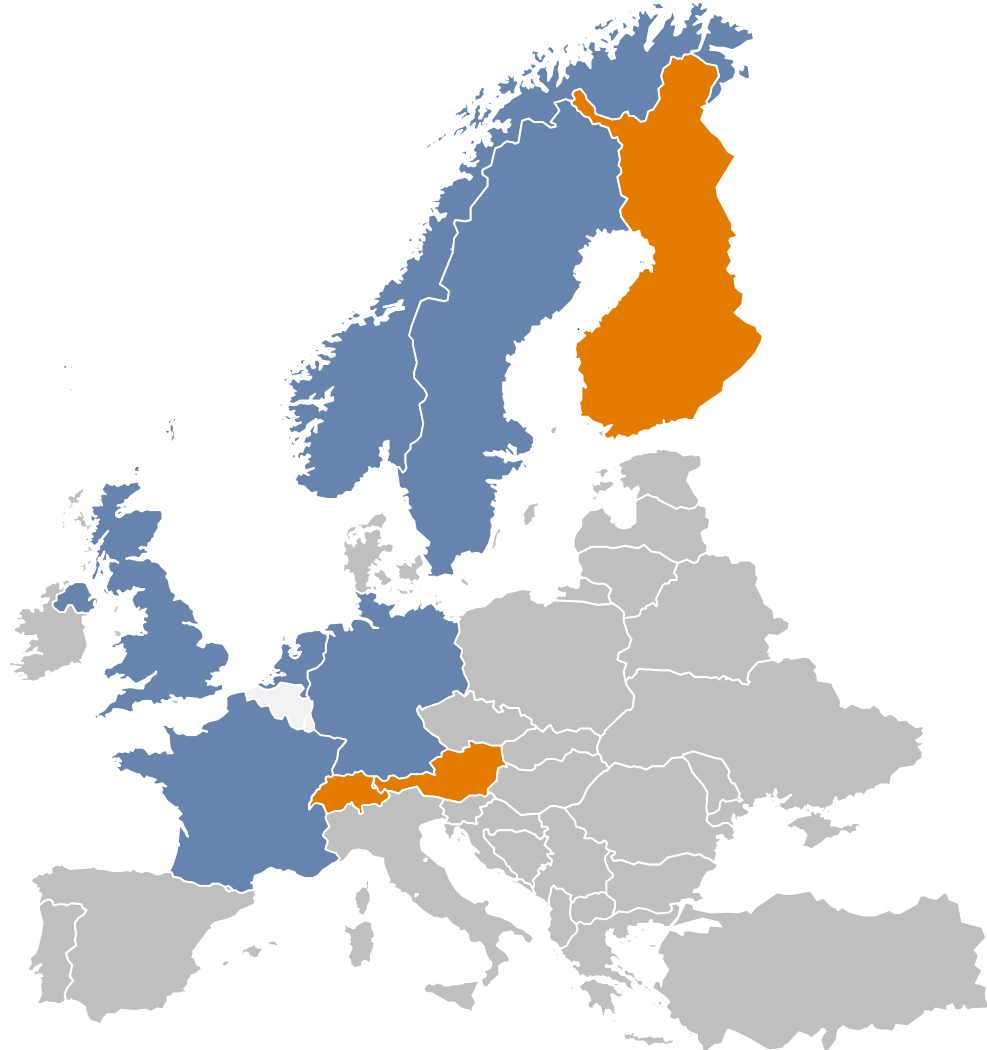
- New business processes
- Connectors



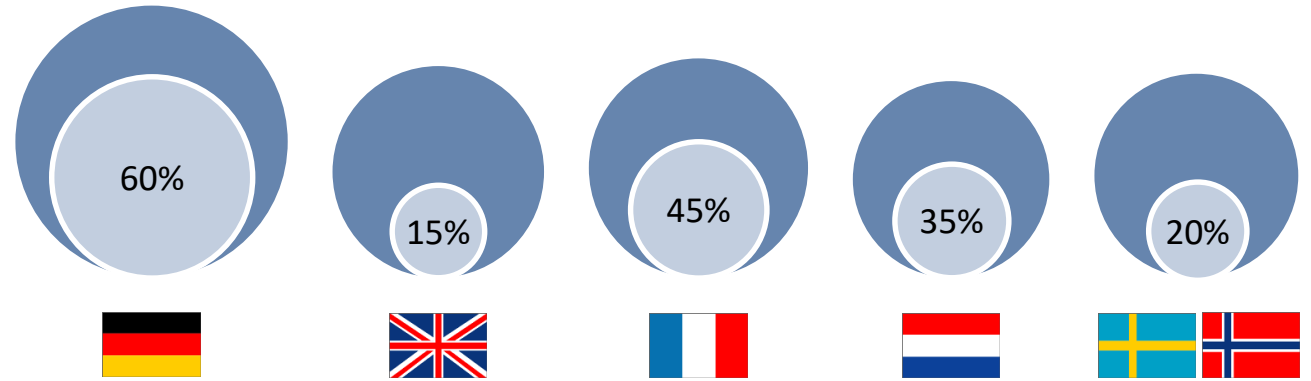
New subscriptions by existing ERP customer base approx. every five to ten years based on software release / changes



Further expansion in existing markets as well as new market entries drive expected ERP growth



Market shares across Europe



Exploit new markets via hub strategy



Note: Market shares based on Aareon's estimates of total units in respective geographies

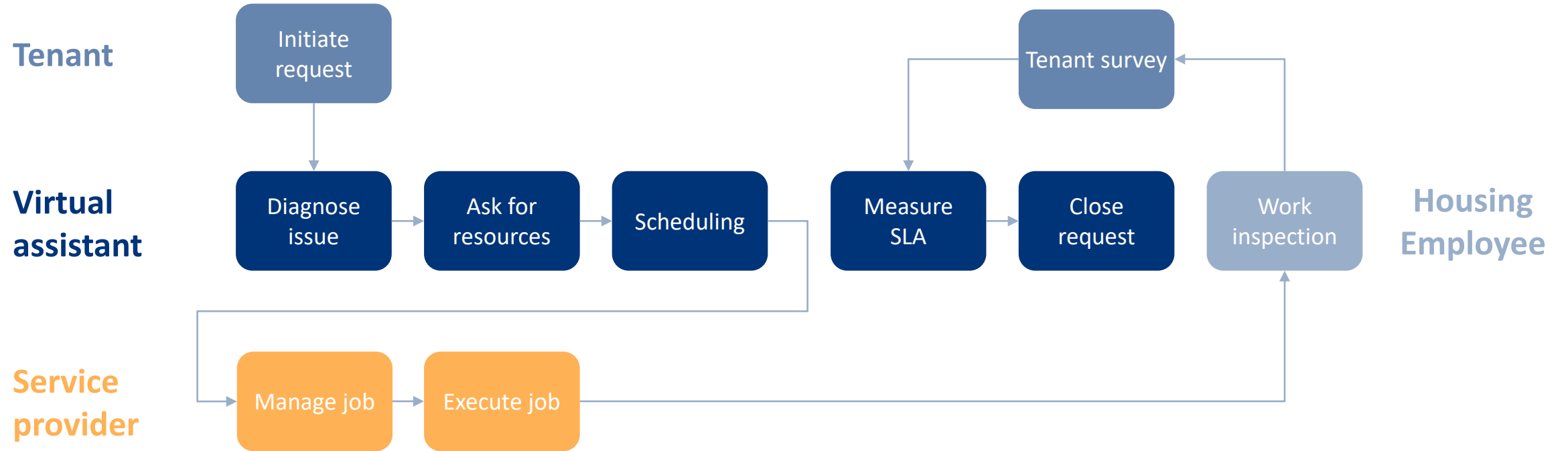
Innovative product roadmap to further strengthen market leadership



CRM uses case for Aareon's Virtual Assistant : How to make tenant's life much easier

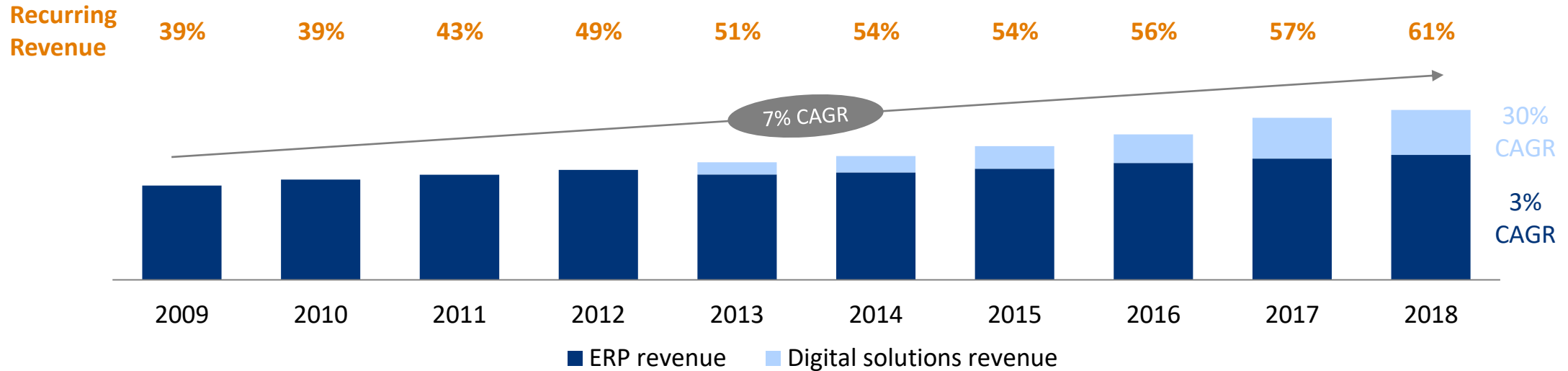


CRM uses case for Aareon's Virtual Assistant : How to make tenant's life much easier



Successful track record of entering new markets and driving growth through upselling

Aareon France revenue development



Market environment

- Mature market compared to other markets in Europe
- Customers have highly developed IT knowledge
- Strong political influence on social housing market



Revenue impact

- Growth mainly coming from existing customer base
- Revenue increase based on upselling digital products and growing recurring share through ERP “maintenance” pricing model



Customer involvement

- Customers highly involved in the creation process of updates and new solutions
- Many group-wide innovations come from the co-creation approach with French customers

Discover new paths with our unique venturing program



Internal

External

Intrapreneurial approach Creating new business lines



- Digital business
- Extending product offering
- Disruptive technologies



- Fully dedicated team
- Recruiting new talents

Predictive Maintenance

- ✓ Validation phase running

Ampolon Ventures Creating new start-ups



- New market segments
- New business models
- Disruptive technologies



ophigo

- ✓ Founded in 2018

Start-up program Partnerships and investments

Selected partnerships

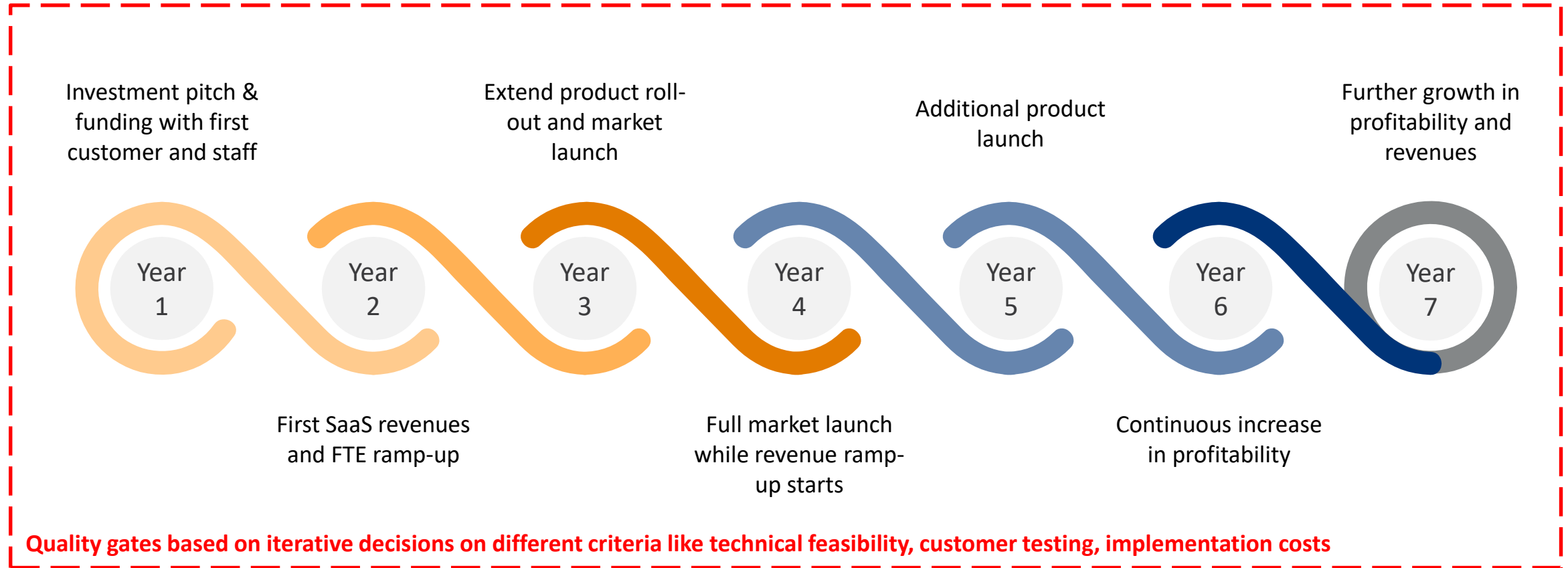


Investments





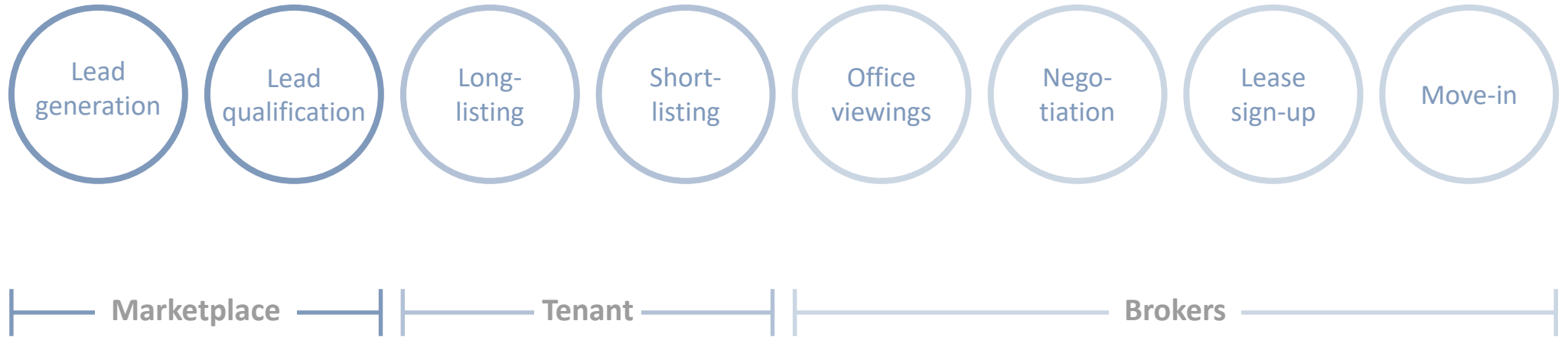
Pipeline for our venturing program consisting of a digital product portfolio with an established process to limit investment risk



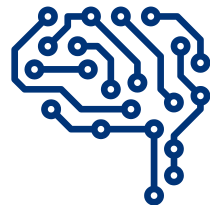
Example: Newly funded start-up ophigo makes office finding hassle-free, transparent and supported



So far



Future with ophigo



Artificial Intelligence & Machine Learning



3D Virtual Tours



Smart Contracts



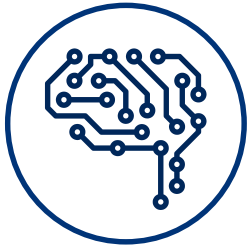
Example: OSRE – latest start-up investment transforming process of connecting property to people effectively



OSRE covers the developers / constructors market segment



A digital marketing platform which covers the first sell / first rent process for newly built buildings



Disruptive

Digitize the sales process workflow



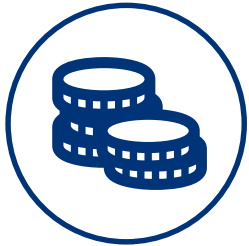
Scalable

Software can be used anytime worldwide



Specific

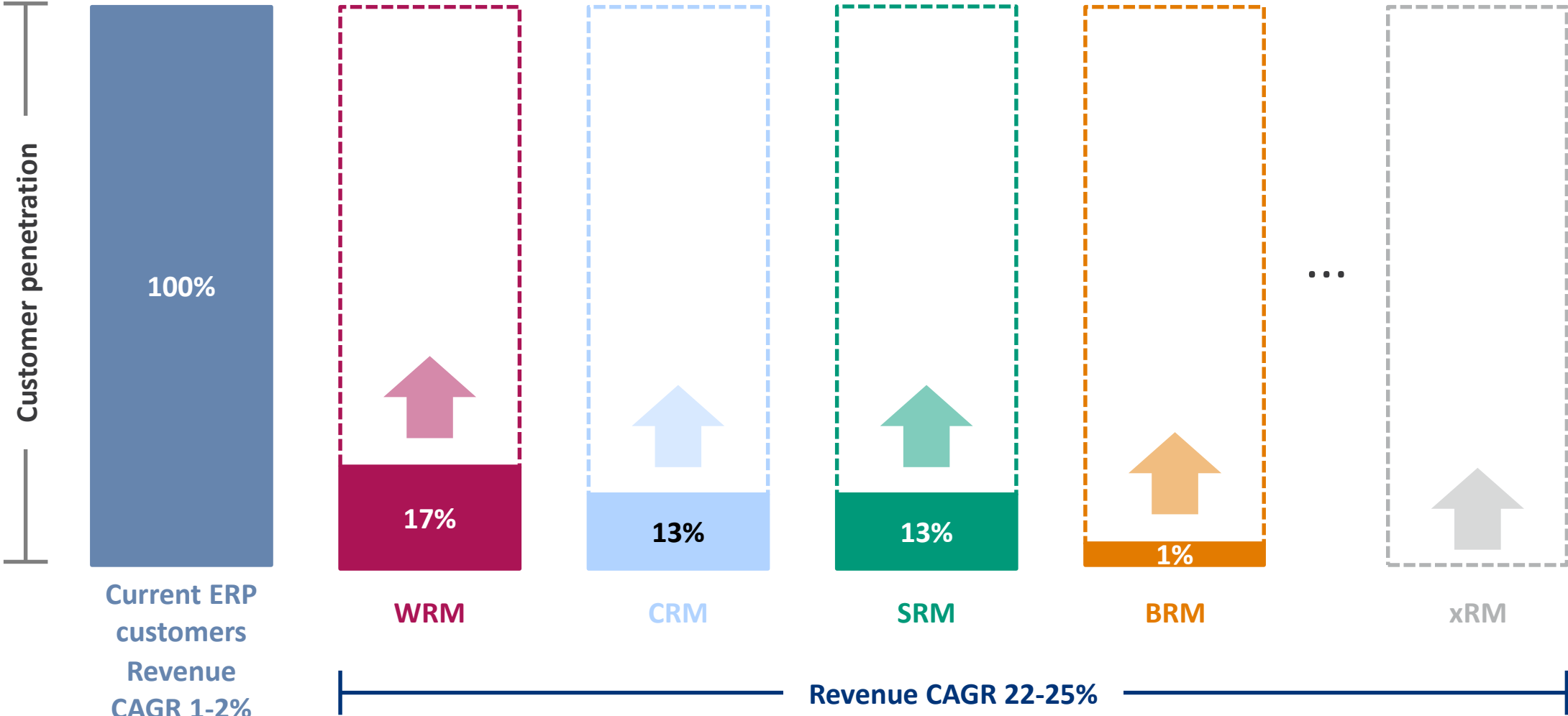
Focused on Real Estate market



Recurrent

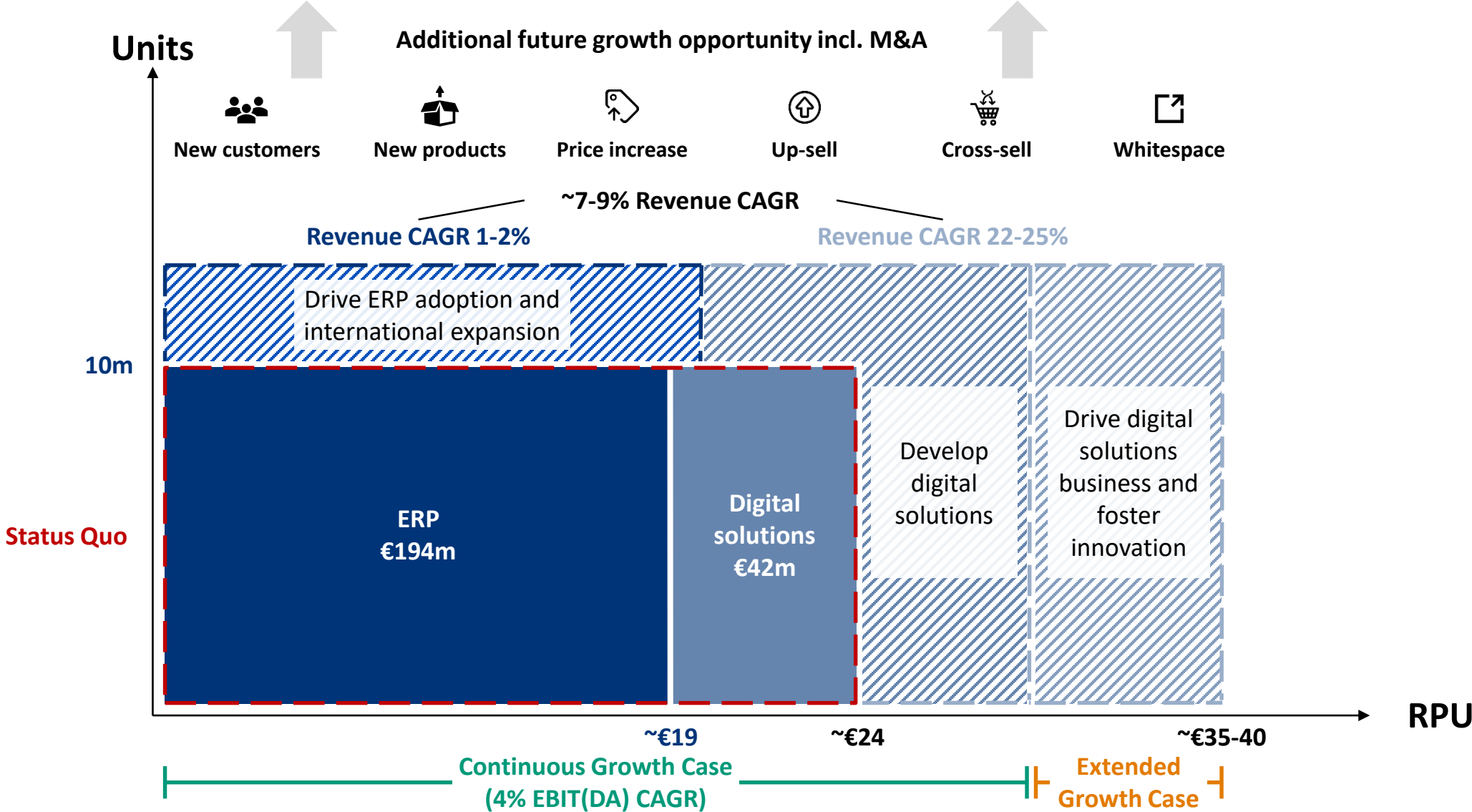
Sold on subscription basis

ERP growth driven by continuous product innovation, with digital solutions growth driven by increasing market penetration



BRM = Building Relationship Management, CRM = Customer Relationship Management, WRM = Workforce Relationship Management, SRM = Supplier Relationship Management

Significant market opportunity for continuous growth



Illustrative sizing only

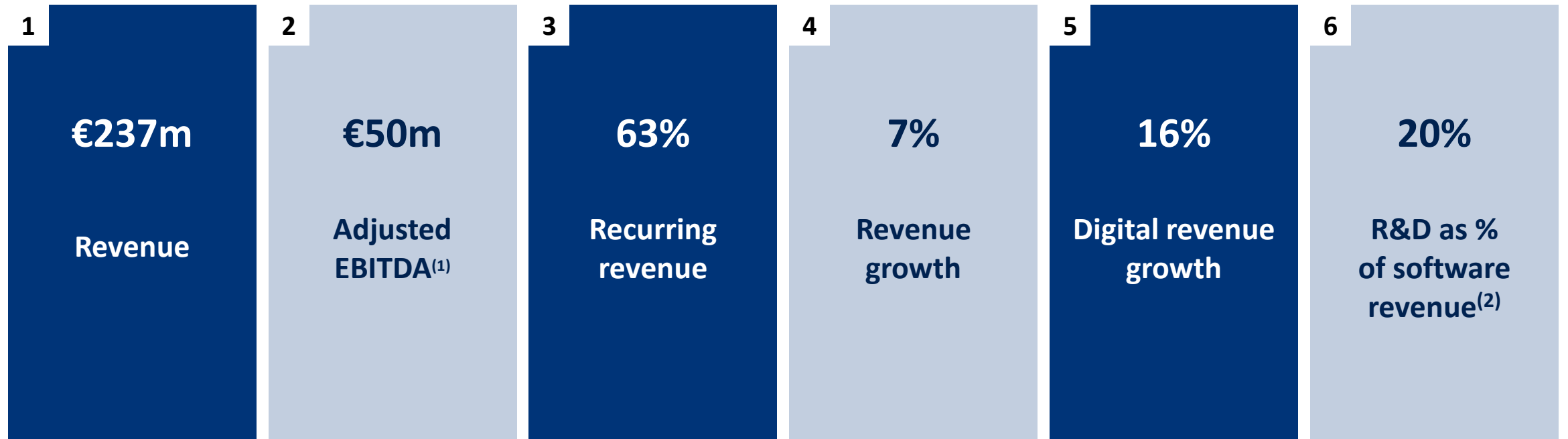
Compelling growth strategy



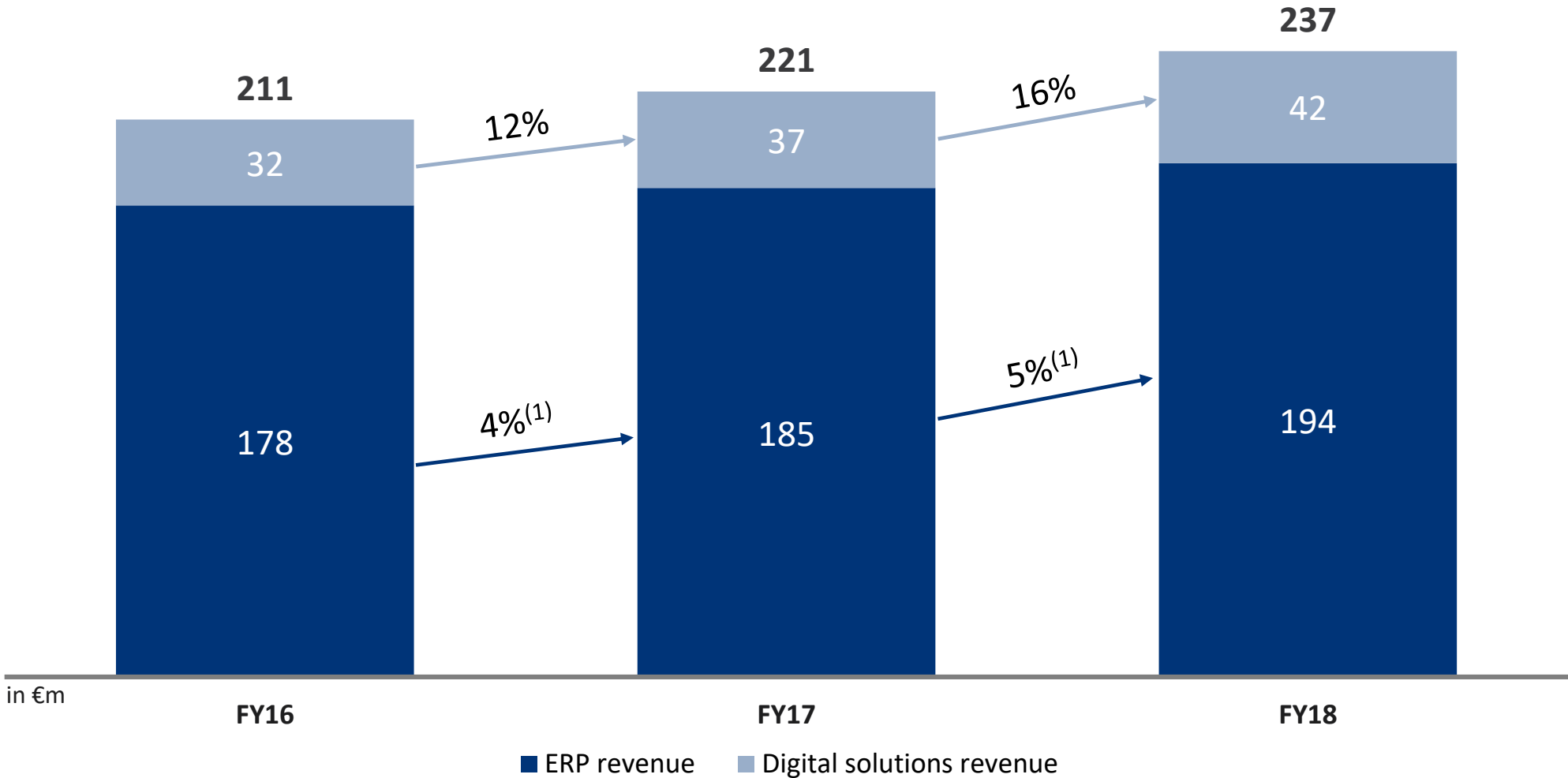
6 Financial overview

Christian M. Schmahl

Aareon 2018 financials at a glance: Scaled business with attractive financial profile

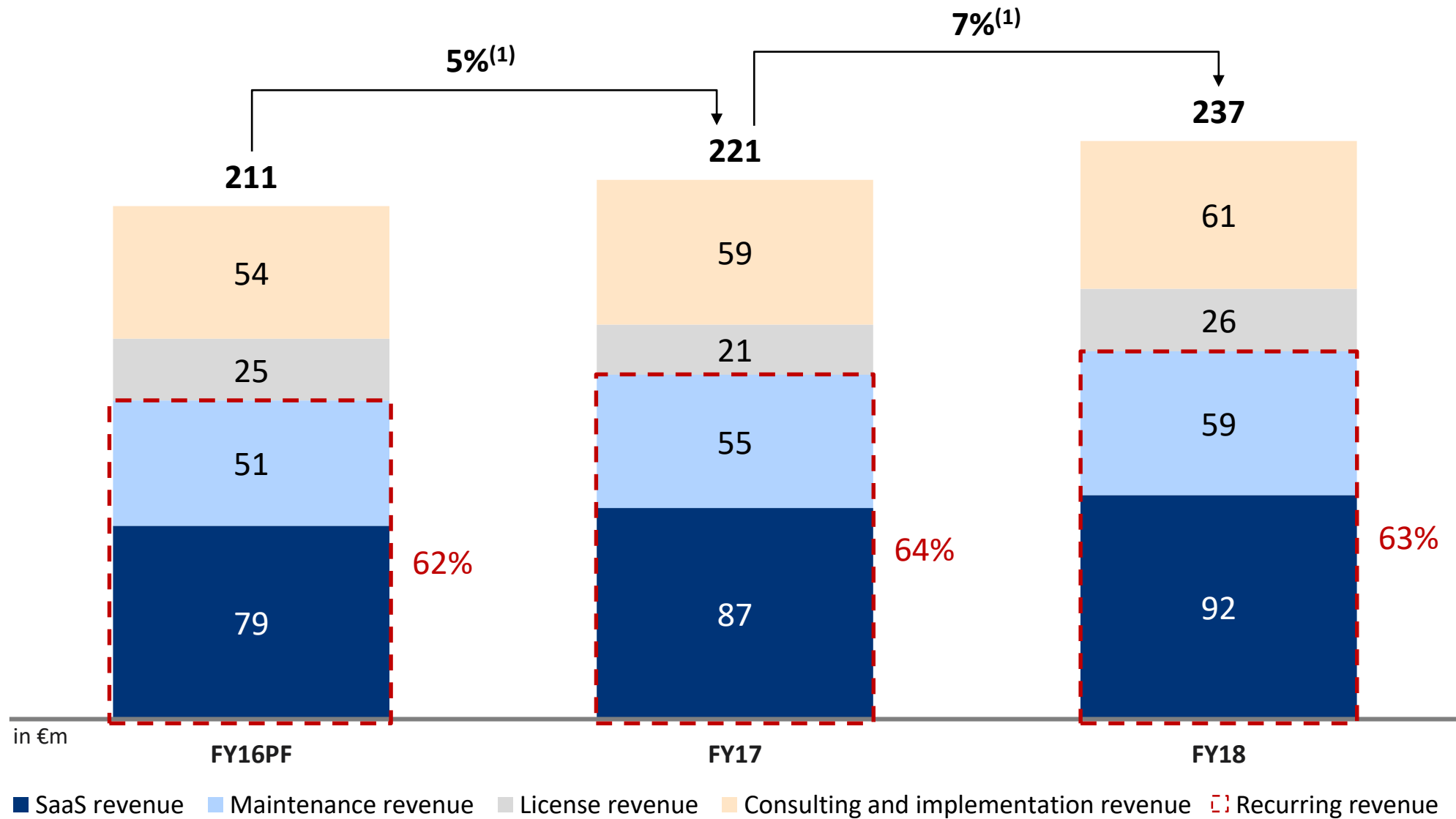


Digital solutions driving revenue growth



All % delta figures calculated on exact figures in €
 Note: (1) ERP revenue grew inorganically by 4% from FY16 to FY17 and by 4% from FY17 to FY18

Strong revenue growth profile



All % delta figures calculated on exact figures in €
 According to our commercial model shown on slide 14
 Note: (1) Revenue grew inorganically by 4% from FY16 to FY17 and by 3% from FY17 to FY18

Continued R&D investment to maintain competitive advantage

% of software revenue⁽¹⁾

18%

19%

20%

Self-funded R&D spend



Note: (1) Software revenues = SaaS, maintenance and license revenue

Proven profitability

Adj. EBITDA margin⁽¹⁾

20%

20%

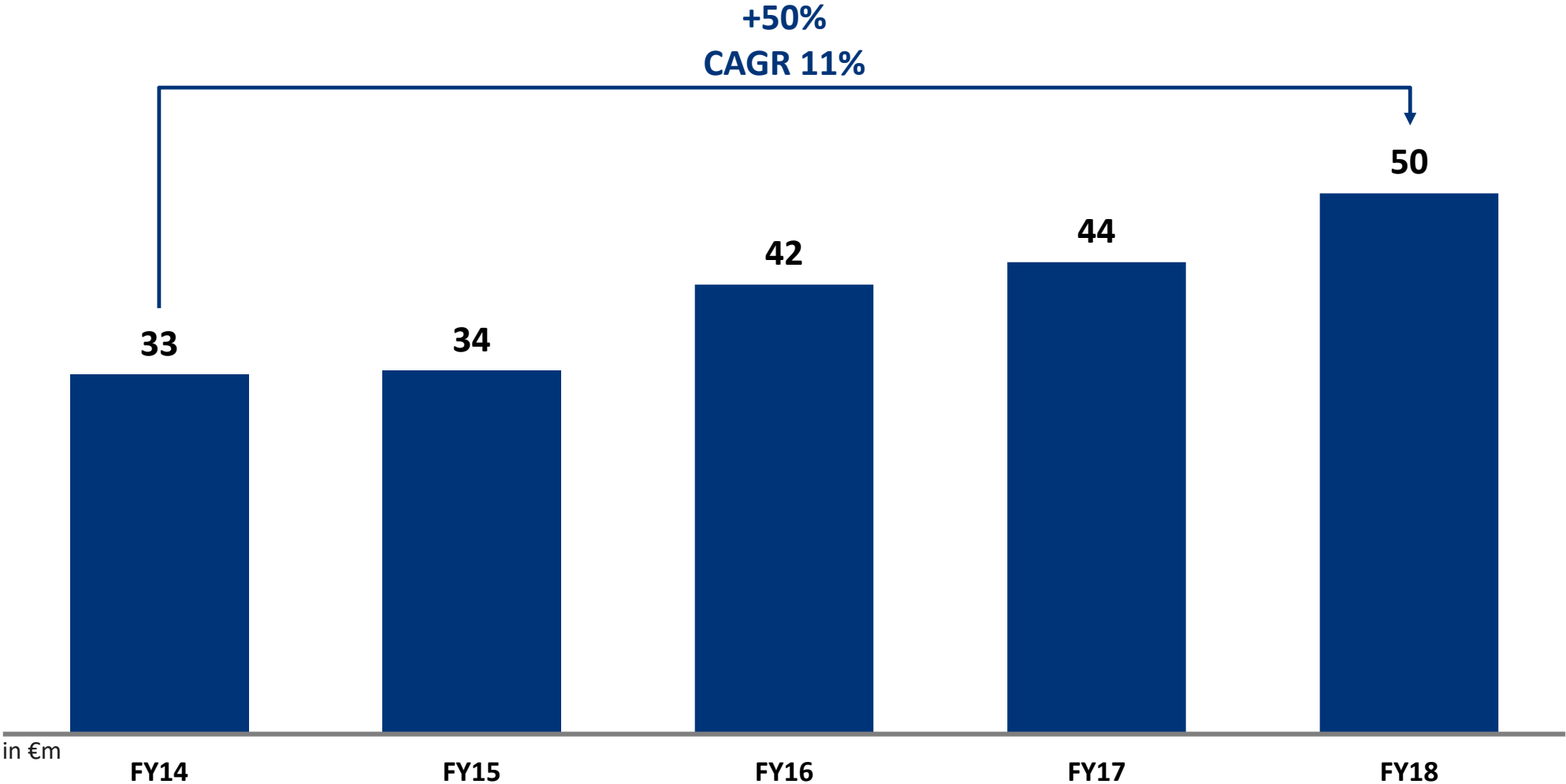
21%

Adj. EBITDA⁽¹⁾



Note: (1) Adjusted for one-offs and other non-recurring items

Historical adjusted EBITDA⁽¹⁾ performance



in €m

FY14

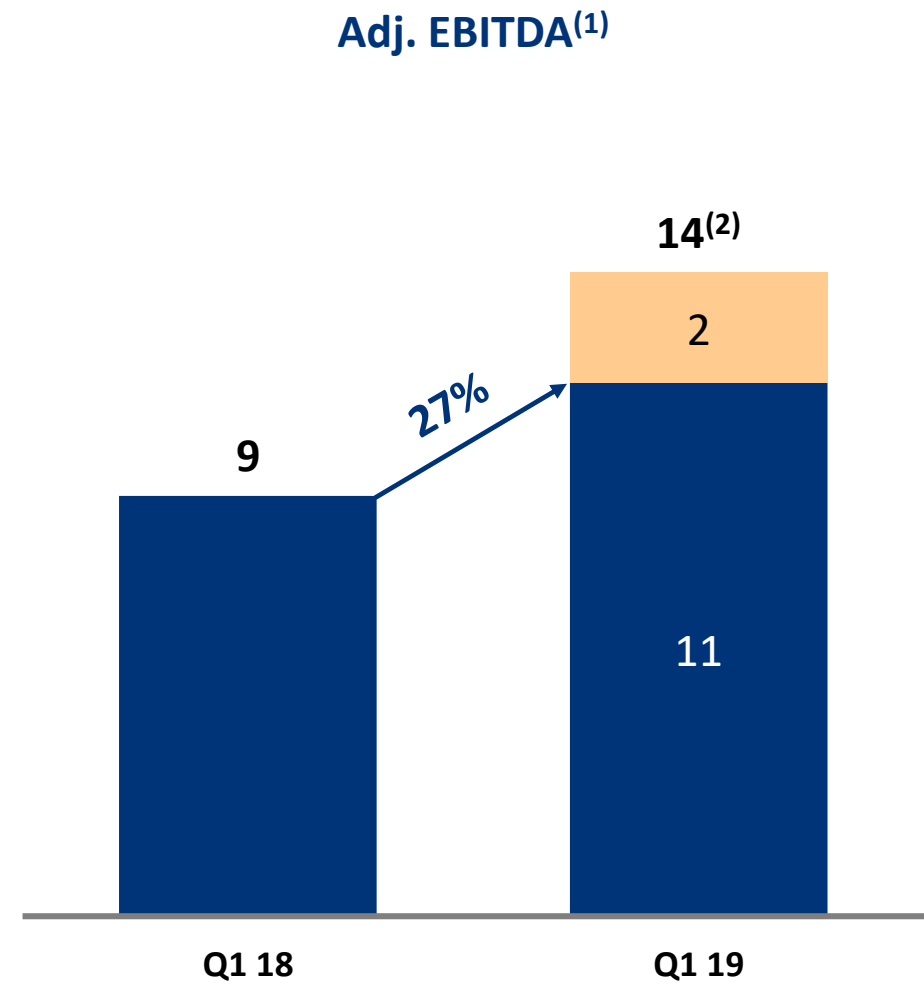
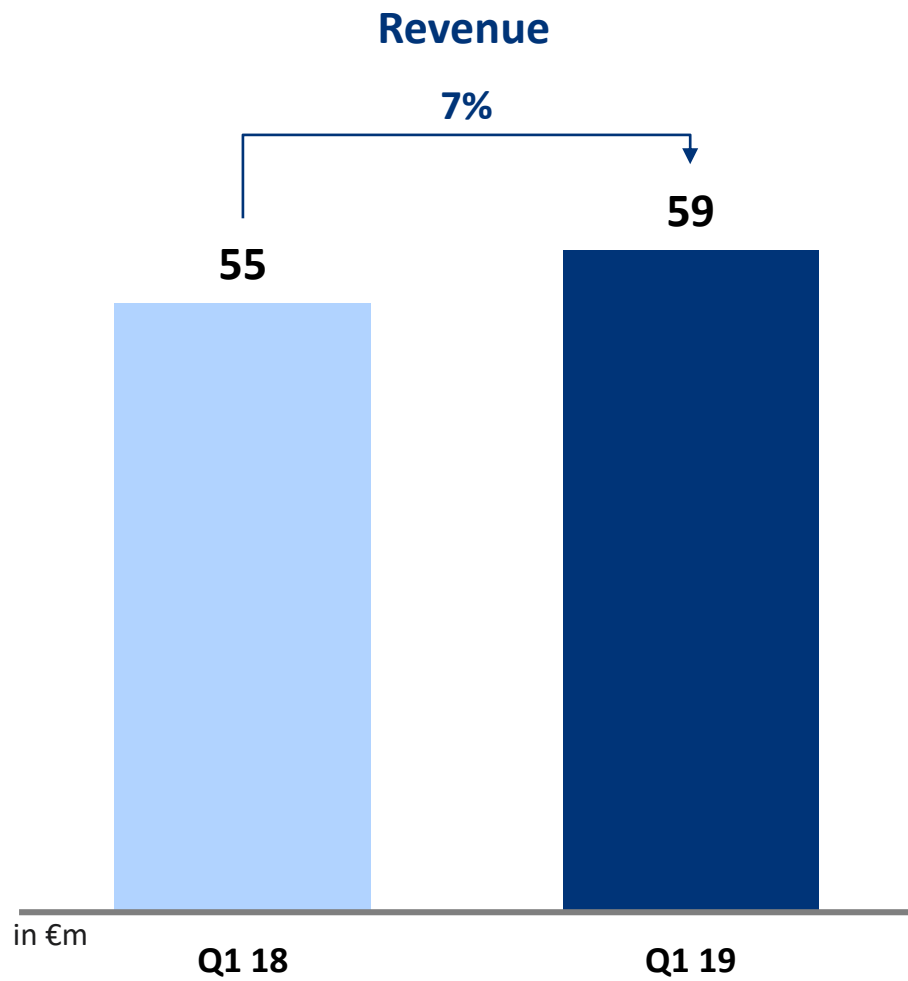
FY15

FY16

FY17

FY18

Q1 2019 update



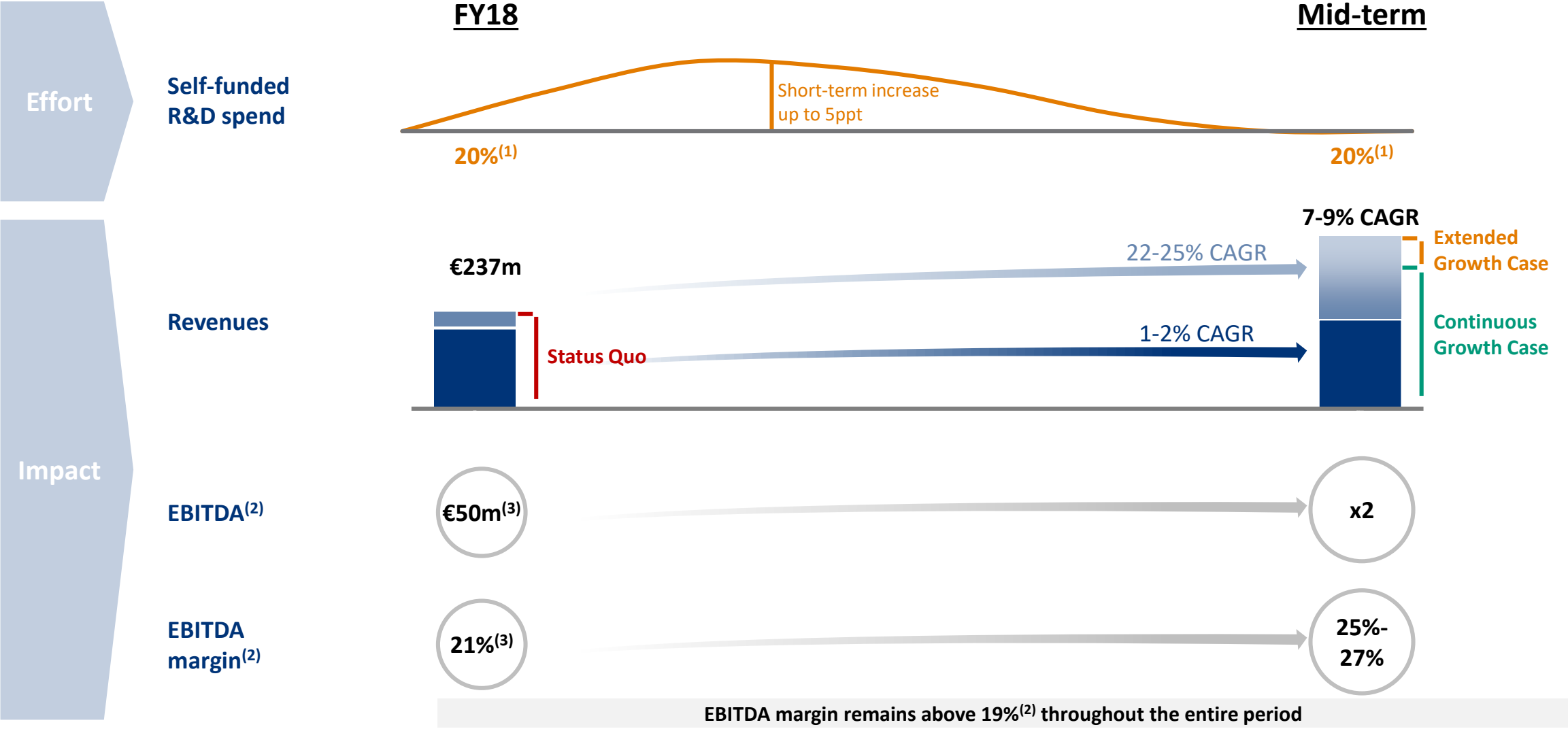
IFRS 16 impact

Outlook – we aim at doubling EBITDA in mid-term

	FY16	FY17	FY18	Mid-term
Revenue growth	5% ⁽¹⁾	7% ⁽¹⁾		7% - 9% CAGR
Digital revenue growth	12%	16%		22% - 25% CAGR
% R&D spend (of software revenue ⁽²⁾)	18%	19%	20%	20% <i>Short-term up to 25%</i>
Adj. EBITDA margin	20%	20%	21%	25% - 27% ⁽³⁾

All % delta figures calculated on exact figures in €
 Note: (1) Revenue grew inorganically by 4% from FY16 to FY17 and by 3% from FY17 to FY18
 (2) Software revenues = SaaS, maintenance and license revenue
 (3) Excluding IFRS 16

Path from present to future – we aim at doubling EBITDA in mid-term



Illustrative sizing only
 Note: (1) As % of software revenues; software revenues = SaaS, maintenance and license revenue
 (2) Excluding IFRS 16
 (3) Adjusted for one-offs and other non-recurring items

KPIs as milestones for developing Aareon in line with three phase model

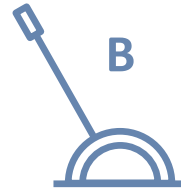
Drive ERP adoption and international expansion



KPIs: Revenue growth and RPU

- Retain / expand current customer base
- Deliver on customer requirements
- Provide ongoing support

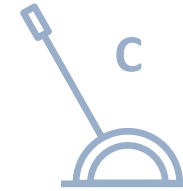
Develop digital solutions



KPIs: Digital revenues growth and RPU

- Grow share of wallet
- Develop new features / products
- Provide training and support

Drive digital solutions business and foster innovation



KPIs: Digital revenue growth and new products

- Win new customers
- Enter new markets
- Develop new products / channels

7 Q&A

Presented by Jürgen Junginger

8 **Wrap-up and closing remarks**

Hermann J. Merkens / Dr. Manfred Alflen

Equity story

Aareon is the leading provider of ERP and digital solutions in the Real Estate industry in Europe

Solid business with high recurring revenue base and increasing profitability

Track record of building innovative Real Estate software solutions and shaping the market

Real Estate industry is ready to digitise its core work flows; large ERP customer base offers significant cross-selling opportunities

Significant growth opportunity as announced in Aareal 2020

Compelling growth strategy to drive ~2x increase in EBITDA in mid-term

Appendix

IFRS reconciliation

<i>(in €m)</i>	FY16	FY17	FY18	FY18 PF¹⁾
Revenues	210.7	221.3	236.6	236.6
Operating expenses	(166.2)	(176.7)	(187.9)	(177.9)
EBITDA	44.5	44.6	48.7	58.7
Non-recurring items	2.6	0.7	(1.6)	(1.6)
Adj. EBITDA	41.8	43.9	50.3	60.3
Depreciation	(7.7)	(8.0)	(9.5)	(18.4)
Adj. EBIT	34.1	36.0	40.8	41.9
Interest expense	(0.0)	(0.3)	(0.3)	(1.7)
Adj. EBT	34.1	35.7	40.5	40.2
Cash flow from operations	34.5	26.8	29.5	39.5
Reconciliation to reported financials				
Adj. EBIT	34.1	36.0	40.8	41.9
Non-recurring items	2.6	0.7	(1.6)	(1.6)
Amortisation of acquired intangibles	(2.5)	(2.8)	(3.3)	(3.3)
EBIT	34.2	33.9	35.9	37.0
Interest expense	(0.0)	(0.3)	(0.3)	(1.4)
EBT	34.2	33.6	35.6	35.6

Note: (1) Pro forma for IFRS 16

Aareon FY18 annual report

You can find Aareon's FY18 annual report [here](#)



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