

백영석 본부장, Industry Value Advisory, Digital Transformation, SAP Korea November 2018

PUBLIC





The World's Largest Provider of Enterprise Application Software*)

Vision

We help the world run better and improve people's lives

Mission

SAP is committed to helping every customer become a best-run business

[기본 정보]

- 설립: 1972년 4월 1일
- 본사: 독일, Walldorf
- 직원: 88,543명 (2017년 말) 80% 고객은 중견/중소기업

[고 객]

- 378,000+ 기업 (180개국)
 - (Forbes 2000대 기업 중 91%)

[혁 신]

- 매출액 대비 14.3%
- 전체 인력의 28.2% (24,872명)
- 100+ 개의 개발 센터
- 17,300개의 파트너사

^{*)} ERP, 공급망관리, 고객관리, 인재관리, 전략소싱 및 구매, 출장 및 경비관리 등 business application (25개 산업)

Digital Immigrants























Tencent腾讯





2006

ExonMobil









2018



Google





Phillips Lightning Case Video: https://www.youtube.com/watch?v=sKSj8HgGA4w

Digital Transformation Journey of Phillips







Service (Smart Home)



Indoor Positioning



Light as a Service



Connected Platform Business

Evolution of (Digital) Transformation - Manufacturing Industry

Product / Process Innovation

Business Model Innovation

Goal

Business Model

Major Technologies **Factory Automation**

Selling Products

Embedded System Machine Connectivity Vertical Integration

E2E Integrated Process
Standardization &
Optimization

Selling Products & Post-Sales Support/Maintenance

Optimization
Analytics
Horizontal Integration

Smart Service (Connected Product)

Product-as-a-Service, Value-Added Service

Service Platform
Service Billing
Big Data Analytics

Digital Ecosystem (Network)
Provider

Platform Business (Data-driven Service)

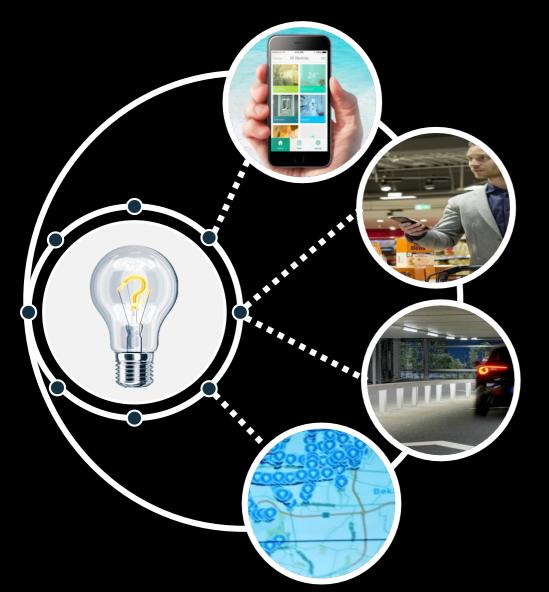
Intelligent Technologies
Open Data Platform
Cross-Industry Standard
Business Network

Major Value Creating Assets

Physical Assets

Data ,

Companies are facing New Challenges amid Digital Disruption



- ✓ Industries' boundaries are blurring
- ✓ Data is a NEW enterprise asset
- ✓ People and Machine collaboration drives step change in productivity
- ✓ IoT and Connectivity change every Value Chain
- ✓ Next generation applications are needed.

Customer and Employee are Driving Forces behind Digital Transformation



"The Customer, not Technology is the most disruptive thing in the market today."

The Digital Era is evolving into the Intelligence Era









Mainframe & PCs 1960s – 1980s Client Server & Internet 1990s - 2000s Cloud, Mobile & Big Data 2000s - 2010s Intelligent Technologies
2010s - 2020s

ENABLING TECHNOLOGIES

- Transistors & silicon revolution
- Large scale Mainframe Computing adoption
- Emergence of PC's
- Plant floor automation

- Widespread PC adoption
- Broadband Internet
- ERP and business process technologies
- Mobile & Smartphone ubiquity
- Cloud Computing
- Social Networks
- Big Data

- Machine learning (ML) and artificial intelligence (Al)
- Internet of things (IoT) and distributed computing
- Blockchain

CUSTOMER VALUE CREATION

Industrial Automation

Business Process Automation

Digital Transformation

Intelligent Enterprise

Next Practices driven by an Intelligent Enterprise

Capabilities



Visibility

the ability to collect and connect data that was previously siloed and recognize unseen patterns



Focus

the ability to simulate the impact of potential options and direct scarce resources to the areas of maximum impact



Agility

the ability to respond faster to changes in the marketplace or the business and pivot business processes towards the right customer outcomes

Outcomes



Redefine the end-to-end customer experience

Self-service enabled by chatbots/voice; personalized customer experience, omnichannel customer service



Deliver a step change in productivity

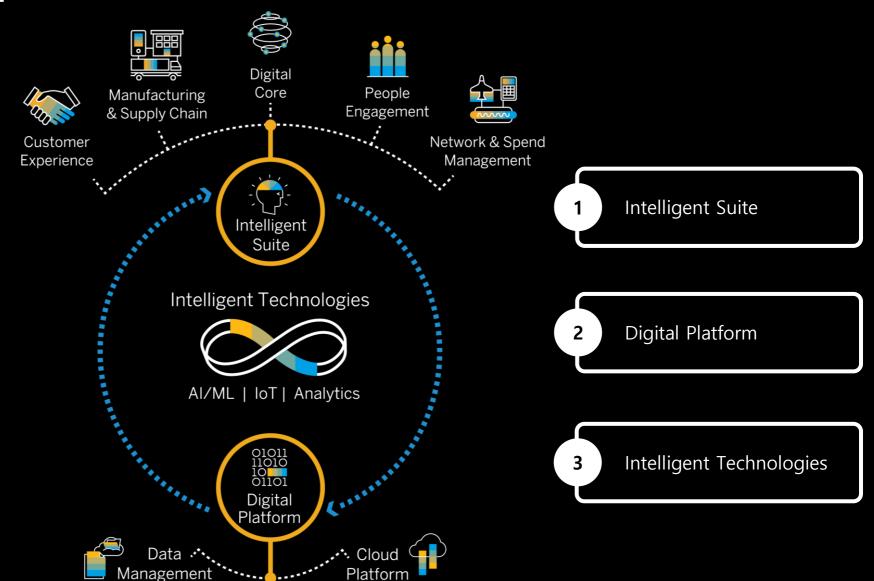
Automated invoice/payment matching; ML based resume matching, predictive lead mgmt.; automated sales discount approvals; predictive maintenance & service; real-time supplier & demand matching



Transform workforce engagement

CXO dashboard & boardroom of the future; ML-based employee approvals; guided process (buying for materials procurement)

The Intelligent Enterprise Framework



THE INTELLIGENT ENTERPRISE features 3 KEY COMPONENTS:







Compressors, Dryers, Filter provider
Major customers include BMW,
Porsche, Siemens, BASF etc.

Discover new business model leveraging Big Data based Predictive Maintenance

Air-as-a-Service: Sigma Air Utility



SIGMA AIR UTILITY

Just buy the air you need

Imagine that your new compressed air supply system required not a single cent of investment cost. You didn't need to fund it yourself or seek outside capital, yet the system is at the cutting edge of compressed air engineering technology and provides exceptional efficiency. Your compressed air supply is permanently guaranteed and the company's budget requirement for maintenance or repairs is zero. Sounds good? It is good. See and read for yourself!

Benefits without compromise

You would hardly build a power station to meet your electricity needs. Why then would you invest your liquid assets to buy a complete compressed air supply system when you can opt for a SIGMA AIR UTILITY package from KAESER? We take care of everything from planning and installation, to system operation, maintenance and repair. This provides you with significant benefits: a reliable compressed air supply, maximum energy efficiency and complete cost transparency.

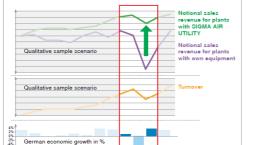
Everything from an expert source

Compressed air is too important to production to risk leaving its supply to anyone other than proven specialists with extensive expertise. KAESER KOMPRESSOREN's hybrid service bundle is tailormade: After-all, KAESER not only provides application-specific system solutions designed by highly experienced compressed air specialists.

As a leading compressor manufacturer and compressed air systems provider, KAESER also offers the associated hardware – compressors, compressed air treatment systems and ultramodern compressed air management systems – and with globally recognised 'Made in Germany' quality. KAESER Teleservice, the logistics centre and our extensive service network improve compressed air uptime even further. Everything fits.

Transparent and reliable

Companies that only buy the compressed air they need instead of a complete compressor station enjoy maximum cost transparency. The price per cubic metre of compressed air is fixed contractually for an extended term, which provides a much more reliable basis for assessing costs than a complex blended calculation. The basic price over the term of the contract covers equipment and operating costs and use of a base volume of compressed air. Moreover, air consumption exceeding this base volume is charged at a contractually fixed price.



The never-ending management challenge: Variable costs not fixed costs

Companies should increase the share of variable costs and reduce fixed costs as a way of safeguarding their return on sales and liquidity in the event of significantly reduced turnover caused by economic crises. This is one way corporate management can ensure that the company remains viable even when times are hard.

The hybrid service bundle



Air-as-a-Service: Sigma Air Utility



KAESER service center

24/7 real-time machine monitoring system



- 3 Optimal lifetime-based equipment maintenance
- **4** Time series data preparation before analysis
- **5** Predictive analytics to prevent equipment outages

2 Automatic and real-time monitoring of customer site air compressors

Machine data

Customer service

Proactive and customized service that accelerates problem resolution

Customer site

1 Provide customers with information on air usage and machine status (pay-per-use charging)





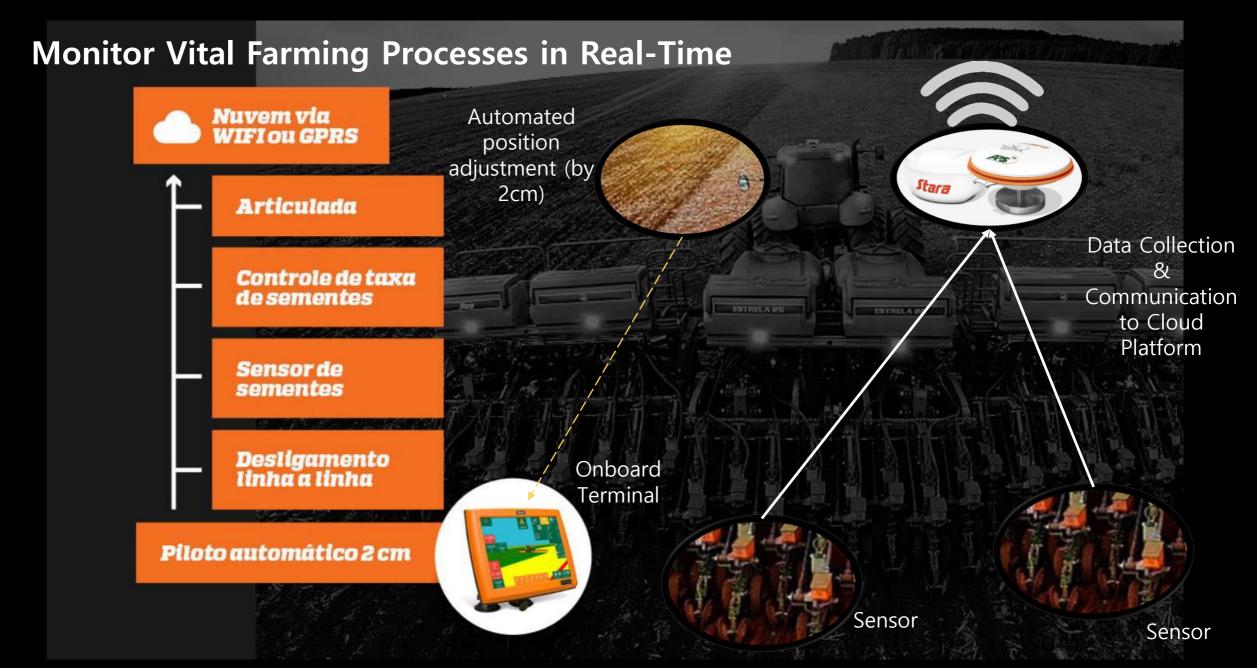
Vivanda's FlavorPrint offers Personalized Food Experiences





CHIVES





Precision Agriculture: Provide PRODUCTIVITY instead of EQUIPMENT



From Selling Tools to Tool Tracking and Asset Management Service



Tool Tracking and Asset Management Service with Pay-Per-Use



Reimagine Business with Digital Technologies to Drive Outcome

STEER YOUR BUSINESS

Insights to Strategic Decisions

Machine Learning / Artificial Intelligence

MODE 1

RUN BUSINESS

Efficiency & Effectiveness

(Established Business Models)

MODE 2

DIFFERENTIATE BUSINESS

Innovation

(New Digital Business Models)

DATA FOUNDATION



Thank you.

Contact information:

백영석, CPIM Head of Industry Value Advisory Digital Transformation, SAP Korea young.suk.baik@sap.com

