

Bevezetés az SAP fejlesztés rejtelseibe

Az SAP szofverfejlesztési módszere



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SAP Labs Hungary Profile

What we do..

ONPREMISE SUITE

Worldwide product responsibility for SCM APO and SCM SNC;
PLM Recipe Mgmt, etc..

ONDEMAND HCM

Career On-Demand with an easy and fast to use end-user frontend and modern analytical capabilities

MOBILE

Lightweight mobile applications for OP and OnD products (Employee lookup, Leave request management..)

GLOBALIZATION

Localization according to country specific (eg. legal, financial) regulations
HCM country versions, IS-Utilities localizations
Real Estate Flexible localizations

INSTALLED-BASE MAINTENANCE SUPPORT

Development support, Custom Development
(eg. SCM, EWM ..)

We would like to create customer value!

The Problem Space is...



How the customer explained it



How the project leader understood it



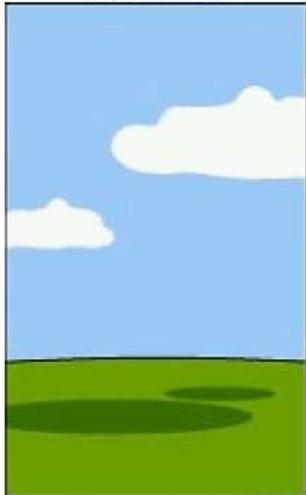
How the engineer designed it



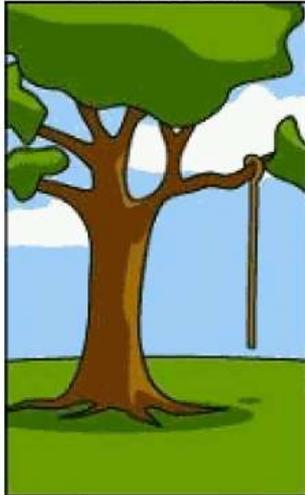
How the programmer wrote it



How the sales executive described it



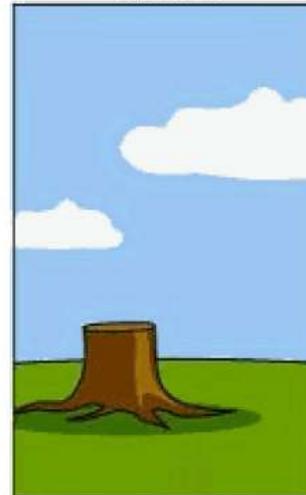
How the project was documented



What operations installed



How the customer was billed



How the helpdesk supported it



What the customer really needed

Development Model of the Past

*“I need more **customer-specific functionality** at **less cost**. And I want it **fast**.”*

*“It is **MY** product!.”*



Development Model of the Past

“How should I get this done? Too many requirements and too little time”



Development Model of the Past

*“You didn’t apply all of
our product standards.”
“Too many bugs!”
“We can’t ship!”*



Our Development Model

Close Cooperation in Fast Iterations

*“Working **in teams** in fast iterations is very productive,”*

*“Working with customers makes us more **innovative** and **focused** on the right things”*

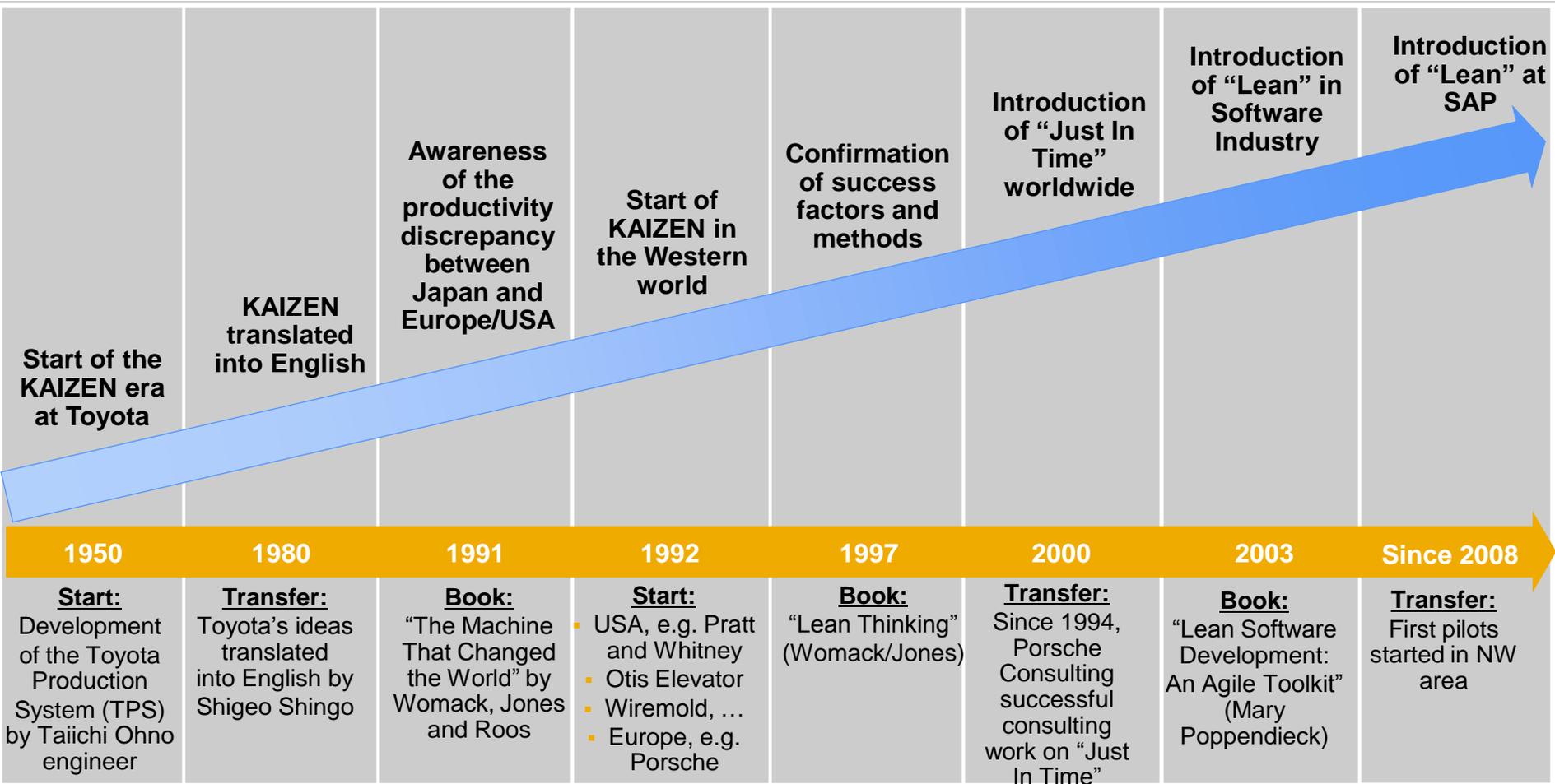
*“**Jointly** we get it right – the **first time.**”*



The term “Lean Production” has its origins in KAIZEN at Toyota...



...and reached the Software industry in 2003



Source: Porsche Consulting

Lean Process Building Blocks

Clear process architecture



SAP Lean Development Model (LDM)

- End to end product ownership
- Alignment across functions & teams
- Unnecessary tasks reduced towards zero
- Transparency for all stakeholders
- Free up time for customer value

Iterative Development Execution

- Cross functional empowered SCRUM teams
- Trust & respect



Lean Principles (JIT)

*JIT = Just-in-Time

BATCH PROCESSING

- ❑ a gyártás munkafázisait nagy sorozatszámokban hajtják végre -> minimális költség/termék
- ❑ hatalmas készletek kezelése -> költség
- ❑ kötegelt feldolgozás beindításához szükséges tételek gyűjtése -> várakozási idő
- ❑ gyártó berendezések átállítása időigényes és költséges -> rugalmatlan a vevői igények változásával szemben

Pontos előrejelzés, alapos tervezés mellett hatékony!

ONE PIECE FLOW

- ❑ vevői igény megjelenése vezérli a folyamatot
- ❑ nem igényel készleteket
- ❑ a termékek egyesével, várakozás nélkül áramlanak végig a munkafázisokon egészen a végfelhasználóig
- ❑ minimális készletek – csökkenő költség
- ❑ azonnali feldolgozás – rövidebb várakozási idő
- ❑ rugalmas reagálás a vevői igényekre

WATERFALL MODEL

- ❑ tömegtermelés szervezési elvei
- ❑ előzetes követelményelemzés a tervezési pontosságért
- ❑ a fejlesztés a vízésés modell fázisain (elemzés, tervezés, ..) kötegelve halad át, hatalmas információs készleteket felhalmozva
- ❑ a sw fejlesztés rugalmatlan folyamat, a késői módosítások drágák és instabillá teszik a rendszert

LEAN DEVELOPMENT MODEL

- ❑ a vevői igény megjelenése vezérli a folyamatot, meghatározza, mikor kezdjen dolgozni egy állomás (PULL)
- ❑ a funkciók egyesével, várakozás nélkül áramlanak végig a munkafázisokon (elemzés, tervezés, ..) a felhasználóig (FLOW)
- ❑ Meghatározott ütemben – egyszerre annyi funkció, amennyi adott időkereten belül teljesen feldolgozható (TAKT)
- ❑ azonnali feldolgozás minden munkafázisban → minimális hibatolerancia (ZERO DEFECT)

Lean Principles – Just in Time



“Just in time” temple

“Just in time” production system
“5R”

Flow principle

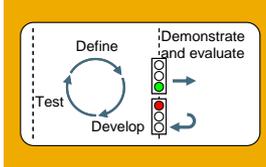
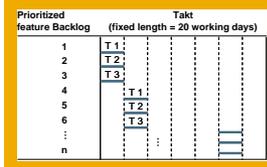
Takt principle

Pull principle

Zero-Defects principle

5R:

*the right part or information
of the right quality
at the right moment
in the right quantity
in the right place*



PCP Map
(like a task list
- workstations)

Development
by fixed sprints

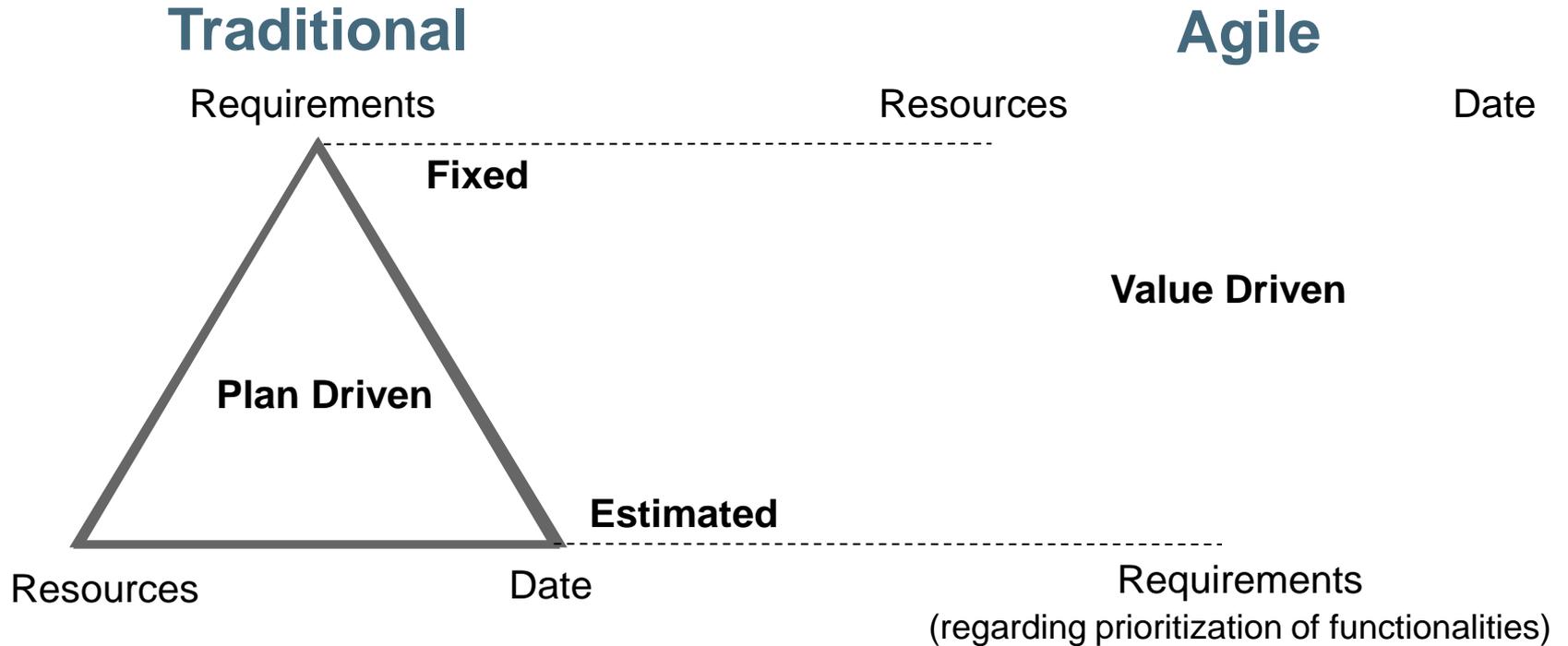
Prioritized
Backlog

**Define-
Develop-Test-
Cycle**

Source: Porsche Consulting



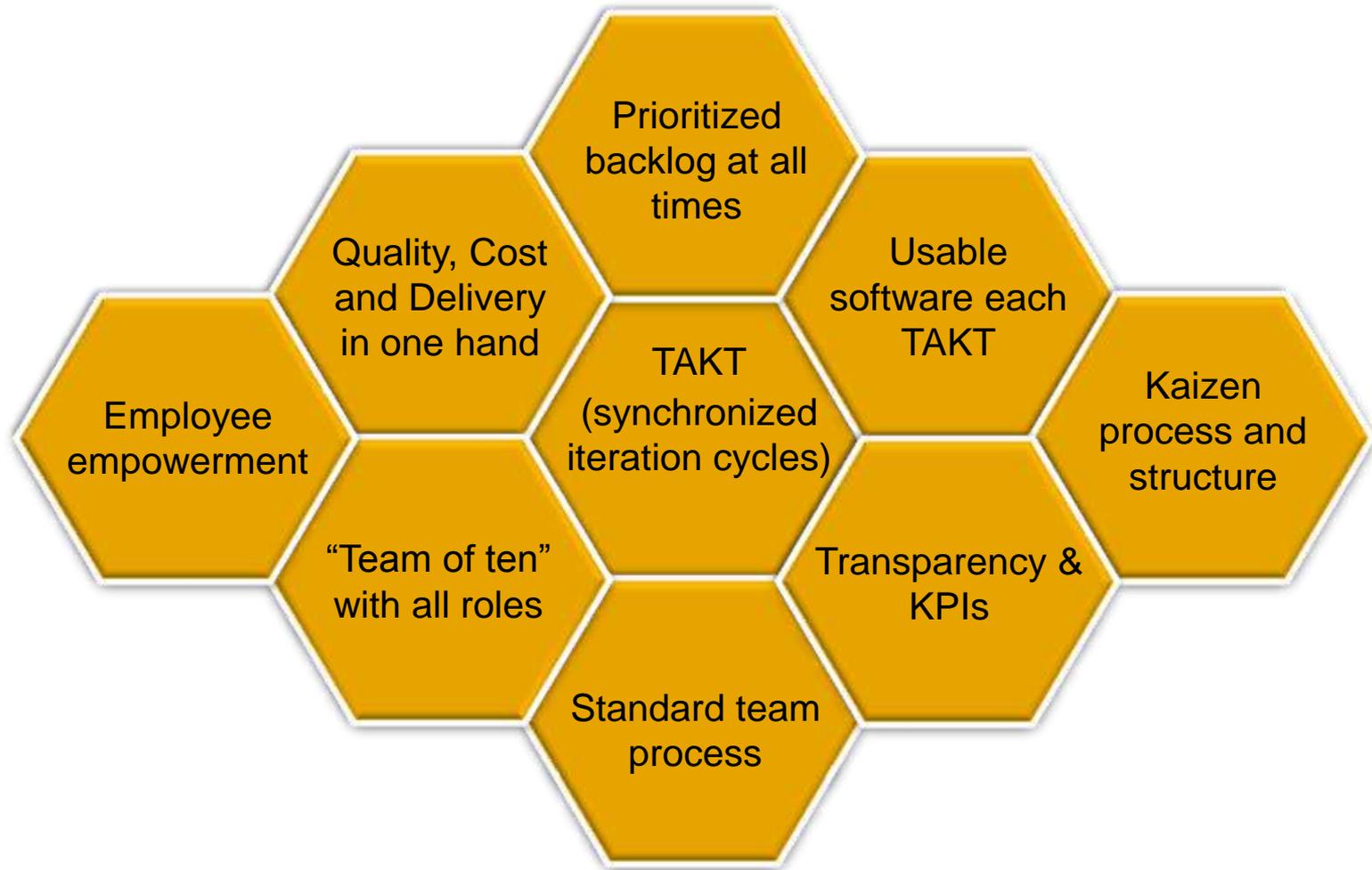
**Continuous
Improvement**



Iteration length is determining scope instead of scope determining the length of the development cycle

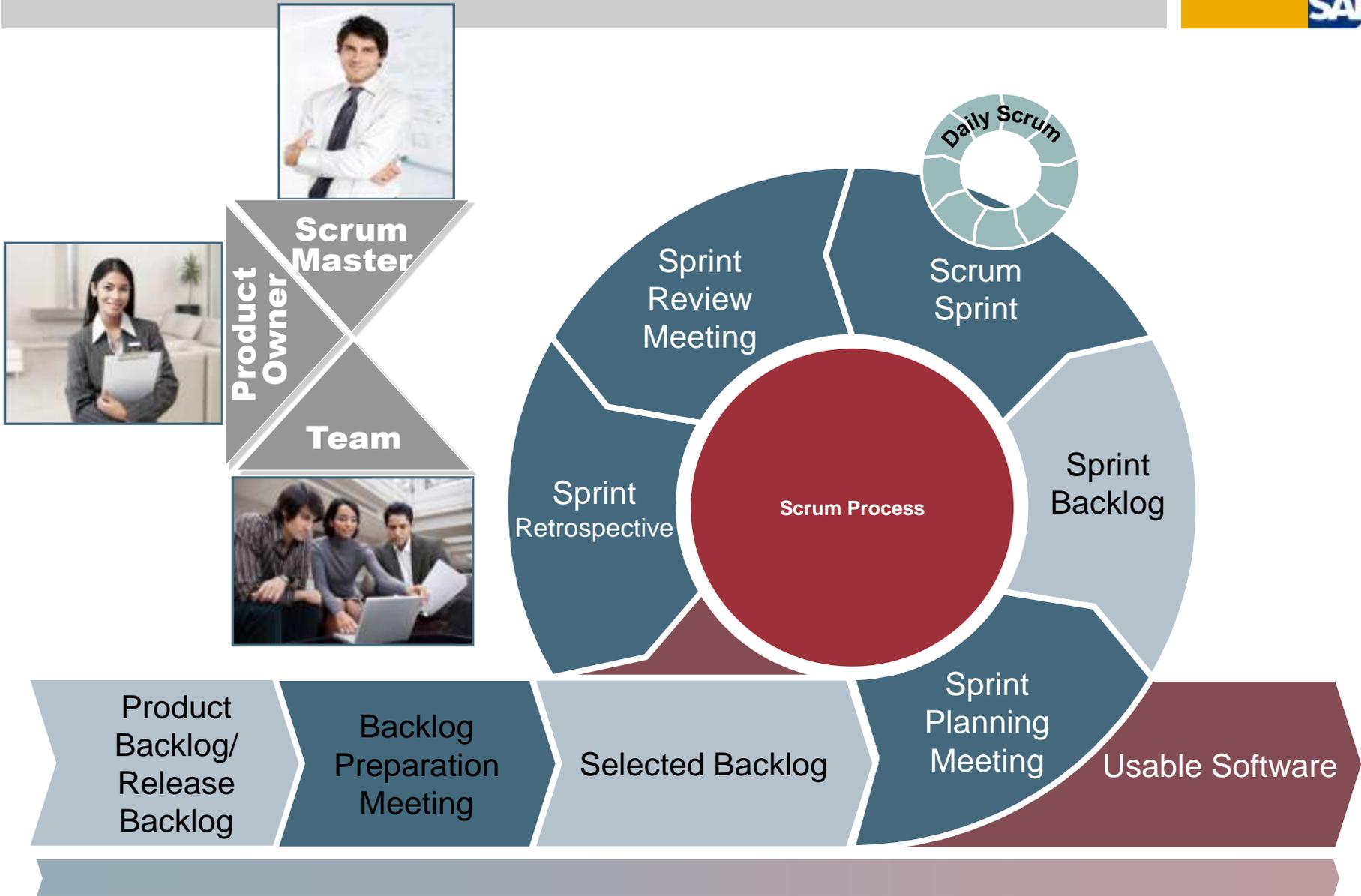
SAP's Lean Development Model

9 Core Elements



Source: SAP & Porsche Consulting ©

Scrum Process



Summary:

- The focus of the Lean Development model is to **improve the product creation process by**
 - **Using a systematic Product Creation Process (Flow)**
 - **Development with Scrum, via fixed Sprints (Takt)**
 - **Working from a prioritized Backlog (Pull)**
 - **Executing the Define-Build-Test-Accept Cycle each Takt (Zero Defects)**
 - **Continuously improving the process by established tools and methods (Kaizen)**

Thank you!

The SAP logo is located in the top right corner of the slide. It consists of the letters 'SAP' in a white, sans-serif font, set against a blue square background that is tilted at an angle.A large, semi-transparent SAP logo is overlaid on a grayscale image of a sailboat's sail. The sail is white with a dark horizontal band across the middle containing the word 'SAP' in white capital letters.

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